

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE
KNOXVILLE DIVISION**

DOUGLAS SEAL,

Plaintiff,

v.

**NORFOLK SOUTHERN RAILWAY
COMPANY,**

Defendant.

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Case No.: 3:20-cv-462

PLAINTIFF’S RULE 26(a)(2) EXPERT DISCLOSURES

In accordance with Rule 26(a)(2) of the Federal Rules of Civil Procedure and by Order of the Court, Plaintiff identifies the following expert witness:

INTRODUCTION

These Expert Designations are based upon information presently known to the Experts and are made without prejudice to the production during discovery, or at trial, of information, documentation, or data that are: subsequently discovered and determined to be relevant; or a product of ongoing investigation and/or evaluation.

With these Expert Designations, Plaintiff is not identifying documents protected from disclosure by any privilege. Nor does Plaintiff waive the right to object to Defendant’s discovery requests on any basis.

Plaintiff incorporates all individuals previously identified and to be identified by the Defendant in its forthcoming Expert Designation and reserves the right to depose and rely upon the testimony of all such individuals. Plaintiff also reserves the right to amend or supplement these Expert Designations at any time due to newly introduced information, documents, or

EXHIBIT 1

testimony that may affect these Experts' opinions. Plaintiff also reserves the right to amend these disclosures to reflect and supplement Plaintiffs' Experts' opinions and conclusions related to the facts, claims, and defenses of this case.

Plaintiff may call the following Expert Witnesses at the trial of this matter:

NON-MEDICAL EXPERTS:

1. Tyler Kress, Ph.D., CIE, CLXT
2312 Craig Cove Road
Knoxville, Tennessee 37919

Dr. Tyler Kress' curriculum vitae is attached hereto as Plaintiff's "**Exhibit 1.**" Dr. Kress is qualified to testify and give opinions in this case pursuant to his education, training, and experience in the fields of bio-mechanics, ergonomics, engineering, and workplace safety. He will testify as an expert in ergonomics, biomechanics, engineering, and workplace safety in regards to Plaintiff's duties while in the employ of Defendant. Dr. Kress is an expert in the aforementioned fields, as evidenced by his CV.

Dr. Kress' opinions and factual basis for those opinions are contained in his report which is attached hereto as Plaintiff's "**Exhibit 2.**" His fee schedule is attached hereto as Plaintiff's "**Exhibit 3.**" His case list is attached hereto as Plaintiff's "**Exhibit 4.**"

MEDICAL EXPERTS:

Plaintiff has not specifically or financially retained the following medical providers for this trial. However, Plaintiff reserves the right to call any of Doug Seal's physicians to testify, including the providers listed below.

Generally, all medical experts are expected to testify in accordance with the facts known as stated in their respective records, notes and reports, and the records, reports and notes of the other medical providers, which they reviewed, and each medical expert is expected to testify in

accordance with the opinions and mental impressions set forth in each of their respective records, notes and reports. Plaintiff has previously furnished all parties with the medical records in his custody and control. They are also generally expected to testify regarding the nature and extent of Plaintiff Keith Seal's injuries sustained as a result of the incident made the basis of this lawsuit. As part of the response to all requests for production, Plaintiff has attached copies of medical records and written reports which are in his possession. Said written medical reports and notes are dated. The mental impressions and opinions held by said medical providers may be contained in said medical records, reports, notes, MRI film, x-ray file, and in Plaintiff Doug Seal's medical records. The facts known to all medical experts are those facts set forth in Plaintiff Doug Seal's medical records as provided to all parties and as obtained by Plaintiff, and the information they each gleaned from examining Plaintiff and the records, which facts form in part the basis of said opinions. Such opinions are further based upon each doctor's and health care provider's knowledge gleaned from their respective years of medical studies and from their respective years of medical practice, including previous exams of other individuals with similar injuries. These individuals provided medical treatment to Plaintiff and will testify about his physical and medical condition at the time of treatment.

Each expert may testify to the causation, origin, and extent of Plaintiff's injuries. Additionally, they may also testify regarding whether the injuries he sustained were caused by the incident made the basis of this lawsuit and/or they may be requested to rule out other potential or theoretical pre-existing or co-existing possible causes of the injuries; the impact, nature and extend of the injuries sustained; including the issues of causation, aggravation, pre-existing conditions, sole cause and/or contribution. Each medical provider may testify to the consistency of the operative findings with pre-operative diagnoses and the traumatic event made

the basis of this lawsuit, as well as pain associated with the injuries sustained by Plaintiff. Also, each, if called, is expected to testify that the medical records concerning Plaintiff which have been produced in the present lawsuit were produced and kept in the ordinary course of business, and that the costs paid or incurred with respect to the medical care and treatment rendered to Plaintiff were reasonable and necessary and were reasonably related to, and required by, the injuries to Plaintiff's shoulder. Each physician, if called may also testify as to future treatment that, to a reasonable degree of medical certainty, will be required and the costs of such future treatment.

1. Robert G. Smith, MD
Ortho Tennessee
260 Fort Sanders West Boulevard, Building 6
Knoxville, Tennessee 37922

Dr. Robert G. Smith is a board-certified orthopedic surgeon who has evaluated and treated Plaintiff. While not a retained expert, Dr. Smith is being disclosed out of an abundance of caution. Dr. Smith's medical records have been produced in this case and detail the treatment he performed and proscribed as well as his opinions as to causation, extent of injury, diagnosis, and future medical treatment.

It is anticipated that Dr. Smith will testify regarding Plaintiff's shoulder injury made the basis of this claim and the resulting treatment. Dr. Smith is also expected to testify that based on a reasonable degree of medical certainty, Plaintiff's work exposure to heavy manual labor while working for Defendant caused or contributed to Plaintiff's shoulder injury and resulting need for surgery. It is anticipated that Dr. Smith will testify as to his past, present, and future care and treatment of Plaintiff, including his diagnoses, prognoses, recommended treatment, and opinions as to causes and relationships between Plaintiff's work for Defendant and his shoulder injuries.

2. Gerald Russell, MD
Farragut Family Practice
11130 Kingston Pike, Suite 7
Knoxville, Tennessee 37934

Dr. Gerald Russell is a board-certified physician who has evaluated and treated Plaintiff. While not a retained expert, Dr. Russell is being disclosed out of an abundance of caution. Dr. Russell's medical records have been produced in this case and detail the treatment he performed and proscribed as well as his opinions as to causation, extent of injury, diagnosis, and future medical treatment.

It is anticipated that Dr. Russell will testify regarding Plaintiff's shoulder injury made the basis of this claim and the resulting treatment. Dr. Russell is also expected to testify that based on a reasonable degree of medical certainty, Plaintiff's work exposure to heavy manual labor while working for Defendant caused or contributed to Plaintiff's shoulder injury and resulting need for surgery. It is anticipated that Dr. Russell will testify as to his past, present, and future care and treatment of Plaintiff, including his diagnoses, prognoses, recommended treatment, and opinions as to causes and relationships between Plaintiff's work for Defendant and his shoulder injuries.

OTHER EXPERTS:

Any other expert disclosed by Defendant and/or any other party – on cross examination.

Plaintiff further reserves the right to supplement these disclosures should additional information be obtained, circumstances change, or should these disclosures be found to be incomplete.

Respectfully submitted,

WILLIAM B. HICKY, ATTORNEY AT LAW

/s/ William B. Hicky

William B. Hicky, BPR# 25452

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Attorneys for Plaintiff

CERTIFICATE OF SERVICE

I hereby certify that, on this 15th day of January, 2022, I transmitted a copy of the above and foregoing by electronic mail to the following:

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/s/ William B. Hicky

William B. Hicky

VIDEOTAPED DEPOSITION OF TYLER A. KRESS, Ph.D., CIE
February 16, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE
KNOXVILLE DIVISION
CAUSE NO. 3:20-cv-462

DOUGLAS SEAL,)
)
Plaintiff,)

-vs-)

NORFOLK SOUTHERN RAILWAY)
COMPANY,)
)
Defendant.)

APPEARANCES

FOR THE PLAINTIFF:

MR. CHARLES EDWARD SOREY II
CHRIS CHRISTY LAW FIRM
1000 Highland Colony Parkway
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Ridgeland, Mississippi 39157
(601)341-6929

FOR THE DEFENDANT:

MR. JOHN W. BAKER, JR.
BAKER, O'KANE, ATKINS & THOMPSON
2607 Kingston Pike, Suite 200
Post Office Box 1708
Knoxville, Tennessee 37901-1708
(865)637-5600

ALSO PRESENT: Steven Pendleton, Videographer
Dennis Mitchell

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I N D E X
THE DEPOSITION OF
TYLER A. KRESS, Ph.D., CIE

PAGES

DIRECT EXAMINATION4

By Mr. Baker

E X H I B I T S

DEFENDANT'S REFERENCED/MARKED

Exhibit 1 - Deposition notice	.....5
Exhibit 2 - Curriculum vitae	.....16
Exhibit 3 - Report	.....16
Exhibit 4 - List of material	.....10
Exhibit 5 - Compilation exhibit	.....23
Exhibit 6 - Handwritten notes	.....26
Exhibit 7 - Handwritten notes	.....61
Exhibit 8 - Employee History Inquiry	.....63
Exhibit 9 - Portions of Employee History Inquiry	
Exhibit 10 - Jacking Records	.....70
Exhibit 11 - Pocket 13 listing	.....78
Exhibit 12 - Photograph	.....106
Exhibit 13 - Central Division document	.....107
Exhibit 14 - PowerPoint	.....111
Exhibit 15 - Photograph	.....145
Exhibit 16 - Drawing	.....147
Exhibit 17 - Late filed	.....152

S T I P U L A T I O N

The deposition of TYLER A. KRESS, PH.D., CIE, called as a witness at the instance of the Defendant, taken pursuant to all rules applicable to the Federal Rules of Civil Procedure, by notice, on the 16th of September 2022, at the law office of Baker, O'Kane, Atkins & Thompson, 2607 Kingston Pike, Suite 200, Knoxville, Tennessee, before Brenda L. Davis, LCR, RPR, RMR, pursuant to stipulation of counsel.

It being agreed that Brenda L. Davis, LCR, RPR, RMR may report the deposition in machine shorthand, afterwards reducing the same to typewriting.

All objections except as to the form of the question are reserved to on or before the hearing.

It being further agreed that all formalities as to notice, caption, certificate, transmission, etcetera, excluding the reading of the completed deposition by the witness and the signature of the witness, are expressly waived.

1 A. Yes, sir. Yes, sir.

2 Q. How long did that interview last?

3 A. About an hour and fifteen min-- hour and
4 twenty minutes. Hour and twenty minutes, as I
5 recall.

6 Q. Anything else you've done?

7 A. Yeah, I've added some more material myself
8 that is independent of what the attorneys have
9 provided me, discovery-related type material, and
10 I've added some material myself to the file, too.

11 Q. All right. So let me go through this and
12 make sure I understand what you're saying. On
13 November the 24th, 2021, you received documents from
14 Plaintiff's counsel. Yes or no?

15 A. Yes.

16 Q. And then the next thing that you did on
17 the case, I assume, was review those materials.

18 A. Well, I also received a deposition on
19 December 19.

20 Q. Okay.

21 A. So, yeah, during the course of the time of
22 receiving those and authoring my report I reviewed
23 those materials.

24 Q. Okay. So then you prepared and produced
25 your report on January 14, 2022.

1 A. That is correct.

2 Q. So between November 24 and the production
3 of the report on January 14, 2022, your work on the
4 case had consisted solely of the following: One,
5 review of documents, review of depositions, review,
6 I assume, of articles and literature that you felt
7 was germane to your report, and then you prepared
8 your report. Did I leave anything out?

9 A. I think that's a decent, succinct
10 overview.

11 Q. Okay. And since then, after your report,
12 the lawyers sent you some additional material, or
13 not?

14 A. I think the only thing that I've received
15 since then from the lawyers would be the handwritten
16 notes from Mr. Seal that he had made, and --

17 Q. Yeah, I have those.

18 A. -- I received them -- you know, that were
19 regarding some jack handling data. And then I
20 received also some -- part of that document that was
21 sent to me had some medical bills attached to it.

22 Q. Okay. You all produced those today, I
23 believe.

24 A. Well, have you had --

25 Q. I got them today, this morning.

1 A. Okay. There has been --

2 MR. SOREY: No, what he's talking about
3 we sent you right as the case began, the
4 number of cars that --

5 MR. BAKER: Oh, yeah.

6 MR. SOREY: -- he had jacked and
7 everything.

8 MR. BAKER: Right. This was before
9 we -- you inspected the billing records.

10 MR. SOREY: Right.

11 MR. BAKER: Right, right, I had that.

12 BY MR. BAKER:

13 Q. Okay. And so then you added some more
14 material. When did you do that?

15 A. I added some more material last night and
16 this morning.

17 Q. Okay. You know we're in federal court,
18 don't you?

19 A. Yes, we're -- I do know we're in federal
20 court, unless --

21 Q. And you know that it's inappropriate for
22 you to have done what you've done and produced all
23 these documents on the morning of your deposition?
24 You know that's inappropriate. Don't you?

25 A. I don't know that. I'm just working on a

1 Q. Yeah.

2 A. Okay.

3 Q. I mean, I asked you -- you represented to
4 me and the court that you added documents last night
5 and that you added documents this morning. And my
6 question is, select the documents that fit that
7 description in the ones I gave you that I got this
8 morning.

9 A. These three are ones that are -- I didn't
10 add personally.

11 Q. All right. Good.

12 A. All right.

13 Q. So the rest of them are the ones that you
14 added?

15 A. Let me check if you've printed off all of
16 them, to see. It seems like there's about 19
17 documents, and I think that's the correct number of
18 how many would fall in that category.

19 Q. All right, hand those back to me. So what
20 you're handing back to me are the documents that
21 you generated last night and this morning. Correct?

22 A. Correct, yes, sir.

23 MR. BAKER: We'll make these collective
24 Exhibit 5.

25 (Defendant's Deposition Exhibit 5 marked

1 for identification.)

2 BY MR. BAKER:

3 Q. And why did you do that?

4 A. Well, knowing that my depo -- deposition
5 was today and having -- knowing what I have reviewed
6 on the case and done on the case and aware of, felt
7 like, as I'm preparing and studying and reviewing my
8 file materials, that I needed to make sure that I
9 added those types of materials and examples to the
10 file is the primary reason.

11 It was just a sampling of some -- of
12 literature, stuff -- some of it I'm -- you know, was
13 familiar with and I had reviewed and was aware of
14 the in the file but never added to the file. So I
15 just wanted to make sure, in preparation for today,
16 that I was as thorough as I could be.

17 Q. Let me show you Exhibit 5 that I've
18 marked A. Hello?

19 A. Yes, sir.

20 Q. What's that?

21 A. It's a document that I've downloaded from
22 a company called Hydra-Tech International that has
23 some information on road truck jacking systems.
24 It's a two-page document that talks about their
25 configurations and some accessories associated with

1 them.

2 Q. How do you believe that's relevant to this
3 case, if it is?

4 A. Well, if -- as I recall, when I had
5 reviewed the file there was a Norfolk Southern
6 Standard Work Document associated with the wheel
7 change line of road and they had identified jacks
8 manufactu-- being the same manufacturer, and the
9 photographs of the jacks in the Norfolk Southern
10 Standard Work Code Document looked like those. So
11 that's -- that's the -- I guess the most relevant
12 answer to that question, I think.

13 Q. Well, do you have any criticism of those
14 jacks as depicted in 5A?

15 A. Well, my criticism is associated, as I've
16 outlined in my report, with handling of these
17 jacks --

18 Q. I didn't ask you that. I know your report
19 criticizes the actual handling of the jacks that we
20 see in that Exhibit 5A.

21 My question is, do you have any criticism
22 of the jacks, the nomenclature of the jacks and the
23 pumping device and those sort of things?

24 A. That's not the nature of my criticism.
25 I've not evaluated these from a design standpoint or

1 how they function or the nomenclature here.

2 Q. So you've not analyzed the jacks that we
3 see in 5A for the purpose of rendering an opinion
4 that they're defective or not defective.

5 A. No, this is -- I'm not evaluating them
6 from --

7 Q. Okay.

8 A. -- a product standpoint, in that regard.
9 This is biomechanics and ergonomics and industrial
10 safety.

11 Q. All right, may I have them back? Thank
12 you.

13 Did this man, Seal, tell you anything that
14 you did not already know last night for the hour and
15 twenty minutes that you spoke to him?

16 A. If I may, could I have the document I
17 provided you? I might want to glance at it in
18 response to that question.

19 MR. BAKER: Okay, let me put Exhibit 6.

20 (Defendant's Deposition Exhibit 6 marked
21 for identification.)

22 BY MR. BAKER:

23 Q. It looks like you got a thing marked video
24 and you have a thing marked notes, one hour and
25 twenty minutes. Are these together or separate?

1 A. They're separate.

2 Q. Okay. Well, I'll hold this one, and I'll
3 give you the Exhibit 6 to you now.

4 A. And I haven't gone through his deposition
5 and then document to see all that might be in this
6 -- in my interview that wasn't in his deposition, so
7 I can't say I can give you a comprehensive answer.
8 But certainly there was -- he told me quite a bit of
9 overlap that was already in his deposition. I think
10 there was some more detail in our phone conversation
11 with respect to --

12 Q. Well, mark yellow about new things that
13 you can remember right off the bat.

14 A. And I may be marking something that's
15 covered in the deposition. I --

16 Q. Do the best you can.

17 A. Yeah, I will say it -- 174-page
18 deposition.

19 Q. Do the best you can.

20 A. I might not remember it all. I've marked
21 some things that -- like knuckles and some other
22 things he did that might have been covered --

23 Q. Just let me --

24 A. -- also but in a more cursory way, and
25 then he's got into a little more detail or different

1 A. Yes. And I don't think there are any more
2 in my file, there might be, but --

3 Q. Well, look.

4 A. -- I'm not remembering as I sit here. You
5 want me to look some?

6 Q. Yeah, I want to see if you've reviewed any
7 photographs. We'll take a short break on that.

8 A. Oh, sure.

9 VIDEOGRAPHER: We are off the record,
10 the time is 12:06 p.m.

11 (A brief recess was taken.)

12 VIDEOGRAPHER: We are on the record,
13 the time is 12:11 p.m.

14 BY MR. BAKER:

15 Q. You've had an opportunity to review your
16 file. Did you find any photographs, other than the
17 ones that were embedded in the work procedure
18 documents?

19 A. Yes, there were some photographs in the
20 PowerPoint presentations that I had in my file.
21 There's some photographs in many of the documents
22 that I added to the file. And then there was also a
23 video. I wouldn't refer to that as a photograph,
24 but --

25 Q. Right.

1 A. -- that's a collection of a lot of
2 photographs, or images, so to speak.

3 Q. Yeah. But you've not been shown any
4 stand-alone photographs in this case, have you?

5 A. Only the -- what I've listed. I did not
6 receive the exhibits to the Plaintiff's dep--

7 Q. You didn't receive any photographs like
8 this, of any of the equipment, out in the field.

9 A. I did not receive that.

10 Q. But any photographs like this, of this
11 ilk, this type of photograph?

12 A. That's --

13 Q. You have not?

14 A. That is correct.

15 Q. Okay. So I'm paying you \$375 an hour
16 today. Have you come today to provide to me your
17 opinions and the bases of your opinions in this
18 case?

19 A. Yes, I think I could do that. And also
20 tell you what I've done since my report, too, in
21 adding other material and things.

22 Q. Well, I thought I asked you what you've
23 done since your report. Did I not do that?

24 A. Yeah, you did.

25 Q. All right.

1 A. I came prepared to tell you about my whole
2 file and my opinions and the bases of them.

3 Q. I would like to revisit -- turn to your
4 report, page six, please.

5 A. Yes, sir.

6 Q. It says, the bottom of the page, "I have
7 worked on numerous cases in the past involving
8 musculoskeletal injuries to railroad/Norfolk
9 Southern Railway Company workers, have reviewed
10 materials associated with discovery in those
11 matters, and have inspect railroad work
12 environments..." Did I read that correct?

13 A. Yes.

14 Q. "...including carman jobs, railcars,
15 changing knuckles, handling jacks, etcetera..." Did
16 I read that correctly?

17 A. Yes.

18 Q. I want to ask you about the handling jacks
19 part. I had asked for you to produce any and all
20 records relating to your experience -- any other
21 cases or your experience in observing, watching,
22 analyzing the concept of handling jacks. That's
23 what I asked you to produce, did I not?

24 A. That was evidently one of the items --

25 Q. Right.

1 A. -- in the duces tecum.

2 Q. And it was also in the letter that was a
3 part of your file that I read. Right?

4 A. I believe it was in the letter, yes.

5 Q. All right. Okay. So my question is, have
6 you ever had a case involving handling jacks?

7 A. Yes.

8 Q. All right. Tell me about that case. I
9 mean, te-- well, first how many cases?

10 A. I don't know.

11 Q. All right. Have you ever -- can you
12 identify that case?

13 A. I can't by -- as I sit here by name. I've
14 worked on, as -- for example, carmen do handle a lot
15 of jacks, and I've worked on numerous cases over the
16 years of different railroad craft. Other craft
17 sometimes handle jacks, too. But, they certainly
18 handle them a lot. And so some of those claims are
19 acute, some of them are cumulative, some are
20 combinations. But I don't recall all the
21 plaintiffs' names or the ones that had that as part
22 of the case or a primary aspect of the case.

23 Q. Have you ever had a case involving a line
24 of road wheel change using portable jacks before
25 today -- before this one?

1 A. I may have worked on a case where that was
2 part of an individual's work. But I do not recall
3 that -- that doesn't mean it might not have been,
4 but I don't recall that being a primary issue in a
5 previous case.

6 Q. Can we agree that this case here involving
7 Mr. Seal represents your first analysis from a
8 biomechanical/ergonomic standpoint of a line of road
9 wheel change using portable jacks?

10 A. I don't -- as a primary issue, I think
11 that might be right. I think -- because I don't
12 have a specific recollection of that being a main
13 issue in a case.

14 Q. Right.

15 A. That doesn't mean that they might not have
16 done that, obviously. I think -- I feel confident
17 that that -- I've worked on cases where -- that they
18 had that task. But where that was a big part of the
19 case, I think that's, as far as my memory goes,
20 correct.

21 Q. So I want to make sure I understand your
22 -- I thought you would just simply say yes or no,
23 but you kinda went on there.

24 Can we agree that this case here is the
25 first time that you, as a biomechanical engineer,

1 ergonomic expert, have analyzed a line of road wheel
2 change using portable jacks?

3 A. The short answer is, I don't know. I've
4 tried to give you an answer as well as I could from
5 what I can remember. I don't remember it being a
6 primary issue. I think I -- you know, I tend to
7 remember that -- where they used it on line of road
8 but out on pads, where they've had concrete. I
9 don't remember some -- I don't recall a primary
10 issue line of road, you know, out on ballast and
11 that.

12 So I don't have a memory where that was a
13 specific issue. Could have been an issue in a case.
14 I'm just not remembering.

15 Q. Okay. But as we sit here today, you have
16 no memory of ever conducting such an analysis of
17 line of road wheel change using portable jacks as
18 the main issue in the case.

19 A. I know I have looked at portable jacks and
20 jacking up railcars in the past in cases. I would
21 agree that I don't have a recollection of a case
22 where that was a primary issue out on the line of
23 road.

24 Q. All right. Have you during your career
25 ever been allowed on railroad property for the

1 purpose of observing a wheel change using portable
2 jacks?

3 A. Not that I can recall.

4 Q. Have you conducted a site inspection in
5 this case, observing the handling of portable jacks
6 in connection with a wheel change?

7 A. No.

8 Q. In looking at your report, would you agree
9 that the task at issue in this case, as Mr. Seal
10 testified in his deposition, is an ergonomic
11 analysis of handling portable jacks in line of road
12 wheel changes?

13 A. I'm sorry, could you ask that again?

14 Q. Sure.

15 A. I missed a little part of the beginning.

16 Q. Would you agree that the issue in this
17 case and the claim that has been made in this case
18 in Plaintiff's Complaint and in his deposition
19 relates solely to his handling these heavy jacks on
20 line of road wheel changes, mainly at the number 13
21 pocket track at John Sevier Yard, and in other
22 places?

23 A. I can't agree, because as you -- as I
24 mentioned earlier, I've not read the Complaint and I
25 don't know what all is pled or claimed and if they

1 criticism is of climbing ladders on railcars.

2 A. Well, I've analyzed it in great detail.
3 I've modeled it biomechanically. I've done some
4 modeling by hand and done hand calculations. I've
5 even modeled it using some computer analysis. I've
6 done it myself to evaluate it, made a lot of
7 dimensional measurements in the environment. I
8 reviewed a lot of materials associated with that
9 task.

10 So that's -- I mean, that's just a
11 thumbnail sketch of some of my experience in that
12 respect.

13 Q. Have you ever touched a portable wheel
14 jack?

15 A. I have.

16 Q. Tell me where.

17 A. I don't remember exactly where. I can't
18 remember any cases of --

19 Q. How many years ago was it?

20 A. The last time I touched a portable jack.
21 I think I've done it since 2010, you know, in the
22 last -- I think it was -- would have been -- I don't
23 recall anything post COVID, when we talk about --
24 gosh, our world talks about the COVID era.

25 Q. Have you ever lifted a portable wheel

1 jack?

2 A. I don't think I have ever lifted -- and
3 when you say a portable wheel jack, you mean a
4 portable --

5 Q. Like we're talking about in this case.

6 A. No, I don't believe I've ever lifted one.

7 Q. Have you ever slid one?

8 A. I have rolled one. I don't recall sliding
9 one.

10 Q. When you say, "rolled," what do you mean,
11 "rolled"?

12 A. Some jacks that are designed to lift heavy
13 equipment such as railcars have wheels on them.

14 Q. Okay. Have you ever slid or moved in any
15 way a portable wheel jack like the jacks involved in
16 this case?

17 A. No.

18 Q. Have you ever -- we've already established
19 that you've never seen a wheel change line of road.
20 Have you ever seen anyone move a portable jack that
21 did not have wheels on it?

22 MR. SOREY: I'm going to object to form
23 of the question in that you said he's never
24 seen a line of road wheel change. I think
25 what he said, he's never seen one in person.

1 MR. BAKER: Go ahead, answer the
2 question.

3 THE WITNESS: So you're asking, have I
4 ever seen somebody lift one or --

5 MR. BAKER: Right.

6 THE WITNESS: Well, I've observed --

7 MR. BAKER: You personally, your
8 eyeballs looking at someone lift one or move
9 one in any way.

10 THE WITNESS: Like the ones in this
11 case.

12 MR. BAKER: Yes, like the ones in this
13 case.

14 THE WITNESS: Because there's been
15 jacks involved in a lot of cases.

16 MR. BAKER: Right.

17 THE WITNESS: But 185-, 195-pound jack?
18 I don't -- I don't remember ever seeing
19 someone lift one.

20 BY MR. BAKER:

21 Q. Have you ever performed any measurements
22 about the forces involved in moving a portable wheel
23 jack of the type and nature involved in this case?

24 A. When you say measurements, perform
25 measurements, that implies being out in the field

1 and like actually having a device, like a force
2 gauge --

3 Q. Right.

4 A. -- and measuring something physically.

5 Q. Right.

6 A. I have done a lot of measurements of
7 exposures to various weights and different body
8 positions. I mean, I've spent decades doing that.

9 Q. I don't want to talk about that. I'm
10 talking about jacks.

11 A. Yeah. And, again, it's a weight that can
12 be modeled with the dimensions in which you carry it
13 and the nature of how you would hold it. So I have
14 modeled that extensively and evaluated it, done --
15 taught from it, taught that ad nauseam.

16 But I've not actually been out in the field
17 and instrumented devices and -- you know, to weigh
18 these or lift them and measure forces associated
19 with certain maneuvers of them, if that -- and
20 dragging them on ballast or anything like that, if
21 that's what you're asking.

22 Q. That's what I was asking.

23 A. Okay.

24 Q. Have you ever attempted to analyze by
25 looking and making measurements of the position of

1 the wrists and the position of the arms in
2 connection with lifting or sliding portable wheel
3 jack that we're -- of the type and nature involved
4 in this case?

5 A. Have I ever analyzed it or considered it?
6 Is that what you're --

7 Q. Yeah, looking at -- well, let me just ask
8 it in a different way. You're a biomechanical
9 engineer, you're an ergonomic person, and one of the
10 things you all do is you make measurements of body
11 movements. Do you not? To determine if there's a
12 risk factor associated with that particular body
13 movement?

14 A. Well, sometimes we'll make measurements,
15 sometimes we just -- we'll know the physical
16 dimensions of the human and the machine or the
17 equipment or the tool and we'll analyze it from
18 knowing the dimensions and the weights and --
19 without having to make measurements. You can also
20 do analysis having the data.

21 Q. Okay. Well, have you ever actually
22 watched a man handle a portable jack of the type
23 involved in this case and analyzed the manner of the
24 lift and the position of the arms and the position
25 of the hands and the posture associated with lifting

1 the jack, by looking at a person actually doing it?

2 A. Well, I thought I answered that earlier.
3 I haven't actually -- I mean, I've seen the video,
4 seen how they handle it. But I haven't actually
5 seen somebody lifting a jack such as the ones in
6 this case.

7 Q. Right. And I think we established you've
8 never seen --

9 A. Physically, like two men --

10 Q. Yeah, you've never seen anyone actually.
11 So you can't tell us today based upon your own
12 personal observations of a person doing the work the
13 posture that they would use in lifting or sliding
14 and the position of their arms and hands while they
15 would be doing that.

16 A. I can certainly discuss it, but not on
17 personal observation, because I haven't personally
18 observed --

19 Q. Okay.

20 A. -- them doing that task.

21 Q. All right. Now, you said you looked at
22 some videos in this case -- wait, let me -- I want
23 to ask you another question.

24 In reviewing your report, I did not see any
25 measurements that you made in this case. There are

1 you put in your report? I didn't see any. But it's
2 a long report and maybe I missed it.

3 A. Well, as you know, I included some
4 highlights from both depositions and they may have
5 talked about some of it there. Also, on page 16, I
6 talked about some of the dimensions of the
7 environment on the third full paragraph, about
8 three-quarters of the way down. There may be some
9 other places in my report, but that's certainly one
10 of them.

11 Q. Let me show you -- you've made some notes
12 of the vid-- on a document that says -- or a piece
13 of paper that says, "Video." Right?

14 A. Yes, sir.

15 (Defendant's Deposition Exhibit 7 marked
16 for identification.)

17 BY MR. BAKER:

18 Q. Is this the video that you reviewed that's
19 in your -- Exhibit 4 to your deposition? It says,
20 "Video titled: 'Raising It Safely'."

21 A. It's indexed in Exhibit 4. Yes, that is.

22 Q. So that's the video you saw?

23 A. That is the video that I saw that was case
24 specific.

25 Q. Have you seen any other video besides

1 that?

2 A. I have seen other videos besides that.
3 But that's the only case-specific video. I mean,
4 I've seen videos on how -- on jacking cars and
5 jacking equipment and the products that are
6 available and how jacking jobs are done and things
7 of that nature.

8 Q. Okay. So on this document you said -- it
9 says, "Video." And this video, "Raising It Safely,"
10 number 8034, it says -- you wrote down, "These jacks
11 are heavy"? Well, I've got it right here.

12 A. Yeah, I --

13 Q. Okay.

14 A. Yeah, I wrote that down.

15 Q. Just read into the record what you're
16 saying here, so I don't have to ask you the
17 questions.

18 A. Yeah, I --

19 Q. Just read it.

20 A. Yeah.

21 Q. Thank you. Exhibit 7.

22 A. "Video. 'These jacks are heavy. So
23 use'" -- I put the "the" in the wrong place, that's
24 what got me. I think it said, "'So use the Rewell
25 truck crane to maneuver it into position on the jack

1 bay.'" I put the "the" after Rewell, I think it
2 goes before. "'Avoid lifting and carrying the jacks
3 as much as possible. And when you do have to lift
4 one, use safe lifting practices to protect your
5 back.'" "

6 Q. Okay. Did you review the Employee History
7 Inq-- have you ever seen the Employee History
8 Inquiry in this case?

9 A. Yes.

10 Q. What's an Employee History Inquiry?

11 A. It's an inquiry into a particular person
12 and the details of the records that Norfolk Southern
13 has associated with their history and discipline and
14 claims and things of that nature, is my
15 understanding.

16 (Defendant's Deposition Exhibit 8 marked
17 for identification.)

18 BY MR. BAKER:

19 Q. Okay. Is this it, for Mr. Seal?

20 A. I do remember, I think it was 165 pages
21 long. But I might be remembering another document,
22 I don't know. But, yeah, that's --

23 Q. So what --

24 A. -- what I remember.

25 Q. So what does that involve? Safety

1 presentations?

2 A. It talks about the different trainings he
3 had, the different things that he's done. It's
4 basically a -- whether -- you know, all his
5 injuries, all his accidents, all his disciplines or
6 rule violations and trainings, is my understanding
7 is the nature of what all that encompasses.

8 Q. Is this a good thing or a bad thing for a
9 railroad to do, train its employees?

10 A. Training's good. You need to be trained
11 on how to do your job.

12 Q. Right. And do you have any criticism of
13 Exhibit Number 8, of the railroad trying to provide
14 its employees with these safety presentations?

15 A. I haven't gone through Exhibit 8 to see if
16 there's problems, in the sense of errors or mistakes
17 or things that are documented poorly or not
18 appropriately. So I don't have a criticism one way
19 or another. I haven't evaluated it in that regard.

20 Q. Do you take the position that this
21 gentleman, Mr. Seal, was not trained in handling
22 jacking equipment?

23 A. I take the position that when he was asked
24 to do it, I think the -- when he had to start doing
25 it, I think the file, and my understanding,

1 know how that's done?

2 A. Yes, I do.

3 Q. All right. So how did you learn how it's
4 done? From looking at these documents and that sort
5 of thing?

6 A. Well, I was aware of jacking railcars,
7 having been familiar with it in the past. But as
8 far as how it's been done and the nature of how it's
9 being done specifically in this case and with
10 Mr. Seal and how often and where they did it and
11 whether there were pads or not, etcetera, yes, it
12 was reviewing the case-specific documents in that
13 regard.

14 Q. Okay. Well, let's just -- it's time for a
15 test. Let's do it this way: You have a car to be
16 jacked line of road, and you have a work truck, and
17 inside that work truck are two carmen whose job is
18 to jack the car and, presumably, remove the
19 defective wheel, wheelset, and replace it with a
20 non-defective wheelset. You with me so far?

21 A. I am.

22 Q. All right. So the truck arrives at the
23 car and these guys are going to change the wheelset.
24 I want you to detail for me exactly how that's done.
25 Starting with what? So from the first thing they do

1 until the last thing they do.

2 A. Well, the first thing they really should
3 do is to ensure that they have -- the railroad
4 should ensure that they are following guidance from
5 the Notice of Safety Advisory 99-1 from the FRA, and
6 that they are also doing this work consistent with
7 49 CFR 215.9 and 49 CFR 232.

8 Q. In other words, those documents basically
9 stand for the proposition that -- what is a defect
10 and what is not a defect and the -- I think you gave
11 me the document here someplace. Let me get it real
12 fast. We'll make the 99-1 5B, that I've marked
13 here. And that list recommended site selection,
14 weather awareness, equipment selection, equipment
15 inspection, preparation for lifting, angularity,
16 safety supports, periodic inspection, safety
17 supervision. Did I read that correctly? I've got
18 it right here.

19 A. Yes, that's -- you did. And embedded in a
20 lot of that was, obviously, the nature of the ground
21 and how solid it was and the soil conditions and the
22 nature of potential changing weather and how it can
23 affect the ground.

24 Q. Well, I just read the categories.

25 A. Right.

1 Q. I didn't go through what each one says.
2 And then you've cited 49 section -- CFR section
3 215.9 "Movement of defective cars for repair."
4 And we'll make that Exhibit 5C. All right?

5 A. Okay.

6 Q. And this is the document that you provided
7 to me. Right?

8 A. Yes, it was stuff that I added to my file.

9 Q. Right. And I got today. Okay.

10 A. Well, those documents, with all due
11 respect, are referenced in the materials that have
12 been provided and within the railroad internal
13 materials, too.

14 Q. 99-1 and 49 CFR 215, you are saying that
15 the railroad knows about those?

16 A. I am saying that.

17 Q. Of course they do. We're not taking the
18 position they didn't. Why would you say what you
19 said?

20 A. What do you mean, why would I said what I
21 said?

22 Q. Nevermind.

23 A. You were saying that you just got them
24 provided today, and I was just pointing out that I
25 think you had had them -- I think that was -- I was

1 just trying to say that I think there's more detail
2 to that. I think you should -- they're mentioned in
3 materials specific to this case that have been a
4 part of the file long before today. I just happened
5 to add them physically to the file so it's -- and so
6 we could have them for discussion today as needed.

7 Q. Okay. You got any more documents you're
8 going to add to the file?

9 A. Probably, sure. I mean, as discovery goes
10 on, I would expect to get some more. Mr. Mitchell's
11 here. I imagine he's involved. And I don't know if
12 he's going to, you know, be disclosed and deposed.
13 And so, yeah, I'm sure I'll add more as the work
14 goes on in the case.

15 Q. Will there ever be an end?

16 A. Well, I would think so, when the case --
17 there's no -- you know, discovery's closed, things
18 aren't being produced or we're not preparing for
19 trial and the matter goes away, I suppose.

20 Q. Okay.

21 A. I don't know. A lot of that depends on
22 you attorneys. You all create a lot of paper.

23 Q. So you're going to keep on producing trial
24 -- documents all the way up to the date of trial?

25 A. I don't -- a lot of what is produced to me

1 it there.

2 Q. I didn't ask you that. I asked you how --

3 A. I'm telling you what physically you do.

4 You have to do a repair assessment first.

5 Q. I asked you --

6 A. And these are part of the steps.

7 Q. I am asking you physically what is done to
8 change out a wheelset. I'm not -- I want you to
9 assume that all the decisions have been made about
10 this is the place it has to be jacked.

11 A. So we've bypassed all those --

12 Q. We bypassed all that.

13 A. -- and looked at the location, you know
14 there's not -- you've not considered jacking pads or
15 repair shops nearby. I mean, you've already made
16 that decision.

17 Q. Right.

18 A. You've already said, "We're here, we're
19 going to do it."

20 Q. That's right.

21 A. And the truck's there. We're going to
22 start from that point.

23 Q. Right.

24 A. Okay. Well, again, I just want to make
25 that clear. So -- and I'm going to assume that you

1 have the equipment and training of the personnel in
2 place that Norfolk Southern believe is needed for
3 the way in which they perform the job.

4 And so the best answer, and I can certainly
5 go through the details of it --

6 Q. That's what I want you to do.

7 A. -- would be to refer you to the --

8 Q. I don't want to refer anything. I want to
9 know what Dr. Kress knows about the physical
10 requirements -- what is physically done to change
11 out a wheelset line of road. You don't seem to want
12 to answer that question.

13 A. No, I definitely want to answer it, and
14 I'm trying to.

15 Q. You sure?

16 A. Yes. And I want to tell you the basis of
17 this answer, because it's a long answer and it --

18 Q. All your answers are long.

19 A. -- the primary -- the primary places would
20 -- obviously, I've talked to Mr. Seal, who does it a
21 lot, and how he's done it in practice and how they
22 do it. But there's also the Car Department
23 Instructions, specifically 12-28, that I have in
24 this case, and 12-28B, for line of road jacking.

25 There's the wheel change line of road

1 standard work procedures that I have in the file
2 that talk about wheel change line of road. There's
3 also one on the Combilift and jack. There's also
4 the 20-minute video -- or I think it was 20 minutes
5 or so, roughly -- that was produced in this case by
6 Norfolk Southern about the procedures, how they do
7 it on line of road.

8 Q. Is that how you obtained your information
9 to be able to answer the question?

10 A. Well, I was just going to say, my
11 interview, his deposition, and those primary
12 materials have captured the details of how they do
13 the job. And I'm glad to start bullet-pointing that
14 process from my review of those materials, if you'd
15 like.

16 Q. Well, all right, so basically your
17 answer's going to be based upon your review of the
18 materials.

19 A. Absolutely.

20 Q. And not based upon your watching the full
21 and complete wheel change line of road, but from the
22 materials.

23 A. Oh, I watched the video, the 20-minute
24 video.

25 Q. I mean, the vid-- include the video.

1 A. I've not -- I thought we had that clear.
2 I've not been out there watching this task. I've
3 not done an inspection.

4 Q. Okay. So I think I'll withdraw -- well,
5 I'm not going to withdraw the question. I think
6 we've reached an agreement that your knowledge about
7 the specifics of how a wheel change takes place line
8 of road is based upon your interview with Mr. Seal,
9 your review of his deposition, and the document you
10 referred to in your answer, and the video.

11 A. Well, there's documents that I've referred
12 to.

13 Q. Right.

14 A. Several of them.

15 Q. Right. And the video.

16 A. And there's other ones. But those are the
17 main -- the other things in the file that speak to
18 it to some extent. But those are the main ones that
19 come to mind that form the basis of my understanding
20 of how it's being done in Mr. Seal's workplace.

21 Q. All right. And so what is Dr. Kress's
22 definition of repetition in this case?

23 A. Repetition is simply meaning how often you
24 do something.

25 Q. Okay.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE

DOUGLAS SEAL,

Plaintiff,

vs.

NORFOLK SOUTHERN RAILWAY
COMPANY,

Defendant.

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No.: 3:20-CV-00462
Jury Trial Demanded

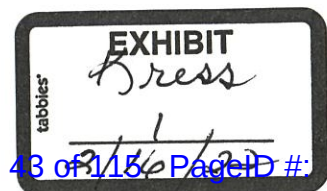
AGREED NOTICE TO TAKE VIDEOTAPE DEPOSITION
DUCES TECUM

To: Charles Edward (Eddy) Sorey, II, Esq.
1000 Highland Colony Park, Suite 5203
Ridgeland, Mississippi 39157

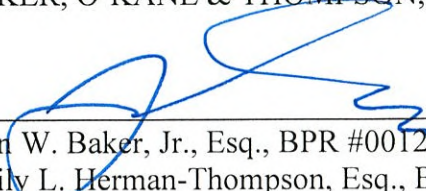
By agreement, you are hereby notified that pursuant to Rule 30 of the Tennessee Rules of Federal Procedure, the videotape deposition *Duces Tecum* of **TYLER KRESS** will be taken on **February 16, 2022** at the law office of BAKER, O'KANE & THOMPSON PLLP, 2607 Kingston Pike, Suite 200, in Knoxville, Tennessee. The videotape *Duces Tecum* deposition will commence at **11:00 a.m.** on that date and will continue from day to day until completed or adjourned before a duly qualified court reporter.

The witness is requested to bring the following documents listed on the attached *Duces Tecum* Notice.

Dated this 18 day of JAN., 2022.



BAKER, O'KANE & THOMPSON, PLLP

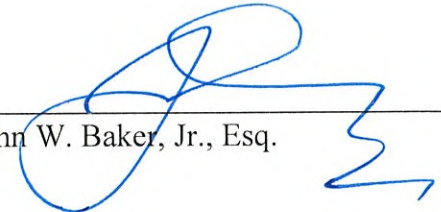


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CERTIFICATE OF SERVICE

I certify that a true and correct copy of the above and foregoing document has been served on all counsel of record either by hand delivery or United States Mail, postage prepaid.

This 18 day of Jan., 2022.



John W. Baker, Jr., Esq.

DUCES TECUM NOTICE

- (1) Dr. Kress' entire file, including, but not limited to, the documents he was provided by counsel for the Plaintiff, his notes, all photographs and videos and any other documents and material, including recorded conversations and statements contained in his file;
- (2) NIOSH Musculoskeletal Disorders and Workplace Factors, 1997;
- (3) NS Ergonomic Policy;
- (4) 1993 AAR letter to Robey, Reference Task Force;
- (5) 1993 AAR Task Force Agenda for NS;
- (6) 1995 NS Whether NS not have person on AAR Committee;
- (7) NS Ergo Training 2006;
- (8) Preventing TCD's of Upper Extremity;
- (9) 1997, 7-31, Letter, Ergo Meeting SALB to Robey RECTD Ergo;
- (10) 1993, 1-24, Memo from George Page;
- (11) 1948, AAR Ergonomics and Surgical Section Report;
- (12) 1997 NIOSH Ergo Study;
- (13) Ergonomics Process of NS Upper Extremity Update 9-8-95;
- (14) The Ergonomics Manual;
- (15) AAR Interchange Field Manual, Rule 13;
- (16) AAR Ergo Guide Condensed Controlling CTD's;
- (17) 1991 AAR Lifting Guides – NIOSH;
- (18) NSRC Notification Document Canceling NSB-0028: Handling Coupler Knuckles;
- (19) NSRC Notification Document Canceling NSB-0085: Lifting, Pulling and Pushing;

- (20) Any and all notes, reports, photographs, videos, and documents of any kind, including text messages, emails relating to Dr. Kress' representation on Page 6 of Dr. Kress' report relating to his claim that he has observed and/or reported on the "*handling of jacks*".

Laurie Hall

From: Laurie Hall
Sent: Tuesday, January 18, 2022 4:32 PM
To: Eddy Sorey; will@hickylaw.com; james@jrferguson.com
Cc: Jay Baker
Subject: Douglas Seal vs. Norfolk Southern Railway Company RE: Depo Notice for Dr. Tyler Kress (FROM JAY BAKER) 1-18-22 4:32 p.m.
Attachments: 22-1-18 Charles Sorey Lt. Re-Depo Notice-Kress.pdf; 22-1-18 Depo Notice-Dr. Kress.pdf

Laurie Hall, Typist to
John W. Baker, Jr., Esq.

ATTORNEYS AT LAW

BAKER | O'KANE

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This e-mail is confidential and may be privileged. If you are not an intended recipient, please contact the sender at (865) 637-5600.

January 14, 2022

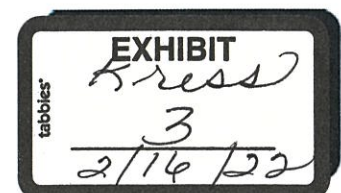
James R. Ferguson
Law Office of H. Chris Christy, PA
201 West Broadway
Ste. G12
North Little Rock, AR 72114

Re: Doug Seal v. Norfolk Southern Ry. Co. (NSRC or NS)
File No. SEA.NOR211124

Dear Mr. Ferguson:

Introduction/Summary: This report sets forth my opinions to date regarding Doug Seal's workplace at Norfolk Southern Ry. Co. and the risks associated with musculoskeletal injury in his railroad job. Mr. Seal (DOB: December 30, 1966) has been an employee of NSRC since 1989. He does heavy work as a carman in a manual type job and has been exposed to years of repetitive, forceful (e.g. lifting, pushing, & pulling) and stressful job duties sometimes in cold temperatures. These risk factors are widely known and have been recognized for decades as being causative and related to the development of wear-and-tear and acute bioengineering compromise of human musculoskeletal components, including for example to the shoulder. For example, during his many years of work at NSRC, Mr. Seal performed regular manual material handling tasks, including, but not limited to, lifting railcar parts, knuckles (weighing approximately 83 pounds), heavy jacks, etc., in addition to other exposures such as having to perform "lifting" & push/pull tasks of moving equipment and climbing rail cars, setting handbrakes, etc, through the years. Reiterating, heavy work involving significant musculoskeletal stress can result in accelerated degeneration or wear in the bioengineering tissues of the human body, and make joints and musculoskeletal tissues at joints more vulnerable to acute and cumulative damage. Evidence in this case certainly highlights the excessive exposure involved in the task of jacking equipment/railcars.

As I mentioned above, part of his work involved handling heavy jacks and also heavy knuckles. He had shoulder surgery on July 17, 2018, as a result of right shoulder musculoskeletal injury involving rotator cuff damage/tearing and impingement syndrome. Shoulder problems and damage would be expected when the biomechanical exposures are excessive and inconsistent with proper safe job design. For example, the standard way of jacking railcars was stopped at NS where Mr. Seal worked and carmen were having to jack them in the yard. Mr. Seal had to handle jack weights well in excess



of 50 pounds; the typical jack he and a co-worker would handle weighed approximately 185 pounds. With the attachments, a reasonable estimate of the weight that two workers would have to lift is 190 pounds. If the weight is ideally distributed between two workers each would be manually handling 95 pounds, however the weight would not be evenly distributed during the duration of a lift. Performing this task on occasion on the road (as discussed in some of my file material), due to an emergency need, is different than having to do the task on a more frequent basis over a period of several months. The boom lift (sometimes referred to as the re-wheel truck crane) on the NS work truck is limited in that in many cases jacks can apparently be set on one side of the track but not on the other side. And, even when the boom lifts and places the jacks onto the ground surface, they still have to be manually lifted and moved some by the carmen.

The next section of this report is titled "Qualifications/Experience, Curriculum Vitae, Case List, & Fees". My "Methodology - List of Materials Reviewed & Basis for Discussion & Findings/Opinions" in this matter are summarized in a subsequent section, and lastly there's a section titled "Discussion & Findings/Opinions". If other materials are produced, and if allowed by the court, I would like to reserve the right to update and/or supplement this report as such additional material or discovery may be generated and/or provided to me. For ease of reference in order to best communicate some findings/opinions in this matter I have specified questions at the end of the last section of this report (titled "Discussion Findings/Opinions") and provided responses accordingly.

Qualifications/Experience, Curriculum Vitae, Case List, & Fees: I am qualified to render the opinions expressed herein as a result of my formal engineering education as well as my experience in biomedical/human factors engineering, industrial safety, and ergonomics/biomechanics. I have earned my B.S., M.S., and Ph.D. (with major concentrations in Engineering Science & Mechanics/Biomedical Engineering and Industrial Engineering/Human Factors Engineering), and taught engineering and safety at The University of Tennessee for decades. I am a Board Certified Industrial Ergonomist and I have been extensively involved in research, teaching and consultation in understanding safety and musculoskeletal injuries and in evaluation of environments/systems as they pertain to safety and design. In addition to having served as the Director of The University of Tennessee's Engineering Institute for Trauma & Injury Prevention and Associate Director of The University of Tennessee Safety Center, I have been an Assistant Professor of Industrial Engineering, Principal Scientist and Associate Director of the Engineering Institute for Trauma and Injury Prevention, and an Adjunct Professor in the Department of Health and Safety Sciences. I have also served as The University of Tennessee's lead person for the Safety, Security and Human Factors Division of The University of Tennessee/Oak Ridge National Laboratory National Transportation Research Center. Additionally, I held an adjunct professor appointment in engineering at Virginia Tech for 13 years. I have taught numerous graduate and undergraduate college courses in engineering and safety that involve designing safe environments and human interfacing. For example, some of the courses that I have taught are titled Introduction to Human Factors Engineering; Industrial Safety; Safety Principles and Practices; Human Factors Engineering and Ergonomics; Human Factors and Product Safety Engineering; Advanced Human Factors Engineering Methodology; Problems and Research In Accident Prevention; Safety Instrumentation; and Advanced Topics In Human Factors, Safety and Biomechanical Engineering. I have conducted research on behalf of major automotive and motorcycle manufacturers, the

American boating industry, sports equipment manufacturers, the Occupational Safety and Health Administration, and various other industries, organizations, and corporations. I have consulted frequently in litigation and non-litigation related matters for injured parties in addition to various nationally and internationally recognized companies including numerous insurance companies, trucking companies, manufacturers of recreational vehicles and equipment, cruise lines, automotive manufacturers, major restaurant chains, etc. Much of my work efforts in my career have been in the areas of biomechanics of injury, human factors engineering, human interfacing, and engineering safety. I have studied and taught extensively in the scientific fields of human factors, biomechanics, & safety and with respect to understanding hazards as they relate to human interfacing with various products/systems/environments and with regard to engineering reasonableness. I have previously forwarded a curriculum vitae for your reference and disclosure purposes, and under separate cover have sent a listing of the cases in which I have testified, either by deposition or at trial, during the last four years. As you know, my fees for services are \$375 per hour plus reimbursement for related expenses associated with case-specific activity such as airfare, hotel, photographic prints, etc.; a fee letter has also been forwarded to you for your use in disclosure purposes in this matter.

Methodology - List of Materials Reviewed & Basis for Discussion & Findings/Opinions:

In accord with your request, I have reviewed available material and evidence associated with this case. At the end of this report I have attached some highlights from my review of Mr. Seal's deposition and NS' Corporate Representative's deposition. For reference purposes, associated page numbers are provided along the left-side of the attached deposition highlights. I have also attached medical records highlights for Mr. Seal. In developing my findings/opinions to date and preparing this report I have relied on the below list of materials specific to Mr. Seal's case, in addition to other documents and material as discussed below.

List of Materials:

- Deposition of Douglas M. Seal, taken 8/12/21
- Plaintiff's Personnel File [includes 40 documents]
- Plaintiff's Medical Records [237-page PDF document]
- Plaintiff's Employee History
- Plaintiff's Wages 2015-2018
- Norfolk Southern Carman Job Description
- Four types of Car Department Instructions
- Norfolk Southern Video titled "Raising It Safely - #8034"
- Car Wheel Change Using Combilift & Jack
- Wheel Change Line of Road
- Deposition of NS Corporate Representative Ryan Stege, taken 12/15/21

I have also reviewed and am relying upon various studies and other documents such as, but not necessarily limited to, the following:

AAR Ergonomic Guide, Vol. 1 (2 copies)
AAR Ergonomic Guide - Low-Back Pain and Manual Materials Handling, 1991
AAR Ergonomic Guide - Anthropometry, Seating, and Slips and Falls, 1990 (2 copies)
AAR - Biomechanics of Low-Back Pain, 1986

Workplace Ergonomics Survey and Analysis of Carpal Tunnel Syndrome Stressors, July 1990
AAR - Basic Ergonomics: Principles and Techniques, 1992
AAR Ergonomic Guide - Low-Back Pain and Manual Materials Handling, 1990
AAR - Basic Ergonomics: Principles and Techniques, 1992
AAR - Ergonomics Programs at Heavy, Industrial Corporations, by P.B. McMahan and G.B. Page, 1994
AAR: Research and Test Department - Environmental and Safety Research Division - Evaluation of Track Maintenance Equipment Design: Project Summary
AAR - Ergonomic Issues in Safety and Productivity: Ergonomic Issues of Seated Tasks, 1990
NIOSH - Musculoskeletal Disorders and Workplace Factors, 1997
AAR Evaluation of Tool Design and Method of Use of Railroad Hand Tools on Back Stress and Performance, by Paul McMahan and George Page, 1986
Ergonomic Committee Meeting Agenda, 03/04/97
Conrail - Ergonomic Workstation Review, 1994
Letter with meeting details regarding an ergonomic meeting, 07/31/91
Achieving Strategic Railway Objective Through Ergonomics - Symposium Outputs
letter from AAR VP to AAR medical selection, dated 11/01/96
AAR Ergonomics Workshop Guide with List of Attendees, 1990
FRA, DOT 49CFR225.1 - Railroad Accidents/Incidents: Reports Classification, and Investigations
FRA, DOT 49CFR225.5 - Definitions
The Right Track for Railcar Safety by Safety Management Group
US Patent for Hopper Car Gate Opener and Method of Operating a Hopper Car Gate
US Patent for Automated Railcar Gate Operating System
Article title "Industry's Most Dangerous, Difficult, Dirty Jobs made Safer, Easier and Faster to Perform
NS Ergonomic Policy
Video (NSRC), Ergonomics - Putting it All Together
1991 Letter NS Personnel RE: AAR Study
1992 NS Letter RE: Try to Reduce Force to Set Hand Brake
1986 AAR "An Evaluation of Tool Design and Method of Use of Railroad Hand Tools on Back Stress and Performance"
1993 AAR Document Showing Roby Attendance
1993 AAR Letter to Roby RE: Task Force
1993 AAR Task Force Agenda for NS
1993 AAR Task Force Memo with Hand Brake Systems
1993 Feb AAR Task Force Guided Including Ergo Design
1995 AAR Punwani Letter
1995 Letter NS Not Have Person on AAR Committee
1988 AAR Ergo Program Focuses on Fewer Back Injuries
NS Ergo Training 2006
Preventing CTDs of Upper Extremity
Roby 1995 Letter: Lever Type 125lbs Should be 30lbs

1993 NS Doc RE: Need to Adopt Ergo Program
1997 - 7-31 Letter Ergo Meeting Salb to Roby RE: CTD Ergo
1990 AAR Study RE: Handbrake Ergo to NS
1993 - 1-24 Memo From George Page
1994 - 9-19 Page AAR Comments on ANSI Z-365 Working Draft
1996 - 11-1 Letter from AAR VP to Med Section
1996 - 12-17 Letter to Dr. Prible from Chuck Taylor
1990 - 8-31 Letter from AAR George to William Westerman
1990 - 9-12 Letter from NS AVP Westerman to Roby
1990 - 10-5 Letter to Roby NS from Page at AAR
1990 AAR Ergo Workshop Guide
1994 Research Project 5 AAR & Moneray Tech
1989 - 3-27 AAR Ergonomic Guide Vol. I Draft
1990 AAR Ergonomics Workshop Manual
1991 AAR Ergonomics Guide Seminar Pre-Release Edition
1991 AAR Ergonomics Manual Pre-Release Edition
AAR 1990 Ergo Issues in Safety and Productivity Section 2
1990 AAR Ergo Workshop Attendees
1992 AAR Basic Ergonomics Guide - Principles and Techniques
AAR ErgoGuide Chap2 CTDs
1992 Letter AAR to Roby
Ergo Workshop for Front Line Supervisors
1992 AAR McMahon Memo
1948 AAR Ergonomics & Surgical Section Report
1994 AAR Prelim Benchmark of Ergo Program
1994 AAR Ergo Programs Heavy Indust Corps
1990 AAR Ergo Workshop Unit I
1990 AAR Ergo Workshop Unit II
1997 NIOSH Ergo Study
2000 OSHA Ergo Book
FRA 49CRF225.1
FRA 49CRF225.5
1995 Santa Fe Ergo Program
1994 BNSF Ergo Network Handbook
Ergonomics for Process Improvement
1994 Customer Service Dept Ergo Process
Conrail Ergo Awareness T&E Training
Conrail Ergo Policy and Process - Draft
Conrail Ergo Policy
1997 Ergo Committee Meeting Agenda 03/04/97
Conrail Ergo Team Train and Ref Management
1989 Conrail Ergo Shop Program
05/24/94 Memo B. Keller to W. Field
Ergonomics Process of NS Upper Extremity Update dated 09/08/95

Setting Up an Ergonomics Program
The Ergonomics Manual
AAR Interchange Field Manual Rule 13
AAR Standard S-736 Handbrake Lubrication
AAR Ergo Guide Condensed Controlling CTDs
1991 AAR Lifting Guides NIOSH
FRA, Title 49, Vol. 4, Section 231.27
NSRC Standard Work Document "Operating Covered Hopper Gates Specific & Standard Tool List
NSRC Notification Document Cancelling MSB-0028: Handling of Coupler Knuckles
NSRC Notification Document Cancelling MSB-0085: Lifting, Pulling and Pushing

I have also reviewed other materials (some of which, but not all, have been identified above too) such as the American Association of Railroads (AAR) Ergonomic Guide - [Low Back Pain and Manual Materials Handling, Includes PowerPoint Slides], October 1990; AAR Ergonomic Guide - Ergonomics Workshop - December 1990 [Draft October 31, 1990]; AAR Ergonomic Guide [Low Back Pain - and Manual Materials Handling - Pre-Release Edition, Includes Load Limits Job Analysis 2-D Chart]; AAR - Research and Test Dept. - Report Brief "Development of Proposed Program of Ergonomics" - [To Chief Safety Officers, Chief Medical Officers and Others, Authors: McMahan, Todd Brown, Tim Jones], July 1994; AAR Ergonomics Program Focuses on Fewer Back Injuries [Author: McMahan - "Injury from Over-Exertion is Responsible for About 60 of the Industry's Personal Injury Payouts," etc.], August 1988, Ergonomics Programs at Heavy, Industrial Corps. [McMahan, Page - Authors - Overview of Caterpillar, Abbott Labs, Alcoa and Forward Ergo Programs], February 1994; AAR Safety Section Annual Meeting - Florida [Ergonomics in the Workplace - AAR Research and Test Presentation - Todd Brown, etc.], 1994; AAR Committee Titles, 7/28/92; Ergonomic Analysis of Trackmen Activities [Report to AAR by Purswell, Woldstad, Virginia Tech Report], 6/1/91; NIOSH Technical Report "Work Practices Guide for Manual Lifting" - U.S. Dept. of Health and Human Services [Excerpt Only, 4 Pages], March 1981; AAR Ergonomic Materials - "Basic Ergonomics: Principles and Techniques" [Undated Published Version, 146 Pages]; AAR Ergonomics Materials - Cover Page States: "Chapter 4 - Case Studies" [142 Pages], Copyright 1992; Work Practices Guide for Manual Lifting - U.S. NIOSH [Full Version - 204 pages], March 1981; AAR Ergonomic Guide - Table of Contents and Load Limits Chart [2 pages], April 23, 1991; AAR Ergonomic Workshop - Low-Back Pain and Manual Materials Handling [List of Presenters, 3 pages], October 18-19, 1991; Employee Safety in Rail Transport: The Application of Ergonomics [McMahan and Page, World Safety Journal], 1/1989; Ergonomics Bibliography List (Items 1 -12); Work Measurement System Creates Shared Responsibility Among Workers at Ford [Shinnick & Erwin], 8/1989; Work Practices Guide for Manual Lifting [AIHA, 1983]. These above-listed materials, among others, are examples of knowledge associated with the risks of musculoskeletal injury in the workplace.

I have worked on numerous cases in the past involving musculoskeletal injuries to railroad/NSRC workers, have reviewed materials associated with discovery in those matters, and have inspected railroad work environments (including carman jobs, railcars, changing knuckles, handling jacks, etc); Such experience provides me with background knowledge; and, again, in developing my opinions and preparing this report I have relied on the above list of materials, in addition to my background, education, experience, and personal library.

The methodology I employed in this case is substantially similar, if not identical, to my efforts as a biomedical, safety, & industrial engineer having investigated thousands of accidents and/or work environments in a non-litigation setting as research for major projects. It is the way I have investigated risks on behalf of the U.S. government, state municipalities, major companies, and other organizations/entities involved in safety/biomechanical-related issues, research, and injury prevention technologies. My approach is the same approach that we teach Masters-level and Ph.D.-level engineers and safety-and-health graduate students with respect to evaluation of hazards and risks. We do engineering assessments to analyze potential exposures to humans, consider the human factors and safety knowledge-base, and compare them in order to understand risk to humans in various environments and under a variety of interfacing scenarios. A human factors methodological approach is used in the evaluation of the human, machine, and environment considerations and how they may or may not overlap or interact with one another and to understand how they are causally related to exposures and/or resultant injuries.

I performed my investigation on the subject matter just as a federal safety and health official would do in evaluating accident causal factors and assessing environments for injury risk. For example, I have performed research work on projects for the United States Postal Service and for the United States Occupational Safety and Health Administration (OSHA) in the past. In so doing, for example, I reviewed hundreds of OSHA's accident investigation files to assist its employees in improving their investigative techniques and propose possible intervention strategies for improved safety. The methodology that OSHA uses in investigating/assessing accidents is essentially the same that I use to evaluate accidents and human exposures. Basically, the process involves a fact-gathering process by reviewing workplace-related information that is/was documented that is related to exposures/tasks (to the extent the evidence exists), reviewing worker statements, obtaining potentially relevant information about the equipment and/or site associated with the workplace (such as photos, dimensions, objects involved, descriptions, etc.), and then considering all such information about the environment as it pertains to human exposure, causation, and injury risk. Differential consideration is given to the person(s), machine(s), and environment, in assessing the intrinsic and extrinsic factors in order to determine most likely cause-and-effect relationships.

The above described approach is widely used in the fields of human factors/ergonomics and safety. Root cause analyses of environments, machines/products, and human contributions is fundamental in understanding, and in determining how to avoid, ergonomic/safety hazards and prevent accidents and injury. In the upper-level and graduate university Industrial Safety, Principles in Safety & Health, and Human Factors/Ergonomics courses that I have taught over the years, we regularly emphasized the importance of understanding the knowledge of the individuals involved in activities or performing tasks, the nature of what they are doing and where they are doing it (premises/environment, using machines/vehicles/equipment), and how these directly relate to human interfacing, risks of injury, overall safety, human error, and/or reasonableness of conditions.

Discussion & Findings/Opinions: Mr. Seal was asked about his job duties and injury history in his deposition. As I mentioned earlier, I have attached highlights at the end of this report from my review of his deposition. Again, along the left-side of my highlights I have denoted the page numbers from the deposition for his various responses. The following truncated highlights contain some information from his testimony:

Page: **Highlights of Mr. Seal's Responses:**

- 7 Ptf's DOB is 12/30/66
- 8 Ptf has been with the railroad since 1989, as a carman.
- 9 Job Ptf currently holds, "Road truck. I would say that's the title, road truck carman. But we're on the repair track, in the yard, everywhere." Asked what a road truck is, "It's the truck they send out to do any kind of jacking or -- at this moment, we take it out to do any repairs or inspections on the cars at other locations other than John Sevier."
- 10 Ptf confirms he had surgery on his right shoulder, and that he was holding the job position of road truck before he had surgery.
- 11 Ptf confirms he would take the truck to do general repair work such as wheel changes, and that he would use portable jacks; Ptf confirms he's also done that after he returned to work in Feb. 2019. Ptf states that he is 5'6" without boots, and his weight is around 210-212lbs.
- 12 General weight through the years, "I fluctuate from there to 215, maybe 207.
- 14 Ptf confirms that he told Dr. Smith repeatedly that his job required him to lift weights up to 90-100lbs
- 18 Deponent also confirms he has: kneeled, squatted, carried objects, pushed and pulled, and lifted.
- 19 Deponent confirms that as a carman, he uses his arms, shoulders, back, hands, and legs to perform his work, and has done so since 1989.
- 20 Deponent confirms the job of a carman is to deal with replacing car wheels; also confirms that at John Sevier, they have a RIP track.
- 21 Deponent confirms that in the RIP track, they had hydraulic devices that would raise the car for you; also confirms that another way to deal with the wheels is to use a jack to lift the car out in the field. Confirms that with the RIP track, you get to do the work inside, out of the weather, that it doesn't take as long, and you don't have to worry about dropping the car. Deponent confirms that being at the RIP is more productive and efficient. Confirms the yard out at John Sevier was what they would call "idled".
- 22 Confirms that when the yard was idled for various reasons, the RIP track was also idled, for a couple of years; confirms it was started back up sometime in November 2018. As part of his road truck job, he still would jack cars on the line of road at the various places.
- 23 Deponent confirms it's potentially dangerous work.; confirms he's been instructed about the potential danger of carman's work throughout his career.
- 45 Ptf does not recall watching a video on car jacking procedures back in 2003; says he's seen the video, but doesn't remember if it was 2003. Asked when he remember seeing the video, "For it to be imprinted in my mind as my job and to have to be critiquing it to the ninth degree was after I had become a truckman."
- 49 Agrees that when jacking, you generally have another man working with you.
- 50 Asked how he would go about jacking a car, "Well, prior to even putting those down, you want to recognize what's going to be under the base of it. If you don't have bridge ties or a concrete jack pad already in place, you have to determine how much ballast is under it, where solid ground is, or if you got enough ballast that you can -- how many boards you need to put down to come up to the beam or the ties to place the jack pad on."
- 52-53 Ptf was asked if they would use the boom to move the portable jack over and put it on top of the jack pad or as close as possible, "You try to get it as close to the jack pad as possible, and there -- I mean, it would depend on the height of the side sill on a car if you would be able to set it on the jack pad. And that would be on the near side only."

- 53 Confirms that part of the job is that they have to put the portable jack on top of the metal jack pad and blocks; they do have handles. They have to lift it 1-2 feet to get it on top of the pad.
- 54 Using the boom, "... You can get it -- you could actually set it right at the pad, if you can't get it under it. But the other side, you're not going to, you're just going to go to the corner of the car and that's it."
- 55 Generally, the truck on the A end and the truck on the B end are close to each end of the car. Confirms they would have to move the portable jack on one side of the car to get it to the place where they were going to put it on top of the pad, and that would be anywhere from 3-8 feet in distance. Confirms it would be a two-man job, and they would have to pick it up.
- 63 Confirms that Exh 12 is a photo of an aluminum jack pad that he would use; estimates they weigh 30-40lbs. Asked how they would put them down, "We would normally set it off the truck in the middle of the track and -- it depends on what the other one's doing, if one of them can -- you can get it and set it on both sides or one, it just depend on if you both were at that point in the job that you just each grabbed one and went to one side and put it on."
- 69 Removing the trucks, "You would use a -- we keep a push/pull pole on the -- in the bed of the truck that we use, if there's no severe slid flats or buildup that you can't move by physically pulling."
- 97 Ptf's claim, "We lifted the jacks to put them in place, to reset them on 13 pocket as well as everywhere we went to jack."
- 98 Ptf confirms that his claim in this case is that he had to lift the portable jacks at the number 13 pocket track in John Sevier Yard and all the other places listed earlier in his deposition [on pg 9-10]. Confirms that other than the number 13 pocket track, he still had to jack line of road cars for wheel changes in all of those places, "Almost all of them that we'd talked about." Ptf asked if he still handles the jacks in the same way that he's always handled the jacks, "By the handle, yes. But I'm using the left arm. Even the guys I'm working with will make sure I'm on the right side and -- because I just don't want to hurt the shoulder again."
- 99 Confirms that when the John Sevier Yard was idled in May 2016, the RIP track was also idled. What Ptf's job was before the yard was idled, "I was working in the forwarding yard." What he was doing, "Lacing hoses, and inspecting, brake tests, yes, sir." Ptf confirms that prior to going to the yard, he was doing work at the expedite track. Ptf was told the yard was going to idle the night before they did it.
- 128 Ptf asked if he ever personally asked Mr. Strickland why they did not re-open the RIP track, so that they could be inside, out of the weather, and more efficient, "I did, as well as everyone else."
- 128-9 Ptf asked if he would rather do a job where he is not outside in the weather, "Yes. And I would rather done it up there, where you didn't have to worry about those road truck jacks."
- 129 Confirms that he had to worry about the road truck jacks anyway because he was jacking cars in all of the other places, "And that was -- I can tell you, the stress level, the anxiety and the fear that we had at that time on the line of road, especially line of road with some iffy places, then to come into the yard and have to do it there knowing that we couldn't have done it on a RIP track." Confirms he talked to Strickland and Kennedy about re-opening it.
- 129-0 What deponent told Strickland, "We would basically just ask him why that the RIP track was unavailable for us to jack on. Because we knew they were certifying and inspecting the jacks every year. They removed them out of track one and track three but they left them in two. So we know that it was intact to work. But we weren't allowed to use it. So we knew that that would be the safest place for us and where it would be a whole lot easier and less stressful

- to have jacked these cars while they were in the yard.”
- 130 Ptf says he said the same thing to Kennedy and Chambers. Confirms they all complained about having to jack the cars outside when the cars were in John Sevier, as opposed to inside the RIP track. Asked if Ptf made any other complaints, “No, as far -- but as far as -- when we'd be -- the only thing that we would have said after that, in our concerns about not being able to use repair track, as far as jacking in general, would be questioning about having jack pads put in wherever else we were going to regularly be jacking.”
- 142 Asked about Exh 39, and his medical visit on 03/02/17, where it says Ptf has sharp pains if he tries to lift heavy objects or do a pull up; what heavy objects, “Anything heavy. I would have thought -- at that point, I had the -- when I read this, the only thing I could think of at that time was that I'd had the tennis elbow, and I even had a brace to keep wearing on it because it would hurt in the lower bicep.” The heavy objects referred to include portable jacks.
- 143 Discomfort when he would lift the portable jacks, “It would just depend. I mean, it didn't hurt all the time, every time. It would be how many times I did it or -- and if -- say if that -- my right arm or my left arm, I've had it in both of them, with the tennis elbow stuff, you know, you go with the one that doesn't hurt. So it ain't like you just grab it and hurt.”
- 144 Ptf would lift heavy objects up to 90lbs regularly, “That would not be the jacks. That would be like a knuckle, I think they're closer to 90, or 60, somewhere in there.”
- 145-6 The record states that he had pain for 2 years, “I probably said -- the last couple, as far as from the latter end of -- or somewhere around '17, the latter end of '16 coming into '17. Because by that time, I'd been jacking quite a few times.”
- 146 Deponent confirms there is no question in his mind that the pain he was having was as a result of jacking the cars. How much the jacks weighed, “Hundred and eighty-five. And that's without the adapter on it. You may have it on there and have to move it off of the jack pad to re-adjust or something. So you're going up to two-hundred- and-something pounds.” Confirms that there would be two people lifting the jack.
- 147 The medical record states that Ptf's shoulder started hurting when he started his new job at the railroad; confirms that is working the work truck; the record is dated 07/23/18. Ptf asked if he told anyone at the railroad that lifting the jacks was hurting his shoulder, “Some of the guys that I would work with, I'm sure that I complained about it aching.” Probably started complaining about his shoulder in 2017 or 2018.
- 163 Asked if the pain got worse and worse as time went on, “It just -- it never was just like a crippling pain or anything, just a ache, until, like I said, April 2018, after -- it was three or four days we had jacked in a row, and that one morning I got up and I couldn't even reach up and touch my face. So I knew then that it was way more than a little ache or anything like that.” Confirms that everything began happening after he changed to that job and started handling the jacks.
- 164 Ptf asked if the only time he would handle overhead work would be climbing on cars in order to reach up and also when putting blocks back on the bed of the truck, “Right, getting them off and putting them back. Or if you were underneath the car, unhooking the brakes or something, your hands are going to be above you.” Has not jacked in the dark, “Yeah, it was daylight. Because everything fell to first shift at one point, when a time change would happen, to where it'd be dark at 5:00 o'clock and second wouldn't be able to jack at all, then every bit of it was on day shift.” Confirms they were allowed to jack a car adjacent to a live track.
- 167 Ptf confirms he was off work from 07/17/18-02/13/19.

Ryan Stege testified by deposition on 12/16/21 on behalf of Norfolk Southern as their corporate representative in Mr. Seal's case. Mr. Stege is the director of locomotive operations and maintenance for NS. The following truncated highlights contain some information from his testimony:

Page: Highlights of Corporate Representative Ryan Stege's Responses:

- 16 Documents deponent reviewed to prep for his depo today, "So Schedule A mentions the 50-pound lifting bulletin or it mentions lifting 50 pounds, so MSB-0085 is one of the documents I reviewed. Also the ergonomics Power Point training, I reviewed that again. I also reviewed videos that were prepared showing carmen using these jacks that are in question for this deposition."
- 17 Asked to tell about the ergonomics Power Point, "So the ergonomics Power Point is training that lists steps employees should take to keep themselves safe when they're handling the equipment and the tooling that railroading brings...Knowing their own limits is another one of those key steps in that training as well."
- 23 States that there was input between all the division managers and shop managers when the bulletin was being drafted; the bulletin is made Exh 2. Deponent asked to review paragraph 1 in Exh 2 and tell what he knows about that, "So Paragraph 1 sets up that this document is about the work that we do in the mechanical department. That work requires lifting, carrying, pushing, or pulling various objects and tools, and then employees are responsible for knowing their physical limitations and taking precautions to ensure these limitations are not exceeded."
- 24 Asked if supervisors of NS are to enforce the bulletin in Exh 2, "Yes, sir, all rules and bulletins in effect at any given time are what the supervisors are wanting to make sure the employees are complying with, and employees, for their own good, are responsible for their own safety. Most employees you talk to are conscientious enough to know that they want to follow the rules." They no longer enforce the bulletin in Exh 2 because it was cancelled in November 2019, "It really has to do with that last sentence in that first paragraph we read, that employees know their own limits and an employee should keep himself to those limits. The limits that a bulletin has in it are not necessarily applicable to the limits each individual employee would have."
- 24-25 Asked if an employee feels they cannot lift more than 30lbs, are they not supposed to lift more than 30lbs, "I think 30 pounds is a little bit of an extreme case. The work that we do on the railroad, they'd have a hard time working in the mechanical department if 30 pounds was their limit, but to your point, yes, sir, each employee should know what their limit is and avoid putting themselves in a position where they're over that limit."
- 25-26 Deponent's understanding of the 2nd paragraph in Exh 2, "Yes, sir. So Paragraph 2, there was a lot of work leading up to when this bulletin was issued in 2013 where tools that could be adjusted or redesigned or improved upon, we did a lot to improve leading up to 2013 to get as close as we could to lighter tools and easier to handle tools. So at that point, one of the things that sticks out in my mind was the Pennsy rerailer. We actually had that redesigned so that it could be lifted by two employees and not put a single employee over the 50-pound lifting limit. That's what was set in this paragraph here."

- 26 Exh 2 was one of the bulletins dealing with a two-person lift; asked if there are any more, "I'd want to go look through the safety and general conduct rules again to see if a two-person lift is mentioned in those to answer the question."
- 27 The recommendation at the time Exh 2 was issued was 50lbs per person, and 100lbs per two people, "That was what was set to increase awareness on employees and make them think about what they're lifting and what they're handling at any time." Asked if that was the standard they enforced during that period of time, "While this bulletin was in place, that's correct"
- 28 Deponent asked what means of physical lifting has been made available to a mechanical carman having to remove wheels from a car and replace them with other wheels, "Yes, sir. The road truck that the employees use, all of those have been outfitted with a crane as well as kitted material and tools so that all of that can be handled as much as possible with that crane from that truck." What deponent means by that, "So, for instance, the jacks. The jacks are in one kit or one box where, you know, two jacks are in the box together with the hydraulic pump where they're lifted as a kit off of the truck. That reduces the number of lifts that have to be made and makes it so that it's easier to handle the crane and reinforces the employees for using the crane as much as possible."
- 29 Deponent has seen a video by NS that shows the crane being used on both sides of a car. Asked if in deponent's opinion, did the video show them putting the jacks on both sides of the car, "Yes, sir. They couldn't reach the jacking pad on the far side, but they could set the jack to the far side."
- 30-31 Equipment a carman would use to perform the task of jacking, "So there's quite a bit. I mean, the Standard Work Document is probably the easiest place to see that list of equipment, but the jacking pad is usually the first -- well, let me go back to the blocks. Usually the blocks are used to set a level spot for the jacking pad. The jacking pad is set down with that. Then there are the hydraulic jacks themselves. There's the hydraulic pump unit or power unit that powers the jacks. There's the hoses that go between that equipment. There's the controls for that jack. There's levels to check the jacking pad. There's a safety level to monitor the car. There's a -- if the trucks are going to be removed, there's a safety stand and more cribbing or blocking that can be used with that to support and be a backup to the jacks while the truck is removed from under the car. There's the replacement wheel. There's straps and chains and lifting rigs that go with all of the above to use with the crane to lift all of that equipment. Then there's usually at least two carmen to go with it."
- 31 There have been times when more than two carmen will do that task. How it was determined that this was a two-carman type job, "Mainly around watching the car, one of the worst things to happen is to drop a car. So two carmen are used so that both sides of the car can be monitored. Sometimes it's difficult for one man to see both sides, but there's the safety level and all the other things added to support both men doing the job safely as well." The hydraulic jacks weigh about 187lbs; that's just the jack itself.
- 32 Collars, "Yes, sir. So as the jack goes up, there's steel collars or aluminum collars that are put in around the jack shaft, and that is to back up -- if the hydraulics were to fail, the jack would rest on the collars instead of going all the way back." Does not know how much the collars weigh; how many collars can be added to the hydraulic jack, "Depending on how far they have to jack the car up, there's a couple on each side." Deponent confirms that once the road truck crane puts the hydraulic jack as far as it can on the opposite side of the car

- that the two carmen then have to carry that to put it in a proper position, "Yes, sir, to get it on the jack stand or on the jack pad, excuse me, where it would need to be to lift the car."
- 33 The jack pad usually sits about three inches above the level of the ground. Asked if he would recommend two people trying to drag a hydraulic jack through ballast to put it in position, "There's no reason why it couldn't be dragged right up against the jack pad, but it would have to be lifted three inches to set it on the jack pad."
- 34 Asked if dragging it is a recommended way of doing it, "That would honestly be up to each employee on what they could do. To move it is not bad with two people. We do it hundreds, even thousands of times safely all the time, and these carmen will tell you they're able to do it safely. You only have to lift it enough so that you can move it up against that jack pad and then lift it that two or three inches further onto the top of the jack pad. There's no height lift or, you know, raising your arms up above your head or anything like that. We're talking about something that's even got handles put on it by the manufacturer for that easy lift onto the jack pad."
- 40-41 Asked how the 50lb weight restriction was developed, "... There were discussions about how to increase awareness on what an employee pays attention to lifting. Just like a speed limit helps you pay attention to your speed going down the road, having a lifting limit helped employees pay attention to what they were about to lift and what they were about to handle whether it was lifting, pulling, or pushing, as the bulletin is titled. So 50 pounds was chosen just as that limit to help increase that awareness of what an employee was about to handle at any time and to require the job briefings and the extra care needed when more than 50 pounds was going to be required such as when we're talking about these jacks here as well."
- 41 Asked if the 50lb limit came as a result of speaking with ergonomic people, or studies, "No, sir, there's nothing magical about the 50-pound number. That's like saying that, you know, if you lifted something that was 50 pounds, but don't do something that's 51 because it'll hurt you. You know, that just doesn't make much sense. You could hurt yourself with less if you lifted incorrectly."
- 44 Rules about walking on ballast, "I don't have the numbers in front of me. I'd have to look them up, but they generally talk about watching your footing at all times and watching out for tripping hazards, loose ballast, the things that would cause you issues walking on ballast."
- 45 Deponent asked if he would agree that walking on ballast is more difficult than walking on level ground, "No, sir, I don't categorize it as more difficult..."
- 47 Deponent asked if he had any alternatives that he could give the two-man crew to having to either pick up the hydraulic jack and carry it or drag it, "No, sir, there are going to be times during a wheel change where lifting that at least up onto the jack pad is going to be required to do the job." Says that there are wheel changes that have to be done in the yard too; it depends on the wheel defect.
- 48 Deponent asked if he would agree that in the yard, the majority of wheel changes are done at the in-ground system, "If there is such a system at that yard, I do agree with that in general." Deponent confirms there was such a system at the Sevier Yard in Knoxville during the time period between 2013 and November 2019.
- 49 Deponent does not know where the amount of weight of 50lbs was derived for the job description in Exh 1. Asked again if that would be assuming that lifting up to 50lbs would be a safe amount to lift, "Once again, it's not necessarily the weight. It's how the work is done that would say whether it's safe or not or done safely or not."

- 50 What 'I'm coming home' means, "It was a safety slogan, a safety campaign and safety slogan, that was released by the company. I don't remember the year, but it was at one of the big annual safety meetings and they released that, and it was a focus for at least a year or two about doing the job safely, not using brute force but paying attention to how you do your job through the day so that you go home safely at the end of each day of work. That's where the "I am coming home" -- I am coming home safely was the campaign."
- 57-58 Asked if they have done any studies on the harmful effects of lifting over 50lbs for a line of road carman, "The problem to me with the question is that when done properly using the handles that are provided, using the crane as close as they can get it to the jack pad, and all of those things, there are no harmful effects. An employee, knowing that he's not supposed to use brute force..."
- 59 Asked if Norfolk Southern knows what type injuries can occur to carmen lifting in excess of 50 pounds, "I'll restate my previous answer that injuries can occur even without lifting with improper twisting and other things that could happen. So, yes, Norfolk Southern has seen injuries that can occur irregardless of the amount of weight that's being lifted or handled when done improperly."
- 61-62 Deponent was asked if Norfolk Southern realizes that when these two men on the carman crew, on a line of road crew, have to change out wheels that they are going to lift at least 90 to 100 pounds each in the performance of the job, "For that short distance to get it onto the jack pad, yes, sir."
- 62 Deponent asked to define brute force, "So brute force would be lifting or pushing or pulling with a jerking motion or also it could be defined as brute force would be at the limit or beyond the limit of the employee."
- 62-63 Asked what Norfolk Southern's expectation is about an employee lifting beyond their own known and identifiable limitations, "It's covered in our safety rules and it's covered in the bulletin that was in effect that we've been discussing, MSB-0085. That second sentence in the first paragraph says that employees are responsible for knowing their physical limitations and taking precautions to ensure these limitations are not exceeded."
- 67 "Based on the location this work has to be done, the crane can't reach around the corner of that car. It has to be lifted onto that jack pad by the employees."
- 71 Doesn't believe the ergonomics training Ptf received described pulling heavy objects through ballast. Asked if there is any other area where they would have to lift the jack, "It depends on where you were able to place it with the crane. If you got it to the edge of the jack pad, then you would just have to lift the three inches to the top of the jack pad. If it was at the corner of the car and the jack pad was two feet back from there, then you would have to move it the two feet and then up the three inches to the top of the jack pad." Asked if deponent would take issue with Ptf and other carmen testifying that they would often have to carry the jack 6-8 feet, "I think that distance sounds a little long from the corner of a car to where the jack is typically set."
- 72 Deponent asked if he thinks it would be proper to drag the hydraulic jack and still be in compliance with the ergonomic regulations as set forth by Norfolk Southern, "Yes, sir, it could be done. Like I said before, the employees in their job briefing can decide to lift it, too, and still be in compliance."

As stated in the Introduction section at the beginning of this report, the intention of the following numbered questions and corresponding responses are to provide you with a succinct organized summary of some findings/opinions for ease of reference:

1. What ergonomic issues may be implicated by the nature of the work Mr. Seal did while at the railroad?

Doug Seal's work at the railroad involved exposure to ergonomic/biomechanic risk factors consistent with his musculoskeletal injuries. He worked in a manual type of job that involved exposures such as force (e.g. opening/closing doors, lifting objects), repetition, awkward postures, and cold temperatures. Again, these risk factors are widely known and have been recognized for decades as being causative and related to the development of cumulative (wear-and-tear) and acute bioengineering compromise of musculoskeletal components, and including (but not limited to) the shoulder specifically.

For example, while handling heavy jacks, Mr. Seal was doing his job to the best of his ability and there is no indication that he violated any safety rules or policies. Mr. Seal was simply doing the task as he was expected to do it, and NSRC did not charge him with any rule violation. NSRC, however, inappropriately and unnecessarily exposed him to a hazardous manual task. Remarkably, it is NSRC's position that lifting and moving a 187+ pound jack with two people is not bad and they do it thousands of times "safely". NSRC apparently believes that just because an acute injury is not reported when such a task is performed then it is being done "safely" in spite of gross inconsistencies with proper safe job design and widely-accepted industrial safety practices that would indicate such exposure is inappropriate. NSRC ignores their own ergonomic training and a plethora of well-established standards of care and guidance with regard to proper manual materials handling.

Even though a worker may handle approximately half the weight of a heavy jack without a noticeable significant acute incident, the probability and likelihood of injury risk and cumulative exposure is inappropriately increased and can result in the possibility of excessive and variable force exposures over time when workers are permitted and/or expected to do such a task repetitively. As an analogy it is kind of akin to using a tire on a passenger vehicle when the treads are very low and worn/damaged; you can drive and the vehicle functions fine and seems to get you from point "A" to point "B" without any issues or problems until one day it catches up with you and "pop", you have a blow out and run the risk of being injured in a car wreck. Permitting workers to handle weights in excess of recognized acceptable levels may appear such that they seem to do the task multiple times without any notable or "permanent" musculoskeletal injury occurrence, but in actuality their exposure often results in risk causing them to sustain an injury that is acute or often cumulative in nature (until they eventually experience the "straw that broke the

camel") and it pushes one or more musculoskeletal components to a significantly damaged state biomechanically, such as their shoulder. This is the precise reason why proper job design is necessary and important with respect to being able to ensure that carmen and other workers are not subjected to unnecessary and unreasonable risk.

Also, NSRC untenable position in this matter is a blatant disagreement that walking on ballast is not more difficult than not, in spite of their own training materials and videos that talk about the difficulty of walking on ballast and the potential for slips and problems while doing so. Unbelievably, NSRC even suggested that two workers dragging a 187+ pound jack in the ballast over to a jack pad and then lifting it "3 inches" to place it on a jack pad is an approach to performing the jack handling task. This is surprising and has potential biomechanical disaster written all over it from a workplace hazard standpoint; pull forces would spike to extreme levels well in excess of accepted values and there is good potential for an individuals hand to slip while trying to drag the jack causing sudden and unexpected excessively large spikes in force exposure to their co-worker in addition to the potential for the heavy jack to fall over onto a worker's lower extremity. This is exemplary of NSRC's lack of a proper job design from a safety standpoint. When pressed about this suggestion that the workers could just drag the heavy jack, NSRC said that would honestly be up to each worker. Again, leaving such decisions up to workers without reasonable job design, guidance, and training in how to perform tasks within reasonable standards of care is a formula for an unsafe environment and unnecessary and unreasonable cumulative trauma (and/or acute trauma) will likely persist.

Note that in the above paragraph I put "3 inches" in quotes. It may be worth expounding on that value that was testified to by NSRC's corporate representative. The 3-inch testimony is misleading because the task involves placing the jack onto an aluminum jack pad which would be 3 inches, however, evidence indicates that there would be wood blocking present too, likely being a minimum of 3/4" plywood on up to approximately 2 to 4 inches for oak blocks. Also, when asked about Mr. Seal and other carmen claiming that they would often have to carry the heavy jack 6 to 8 feet NSRC's corporate representative testified, "I think that distance sounds a little long from the corner of a car to where the jack is typically set". My experience would indicate that NSRC is incorrect in that position, and that 6 feet would be a common distance for various railcars, and some boxcars and other container cars may even involve distances of up to approximately 10 or 12 feet.

Mr. Seal was exposed to musculoskeletal forces well in excess of recognized accepted values in that he regularly had to lift 83 to 100 pound objects (for example in handling knuckles and the shared weight of jacks). It is useful to note that from an industrial safety standpoint maximum acceptable limits for 2-handed simple push/pull force exposures typically range from 30 to around 75 pounds and the maximum recommended weight limit for lifting is 51 pounds (under ideal posture

variables). It is worth noting that NSRC denies that their 50-pound lifting limit came as a result of ergonomic or scientific studies though. It is this type of exposure and lack of recognition by NSRC of the risks associated with such that results in high forces being transmitted through the upper extremities that put workers at unreasonable risk of musculoskeletal injury.

Bottom line, NSRC failed to design Mr. Seal's job properly in order to reasonably address recognized hazards associated with exposure to risk factors for shoulder injury. NSRC failed to properly implement appropriate training and, most importantly, reasonable engineering/ergonomic controls to help sufficiently reduce risk to Mr. Seal.

2. Did NSRC have knowledge and apply that knowledge properly with respect to ergonomics and avoidance of musculoskeletal disorders and overexertion injuries (due to exposures and related issues) that should have prevented Mr. Seal's injuries?

NSRC safety personnel and management should have been well aware of proper job design procedures and should have known of the ergonomic hazards in the tasks that were assigned to Mr. Seal. Classic industrial safety and appropriate occupational safety & health principles have indicated for decades that workers should perform tasks well below their strength capability limitations. NSRC has significant materials in their internal files regarding proper job design practices with respect to ergonomics. Although NSRC has stated their position in this case that their workers are not supposed to use brute force (and NSRC says that could be defined as being at the limit or beyond the limit of an employee), yet the nature of the jack handling task is such that a worker will likely have to use brute force as it is characterized by NSRC.

The Federal Employers Liability Act of 1908 requires that railroads such as NSRC provide their employees with a reasonably safe place to work and with reasonably safe and sufficient tools and equipment. The Occupational Safety and Health Act of 1970 clearly states [29 USC 654 Section (a)(1)] that it is the general duty of all employers to provide their employees with a reasonably safe workplace free from recognized hazards. NSRC failed in its responsibilities. NSRC failed to perform comprehensive worksite and job evaluations to assess the risk factors present in Mr. Seal's job. NSRC did not implement an ergonomics program that included proper methods training for the workers and supervisors, re-design of jobs to minimize recognized hazards, and appropriate medical management and intervention (even though a "paper draft/outline" of such a program was developed by an employee of Norfolk Southern, Bill Roby, back around 1990. Bill Roby was Norfolk Southern's main employee responsible for internal ergonomic-related safety issues.

NSRC failed to apply appropriate job design procedures creating an unsafe place to work for Mr. Seal. NSRC put their workers in an unreasonably hazardous environment by requiring their employees to work in the manner that Mr. Seal

worked. NSRC's own internal training video pertaining to jacking equipment indicates that manual handling a heavy jack is a two-man job, yet states several times that they are heavy and that workers should "avoid lifting and carrying jacks as much as possible", yet again, in Mr. Seal's case NSRC takes the position that handling it with two people is fine and they do it thousands of times "safely". Permitting workers to do something repetitively that they should avoid as much as possible is not reasonably safe.

There are other ergonomic/biomechanical exposures that add to the risks in Mr. Seal's job and equipment/railcar jacking task at NSRC. In addition to manually handling and lifting jacks, he has to manually handle center seal stands and blocking materials. NSRC's training video explicitly repeats this guidance again by stating "avoid lifting heavy objects like the stand and the jacks unless you absolutely have to". I mentioned knuckles already, but it may be interesting to note that for quite a while NSRC evidently made it mandatory to have two men carry a knuckle (which weighs approximately 83 pounds), which would result in each worker generally bearing less than the NSRC's 50+ lb weight limit guidance. Mr. Seal would also pull trucks out and do task such as prying on truck sides in order to change brake beams.

Numerous internal NSRC documents demonstrate the awareness and knowledge that NSRC possessed on a corporate level about various risks. I have thousands of pages of NSRC internal documents (bate-stamped with an "MSD" designation) from their "ergonomic production" from the 1980s and 1990s that show extensive knowledge about use of appropriate engineering controls and proper job/task analyses for reduction of risk. I have reviewed approximately 12,000 pages of NSRC "MSD" documents in hard copy form in the past. Even though significant scientific literature and guidelines existed for many years providing recommendations to appropriately and reasonably design work environments to minimize risks of musculoskeletal injuries and acute & cumulative trauma, NSRC did not appropriately implement them. To supplement many of the materials that I listed in the previous section of this report, as an attachment I am also providing a "Partial List of Potential Relevant Literature" that is simply a sample list of some related type of ergonomic literature.

3. Did NSRC provide a reasonably safe place to work and/or were there reasonably safe ergonomic work practices in place at the time Mr. Seal was injured?

My short answer is "No, NSRC did not". NSRC did not provide a reasonably safe place to work for Mr. Seal. NSRC failed to appropriately minimize recognized hazards. His work was unreasonably dangerous due to a lack of appropriate engineering and/or administrative controls. It is foreseeable and understandable to NSRC that Mr. Seal would be injured from the exposure of manually handling the jacks in addition to his other exposures. It was essential that NSRC understand the potential adverse effects of these tasks as opposed to taking on the position that its

not bad and can be done safely, when such work is seriously inconsistent with common and widely-accepted industrial safety practices. The railroad should have properly assessed the human/equipment interfacing aspects of Mr. Seals' work prior to exposing him to unacceptable risk of injury. Reasonable and appropriate/proper job design, job safety analysis, hazard identification, risk assessment/evaluation, and training should have been properly applied to the workplace.

Proper ergonomic job design is essential to ensure a reasonably safe place to work. Having a common practice and method that regularly involves workers having to apply high forces and/or utilize their strength capabilities close to their maximums is wrong and subjects them to unreasonable risk of musculoskeletal injury. In certain circumstances it may take longer to use mechanical assist devices or design jobs/equipment to be handled by multiple workers, but this is precisely how risk can be reduced to appropriate levels. Appropriate engineering and/or administrative controls and training should be in-place and implemented in order to ensure workers are not exposed to unnecessary risk of cumulative and/or overexertion injury. "Overexertion" in this context simply means that an individual has performed a manual task that pushed them beyond their physical capacity.

The railroad failed to provide proper job design and training to Mr. Seal concerning recognition and exposure to the potentially injurious condition on his job. This is inconsistent with OSHA Safety and Health Standards for the Construction Industry [Reference 29 CFR Part 1926.21 (b)2]. Note that OSHA has cited railroads for violation of its construction industry standards in the past. Also, with respect to examples of other standards of care, you may want to refer to the General Code of Operating Rules (GCOR) in that there are many rules relating to safety being the most important aspect of the railroad work environment and the need to take the safe course (e.g. rules 1.1+ and 7.1, etc.).

4. Did NSRC follow industry standards relating to ergonomic practices as it relates to the circumstances of Mr. Seal's job?

This is an important question and, as I believe I have already stated, NSRC did not follow reasonable industry standards relating to ergonomic practices as it relates to Mr. Seal's workplace exposure.

According to recommendations by the U.S. Department of Health and Human Services National Institute for Occupational Safety and Health, NIOSH, the work practice of lifting objects as required by Mr. Seal's railroad work needs to be redesigned (such as having to handle heavy equipment/items such as anything exceeding 51 pounds; for example, such as half of a heavy jack or knuckle). NIOSH's Work Practices Guide for Manual Lifting has been available to industry since 1981 and has clear recommendations with respect to "recommended loads" for tasks. An amended version of these lifting recommendations was published in the early 1990s, and, in comparison, is even more conservative with respect to its recommended weight limits. The referenced NIOSH guideline establishes some of

Mr. Seal's assigned work as unacceptable. Supervisors and workers need to be trained in order to understand what is considered to be unacceptable. It may be of interest to note that the Association of American Railroads (AAR) developed a microcomputer-based and IBM-PC version of the NIOSH lifting guidelines. Both versions were made available, free-of-charge, to the railroad industry for quite some time; the software is discussed in more detail in a 1984 AAR Report (R-592) titled Applications of Biomechanical Principles and Models to Reduce Railroad Injuries from Physical Exertion.

Risk factors that are associated with the development of acute and cumulative injuries are commonly understood within the safety, ergonomics, & biomechanics fields, and implementation of ergonomic changes to minimize and/or appropriately reduce risk of injury to the upper extremity (and other musculoskeletal components) is commonplace. Joints, and particularly the shoulder, are susceptible to "acute" and "cumulative" damage due to "mechanical exposures" (e.g. force, sudden accelerations/decelerations, postural influences and repetition). I have reviewed voluminous amounts of literature which discusses this susceptibility to these occupational risk factors such as repeated physical activity, awkward postures, and forceful activity. These risk factors have been recognized for decades and have been well documented in written literature. The literature was significantly abundant on these topics in the 1970/'80s and certainly other publications existed pre-dating that time period. I'm relying upon numerous scientific peer-reviewed publications and sources such as OSHA, the National Institute of Occupational Safety and Health, the Center for Disease Control, the National Academy of Sciences, the General Accounting Office of the U.S. Government, Association of American Railroads (AAR) documents, the United States Federal Railroad Administration, the American Academy of Orthopaedic Surgeons, the American College of Occupational & Environmental Health, "Healthy People 2000" published in 1990, and other scientific papers, journals, and literature. Also, as I mentioned earlier, numerous internal NSRC documents demonstrate the awareness and knowledge that NSRC possessed on a corporate level about the risks. Even though significant scientific literature and guidelines existed for many years providing recommendations to appropriately design work environments to minimize risks of musculoskeletal injuries, NSRC did not reasonably implement them.

If you have any questions or need anything further please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tyler Kress", with a stylized, flowing script.

Tyler Kress, Ph.D., CIE

Page 21 (Kress to Ferguson)
Re: Seal v. NSRC Report
January 14, 2022

enclosures

Curriculum Vitae, 4-yr Case List, & Fee Letter (sent separately)
Deposition Highlights (attached)
Medical Records Highlights (attached)
Partial List of Potential Relevant Literature (attached)

Douglas Seal Deposition Highlights

BAKER

- 7 Ptf's DOB is 12/30/66; he is currently 54 y/o.
- 8 Ptf has been with the railroad since 1989, as a carman. His current supervisors are Ven Skeen and Keith Sweeney. Deponent confirms he is currently working as a carman at NS, regularly and continuously without criticism.
- 9 Job Ptf currently holds, "Road truck. I would say that's the title, road truck carman. But we're on the repair track, in the yard, everywhere." Asked what a road truck is, "It's the truck they send out to do any kind of jacking or -- at this moment, we take it out to do any repairs or inspections on the cars at other locations other than John Sevier."
- 9-10 [Discussion of locations where the truck will go.]
- 10 Ptf confirms he had surgery on his right shoulder, and that he was holding the job position of road truck before he had surgery.
- 11 Ptf confirms he would take the truck to do general repair work such as wheel changes, and that he would use portable jacks; Ptf confirms he's also done that after he returned to work in Feb. 2019. Ptf states that he is 5'6" without boots, and his weight is around 210-212lbs.
- 12 General weight through the years, "I fluctuate from there to 215, maybe 207, somewhere in there. But I've been in that range for a while." Ptf confirms his surgeon was Dr. Smith.
- 14 Confirms Dr. Smith returned him to work on 02/13/19, and imposed no limitations or restrictions on Ptf. Ptf confirms that he told Dr. Smith repeatedly that his job required him to lift weights up to 90-100lbs, and Ptf had to be 100% before he could go back to work. Confirms that Dr. Smith should have known exactly what Ptf did at work.
- 15 Ptf asked if Dr. Smith is a good doctor, "He's done some knee work on my mother, that's why I chose him, and she's had good luck, so that's -- that's the only one that I knew." Ptf confirms he had shoulder surgery on 07/17/18; also confirms that he worked hard to get through therapy.
- 15-16 Ptf asked if he enjoys working for the railroad, "I've always enjoyed the work, I mean, you know, from the welding, from -- anything that we did with railcars. I mean, I enjoyed the work."
- 16 Ptf confirms he is an experienced carman.
- 17 Ptf believes he is a competent and qualified carman. Deponent confirms that through the years as a carman, he has climbed ladders, and bent and stooped to do his work.
- 18 Deponent also confirms he has: kneeled, squatted, carried objects, pushed and pulled, and lifted.
- 19 Deponent confirms that as a carman, he uses his arms, shoulders, back, hands, and legs to perform his work, and has done so since 1989.
- 20 Deponent confirms the job of a carman is to deal with replacing car wheels; also confirms that at John Sevier, they have a RIP track.
- 21 Deponent confirms that in the RIP track, they had hydraulic devices that would raise the car for you; also confirms that another way to deal with the wheels is to use a jack to lift the car out in the field. Confirms that with the RIP track, you get to do the work inside, out of the weather, that it doesn't take as long, and you don't have to worry about dropping the car. Deponent confirms that being at the RIP is more productive and efficient. Confirms the yard out at John Sevier was what they would call "idled".
- 22 Confirms that when the yard was idled for various reasons, the RIP track was also idled, for a couple of years; confirms it was started back up sometime in November 2018. As part of his road truck job, he still would jack cars on the line of road at the various places previously discussed [on pgs 9-10].

- 23 Deponent confirms it's potentially dangerous work.; confirms he's been instructed about the potential danger of carman's work throughout his career. Counsel tells Ptf that he's been out at the RIP track, and Ptf interjects and tells counsel that he's seen him out there.
- 24 Counsel tells Ptf that he went out and watched Ptf and videoed him and his gang working, and counsel tells Ptf that he was struck by the efficiency of how they went about their business, and that no one seemed to be in a hurry - by Ptf, "No. Most of the time, no."
- 26 Ptf no longer lifts weights, but has in the past. When Ptf stopped lifting weights, "Well, the last time I even attempted it was probably about a year and a half ago. My wife was at Planet Fitness and I -- it was after I was released, and I thought, well, I'll try to start working out a little and strengthening my shoulder and everything, tried to get in shape. But that only lasted about three weeks, when I did one machine out to the side and it stung it and that's the end of that... But as far as lifting weights, it's been -- I couldn't even -- it's been quite a few years since I had actually had a weight set and lifted." Says it's been at least 7-8 years.
- 27 When Ptf would do pull-ups, he would do 8-10, but says he was lighter at that time.
- 28-29 The last time Ptf did a push-up, "The most time I did push-ups was maybe five or six years ago, I would do a regime of push-ups and crunches."
- 29 Ptf would usually do 50 push-ups at a time.
- 30 Ptf asked if he was provided training on lifting, "Yes, as far as lifting with your legs, not with your back and...."
- 31 Deponent recalls attending the presentation by R.A. Gregg in 1990 and 2003.
- 32 What he learned at those presentations, "Which I -- you know, lifting weights when I was younger and stuff, I knew lift with your legs, not with your back... So that -- that's what he taught." Agrees that you want to avoid lifting things with your arms extended out.
- 33 Deponent confirms that he's done is "dead level best" to lift objects in the correct way throughout his entire work career; agrees that if he didn't, he'd hurt himself.
- 34 Deponent states that he's never been on the safety committee. Ptf confirms that once NS idled John Sevier, a lot of carmen who he worked with were transferred to other places, or their jobs were abolished; that occurred in May 2016.
- 35 Ptf confirms that he's had rules like the "Safety and General Conduct Rules" ever since he started working with the railroad, and he's required to follow those rules, and he is tested on them. Purpose of the safety rules, "To keep you from getting hurt." Says he's tried his best through the years to follow the rules, and they are mostly common sense.
- 36 When asked if Ptf believes that he has a duty to exercise reasonable care for his own safety, "Yeah. I believe you need to watch out for yourself." When asked, Ptf says he is the person most responsible for his own safety.
- 37 Deponent confirms there is a CDI for car jacking procedures.
- 38 Also confirms there is an SW for car jacking procedures. They can go on the computer and pull the CDIs and SWs off of a website, "It's a website where we can go check pay, go to safety, go to other links throughout the company." They have had that for 7-8 years; agrees it's a good thing.
- 39 Deponent confirms they would have written CDIs and SWs in the work truck. If there was a change, their supervisor would send them an email, and they would "bulletin it".
- 40-41 Ptf asked if he thinks that Wayne Strickland's intentions were good and if he wanted to do things to make the job efficient and to keep the employees safe, "I've said that he -- he wanted John Sevier to do well. I can commend him on that. When all of this happened, he was trying to keep work and -- because I know he would go out and -- we'd never had it before, like once a month or once every other month he'd put out how much we had made at that time compared to the others, trying to make sure that we -- during the time that we

- were going through this idle that we were productive. But -- so I commend him on that. And he -- you know, naturally, he expected everything to go according to rules."
- 41 Confirms that Mr. Strickland wanted the John Sevier City Yard area to be productive, so no one would be cut off and they would continue to have their jobs and make a living for their families.
- 41-42 How deponent would compare Sean Kennedy to Mr. Strickland, "He was a little more laid back, but he was -- you know, he expected you to do what you was supposed to do."
- 43 Does not ever recall Kennedy coming out to watch them do a jacking; says that Strickland would. Asked if Kennedy was not there very long, "No, he was -- he was there -- he came, I remember, shortly before that I had to mark off and then he was there shortly after I came back, before he got moved to Birmingham."
- 45 Ptf does not recall watching a video on car jacking procedures back in 2003; says he's seen the video, but doesn't remember if it was 2003. Asked when he remember seeing the video, "For it to be imprinted in my mind as my job and to have to be critiquing it to the ninth degree was after I had become a truckman."
- 46 Asked what Exh 4 is, "I'm sure it's discussing all the tools needed to jack a car." Says it's a general description of how to do it.
- 48 Asked what a job briefing is, "It's when you go to do a job, you discuss it between who's involved in doing the work." Asked if something changes during the course of the job, do they have to do another job briefing, "Yes, that's what they want." Ptf asked if he thinks job briefings are important, "Yes. We've done that before they even started calling it that. That was just commonplace when you work together."
- 49 Agrees that in the world of jacking cars line of road, they want to try to be on the same wavelength; agrees it's a team effort. Agrees that when jacking, you generally have another man working with you.
- 50 Asked how he would go about jacking a car, "Well, prior to even putting those down, you want to recognize what's going to be under the base of it. If you don't have bridge ties or a concrete jack pad already in place, you have to determine how much ballast is under it, where solid ground is, or if you got enough ballast that you can -- how many boards you need to put down to come up to the beam or the ties to place the jack pad on."
- 50-51 Continued, "Then once you get your jack pad set, you will -- you got to determine distance between it and the car and the wood that will go on top and making sure that you're level, to get the jack as close to the jacking part of the sill on the car."
- 51 Agrees that the goal is to place the jack pad and jacks reasonably stable and level; also agrees that you want to make both sides of the car level with each other. Confirms they would use blocks, wedges, and plywood. Asked if he had a leveler that he would use, "To set those, we use -- we have a normal two-foot level that will span that jack pad."
- 52 They have a safety level that will make noise if it's not level. What they would do with the boom on the truck, "With the boom, you want to -- we'll unload our jack box with it, we transfer the wheels, raise the trucks." Confirms that they use the boom to take the portable jacks off the bed of the truck.
- 52-53 Ptf asked if they would use the boom to move the portable jack over and put it on top of the jack pad or as close as possible, "You try to get it as close to the jack pad as possible, and there -- I mean, it would depend on the height of the side sill on a car if you would be able to set it on the jack pad. And that would be on the near side only."
- 53 Confirms that part of the job is that they have to put the portable jack on top of the metal jack pad and blocks; they do have handles. They have to lift it 1-2 feet to get it on top of the pad.

- 54 Using the boom, "... You can get it -- you could actually set it right at the pad, if you can't get it under it. But the other side, you're not going to, you're just going to go to the corner of the car and that's it."
- 55 Generally, the truck on the A end and the truck on the B end are close to each end of the car. Confirms they would have to move the portable jack on one side of the car to get it to the place where they were going to put it on top of the pad, and that would be anywhere from 3-8 feet in distance. Confirms it would be a two-man job, and they would have to pick it up.
- 57 T.M. Holloway was one of deponent's safety coordinators.
- 60 What is in the photo shown in Exh 10, "That's the crane controller." Confirms that when you are on the ground you can control the boom on the crane. Confirms he used a Palfinger control device. Asked if he was pretty good at it, "I started getting good at it after the amount of time we had to do it." Says it's a complicated control device.
- 60-61 What's complicated about it, "Getting used to which directions the buttons will make the boom go. And prior to, it was manual controls on the truck. It was quite a while before we used the remote... So we were standing at the truck."
- 61 They would stand at the rear of the truck bed, right beside the turret. Device, "There was just handles where you controlled the PTO pick up and the -- whether you were setting your outriggers and/or running the boom." The purpose of the car jacks was to jack the railcar.
- 62 What Exh 11 shows, "It shows the near side, with a jack set up under car." Confirms that they appear to be bridge ties. The ties at the number 13 pocket track were switch ties, not bridge ties. The switch ties are a little shorter than the bridge ties, but deponent doesn't know the specific length. Confirms that the aluminum jack pads would fit on the ties at number 13.
- 63 Confirms that Exh 12 is a photo of an aluminum jack pad that he would use; estimates they weigh 30-40lbs. Asked how they would put them down, "We would normally set it off the truck in the middle of the track and -- it depends on what the other one's doing, if one of them can -- you can get it and set it on both sides or one, it just depend on if you both were at that point in the job that you just each grabbed one and went to one side and put it on."
- 64 Where the controls are for the portable jack shown in Exh 11, "The controls are at the opposite end of that hose that's connected to the jack, away from the car." Device to raise and lower the jack, "There's -- yes, there's a -- on the pump you'll have a control handle that's for up or down, and then you have a hand-held toggle switch controller that's got a extendible cord that you can use to make them activate up or down."
- 65 Ptf asked what chocks are, "The ones we use are just metal wheel chocks that grab the rail. And that is unless it's not wet. If it's wet, they'll slide. But it's to ensure the car to not move when you're jacking." Confirms that Exh 13 shows the chocks.
- 66 Confirms that it is important to get the chocks in place before doing anything else. Confirms that they are supposed to do a visual inspection of the jacks, hoses, control stand, and spacers. Also confirms that they have to make sure the ground is level at the jacking location.
- 67 Confirms that their goal is to try to create a solid jacking foundation and to have the jacks vertically set. They disconnect the brake rigging on the end that is not being jacked. Deponent does not always remove the trucks.
- 68 Confirms that when you raise the car, you are supposed to wait 5 minutes to make sure the car is stable.
- 69 Asked if the safety leveler makes noise, "Yeah. And that doesn't make sense right there."

- "Lower the car out of the bowl, and arm safety level." You would lower it back into the bowl and disarm the safety level." Removing the trucks, "You would use a -- we keep a push/pull pole on the -- in the bed of the truck that we use, if there's no severe slid flats or buildup that you can't move by physically pulling."
- 70 Confirms it's a long pole, "Yeah, a square aluminum pole with handles on it." Confirms he could also use the winch or boom to pull them out.
- 70-71 Asked what a safety jack stand is, "It's a stand that we place under the car once the trucks are removed out from under it, that you bring the car down to touching it, and it has an extra safety to keep the car from rolling."
- 71 The safety jack stand is placed under the car at the center plate; confirms that if he did not do that, he would be violating the SW and the CDIs. Confirms that Exh 14 shows the type of safety stand they would use when removing the trucks.
- 72 What happens when he rolls the trucks out, "When you roll the trucks out, then you have the safety stand over to the side. And when we first started into this job, we would -- you'd have the handle already attached and then you would roll it up to the rail and you'd have to bump the wheels to get it to go over, and one -- usually, one man would kinda guide it in and the other held the handle, to push or pull. And then once you got it into the middle of the rail, you had to adjust your handle, whether it had a steeper -- be able to tilt it back further or less, and then you put it under the car underneath the bowl -- or the center plate."
- 72-73 Confirms it's rolled underneath, "Yeah. And sometimes, though, the -- there may be things, like your airhose or airhose brackets or a bracket for a dead lever that would be there, that you have to maneuver around, so you're -- sometimes you're having to slide it. I mean, you can't use the wheels, you're just having to scoot the whole base."
- 74 Ptf asked if he used the crane to lift the safety jack stand, "We got eventually to where we would use it, instead of trying to wrestle it in. Because we slowed down enough that we didn't -- at first, going into this, we -- you had a handle, we pushed it in, everybody did, and -- but eventually, later on, when we got over worrying about trying to be back by 3:00 o'clock or got over the fear of that car falling to where we could just step back and -- as far as if I walked out there today, I would use a crane to set it over in the middle of the tracks without the immediate fear consuming me that that car is going to fall before I get it there."
- 74-75 Ptf asked what's wrong with using the boom and picking the stand up and putting it between the gauge of the track as close to the car as possible, "Well, it -- that's what it became. But at first, you would concentrate on getting the boom to where the truck was to get those wheels changed out so you could get it back under that car... Because you did not want that car to fall. You were trying to make sure that got done. Because you knew for a fact that if it fell -- which everybody made sure everybody stayed away from the car itself. But you knew if it fell, you were going to be fired. So...."
- 75 Confirms that the CDIs and SWs tell them to stay away from the car in the unlikely event that it would fall. What 'line of fire' means to deponent, "Line of fire during that job would have been not to be under that car, because that's -- due to different circumstances, that car could fall and you didn't want to be underneath it."
- 76 "I do not go under a jacked car that's under those line of road jacks, no." If he saw a co-employee doing that, "I would definitely be telling them to stay out from under the car... That would have not happened in the first place."
- 78 Deponent states that he does not understand what a combilift is.
- 79 Deponent does not recall the presentation in Exh 16, "... I mean, I've watched even from -- how to climb electric poles and all kinds of electrical stuff that we've -- through the years you

- sit and may read it or you look at it but it's not in your current job or your job that you're going to do, and you may have watched it, but it's nothing that you imprint in your brain because it's not what you do."
- 80 "I'm sure that they've showed us those videos and we've watched it. But it was -- like the other stuff, it was videos of jobs that we didn't do -- or that I was not involved in." Ptf acknowledges that he was shown videos of the procedures, and is sure he had to sign for those. Asked if he had access to all of the CDIs and SWs at all times when he was a carman out at John Sevier, "If we needed to know, yes."
- 81 What Exh 17 shows, "It's what we remove the center pin from out of the bowl, when you bring the trucks out, before it gets to the coupler, so you can -- it doesn't hit it." Confirms that is a safety device to keep them from being in the line of fire.
- 82 Deponent states that he wrote out his answers and sent them to his attorneys for his interrogatories and request for production of docs.
- 86 What Exh 19 shows, "It shows Sam Seifert pointing at a safety beside a car jacked up." Confirms it also shows the aluminum jack pads and blocks, and he's standing on bridge ties; confirms it was taken in Oakdale, TN.
- 87 Ptf confirms he's been to Oakdale a few times, when asked if he's jacked cars there. What Exh 20 shows, "That shows Sam Seifert and looks like James Housley getting ready to jack or finishing up, one or the other." The vehicle shown in the photo is their road truck. Asked if that road truck is the same or similar to the road truck Ptf has used since 2016, "It's similar, but it's smaller, it's not a double axle." Deponent's truck is a double axle, so it has 10 wheels.
- 88 Exh 21 shows the same truck, just closer; confirms the trucks have outriggers to make sure the truck is stable when using the boom. If they want to change out a wheel set, they would have a new wheel set in the bed of the truck, and they would use the boom to take it out.
- 89 Exh 22, "Looks like Mr. Housley looking at his levels on the car they're jacking." Confirms the photo shows a portable jack on the right side, and that's sitting on the aluminum jack pad and blocks.
- 90 Confirms that while the car is being jacked up, they put collars on the jack. Confirms they are an add'l safety device to make sure that if something happened, the car would not be lowered, "Yes. And we have had, I think it was twice, to where -- it's one of them deals you just learn when you're out there or safety try to find out what's going on. We've have -- you'd hear something pop and one of those would shoot off about ten feet." Deponent had that happen to him twice, and on one instance, there was a supervisor present, "... I want to think that time Wayne Strickland was there, on that one that shot out."
- 91 Why that happened, "All we could figure, just something settled on the other end. We've had as well where you'll be jacking and you'll hear a pop and one of the wheel chocks will shoot off the rail from the other end. We always put one on each side of the truck because of that." What Exh 23 shows, "The end of the car, with a safety level and a two-foot level." Asked what Safety Level II is, "It's the level that once you bring the car up to set for five minutes and/or once you remove the trucks, you arm it up, and it allows you to be warned if one side or the other starts to settle." Confirms that they also use a "garden variety leveler" to make sure each side is level.
- 92 "Yeah, you just watch it as you're going up to make sure that you're staying pretty well inside the bub-- or between the lines, that there's no major -- one's not going faster than the other or you get the -- you have to slow one side down, speed one side up. So that's the indicator we go by when you're in process of jacking the car up or coming down." Confirms it's an add'l safety device.

- 93 Ptf identifies Exh 24 as a truck set; confirms the diagram accurately depicts all of the parts of a truck assembly.
- 94 Deponent does not recall the instruction shown in Exh 25. Deponent confirms he's seen the training videos about jacking cars on line of road.
- 95 Confirms that the CDIs are kept in the truck, and that if they run into a problem, they will call their supervisor. Says there are times where he has called and the supervisors weren't able to come out. If there is a serious problem, "Well, they said, "Do the best you can," we knew what to do." Confirms that there were a couple of times where they would wait until the next day when the supervisor could come and watch and give advise and counsel.
- 95-96 Asked if Chambers was really good about that, "Yes, he did it -- most of the time, yeah, he would do that. Like I said, there was one time where that was the response, "Do the best you can. You know what you need to do.""
- 96 Asked if it was something that they really needed a supervisor for, would Ptf not take the change of doing it the wrong way until he had a supervisor, "The ones that we considered dangerous, that we didn't want to do, yes, we'd tell them we didn't. And usually the next day they would go and we'd wind up doing it anyway. And then I know one time it -- it about bit us, so -- because the car sank. And luckily we were able to continue going up another few inches to get the wheel back under the car."
- 97 Ptf's claim, "We lifted the jacks to put them in place, to reset them on 13 pocket as well as everywhere we went to jack."
- 98 Ptf confirms that his claim in this case is that he had to lift the portable jacks at the number 13 pocket track in John Sevier Yard and all the other places listed [on pg 9-10]. Confirms that other than the number 13 pocket track, he still had to jack line of road cars for wheel changes in all of those places, "Almost all of them that we'd talked about." Ptf asked if he still handles the jacks in the same way that he's always handled the jacks, "By the handle, yes. But I'm using the left arm. Even the guys I'm working with will make sure I'm on the right side and -- because I just don't want to hurt the shoulder again."
- 99 Confirms that when the John Sevier Yard was idled in May 2016, the RIP track was also idled. What Ptf's job was before the yard was idled, "I was working in the forwarding yard." What he was doing, "Lacing hoses, and inspecting, brake tests, yes, sir." Ptf confirms that prior to going to the yard, he was doing work at the expedite track. Ptf was told the yard was going to idle the night before they did it.
- 100-1 Asked about the bulletin in Exh 26, "... whatever it was the day before they come in and announced that they were going to relieve 14 people, that's when I found out. I remember Randy Wilson, I think, come in and had a meeting that morning and let everybody know they were kicking 14. And the night before, I'd been informed that that's what was going to happen, whatever the date was."
- 101 Says they had an opportunity to bid on certain jobs.
- 102 Difference between the service truck and road truck, "Service truck was just a small one-ton, I guess it's one-ton, truck that was, I guess, right underneath where you needed a CDL." Confirms that for the road truck, you needed a CDL.
- 103 "... at any given moment you may have to drive the service truck, and they started requiring that you had a medical card for it -- late two thousand-- you still had to go through the TDOT scales, and I believe that's when they had found out you had to have a medical card to drive it." Confirms they were smaller trucks. Ptf confirms that he did not have a CDL when he bid on the service truck job.
- 104 In the service truck job, Ptf did not change wheels line of road. Ptf confirms he was working

- with J.C. King, and Mr. King is now retired.
- 104-5 How often Ptf worked with Mr. King, "I've worked with him off and on through the years and -- but that would have been the most that I worked with him, those months -- following the idling."
- 105 Ptf's CDL is made Exh 31, and it was issued on 06/06/16.
- 106 Confirms that the work truck job would require them to change wheel sets line of road. After they idled John Sevier, where was the major part of switching conducted, "I think it was both receiving yards and forwarding yard." Confirms there was switching done in the City Yard.
- 106-7 Confirms there was a pick up in train traffic, and they moved the switching back to John Sevier to some extent, "Yeah, pick up in traffic. And I don't really understand -- I mean, basically, the City Yard, I know they worked the Alcoa cars there throughout until they discontinued that program and they were supposed to do their switching there. And, I mean, I don't -- I couldn't tell you if it was because the influx of cars or what, but.... I know they started more in the yard at Sevier after that."
- 107 Duties and responsibilities on the service truck job, "To travel down to a City Yard to inspect any cars if we needed to, or to help out the Alcoa trucks do their job. To go wherever it was needed to do general maintenance, light maintenance on cars." Confirms that the work truck involved heavier work.
- 107-8 Ptf asked if there came a time when he bid on the work truck, "I did. And after -- what you asked earlier about the service truck, the reason that I bid on the road truck, if I'm not mistaken, I believe that's when Mr. Arthur and Mr. Carey had been fired for 90 days and they came open. And at that time, me on second shift, that's when they had instructed one evening to go down and jack a car. And after I'd received my CDLs, they'd instructed me to go down and jack a car in receiving track 12. So when I figured we were at that point going to have to jack cars regardless of being on the road truck or not, that when it came open to go to day shift with Saturday, Sunday, I figured I'd rather go to that, if I'm going to have to do it, than stay on second shift."
- 110 They were not told that the service truck guys were going to have to be jacking line of road, they were just simply sent down there one day by Steve Cox; he did not go with them. Ptf asked if he assumed that he was going to have to do that from now on out, "Yeah, if the road truck guys weren't available, and especially with two out of work."
- 111 Ptf confirms that he did not have to handle jacking cars on any other occasion as a service truck guy until he became a work truck guy. Confirms Carey and Arthur were fired, "They had a car that fell." Why it fell, "I don't know the specific reason, as far as what would have been in any documents or anything. But I know that the jack pad collapsed, from the photographs that I saw, and that the base of the jacks were completely -- the welds were frostified (phonetic) and it popped off the bottom of the jack barrel." Asked if he knows if they used a safety jack stand, "I don't believe they did. It was in the bushes, without any wheels on it at that time." Does not know if they used a leveler or not.
- 112 Assumes they had rolled the trucks out from underneath the car with no safety jack stand.
- 114 Ptf confirms that he would never, ever jack a car without an electronic safety device; also confirms he would never not apply the safety support stand. Deponent has never dropped a car.
- 115 Deponent confirms he is now working first shift carman line of road.
- 116 Ptf was off work when the RIP track re-opened, but he did hear about it re-opening.
- 116-7 According to Ptf's answer to interrogatory #14, Ptf watched the training video a month or two after Carey and Arthur were suspended for 90 days, "Yeah, that's when I watched it and

- that's when I could look at it and know exactly what it was all about and either critique it -- as far as it never showing those guys going to the other side. And those were different jacks."
- 118 How Ptf would go about making a record of his work so that it could be billed, "We'd have the repair bill that as we were working on the cars, we could fill out on what type of wheels or brake beams or any repair that we did that it could be charged for." Confirms they would have something called a "Road Truck Repair Bill", and they were supposed to put down on the repair bill the location of the repair and the date.
- 119 Where it says "Progress Rail Jackson Wheel Set," "That's a ID they put on them they can scan into the computer when they're billing." Says that sometimes they didn't put on the repair bill where the repair occurred. When it just says Knoxville, what that means, "If it said Knoxville, yeah, that would mean that we were there in the yard."
- 120 Counsel tells deponent that he looked through the billing records and found 17 references to changing out wheels at the number 13 pocket track; deponent says that does not sound right. What he says, "Off the top of my head, I couldn't give you a specific number. I just know that any car that got jacked there in Knoxville, it was at the 13 pocket, except for the ones at receiving track 12, and the ones that I had documented." If the jacking took place at the number 13 pocket track, that should have been put on the repair bill.
- 121 Number three beam, "Number three beam is a brake beam, which you would have to jack to change." If it says 13, that would mean the pocket track. Confirms that part of his job was to be accurate in filling out the forms so that the billing would be accurate.
- 122 "... We were working intimately with the bill writer there, he knew we were there. And if we were down there, whoever it was may not even put it, because you're going right back up and he would put it in." The bill writer was Wayne Upton, and he would put them in himself; Wayne retired in 2020.
- 123 The billing records are collectively made Exh 35. Asked what Exh 36 is, "That was a list of cars that I had documented for those months." Those were the months of January, February, March and April, and it shows six pocket track jackings.
- 124 When and why Ptf made Exh 36, "It was somewhere around the first of the year, when my partner gave me a little, bitty calendar to -- that -- when we were out, just so we could keep up with what we were doing, I would document it down." Why Ptf did not keep a calendar before then, "I -- through the years I -- there's been a few times in the past when you would get busy or you went to a new job or something, I would have a small notepad or a little notebook that you would keep up with your hours or what you were doing as far as jobs or anything you needed to know, but it was nothing that -- I know some guys, they would -- through their whole career they would keep one every day. And I just never did it. But now every now and then, it would just be a whim, whenever I would have one, I'd actually fill it out."
- 125 Asked what Exh 37 is, "It's just another document showing the days that I jacked, if it was a wheel or a brake beam." Why he prepared Exh 37, "That one was just to get prepared for this."
- 126 The one time he did it on receiving track 12, Ptf confirms he was able to complete the job successfully.
- 128 Ptf asked if he ever personally asked Mr. Strickland why they did not re-open the RIP track, so that they could be inside, out of the weather, and more efficient, "I did, as well as everyone else."
- 128-9 Ptf asked if he would rather do a job where he is not outside in the weather, "Yes. And I

- would rather done it up there, where you didn't have to worry about those road truck jacks."
- 129 Confirms that he had to worry about the road truck jacks anyway because he was jacking cars in all of the other places, "And that was -- I can tell you, the stress level, the anxiety and the fear that we had at that time on the line of road, especially line of road with some iffy places, then to come into the yard and have to do it there knowing that we couldn't have done it on a RIP track." Confirms he talked to Strickland and Kennedy about re-opening it.
- 129-0 What deponent told Strickland, "We would basically just ask him why that the RIP track was unavailable for us to jack on. Because we knew they were certifying and inspecting the jacks every year. They removed them out of track one and track three but they left them in two. So we know that it was intact to work. But we weren't allowed to use it. So we knew that that would be the safest place for us and where it would be a whole lot easier and less stressful to have jacked these cars while they were in the yard."
- 130 Ptf says he said the same thing to Kennedy and Chambers. Confirms they all complained about having to jack the cars outside when the cars were in John Sevier, as opposed to inside the RIP track. Asked if Ptf made any other complaints, "No, as far -- but as far as -- when we'd be -- the only thing that we would have said after that, in our concerns about not being able to use repair track, as far as jacking in general, would be questioning about having jack pads put in wherever else we were going to regularly be jacking." Ptf confirms they had jack pads out at Oakdale and at Loudon.
- 131 At first, they did not have jack pads at Concord, but they later came and put them in; agrees that his complaints worked. Asked if they had jack pads at all of the places discussed in pgs 9-10, "No, Morristown does not. Sweetwater, they didn't... Crab Orchard, they didn't." They did not have jack pads at Clinton; they did in Oneida.
- 132 They had jack pads in Bulls Gap. They did not have jack pads in Middlesboro, KY. They did not have jack pads at Young Mine. What deponent would do in the paces where they did not have the longer ties, "You would fix a place for your boards to start stacking up as -- if you could get solid ground, you would start stacking your long boards up to the level of the ties. And then when you set your jack pad, you'd go up, five minutes. And if it settled, which a lot of times they would, you would have to come down either at a board -- you may have to remove the jacks multiple times to put another board on or a spacer, whatever you needed to accommodate for that settling."
- 133 Confirms that without jack pads, the job would take longer. "The second job that we did was in Coster Shop. As a matter of fact, you can put that one down... That was, I believe, the second one that I did, with Steve Cox there at that one. We had to go to what we call the Les Hall track and we had to build up our base with the boards. And I -- I'm -- if -- the boards were about a foot, foot and a half tall, to get even with the ties in the ballast. And that was a -- looking back when I had more experience in jacking, I probably would have not -- I would have requested we didn't jack there, knowing what I know now, because..."
- 133-4 Continued, "It was way -- we had to make the base way higher than I would have ever done it now, and it still settled. And luckily we had two other carmen come over, by that way that day and we got it -- the job done."
- 134 Confirms that he ended up with four carmen and Supervisor Cox. Any other complaints, "I can't think of none, other than what would be in general, needing supplies or if some of the equipment was faulty or anything like that."
- 135 Not claiming that there was anything wrong or defective with the jacks or anything like that, "No, not specifically. And if they were, we let them know. We've had the pump -- and this is what's part of not in that video and everything else that you learn on the job was empty cars

and loaded cars are completely two different things when you go to jack. And a loaded car, you may not know if anything's wrong with your pump or jacks until you start working with them. And we've had it to where the pump control valves are bypassed and you wind up having to control it by the valve instead of the controller -- because the car's in the air and one side's coming down and you -- that's the only way to come down with it... Then you would let them know. And then they would send them off and have them gone through and redone."

- 136 Ptf never made any written complaints. Ptf knows Kevin Krull, and says he was their division manager; last saw him a month or two ago when he came into the repair track.
- 137 Asked if Mr. Krull has always treated Ptf fairly, "In our dealings, yes, until -- at one point they took away my carman leader rate... When we were -- I was a welding instructor for years. And whenever they wanted us to be welding instructors -- they needed two people. Our general foreman, senior general foreman, and DMMO at that time, John Ivey, no one older would take it, so they offered me and Steve Riley the jobs with carman leader rate. And we did that for 14, 15 years. And all of a sudden at the -- getting closer to, I guess, 2014, '13, '14, somewhere in there, the company decided to do away with any of those local agreements and -- He had to do what he did, though."
- 137-8 Ptf asked if he stopped being a welding instructor, "No, I maintained that until my time was up. When I went to the yard in '14, '15, whatever it was, I gave it up."
- 138 Asked if he has any criticism of Les Hall, the maintenance supervisor at John Sevier, "Les Hall was not apt to want to do the work that we needed to, like on the repair tracks, or if you needed anything done to -- well, basically, RIP track. That would have been the only connection I would have known that he had with us."
- 142 Asked about Exh 39, and his medical visit on 03/02/17, where it says Ptf has sharp pains if he tries to lift heavy objects or do a pull up; what heavy objects, "Anything heavy. I would have thought -- at that point, I had the -- when I read this, the only thing I could think of at that time was that I'd had the tennis elbow, and I even had a brace to keep wearing on it because it would hurt in the lower bicep." The heavy objects referred to include portable jacks.
- 143 Discomfort when he would lift the portable jacks, "It would just depend. I mean, it didn't hurt all the time, every time. It would be how many times I did it or -- and if -- say if that -- my right arm or my left arm, I've had it in both of them, with the tennis elbow stuff, you know, you go with the one that doesn't hurt. So it ain't like you just grab it and hurt."
- 144 Ptf would lift heavy objects up to 90lbs regularly, "That would not be the jacks. That would be like a knuckle, I think they're closer to 90, or 60, somewhere in there."
- 145-6 The record states that he had pain for 2 years, "I probably said -- the last couple, as far as from the latter end of -- or somewhere around '17, the latter end of '16 coming into '17. Because by that time, I'd been jacking quite a few times."
- 146 Deponent confirms there is no question in his mind that the pain he was having was as a result of jacking the cars. How much the jacks weighed, "Hundred and eighty-five. And that's without the adapter on it. You may have it on there and have to move it off of the jack pad to re-adjust or something. So you're going up to two-hundred- and-something pounds." Confirms that there would be two people lifting the jack.
- 147 The medical record states that Ptf's shoulder started hurting when he started his new job at the railroad; confirms that is working the work truck; the record is dated 07/23/18. Ptf asked if he told anyone at the railroad that lifting the jacks was hurting his shoulder, "Some of the guys that I would work with, I'm sure that I complained about it aching." Probably started

- complaining about his shoulder in 2017 or 2018.
- 148 Deponent confirms he never complained to Kennedy or Strickland or any of his supervisors about lifting the jacks, "No. I was just trying to do the job."
- 149 Ptf asked if he answered the questions in Exh 40 truthfully, "As best that I could. But when I've looked at this, down at the bottom, the injury onset, April was in my mind because that was in '18, whenever I -- my arm just quit. And when I filled this out in '19, I meant '17, '18. So that's a mistake on my part on that." How long he had the strain type pain, "It would just be -- it would just be a ache. And forever I just thought that I was having arthritis or bursitis. I always hurt. Every time you got older and you started aching in your joints and stuff, getting a little bursitis or arthritis in it."
- 150 What Ptf did to investigate the pain he was having as reflected in Exh 38, "I -- most of the time, I would take ibuprofen or something like that, or it would just go away, and/or -- like I said, that's what I thought, it was just arthritis or something setting up. It wasn't debilitating like it was in '18. Until that point, I thought that's what it was... But then I woke up and couldn't move my arm."
- 151 Agrees that lifting the jacks may have been contributing to causing the discomfort he was having in his right shoulder, "Yes, it was after I'd started on the road truck and had begin that career of jacking cars, somewhere in there it started aching to where -- like I said, I thought it was arthritis or something setting up in it."
- 152-3 Why deponent listed Steve Riley as a witness, "He was one of the primary partners on the road truck."
- 153 Confirms Mr. Riley is now retired. Deponent confirms that he typically works 5 days a week, and 8 hours a day; also confirms that when he begins his workday, he has a safety meeting.
- 154 Asked if they still do stretching, "Not unless you feel you need to do it, that's the protocol now." Ptf says he stretches if he needs to. How often Ptf stretches, "Not a whole lot. I mean, I -- you know, you're not out there running a race or anything, so..." Why Ptf listed Larry Davenport as a witness, "He was the second primary partner I had for most of the time doing the road truck." Confirms they would have two guys on the road truck.
- 155 Confirms Mr. Davenport still works for the railroad, "He's -- same as me, he's vacation -- but he's vacation relief worker in the repair track." Confirms Hooper is still out at the repair track. Confirms that if he went to find Davenport today, he would go out to the RIP. Skeen is a senior general now.
- 156 Ptf was the recording secretary at his union for a while.
- 156-7 Why Ptf listed Mike Carey as a witness, "He was one of the -- he had been on the road truck prior to, and plus he was still doing it when he was there, before he quit. But I believe, if I'm not mistaken, I was told that he's taken a job as a supervisor in Chattanooga."
- 157 Mr. Carey left and came back to the railroad. Jimmy Arthur retired earlier this year.
- 158 Mr. Arthur retired because of disability on his back. Why Ptf listed Wayne Upton as a witness, "Because he was the bill writer this whole time and he would be aware of the difference in how many wheels were changed from prior to the idling compared to what we were doing after the idling, and went on these jobs." What that would be important to Ptf, "For one, just so that he could -- basically, if there was any detailed explanation of the bills that need to be done, he would know how to look, where to look. And, you know, he was hands on with being able to show that we were doing a lot of jacking compared to what had been done on line of road."
- 159 Asked if they have a RIP at Bulls Gap, "No, sir, they had a RIP. And the spot where we'd jack at Bulls Gap is -- there's a concrete pad in the -- on the track where we jacked. So that

- was one of the more secure jacking locations." Asked if Ptf talked to Wayne Upton about the different between the number of cars jacked before and after the idling, "At that time, yeah, I'd asked him what the rate of wheel change-out compared to what they used to be, and he said that there was more going on with us."
- 160 Ptf agrees that his workplace and equipment used were not perfectly safe, but they were reasonably safe.
- 161 The last time deponent saw Dr. Smith was back in 2019, "Yes, I went in for -- I tried to make it, I think, one year after the surgery to have him check it." Confirms everything turned out well. [Unrelated, but Ptf states that he has hearing aids.]
- 162 Ptf confirms that he told Mr. Chambers that he was going to have surgery, "He -- when I first showed him or give him the letter for the doctor's excuse, he said he didn't want it, and I said, "Got to take it," and he asked what it was, and I told him that I was having surgery the next day, and he asked me, was this -- did I get hurt, was it an injury, and I told him that it was not a one-time accident in the sense of I didn't just drop something or something yanked it out one time only. I just made sure he knew it was a -- it wasn't a one-time accident." Pain ever since he started doing the jacking work, "After so long in the jacking, there was a -- it was just a ache and -- but nothing like two thousand-- April in 2018.... It'd never done that."
- 163 Asked if the pain got worse and worse as time went on, "It just -- it never was just like a crippling pain or anything, just a ache, until, like I said, April 2018, after -- it was three or four days we had jacked in a row, and that one morning I got up and I couldn't even reach up and touch my face. So I knew then that it was way more than a little ache or anything like that." Confirms that everything began happening after he changed to that job and started handling the jacks.
- 164 Ptf asked if the only time he would handle overhead work would be climbing on cars in order to reach up and also when putting blocks back on the bed of the truck, "Right, getting them off and putting them back. Or if you were underneath the car, unhooking the brakes or something, your hands are going to be above you." Has not jacked in the dark, "Yeah, it was daylight. Because everything fell to first shift at one point, when a time change would happen, to where it'd be dark at 5:00 o'clock and second wouldn't be able to jack at all, then every bit of it was on day shift." Confirms they were allowed to jack a car adjacent to a live track.
- 164-5 Confirms that a train could come by while they were jacking, "It could. But we were told, you know, before we would jack anywhere near a main line or any tracks that could have them, we'd have to call the dispatcher or the trainmaster and get any information of an approaching train and how long it was going to be there, and they would give us a time and/or permission that we had so much time to do it or to hold up..."
- 165 Confirms they would not do jacking when trains were coming through.
- 165-6 At the number 13 pocket, did they put out their jack pad and blocks and jacks before the car was located in the place to be jacked, "No, most of the time, we had the car on spot. Because if it wasn't, before we even started, we would hook to the car and pull it and put it on spot."
- 167 Ptf confirms he was off work from 07/17/18-02/13/19.
- 168 They were not given that much overtime back at that time.
- 169 Deponent added in all of the weekends between those two dates to come up with his rate of \$35,000 in time owed.

SOREY

- 173 Where he got the onset date of 06/27/18, in Exh 38 from, "That was my physical that year, my yearly physical." Asked if he gave that to the PT people as the date of onset for his injury, "It would have been that or the April '18."

Ryan Stege Deposition Highlights

SOREY

- 6 Deponent's position with NS, "My current title is director of locomotive operations and maintenance."
- 6-7 Asked what that includes under deponent's job title, "So there are many parts of the mechanical staff function and oversight of the mechanical field operations that I have responsibility for; that is, the material distribution folks, the locomotive controls folks, the locomotive technology group, the data mining and data group within the mechanical department, as well as the reliability group and team."
- 7 Deponent asked if he also oversees cars, "I have some joint car groups that are dotted line to me as well within the mechanical staff function. I report to the senior director of mechanical operations and support, and when he's off I also help oversee the car side as well." Deponent's office is in Atlanta, GA. Deponent has been in his current position for just over two years now.
- 8 Deponent confirms he has knowledge of topic #1 listed in Exh 1; also confirms he has knowledge on the 2nd & 3rd topic.
- 9 Deponent confirms he has knowledge of topics #4 and #5.
- 10 Confirms he has knowledge of topic #6. What training deponent has rec'd to be knowledgeable in these areas, "So several different things through the course of my career. I've been with the railroad for 21 years, and throughout those 21 years I have received and even delivered many safety training related topics, whether that's back safety, ergonomics, and around the horn when you look through the training records that Norfolk Southern uses."
- 11 Training deponent has rec'd from the railroad that would relate to being helpful to his testimony today, "I've also participated in parts of the training that even the carmen craft receive at the training center in McDonough, Georgia, prior in my career. I've also supervised and managed some of the field locations on the car side, too. I have experience on the car side as well."
- 12 Deponent did not work as a carman. Training deponent received that was like carman's training, "So the mechanical department puts most of its supervisors through a two- to three-week carman training course. It's an accelerated course for supervisors, but it's taught by the same trainers that teach carmen at the McDonough Training Center in Georgia." Other training rec'd, "I think I have about covered it all, the ergonomics and the safety training as well. I've also organized and delivered and even developed some of the safety workshops that we've done over the years as well, too."
- 12-13 Safety workshops, "They've gone all over. So when I was at Bellevue, we did courses that focused on blue flag protection. We've done courses that focused on back safety. We've done courses that have focused on lifting safety and those sort of things as well."
- 13 Ergonomics training deponent has had, "So it would have been the same training that all mechanical department employees had when it came to ergonomics." "... it wasn't just at McDonough. There were ergonomics courses that were part of safety workshops delivered out in the field as well." Deponent both attended and gave those courses. States that the mechanical department has designated deponent for many of the 30(b)(6) corporate designees.
- 14 Why deponent, "I don't really know the answer to that question. I feel it is because of my experience in the department." Deponent states that he is one of the people at NS with the

- most knowledge with respect to the topics discussed, "I think there are many others that have experience just as much as I do."
- 15 Deponent estimates he's testified under oath at least 10 times. Topics deponent has testified to before, "I've had some where I've been a frontline supervisor, and I've had some where I was also a 30(b)(6) designated corporate representative." Topics for the other 30(b)(6) depositions he's given, "One was related to a derailment, if I remember correctly. We've had others that were also related to employee injuries."
- 16 Documents deponent reviewed to prep for his depo today, "So Schedule A mentions the 50-pound lifting bulletin or it mentions lifting 50 pounds, so MSB-0085 is one of the documents I reviewed. Also the ergonomics Power Point training, I reviewed that again. I also reviewed videos that were prepared showing carmen using these jacks that are in question for this deposition."
- 17 Asked to tell about the ergonomics Power Point, "So the ergonomics Power Point is training that lists steps employees should take to keep themselves safe when they're handling the equipment and the tooling that railroading brings. There's six main steps in there about how to keep yourself safe when you're handling that equipment such as keeping the load close to yourself, using your legs to lift, keeping your back erect, using a widened stance to keep your balance, not twisting during the lift, and all of those sort of things that are there to help with the human factor in keeping the body mechanics safe for the employee and safe for themselves. Knowing their own limits is another one of those key steps in that training as well." Which department takes care of the ergonomics Power Points and presenting them, "So when this training was presented to employees, it was done by either their peers who were safety chairmen or safety committeemen as well as their supervisors. For the most part it would even have been by their gang leaders as well, but it was presented within the mechanical department."
- 18 Asked again who is in charge of the ergonomics Power Points, "So this one in particular -- I need to confirm. I think this one in particular was created by the safety department..." The mechanical department would have sent out the presentation and decided who it was going to be given to. Who is in charge of the safety department, "There's an AVP of the safety and environmental department." AVP, "That job is an assistant vice-president of safety and environmental." The current AVP is Helen Hart.
- 21 What deponent knows about the bulletin titled "Norfolk Southern Corporation Mechanical Safety Bulletin, Subject: Lifting, Pulling, and Pushing", "This bulletin was issued in 2013. A mechanical safety bulletin is a bulletin that would affect and has control over mechanical department employees of Norfolk Southern Railway Company." The bulletin was drafted by D.R. Faulkner; deponent knows him, and believes he's since retired. Mr. Faulkner's last position was general superintendent, "So his job was over the Juniata shop which is a large back shop/mechanical shop in Altoona, Pennsylvania."
- 22 Training Mr. Faulkner would have had as far as ergonomics or areas such as that, "Being a mechanical department supervisor, he would have received the same ergonomics training that I mentioned for myself earlier, but I did not review Mr. Faulkner's training records." The document says it was last approved by D.D. Graab, and at the time, he would have been an assistant vice-president of mechanical; Mr. Graab has since retired.
- 23 States that there was input between all the division managers and shop managers when the bulletin was being drafted; the bulletin is made Exh 2. Deponent asked to review paragraph 1 in Exh 2 and tell what he knows about that, "So Paragraph 1 sets up that this document is about the work that we do in the mechanical department. That work requires lifting,

- carrying, pushing, or pulling various objects and tools, and then employees are responsible for knowing their physical limitations and taking precautions to ensure these limitations are not exceeded."
- 24 Asked if supervisors of NS are to enforce the bulletin in Exh 2, "Yes, sir, all rules and bulletins in effect at any given time are what the supervisors are wanting to make sure the employees are complying with, and employees, for their own good, are responsible for their own safety. Most employees you talk to are conscientious enough to know that they want to follow the rules." They no longer enforce the bulletin in Exh 2 because it was cancelled in November 2019, "It really has to do with that last sentence in that first paragraph we read, that employees know their own limits and an employee should keep himself to those limits. The limits that a bulletin has in it are not necessarily applicable to the limits each individual employee would have."
- 24-25 Asked if an employee feels they cannot lift more than 30lbs, are they not supposed to lift more than 30lbs, "I think 30 pounds is a little bit of an extreme case. The work that we do on the railroad, they'd have a hard time working in the mechanical department if 30 pounds was their limit, but to your point, yes, sir, each employee should know what their limit is and avoid putting themselves in a position where they're over that limit."
- 25 Agrees that if an employee feels they might be hurt, they can just tell the supervisor they don't want to do that job.
- 25-26 Deponent's understanding of the 2nd paragraph in Exh 2, "Yes, sir. So Paragraph 2, there was a lot of work leading up to when this bulletin was issued in 2013 where tools that could be adjusted or redesigned or improved upon, we did a lot to improve leading up to 2013 to get as close as we could to lighter tools and easier to handle tools. So at that point, one of the things that sticks out in my mind was the Pennsy rerailer. We actually had that redesigned so that it could be lifted by two employees and not put a single employee over the 50-pound lifting limit. That's what was set in this paragraph here."
- 26 Exh 2 was one of the bulletins dealing with a two-person lift; asked if there are any more, "I'd want to go look through the safety and general conduct rules again to see if a two-person lift is mentioned in those to answer the question."
- 27 The recommendation at the time Exh 2 was issued was 50lbs per person, and 100lbs per two people, "That was what was set to increase awareness on employees and make them think about what they're lifting and what they're handling at any time." Asked if that was the standard they enforced during that period of time, "While this bulletin was in place, that's correct, Mr. Sorey. All mechanical supervisors would have been looking for ways to make sure that we get as many employees to comply as we could."
- 28 Deponent asked what means of physical lifting has been made available to a mechanical carman having to remove wheels from a car and replace them with other wheels, "Yes, sir. The road truck that the employees use, all of those have been outfitted with a crane as well as kitted material and tools so that all of that can be handled as much as possible with that crane from that truck." What deponent means by that, "So, for instance, the jacks. The jacks are in one kit or one box where, you know, two jacks are in the box together with the hydraulic pump where they're lifted as a kit off of the truck. That reduces the number of lifts that have to be made and makes it so that it's easier to handle the crane and reinforces the employees for using the crane as much as possible."
- 29 Deponent has seen a video by NS that shows the crane being used on both sides of a car. Asked if in deponent's opinion, did the video show them putting the jacks on both sides of the car, "Yes, sir. They couldn't reach the jacking pad on the far side, but they could set the jack to the far side."

- 30-31 Equipment a carman would use to perform the task of jacking, "So there's quite a bit. I mean, the Standard Work Document is probably the easiest place to see that list of equipment, but the jacking pad is usually the first -- well, let me go back to the blocks. Usually the blocks are used to set a level spot for the jacking pad. The jacking pad is set down with that. Then there are the hydraulic jacks themselves. There's the hydraulic pump unit or power unit that powers the jacks. There's the hoses that go between that equipment. There's the controls for that jack. There's levels to check the jacking pad. There's a safety level to monitor the car. There's a -- if the trucks are going to be removed, there's a safety stand and more cribbing or blocking that can be used with that to support and be a backup to the jacks while the truck is removed from under the car. There's the replacement wheel. There's straps and chains and lifting rigs that go with all of the above to use with the crane to lift all of that equipment. Then there's usually at least two carmen to go with it."
- 31 There have been times when more than two carmen will do that task. How it was determined that this was a two-carman type job, "Mainly around watching the car, one of the worst things to happen is to drop a car. So two carmen are used so that both sides of the car can be monitored. Sometimes it's difficult for one man to see both sides, but there's the safety level and all the other things added to support both men doing the job safely as well." The hydraulic jacks weigh about 187lbs; that's just the jack itself. Other items often placed on the jacks, "I don't really understand the question. There's a piece of marine-grade plywood that's put between the jack and the cars. Is that what you're asking?"
- 32 Collars, "Yes, sir. So as the jack goes up, there's steel collars or aluminum collars that are put in around the jack shaft, and that is to back up -- if the hydraulics were to fail, the jack would rest on the collars instead of going all the way back." Does not know how much the collars weigh; how many collars can be added to the hydraulic jack, "Depending on how far they have to jack the car up, there's a couple on each side." Deponent confirms that once the road truck crane puts the hydraulic jack as far as it can on the opposite side of the car that the two carmen then have to carry that to put it in a proper position, "Yes, sir, to get it on the jack stand or on the jack pad, excuse me, where it would need to be to lift the car."
- 33 The jack pad usually sits about three inches above the level of the ground. Asked if he would recommend two people trying to drag a hydraulic jack through ballast to put it in position, "There's no reason why it couldn't be dragged right up against the jack pad, but it would have to be lifted three inches to set it on the jack pad."
- 33-34 Deponent asked if the distance between where the jack can actually be put down by the crane or the boom and where it has to ultimately wind up can vary by locations, "Yes, it's correct that it varies, but it's only by a few feet. It's going to depend on the type of car and where they can get the truck to based on the location they're at. But, yes, depending on where the plates on the car or the point on the car where they would jack at could vary in distance from the end of the car because they're usually going to set that jack as close to that end of the car, which would be as close to the jack pad as they can with the crane, and then they can drag it, get it to the jack pad, and then lift it up onto the jack pad about three inches."
- 34 Asked if dragging it is a recommended way of doing it, "That would honestly be up to each employee on what they could do. To move it is not bad with two people. We do it hundreds, even thousands of times safely all the time, and these carmen will tell you they're able to do it safely. You only have to lift it enough so that you can move it up against that jack pad and then lift it that two or three inches further onto the top of the jack pad. There's no height lift or, you know, raising your arms up above your head or anything like that. We're talking about something that's even got handles put on it by the manufacturer for that easy lift onto the jack pad."

- 35 How often the jack would be taken off the jack pad and reset, "If the employees do the right thing with leveling the jack pad and lining up for that vertical lift on the jacks themselves, the carmen that know what they're doing don't have to reset it very often at all." "... There's lots of small yards in outlying points that do not have RIP tracks with in-floor jacks." Confirms that most of the hump yards have a place built into the ground with jacks already there.
- 35-36 Why NS sets up those permanent in-ground jacks, "Those places are high throughput, high quantity, and very efficient locations, so those are locations where they see more wheel changes than other places. So they can push more cars through than -- you can change wheels much faster and more efficiently with the in-floor jacks because you just bring the cars in rather than having to bring the tooling to the car."
- 36 Asked if it's safer that way, "I wouldn't classify it that way because both means of doing the task can be done safely." Asked if it would put less stress on the carmen, using the in-ground system, "I wouldn't even say less stress. I do agree that they don't have to lift a portable jack if they're using an in-floor jack. There are instances or types of repairs, though, where you can't even move the car because of the wheel defect that it may have."
- 37 Deponent's definition of line of road, "Outside of where we have those -- so I'm thinking of it -- let me think of it from the car side here. The line of road for the car side is basically the domain of the road truck. So the work locations that those road trucks get dispatched to is what I would consider line of road." Asked if it's normal for a line of road truck to not be used in a yard that has available a permanent in-ground jacking system, "Normally that's correct, but -- well, no, I don't agree 100 percent because there are some expedite repairs and some other repairs that even at a location with the operating RIP track they would use the truck to make an expedited repair in the yard still." Says it just depends on the location and the operation for that day.
- 38 How familiar deponent is with Sevier Yard in Knoxville, "I have not worked there before, but I have been there before both at the yard itself and the mechanical facilities there as well." When deponent visited Sevier Yard, the RIP track was working; thinks he visited in 2010 or 2012.
- 38-39 Deponent asked if he knows why the RIP track in the Sevier Yard was idled, "I was not involved in any meetings where that decision was made, but it was made as a business decision with the decision to also idle the yard."
- 40-41 Asked how the 50lb weight restriction was developed, "... There were discussions about how to increase awareness on what an employee pays attention to lifting. Just like a speed limit helps you pay attention to your speed going down the road, having a lifting limit helped employees pay attention to what they were about to lift and what they were about to handle whether it was lifting, pulling, or pushing, as the bulletin is titled. So 50 pounds was chosen just as that limit to help increase that awareness of what an employee was about to handle at any time and to require the job briefings and the extra care needed when more than 50 pounds was going to be required such as when we're talking about these jacks here as well."
- 41 Asked if the 50lb limit came as a result of speaking with ergonomic people, or studies, "No, sir, there's nothing magical about the 50-pound number. That's like saying that, you know, if you lifted something that was 50 pounds, but don't do something that's 51 because it'll hurt you. You know, that just doesn't make much sense. You could hurt yourself with less if you lifted incorrectly."
- 43-44 Referring to the last paragraph of Exh 2, deponent asked what his advise would be on giving alternate means of being able to pick up or drag the hydraulic jack to the position, "... So the paragraph here really gives that answer because the supervisor's job or my job as that supervisor would be to ensure all other means have been exhausted. So that's really about

- what we were talking about earlier. The supervisor or I as the supervisor would want them to get that far-side jack as close to the jack pad as possible to minimize or reduce the amount of distance the employees would have to drag and then lift the jack or lift and move the jack to the jack pad for those few feet that would be there. The employees would then also by this paragraph have the job briefing with each other on how to properly widen their stance, lift without twisting, and use the handles that are provided on the jack for that purpose to do it safely."
- 44 Rules about walking on ballast, "I don't have the numbers in front of me. I'd have to look them up, but they generally talk about watching your footing at all times and watching out for tripping hazards, loose ballast, the things that would cause you issues walking on ballast."
- 45 Deponent asked if he would agree that walking on ballast is more difficult than walking on level ground, "No, sir, I don't categorize it as more difficult, but there's a reason we have the rules. More attention is required when you're walking on ballast." Asked if someone is having to do the task of carrying a heavy object, would their attention be less towards the ballast and more toward the heavy object they are maneuvering, "No, sir, I don't agree with that either. That's the reason that the carmen would have the job briefing ahead of time so that they can still pay attention to their footing and other things while also having a plan for how they're going to make that short lift to the jack pad of about three inches." In deponent's answers, he assumed in every situation that it would be a short distance to travel; asked if that is not always the case, "I can't think of an example where it would be a long distance by any definition I can think of."
- 46 When deponent says short distances, he's talking about, "Really just a couple of feet." Deponent confirms that he cannot envision any situation where the lift would be any longer than a couple of feet, to carry or drag. Asked if when the coupling device is extended, would that increase the distance that would be required to carry or drag the hydraulic jack, "Not necessarily because you're using a crane and the crane will clear the coupler. So you can lift the jack over the coupler and still have it at the corner of the car, but, even if we suppose that extended the distance, those are still only two to three feet longer than anything else. It still falls within my couple of feet answer."
- 47 Deponent asked if he had any alternatives that he could give the two-man crew to having to either pick up the hydraulic jack and carry it or drag it, "No, sir, there are going to be times during a wheel change where lifting that at least up onto the jack pad is going to be required to do the job." Says that there are wheel changes that have to be done in the yard too; it depends on the wheel defect.
- 48 Deponent asked if he would agree that in the yard, the majority of wheel changes are done at the in-ground system, "If there is such a system at that yard, I do agree with that in general." Deponent confirms there was such a system at the Sevier Yard in Knoxville during the time period between 2013 and November 2019.
- 49 Deponent does not know where the amount of weight of 50lbs was derived for the job description in Exh 1. Asked again if that would be assuming that lifting up to 50lbs would be a safe amount to lift, "Once again, it's not necessarily the weight. It's how the work is done that would say whether it's safe or not or done safely or not."
- 50 What 'I'm coming home' means, "It was a safety slogan, a safety campaign and safety slogan, that was released by the company. I don't remember the year, but it was at one of the big annual safety meetings and they released that, and it was a focus for at least a year or two about doing the job safely, not using brute force but paying attention to how you do your job through the day so that you go home safely at the end of each day of work. That's

- where the "I am coming home" -- I am coming home safely was the campaign." Training received from the DuPont Sustainable Solutions group, "That training was about paying attention to risks and making decisions around safety."
- 51 Confirms that training occurred around 2015. Asked if as a result of those trainings, did deponent change anything in his line of work as far as risk factors, "At that point when that training came out, I was the shop manager at Roanoke Locomotive Shop, and we put all the employees and supervisors through the risk factor training from DuPont. It was a safety campaign in that year and I believe the following, if I remember correctly, where we talked about risk factors and paying attention to which risks were on the acceptable level and eliminating the risks throughout daily activities. Even something as simple as taking a sip of your coffee while you're trying to drive was discussed in the training, from what I remember. So, yes, there was quite a bit that we followed up with that year due to this training."
- 52-53 Any suggestions that could make the job of removing and replacing wheels easier or safer, "Not at this point. I think there was so much work done over the years on those jobs -- just adding the cranes to the road trucks is one example and redesigning and coming with the -- really the best jack for a job that entails lifting a 250,000-pound car. To get something like that or to lift something like that with a jack that weighs only 187 pounds, I think, is pretty remarkable, and a lot of work has been done with even the jack pad itself for the amount of weight that it's distributing. So a lot of work has been done with all of that equipment to really remove as much risk as we can to the employees. The interesting thing about the DuPont risk factor training, since you mentioned it, was really -- and Norfolk Southern takes it seriously -- that we have made these jobs as safe as they can be for our employees because we want the employees to go home safe. The DuPont training makes the point that if you took all risk out of your life, you wouldn't even drive in your car because that's one of the riskiest things we all do every day. So really it's remarkable what the employees are able to do with these tools, and the company is always looking for ways to make the jobs better."
- 53 Deponent asked if he would agree that limiting risk to the employee using an in-ground system would be a better choice of changing the wheels out, "If I had a car in a car shop and I was picking between the two, we'd pick the in-floor jacks every time, but, like I mentioned before, there are defects on the cars where they cannot be moved to such a location."
- 54 "If the car is at the location sitting in the car shop and you were choosing between the two, you'd pick the in-floor jack, but what you've got to think about is most all of these locations, when you look at how many times wheels are changed, they are changing them all over. If you're at Oakdale, you don't have in-floor jacks and you can't get to in-floor jacks with a bad wheel. Wheels are an integral part of the car, and, unless you're already at the shop where the wheel is bad, you're going to have to change it line of road."
- 55 Asked if they have a place at Oakdale that is permanently set up to change out the jacks so they don't have to use the pads, "I can't comment on Oakdale specifically, but, yes, there are locations where they're set up for this line of road jacking operation to make it easier and more efficient for the carmen."
- 57 Asked about NS's studies, "No formal studies, but, yes, Norfolk Southern knows that -- obviously Norfolk Southern knows that employees doing line of road wheel changes are going to be required to at least lift one of these jacks onto a jack pad which is about three inches tall."
- 57-58 Asked if they have done any studies on the harmful effects of lifting over 50lbs for a line of road carman, "The problem to me with the question is that when done properly using the handles that are provided, using the crane as close as they can get it to the jack pad, and all of those things, there are no harmful effects. An employee, knowing that he's not

supposed to use brute force, they're not in a hurry during this job, and this job needs to be done meticulously paying close attention to what's going on to keep that car from tipping and to keep it level while you're jacking it, the employees know that they have to do this carefully and use the job briefings as required by the MSB that we've been discussing and it can be done safely."

59 Asked if Norfolk Southern knows what type injuries can occur to carmen lifting in excess of 50 pounds, "I'll restate my previous answer that injuries can occur even without lifting with improper twisting and other things that could happen. So, yes, Norfolk Southern has seen injuries that can occur irregardless of the amount of weight that's being lifted or handled when done improperly."

61-62 Deponent asked if Norfolk Southern realizes that when these two men on the carman crew, on a line of road crew, have to change out wheels that they are going to lift at least 90 to 100 pounds each in the performance of the job, "For that short distance to get it onto the jack pad, yes, sir."

BAKER

62 Deponent asked to define brute force, "So brute force would be lifting or pushing or pulling with a jerking motion or also it could be defined as brute force would be at the limit or beyond the limit of the employee."

62-63 Asked what Norfolk Southern's expectation is about an employee lifting beyond their own known and identifiable limitations, "It's covered in our safety rules and it's covered in the bulletin that was in effect that we've been discussing, MSB-0085. That second sentence in the first paragraph says that employees are responsible for knowing their physical limitations and taking precautions to ensure these limitations are not exceeded."

63 Training Ptf received in the field of ergonomics and what training Ptf received on how to jack cars line of road using portable jacks, "So for the ergonomics part of the question, Mr. Seal did receive the ergonomics training that we've been discussing throughout this morning. Ergonomics & Ergonomic Controls was the name of that training..."

63-64 Continued, "That training focused on just what we've been talking about, where the risk factors are when it comes to lifting and then the tips for smart lifting where we're pre-planning the lift, having the job briefing, widening the stand, lifting with the legs, holding the load close to your body, lifting smoothly and gradually -- that's the no brute force section there -- and then turning your feet so that you're not twisting. Most of that is regarding back injuries for that 6th step there, but that's the ergonomic training. The training on the procedure, there's several different documents. There's the Standard Work Document, both -- let's see here, let me make sure I give you the right number. Standard Work 0018 is the Wheel Change Line of Road document that was mentioned earlier today as well. That has the lift of the equipment that's used and includes pictures of those jacks and the other equipment that we've been discussing today. Then the CDI -- which Mr. Seal did receive training on that Standard Work Document. Also the CDI 12.28 which covers the car department instruction, that document especially focuses on setting the jacks properly, to Mr. Sorey's earlier question about keeping the jacks vertical so that they don't have to reposition those jacks. All of that is covered in detail in CDI 12.28 which Mr. Seal also was trained in."

64-65 Deponent's review of Ptf's Employee History Inquiry, "So the Employee History Inquiry comes out of the safety training data base, and it records all training that employees receive. Every employee has an employee inquiry record that lists all the training any employees receive since they were hired."

- 65 Deponent asked is opinion about whether Ptf rec'd training on proper body mechanics in terms of handling wheel changes, "I would point right back to the ergonomics training that we discussed in depth. Those sections there, there's no doubt they talk all about how to do the proper lift for any lifting, not only heavy lifting."
- 66 Deponent asked if that includes training on joint alignment and proper posture to properly lift weights of any amount, "Yes, sir, it does. Specifically I would point to lifting with your legs and maintaining your back erect as well as not twisting during a lift." Asked if he would describe 3 wheel changes line of road a month as frequent or infrequent, "For someone that's working eight hours a day, five days a week, only those few times a month, I would say that was the infrequent part of the job." How many seconds it would take to lift a portable jack with handles on it with the assistance of another carman three inches, "Not even two seconds. The job briefing and setting it up ahead of time would take much longer than the actual lift."
- 67 Agrees that it's two seconds on the lift and two seconds to get it off the pad, for a total of four seconds. As a supervisor, would deponent have expected an employee such as Ptf to do anything they considered to be hazardous to their health, "Absolutely not. That is stated over and over again across the documents that we've been discussing today." Deponent asked if he would have expected an employee who felt handling a portable jack lifting it three inches to complain about it if he felt it was hazardous to his health, "Yes, sir. We have instances all the time where employees that think they have a better way of doing something or have issue with how we're doing something complain, and that's what we encourage them to do. We reinforce them for doing that actually." Asked if there is any other way to move the jack other than lifting it the three inches to get it onto the jack pad on one side of the car sometimes, "No, sir. Based on the location this work has to be done, the crane can't reach around the corner of that car. It has to be lifted onto that jack pad by the employees."
- 68 Asked if a defect would be changed at the closest yard or a place where the wheel could be changed, "It depends on the defect. There are some wheel defects that if it has to be dragging to where it can be changed, they actually even have to have people walk with it because the wheels can't be moved on their own."
- 69 The yards at Bulls Gap, Morristown, Clinton, Loudon, Concord, Oakdale, Middlesboro, Young Mines, City Yard, and Loudon do not have RIP tracks. Deponent asked if he is aware the Ptf continues to work on the road truck and perform line of road wheel changes throughout his territory, "Yes, sir, I am. I understand he exercised his seniority to bid on that job."
- 69-70 Service truck versus a road truck, "So a service truck is a -- it's a much smaller vehicle, does not have the heavier equipment that you would find on a road truck. A service truck does not have a crane that's capable of lifting a wheel set and taking a wheel set to a car, as an example. A service truck would perform smaller repairs from its tool set and employees that operate it."

SOREY

- 71 Doesn't believe the ergonomics training Ptf received described pulling heavy objects through ballast. Asked if there is any other area where they would have to lift the jack, "It depends on where you were able to place it with the crane. If you got it to the edge of the jack pad, then you would just have to lift the three inches to the top of the jack pad. If it was at the corner of the car and the jack pad was two feet back from there, then you would have to move it the two feet and then up the three inches to the top of the jack pad." Asked if deponent would take issue with Ptf and other carmen testifying that they would often have

- to carry the jack 6-8 feet, "I think that distance sounds a little long from the corner of a car to where the jack is typically set."
- 72 Deponent asked if he thinks it would be proper to drag the hydraulic jack and still be in compliance with the ergonomic regulations as set forth by Norfolk Southern, "Yes, sir, it could be done. Like I said before, the employees in their job briefing can decide to lift it, too, and still be in compliance."
- 73 Asked if Ptf did any jacking 3-4 days in a row, "There are a few that are -- well, actually I only see one that is three or four days in a row in this two-year period or two-year plus period. As I stated earlier, yes, there is one that I see that is three or four days in a row that they did it once each day, but each of those times was still only two to four seconds of actual lifting." How deponent knows that, "Because the max that this thing would ever be lifted and moved to the pad is only a couple of feet." Counsel states that that is deponent's opinion, "No, sir, I saw it in videos and everything else as well. I think it would be the opinion of most carmen that do the job."
- 74 None of the documents in Exh 3-8 talk about dragging the hydraulic jack to the position to place it. Asked if the carmen are correct in saying they often have to pull this thing six to eight feet, would deponent agree that it would take more than a few seconds to accomplish that, "If it was six to eight feet, it would still only take a few seconds. We're only talking two steps for the average person." Deponent states that it can be seen in the video, that it only takes a few seconds.
- 75 Deponent confirms there was one video, and it was set up by NS in the yard to show people how to do the job correctly; asked if the video shows going on the opposite side of the car, "It shows the employees moving the jack on the opposite side of the car. Was that your question? It does show that."
- 75-76 Confirms a bad wheel could be discovered where the ballast is sloped; asked if it would also be taken to a place with sloped ballast to have the wheel changed, "If the location -- if the location is sloped to a point where the jacks cannot be used safely or the car cannot be jacked safely where the jacks can be on a level and well balanced weight distribution, then the car would have to be dragged a distance 'til there was a place where the jacks could be on a good foundation."
- 76 States that it's very important to have a good foundation and keep the jacks and the overall lift vertical.
- 77 Asked if one jack goes up faster than the others, would they have to reposition the jacks, "Yes. Well, not necessarily reposition the jacks. It depends on the situation in that instance that you're mentioning, but it could cause you to have to reposition the jacks." Agrees that there are times, that even if you follow the procedures as set up by NS, that you would have to remove the hydraulic jack and restack blocks or reposition the pad underneath it.

Doug Seal Medical Records Highlights

Summit Medical Group, 4/24/2018, Gerald Russell, MD

Complaint: Patient complains of non-traumatic pain right arm and shoulder. He states this has gradually progressed over the past year and has gotten worse this past week. He denies traumatic injury.

HPI: He has not had an x-ray or other tests performed of his right shoulder. He has pain with abduction of his right shoulder; has elevated trig and FBS.

ROS: No limb weakness or numbness.

Problems: 1. Osteoarthritis of hand. 2. Osteoarthritis of knee. 3. Right shoulder pain (consistent with rotator cuff pathology). 4. Sacral radiculopathy. 5. Tendonitis, bicipital.

Exam: Musculoskeletal: abduction to barely 90 degrees on right shoulder; tender over cervical spine. ROM: Cervical PROM.

Assessment: Right shoulder pain, consistent with rotator cuff pathology.

Plan: X-ray right shoulder, 2 views.

Summary: New patient. We did an x-ray of his right shoulder and discussed the findings. He is being sent for an MRI of the right shoulder.

6/5/2018, Gerald Russell, MD

Complaint: Patient here for 3 week follow up for pain in right arm and shoulder. He states the pain is still there and he is still not able to raise up his arm. He is here to review the MRI results.

HPI: MRI showed small full thickness tear of supraspinatus tendon. He saw ortho but did not have a decision without treatment. He is here today to discuss it. He has pain with elevation or rotation of shoulder. He is still working.

Problems: 1. Osteoarthritis of hand. 2. Osteoarthritis of knee. 3. Right shoulder pain (consistent with rotator cuff pathology). 4. Sacral radiculopathy. 5. Tendonitis, bicipital.

Exam: Musculoskeletal: tenderness over posterior right shoulder. ROM: pain with internal rotation of right shoulder.

Assessment: 1. Right shoulder pain. 2. Tear of right supraspinatus tendon.

Plan: patient could be a candidate for PT and possible injection. Need to hear from the orthopedic surgeon.

Farragut Family Practice, 5/1/2018, Christopher Aikens, MD

Exam: MRI right shoulder

HPI: right shoulder pain

Impression: 1. Subscapularis tendinosis.

2. Small focal full-thickness or near full-thickness tear involving the anterior fibers of the distal supraspinatus tendon, approx. 10 mm proximal to its distal attachment to the greater tuberosity. There is no tendon retraction or muscle atrophy. There is an associated underlying contusion within the humerus.

3. There is trace amount of joint fluid and a small amount of fluid in the subacromial/subdeltoid bursa.

KOSC, 7/17/2018, Robert Smith, MD

Preoperative diagnosis: 1. Right shoulder rotator cuff tear. 2. Right shoulder impingement syndrome.

Postoperative diagnosis: Right shoulder rotator cuff tear, high grade partial tear. 2. Right shoulder impingement syndrome.

Procedure: 1. Right shoulder diagnostic arthroscopy with arthroscopic rotator cuff repair.
2. Right shoulder arthroscopic subacromial decompression with acromioplasty.

Ortho Tennessee, 7/31/2018, Robert Smith, MD

Assessment: Incomplete rotator cuff tear/rupture of right shoulder, not trauma.

Plan: Refer to physical therapist

8/22/2018, Robert Smith, MD

HPI: Post-op right shoulder; status is improving. Pain level is 2/10; pain frequency is occasional; no pain medications. WB status: full. Wound healing. Making good progress.

Assessment: He is doing well. Symptoms have improved. He has progressed with therapy. It sounds like he has done well with getting his range of motion back. He states that he has been compliant with the sling. He will return in 4-6 weeks to progress his therapy.

9/19/2018, Robert Smith, MD

HPI: post-op right shoulder; status is improving. Pain level is 0/10. Pain frequency is occasional. No pain medications. Full weight bearing status. Making good progress with rehabilitation. Not using assistive device. Well-healed incision. No calf tenderness.

Assessment: He is doing well overall. He will progress with his therapy. He is doing the active-assisted range of motion at this point. To begin some strengthening in 10-12 weeks. He will return in 4-6 weeks.

10/31/2018, Robert Smith, MD

Complaint: right shoulder pain

HPI: Patient presents with pain on the right side. The problem is improving. He states that he is going to physical therapy. It is helping. He has almost full ROM. Current pain is 0/10. Symptoms are aggravated by daily activities.

Assessment: At this point, he is doing well. His symptoms have improved. He has minimal pain. He is about 3-½ months out from his rotator cuff repair. We discussed options for him at this point. He still needs to be protective of his shoulder. Unfortunately, with his strenuous work that he does for a job, he is going to have a hard time going back to that until he is 100 percent, which would be about 6 months from the surgery. Recommend keeping him out until that time, which should be a safe point for him putting strain to the shoulder. In the meantime, he is going to be protective. He is going to continue with therapy with a strengthening program. He will return in 2 months, at which time we will finalize his return to work at about 6 months from his surgical date.

1/2/2019, Robert Smith, MD

Complaint: Right shoulder pain.

HPI: Patient presents with pain on the right side. Symptoms occur intermittently. The problem is better. The pain is dull. His current pain is 0/10.

Problems: 1. Acute pain of right shoulder (onset 5/23/2018). 2. Complete tear of right rotator cuff (onset 5/23/2018). 3. Encounter for other orthopedic aftercare (onset 7/31/2018).

Assessment: He is overall doing well. He did have an incident about a month ago, where he had a bit of an injury. He was throwing some brish, doing a little bit more than what was medically recommended. He states that he felt some pain with it at that time. It has been gradually improving since then. He will return in 6-8 weeks. He will be released back to normal work duties with no restrictions.

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McMahan, P.B. *"Application of Biomechanical Principles and Models to Reduce Railroad Injuries from Physical Exertion,"* Association of American Railroads, Report R-592, September 1984.

"Examination of Railroad Yard Worker Safety," U.S. Department of Commerce, National Technical Information Service, July 2001.

James R. Ferguson
Law Office of H. Chris Christy, PA
201 West Broadway
Ste. G12
North Little Rock, AR 72114

Re: Doug Seal v. Norfolk Southern
File No. SEA.NOR211124

James Ferguson, atty jferguson.raillaw@gmail.com

p 501-758-0278

c 501-707-5257

Eddy Sorey, atty eddysorey@gmail.com
Doug Seal, Ptf dmseal@hotmail.com
Will Hicky, atty will@hickylaw.com

Incident: Various
Def Atty: J. Baker

-----As of February 16, 2022

e-depo Douglas M. Seal, 08/12/21, 174pf, Plaintiff
e-copy RPD 2 - Ptf's Personnel File [includes 40 docs]
e-copy RPD 3 - Ptf's Medical Records [237 pg PDF]
e-copy RPD 6 - Ptf's Employee History
e-copy RPD 21 - Ptf's Wages 2015-2018
e-copy RPD 30 - Carman Job Description (PRINTED)
e-copy RPD 33 - 4 types of NS CDIs = Car Department Instructions (PRINTED all 4):
 Jacking & Securing Tandem Axles on Triple Crown Trailers (issued 7-15-08)
 (CDI 12-42)
 Jacking Rail Equipment (issued 12-21-09) (revised 3-31-21) (CDI 12-28)
 Jacking Rail Equipment on Shop/Repair Tracks (issued 7-23-19) (CDI 12-28A)
 Jacking of Rail Equipment – Line of Road (issued 7-23-19) (CDI 12-28B)
e-copy NS SW (Standard Work) - Wheel Change Line of Road (5-14-14) (PRINTED)
 [note - this document is missing page 6 of 7 of the 7-page PDF]
e-copy NS SW - Car Wheel Change Using Combilift & Jack (5-23-14) (PRINTED)
e-copy video titled "Raising It Safely - #8034"
e-depo Ryan Stege, 12/15/21, 77pfc+exhs, corp rep
 [PRINTED Exhibits 2 (NS Safety Bulletin), 6 (PPT), 7 (PPT)]
TK Report (PRINTED)



e-copy letter from John W. Baker, Jr., to ES dated 01/17/22; Mr. Baker has and thanks ES for TK's anticipated report; may Mr. Baker have an extension of two (2) weeks to make our Expert Disclosures? Please let Mr. Baker know; Mr. Baker would like to take TK's depo on 02/15/22, 02/16/22, 02/17/22, or 02/18/22; Mr. Baker would like to take TK's depo in person and of course ES can appear by Zoom; Mr. Baker would suggest the depo be taken at Mr. Baker's office since TK lives in Knoxville; as is the accepted practice with TK, Mr. Baker would very much appreciate ES providing Mr. Baker with a full and complete copy of TK's file five (5) days before the depo; this will shorten the depo; Mr. Baker will make the same accommodation for ES; TK typically relies on many docs and, in TK's report, TK has actually listed them; in addition to TK's file, Mr. Baker is interested in the following specific docs that Mr. Baker asks be produced in advance: [list of 19 docs]; we, of course, will be willing to pay a reasonable expense for copying charges; if ES has any problem complying with Mr. Baker's request, please let Mr. Baker know and Mr. Baker will take the matter up with the Court; Mr. Baker has found that depositions of TK generally are long laborious and in order to cut the amount down, it is essential that Mr. Baker has these docs well in advance; Mr. Baker trusts ES understands; also, in reviewing TK's report, TK says on Page 6 that TK has inspected railroad work environments including the handling of jacks; Mr. Baker will be including that in Mr. Baker's notice for TK's depo a Duces Tecum section demanding that TK produce all notes, photos, reports, and anything at all having to do with TK's experience observing the handling of jacks

/e-copy NIOSH Musculoskeletal Disorders and Workplace Factors, 1997

/e-copy NS Ergonomic Policy

/e-copy 1993 AAR letter to Roby, Reference Task Force

/e-copy 1993 AAR Task Force Agenda for NS

/e-copy 1995 Letter NS Not Have Person on AAR Committee

/e-copy NS Ergo Training 2006

/e-copy Preventing CTDs of Upper Extremity

/e-copy 1997 - 7-31 Letter Ergo Meeting Salb to Roby RE: CTD Ergo

/e-copy 1993 - 1-24 Memo From George Page

/e-copy 1948 AAR Ergonomics & Surgical Section Report

/e-copy 1997 NIOSH Ergo Study

/e-copy Ergonomics Process of NS Upper Extremity Update dated 09/08/95

/e-copy The Ergonomics Manual

/e-copy AAR Interchange Field Manual Rule 13

/e-copy AAR Ergo Guide Condensed Controlling CTDs

/e-copy 1991 AAR Lifting Guides NIOSH

/e-copy NSRC Notification Document Cancelling MSB-0028: Handling of Coupler Knuckles

/e-copy NSRC Notification Document Cancelling MSB-0085: Lifting, Pulling and Pushing

e-copy Agreed Notice to Take Videotape Deposition of Ptf on 08/12/21, in Knoxville, TN; dated 07/13/21

e-copy letter from Jay Baker to ES dated 07/13/21; this will confirm our conference in Jay's office wherein we reach an agreement that Jay would take the depo of Ptf in Jay's office on 08/12/21, beginning at 10:00am Eastern time...

e-copy Agreed Notice to Take Videotape Depo Duces Tecum of TK on 02/16/22, at the law office of Baker, O'Kane & Thompson PLLP, 2607 Kingston Pike, Suite 200, Knoxville, TN, at 11:00am; dated 01/18/22

Handwritten notes from Doug Seal re jack handling data for ~5-month period in 2018

& copies of some medical bills (PRINTED)

/e-copy FRA 1999 Safety Advisory 99-1 - Safety practices lifting/jacking rail equip (PRINTED)

/e-copy §49 CFR 215.9 Movement of defective cars for repair (PRINTED)

/e-copy §49 CFR 232 Brake System SAFETY Standards...etc

/e-copy Sample e-lit internet docs - jacking & wheel change

Plaintiff DOB: 12/30/66

2 1/2 hour
20 minutes

carman

2/15/2022 / 10
cont.

- DOB 12/30/1966

- Height 5'6" ~ 5'7"

- Weight 214 lb

- (R) handed

- No diabetes

- just ~ HBP

~ 2016 little

when shoulder

Blood pressure

Jacks

knuckles

railcar parts

Repair Track

2016 idled their yard

for a short while until got CDCs
was on 2nd shift.

didn't
really
want
this

— Road track work — had to get CDL

soon after got CDL

had to go jack cars — didn't know how
didn't know what it all entailed

got thru it

on/off road jacking from there on

(in floor jacking system @ shop) — RIP
w/in 20 minutes Track

no worry about dropping them

on Road jacks 185 lb



2/15/22
cont

2/10

on jack pad after preparing it
oak blocks
each side of car

30-40 lb extensions on it sometime
opposite side of car to corner

one guy shorter he worked with
one guy taller he worked with

lift up to put jack on Jack pads
jack car hold for 5 mins. let
back down

if one shifts have to re do base
& lift & put down again, etc

Sometime 5-6 times ————— to get it to
settle & not
sink

push/pull pole
pull trucks

wrestle safety stand ————— over rail
in under car
wheels & long handle on
it

did a lot of jacking on line
coming back into yard of road
shouldn't had to experience
it over 2 yr period

2/15/22 3/10
cont

— last Feb ²⁰²¹ me & Emory ^{Gap} did
a jacking job

— last week 1st jacking job
since last Feb

— lifts w/ (L) arm now; keeps away from
(R)

Oct 2018 opened it up
& did a wheel
change in 30 minutes

Question
why not use
Repair Truck

carrying jack on rock is difficult

letter in
depo — read in depo @
request of Δ atty
— those guys just accepted
it — got fired for
90 days

2 other guys
out of B-11s
Gap - jacked
somewhere he
was not &
car fell (2 guys
had nothing to
do w/ it
got 10 days)

Stressful — lifting
also when lift
car & pull trucks out

2/15/22
cont

4/10

— nervous, scared/worry, unsure when jacking
these cars out

felt
pressure/stress to do it

nr
asked
meds

leg

ankle

knee

arm

tennis elbow
lower
bicep

Shoulder

- dull ache

- just thought maybe
bursitis/arthritis/old

- questions re: other parts
to b/c mom has rheumatoid
ask doctor about it
some b/c

aching/hurt/sore — not debilitating

April 2018 — jacked like 4 days in
a row

— woke up ~Thurs
or Fri a.m.

— couldn't even take R hand
& touch face ~

— made appt ~ 2 days down
so-so

↓

doc moved
around MRI

90% torn supraspinatus tendon

wake up boom couldn't move sury

2/15/22
cont.

5
10

RR Job

Coster Shop June 5, 1989

McDonough School ~5 to 6 weeks

welding from Vocab School
David Engle Instructor

carman class very overwired & brief

next to last week laid off @ Coster

Jan 1990 - finally got to work
@ Coster Shop

(welding
adjusting doors etc.)

draft gears, center plates, couplers

No prob/injur

1995 June - shut down Coster

apx 2 yrs

1997 - called back to John Series

2000/2002 Weld Instructor for 13 to 14 yrs.

Bill off went to yard

2016 idled yard

No injury report ~~ever~~

→ Then had

to Jack &
Should have
done in RIP

(eye shot)

Activities

- years ago

weight lifting

tired but
no injury

- bike ride
no injury
weeks

- fishing
- hunting

still lifted & worked
on RIP it no
strenuous &
explosive truck

↑ - diesel
shop

↑ floated

→ knuckles 1 per
week

~30 years service

Q: Why idle yard?

A: don't know... seem to happen a

same time — PSR precision railroading staff

63 men known for many years

down to 14

told had to get CDL to keep job

When they fired 2 guys is when I was on 2nd shift & was told by Steve Cox (supervisor filling in for Strickland) to go Jack up cars

2/15/22

cont

6/10

Unsure of everything we were doing w/out training like jack (5 mins / bring back down & jack moves / hard to get stabilized; don't know if good enough or not - 5 or 6 times

Aug/Sept - 2016 → April 2018 & beyond

20 months

(Per day - 4 min see p. 7)

Physical 1 to 3 days/week

most time — times jack 1 car we have jack 2 cars

when got better

1 wheel or brake beam

Calendar April 16 — Jacked loaded time car 13-packs (1)
April 18 Wed — Del wheel in London → (1)
April 19 — Jacked #3 wheel London → (1)
April 19 — Thurs — (arr go bad) — wake up & bad
April 20 — Del complies (care) — bad

FRI

1 wheel

eg. 20 months

Aug/sept '16 → April '18

2/15/22
Cont.

7
10

Jacks

1 yr - 52 - 5 = 47 weeks/year

8 months - ~32 weeks/year

↓
~80 weeks

Jan. 25 wheel Δ load
26 " louder
30 "
31 "

Minimally
twice
Then
back
down

Jack Job
e carry
- 1 lift to far
side jack set
down w/out hitting
beam

4' to 5' to ~12' (flat car)

+ 1 lift

4 lifts minimal
on 1 car

not firm base
dedicated pad
or ground soft

typical

- oak boards

- adapters goes on top of jacks to
set spacer sometime

- spacers

- jack pads ~30 to 40 lbs

~40 lb
out of
jack box
around car

Knuckles

How many

100s - normal job in Coste

- still have to lift off dolly

- ~~one~~ lift one other day - take guts
out to
work or
complex

2016 to 2018
time period
- lift them?

some out
on load

2 men w/ stick
carrying it but
when put on
then one had
to

~2010
to
2015 time
period or mid
2000s

2/15/22 8/10
cont.

- one hold cut lever up → usually me
 - other put knuckle in
- co-walker
smaller - step
pile

other physically heavy

any brake values

40-60 lbs + 4

coal car - difficult
- steel bolts
- triple block

awkward

finally
got a
tool that
counterbalanced
but issue w/ it
b/c it could
a little up

100s or more

Costner

everyday Act values

stuck adjuster ~ 100 lb times just
lift & feed in one person

pull
on floor
on ~~floor~~ fork
get another
back in

brake
shoes

brake bar
nut/slack adjuster

pull real tough sometimes

RIP wheel Δ out

John
sevier

2/15/22 9/10
cont.

3 in-floor jacks on each imp

Now only on Truck 2

b/c Took out of

Truck 1 & 3

Control panel away from

put car on spot above jack

unhook car ~~catch~~ keys - beat them
out sometimes laying on back

on
brake
lever &
brake
foot

must do before jack

2 little levers on panel push ~~forward~~
forward

safety dogs/wide pad

chock back wheel

Car goes no where

Mike Chambers
did Time
Study on
it -

from unhook
to jack/pull
truck out/
Δ wheel/
put truck
in/set down

- 1-2 hrs in field
- 1st str too longer - 1/2 hr whole shift
- we got better

20 minutes

continue 2018 → 2021?

yes, but not as many when went back

out 7-8 months

do not know why there is not very many

on road how far?

- middletown
- cichwick
- johns - city
- greenville, even chatt.

most of time

{ morristown
- clinton

e.g. was a real heavy one that sunk --

Attentive

lots are high impact wheels

(↓ defects) - could come to RIP

~ bolly - (crane jack to other side)

~ still ground up to jack pad

- majority 2-person crew
- every now & then another person if in pocket near RIP

(equip. on far side limited b/c dip/ballast/ & adjacent

2/15/22
cont. 10/10

① if on line of road done same

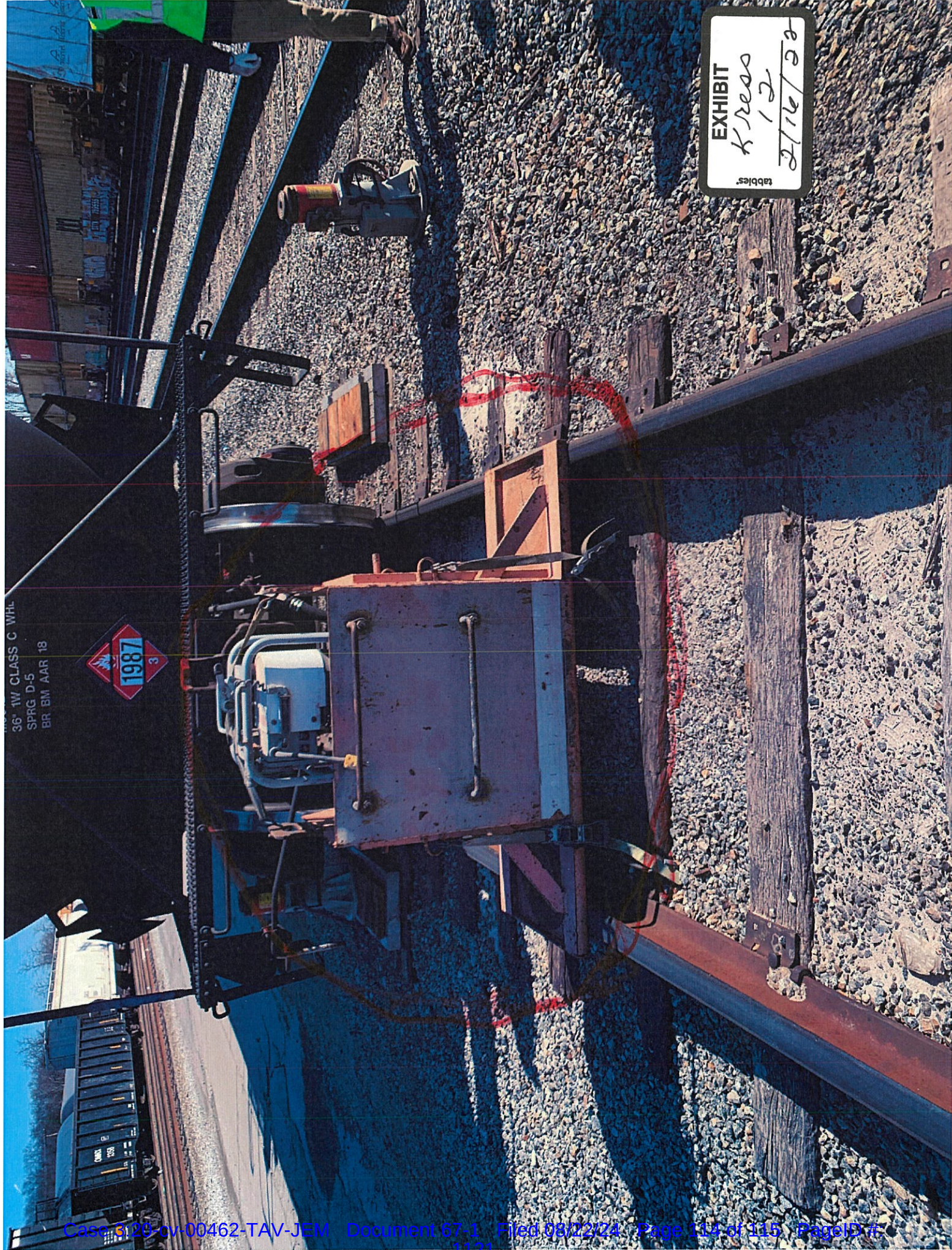
or

similar to RIP

②

On side

- concrete pads &
- dedicated truck &
- leave portable jacks sitting there



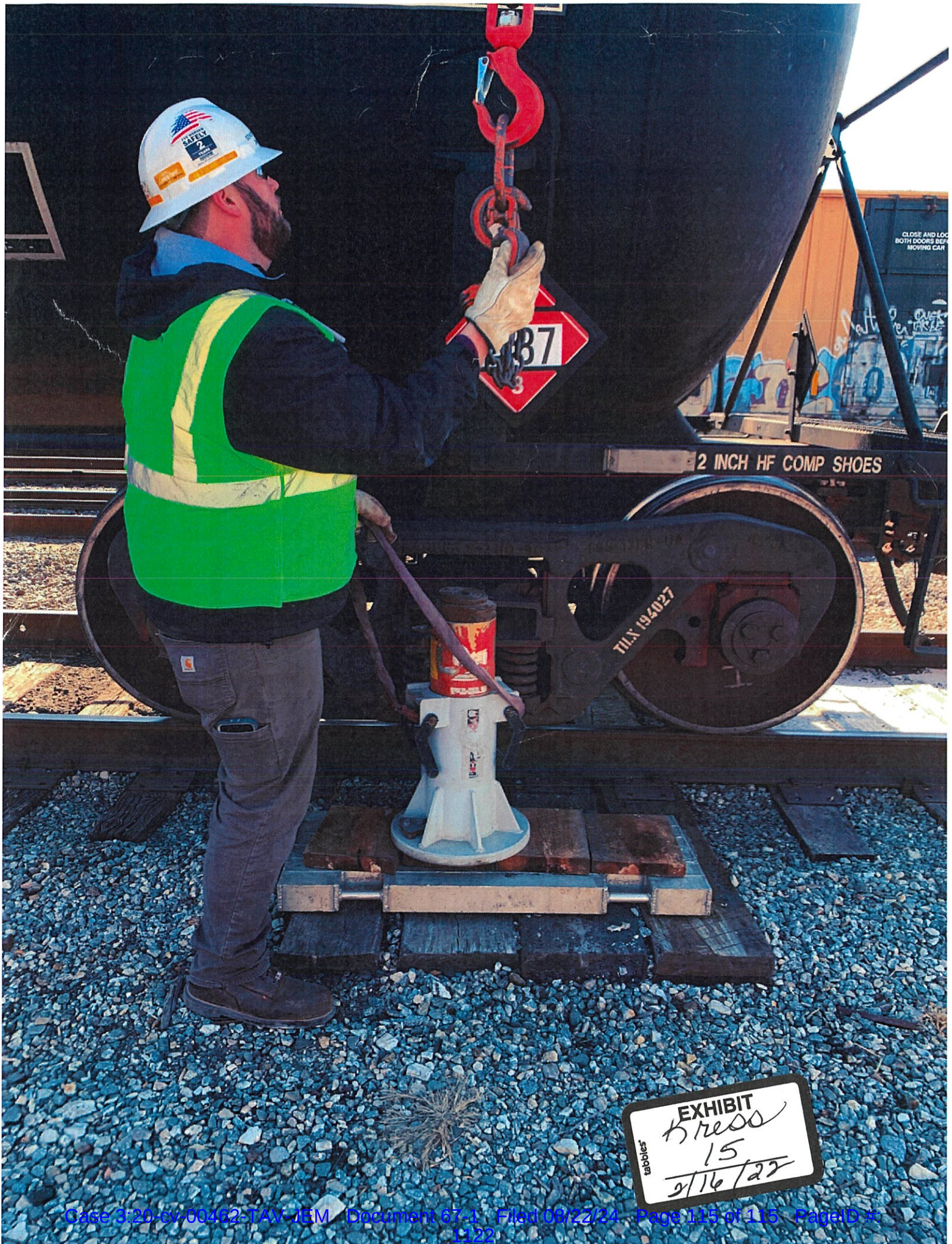


EXHIBIT
Kress
15
5/16/22
tabbles