WEBVTT

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Rae Barton: Welcome everybody to this week's Red List Weekly Webinar. We're so excited to the people that have decided to take the time to sign up and join during their busy day. Today I am so thrilled to be joined by one fabulous Mr. Lauren Green Lauren is a senior lubrication subject matter expert at desk case. He has a lot of passion for

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Rae Barton: taking good care of good machines. He's got a lot of great industry knowledge, and we we feel very lucky to have him on today. So, Lauren, would you maybe like to introduce yourself a little bit more.

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Loren Green: Sure. Thank you. Thank you for the opportunity and thanks for you guys for again taking time out of the day to to check in with us

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Loren Green: a little my background I did 22 years in the Navy as a boiler operator, and that's kind of where my oil analysis journey started. So I was the oil king on a United States aircraft carrier. And that's where we started. I did basic oil analysis and fuel analysis. And that, and then, after I retired and came back to Oklahoma, I was fortunate enough to work for an oil company as a plant manager.

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Loren Green: manufacturing grease and and blending lubricants, and then shifted over to the consulting side. And that's kind of how I've

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Loren Green: gotten involved in this and and

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Loren Green: met with the red list folks, and we have been really impressed with the capabilities of their software. And that so that's

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Loren Green: and how we got to where we are right now.

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00:01:28.800 --> 00:01:50.090

Rae Barton: Thank you so much, Lauren. He really like. I said. He really is an expert. So I I'm so grateful that he's here today before we dive into our subject. Today, I wanna do a quick plug for red list attain. If you are a customer, a partner, or maybe you just wanna get to know more about the industry and have interest. We do have our red list, attain conference

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Rae Barton: for anyone that would like to. If you're in the heavy machinery industry space. You can go to

go.getredlist.com forward slash attain 25. This will be held in October from the 13th through the 15th in Provo, Utah. And it's a great opportunity to network to learn more about the tech. That's kind of coming downstream in this space.

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Rae Barton: So we'd love to have you there if you'd like to come.

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00:02:15.420 --> 00:02:24.400

Rae Barton: But with that, said Lauren, I'm gonna let you take today's you know, topic away and and start teaching.

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00:02:24.850 --> 00:02:49.340

Loren Green: All right. Well, thank you. So kind of like. The bullet point says, here, you know, maintenance is most effective when built on accurate asset data and a meaningful strategy, you know, wasting time on tasks and stuff. Kind of all of this started when Ray and I started having a conversation. And like when you use red list and stuff, you're trying to build out your like, you know, to be able to track your Pm's. And I've done

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Loren Green: dozens and dozens of plan assessments. And very, I don't know that I've ever actually gotten an accurate asset list. So when you're trying to go through and you know, populate a database or make the transition from one

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Loren Green: one maintenance software to another. That's a good time to clean up the the asset database and make sure that it accurately reflects all of the equipment in the plant.

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Loren Green: like I said, when most often excuse me when I would get a list, and a lot of times we call through there, and you know most of the places. If they're using sap or maxima, or something like that, they're gonna have

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Loren Green: everything in the plant

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00:03:31.010 --> 00:03:42.890

Loren Green: in that database. So like, you know, doors, fire extinguishers, power panels, and from a lubrication. Or, you know, in a maintenance perspective, there's a lot of things on there that don't

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Loren Green: require maintenance that don't need to be in there. So we'll call all of those things out and try to get down to just the lubricated assets, and then invariably.

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Loren Green: you find

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Loren Green: equipment that's not in the asset list or assets in the list that don't exist in the plant anymore. That's kind of

how this conversation started, so that we sort of figured we'd go from here.

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00:04:07.635 --> 00:04:08.430

Loren Green: Oh.

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Loren Green: you know, usually when I'm teaching lubrication classes. This, this comes up quite a bit, and it's, you know, the numbers kind of vary depending on what website you look at or whose article you read, but the the overall

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Loren Green: idea behind that is the vast majority of the Pm's that we get particularly I. You know the stuff that I'm more familiar with in the lubrication side.

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Loren Green: I would have to assume that if it's that way for Loop Pms, it's likely that way, for most all of the other Pms. As well.

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Loren Green: But there's a very, very few of those that are actually

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Loren Green: an executable Pm. Once that you spit it out of the software, you print it on paper, or you've got it on your pad, or whatever that you can run out and do that. Pm, as it's written so like I said a lot of times you have.

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Loren Green: You know there's a week's worth of Pm. Spit out on equipment that we removed out of the plant 2 years ago.

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Loren Green: Now that's like we call that an easy week. I've still got the Pm's in there. So I'm gonna run and go do those things so that you know they gave me my Pm's for the week. We don't have the equipment. I don't have to worry about it anymore.

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Loren Green: One of the things that is kind of concerning on the other side of that is having new equipment installed in the plant that didn't get uploaded into the database. So there's not. We're not even doing maintenance on that stuff. We don't realize that it didn't get added until we start having to deal with the failures. And then it's like, oh, no, this wasn't even in there. Then

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00:05:32.810 --> 00:05:37.339

Loren Green: the other part of the the big chunk of them of the Pm's that we have.

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00:05:37.620 --> 00:05:54.990

Loren Green: You couldn't follow that Pm. And execute it step by step, like that's out of sequence. You can't do step 5 until you've, you know. Step 15 has to be done before step 5, because you won't be able to. You've got to pull the cover off, or whatever, so to have somebody to go through and look at the Pm's

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Loren Green: to make sure that they're written.

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Loren Green: you know, logically, in order, or in the case of the lubrication stuff a lot of times. It's just.

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00:06:04.190 --> 00:06:06.290

Loren Green: you know, grease electric motors

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00:06:06.750 --> 00:06:21.899

Loren Green: with no, not even a motor list of how many of what motors there are, and nobody's gone through to look and see. For sure, you know how much of you know what grease we put in there, how much grease, how often we're supposed to do that it just, you know, grease, electric motors.

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00:06:22.030 --> 00:06:23.050

Loren Green: and

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00:06:23.230 --> 00:06:29.300

Loren Green: you know, if you break them down, one of the things that's kind of cool about, you know the red list as opposed to a lot of the other softwares

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00:06:29.740 --> 00:06:39.760

Loren Green: is if you have that pn, that says grease electric motors. If there's 20 motors over in that corner that we're supposed to do what happens if the Lube Tech gets called off halfway through the process?

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Loren Green: Do we check it off as it's completed? Do we leave it till the next time, for you know it's not completed. So in one case we're either not going to lubricate half the motors or half the motors get lubricated twice as often because we don't. You know, it's just checked off by the route, whereas you know other softwares or other other management systems will allow you to do that by component, so that you can keep and accurately track what's being done. So to kind of come back here again.

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Loren Green: You know, the 50 and 60% of the Pm's not having value and poor alignment with the failure modes. Just actually, you know, taking the time to do either, you know, an Fmea or a famica, where you're actually looking at what's causing this equipment to fail and designing the maintenance activities. Towards that, you know the over reliance on the oem schedules.

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Loren Green: And I'm sure it's

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00:07:34.690 --> 00:07:46.219

Loren Green: when I say it. It sounds like it's, gonna you know, it's not necessarily done through malicious intent, but as a reliability guy or a maintenance professional like. You kind of look at it as the the maintenance

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00:07:46.950 --> 00:08:10.669

Loren Green: that they give you in the Oem Manual. That's just to get you to 1 point in time, like warranty plus one. And if kind of approach it, you know from that perspective, you know, that's going to be the minimum that you need to do to get you out to the warranty period, because then after that, you own it, you get to buy all the parts and the pieces. So if you kind of look at it from that mindset, then what can we do? That's always, you know, like in the navy always said you can add 2 don't take away from.

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00:08:10.720 --> 00:08:17.239

Loren Green: so how can you dial in and make those schedules better or more applicable? And

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Loren Green: a lot of times with the oem schedules, things to kind of think about there.

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Loren Green: I've not seen one yet where they actually account for, you know, moisture and humidity in the environment, or particularly contamination. They do a pretty good job of addressing, you know, temperature in a lot of cases for the operating temperature. But there's a couple of pieces out of there that are missed, and when that I mean the engineers when they're writing the Oem Manuals, they can't write it, obviously, for every scenario. So it's kind of that 80 20 rule there. We're trying to write it to cover most applications, but not necessarily all.

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Loren Green: The not really having a criticality strategy. It's

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Loren Green: funny still, to me, with all the like, all the focus on reliability and maintenance, and and all the the conferences, and all of these things that go, that the the level of knowledge that's

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Loren Green: still not there, I guess, like I mean, without

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00:09:12.690 --> 00:09:30.530

Loren Green: trying to be, you know, condescending. It's it's kind of surprising how many like people, you know, kind of think they know the right way to do it, or whatever it's. Still, you know, we still have them, you know, as an example, grease it till you see it is like the little bumper sticker slogan for that, and without anybody going through and taking the time to figure out. You know again how much, how often, and all that kind of stuff.

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00:09:31.410 --> 00:09:40.440

Loren Green: So, but the from the the criticality standpoint, you know. Look, looking at it realistically and doing a full criticality assessment on it. Not just

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00:09:40.620 --> 00:10:02.339

Loren Green: the you know. Well, with this shuts us down. What's this going to cost? There's there's other pieces that should go into that, you know, just the check, the box mentality again, they're not enough detail or context, not. This is one kind of, I guess, that dials back into that, you know, like the the easy week maintenance thing when we've got equipment in there, you know, usually when I'm telling in the class that

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00:10:02.680 --> 00:10:06.650

Loren Green: and it's like, well, you know, we've got, we've got Pm's that spit out of the system

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00:10:06.820 --> 00:10:15.350

Loren Green: that the equipment doesn't exist anymore. I was like, Well, how many times do I have to tell the planner Scheduler? Tell whoever that stuff is gone.

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Loren Green: So if you know, if they're not going to take it out of the system. Okay? Well, then, fine. I'll still, I'll

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00:10:21.100 --> 00:10:25.280

Loren Green: yeah. I'm tired of telling them that kind of that thing.

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00:10:25.760 --> 00:10:29.830

Loren Green: so that kind of ties back with the feedback loop, the documentation or tracking

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00:10:30.690 --> 00:10:37.039

Loren Green: having again equipment with no Pm's or Pm's, with no equipment, and then, not being able to do them in the order, kind of already sort of went through that one. But.

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00:10:38.640 --> 00:10:55.519

Rae Barton: Yeah, it's funny that you said grease it until you see it. That actually just reminded me of a story. I was on a call with one of our partners, and they had a client who they just hired a new lubrication technician. And when that lubrication technician shadowed the one that was leaving.

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00:10:55.520 --> 00:11:24.519

Rae Barton: They they taught them to pump in enough grease that just a little bit would come out the top of the bearings, and this new Lube Tech got to one specific bearing, and they just kept pumping. They just kept pumping and pumping and pumping. They put 50 shots of grease into this one bearing, and it spanned so fast that they were lucky that it didn't spark a fire. So it's funny that there's I just thought of that, as you were saying, that, grease it until you see it like. Don't do that.

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00:11:24.520 --> 00:11:31.890

Loren Green: No, and I had. This was way early on one of the jobs I had before. I was a field service guy for a Pump Company. We did, you know, like

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00:11:32.250 --> 00:11:36.810

Loren Green: laser alignments, pump commissionings and stuff like that, and field service repairs.

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Loren Green: And I was at the local airport here, and my job for the day was to go around with their guy and help him do the Pm's. And stuff for all the pumps at the airport, and we come up to one, and it's actually pulling fuel from the tank to load up the truck so that they could go and refill the airplanes. So we're sitting out there, and there's this little I don't know. It's like an inch and a half pipe. I don't know. It's maybe a 3 horse, 5 horse motor a vertical. So it's not really not a very big motor at all. And we're sitting there. And this is before I had gone through any kind of lubrication training, or had done any of this stuff.

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Loren Green: and he's like, you know, that that grease it till you see it. Thing. Yes, sir, so you know I've put 2 tubes of grease in this motor, and I've never seen any of it come out.

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00:12:16.070 --> 00:12:33.930

Loren Green: and I'm like, Oh, my God! Well, we look. And sure enough, you know, usually I mean well, not usually, but a lot of times. There's a pipe plug like 180 degrees out from the Zirk fitting, I was like, well, the idea is, you pull that plug out, and then, you know, grease it till you see it. You push grease in until you see grease come out of that that plug.

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Loren Green: Well, I'll be. I never even knew that was there. And I'm like, just you know, this is the guy doing maintenance on equipment at the airport where people are flying in and out.

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00:12:43.220 --> 00:12:46.399

Loren Green: I was just like, Wow, that's not not at all scary.

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00:12:46.920 --> 00:12:47.430

Loren Green: So.

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Rae Barton: No, not at all.

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00:12:50.220 --> 00:12:51.640

Loren Green: So, anyway.

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00:12:52.470 --> 00:13:03.730

Loren Green: Oh, the the big thing here is the, you know, knowing what you have actually going around and identifying equipment like I said, I have not gotten one yet.

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00:13:03.870 --> 00:13:22.830

Loren Green: That was an accurate asset list, and you know, from talking to some of the folks with at the Red List when they're doing their assessment. It's the same thing when you you always there has to be. There's something or and one of the problems, too, even if ideally, if it was a hundred percent accurate for the equipment.

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00:13:23.390 --> 00:13:24.570

Loren Green: What

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00:13:24.830 --> 00:13:40.530

Loren Green: what I find a lot of times is what the guys call it, or what the at the asset identification. This is the the number 4, Crusher, Gearbox, and or I mean, maybe not so much like that to that degree. But whatever the name is the nomenclature in the asset list.

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00:13:40.640 --> 00:13:51.769

Loren Green: The guys down the floor when we're walking around trying to find that particular asset. I don't know what that is, I have no idea, and when you finally track it down, the guy's like, Oh, that's the jumper.

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00:13:51.770 --> 00:14:10.829

Loren Green: like whatever, or the the bouncer, or whatever some random like nickname for it. So there's a huge disconnect between what the guys on the floor call it, and the actual asset id so kind of tying back back to knowing what you have, and making sure that everybody's kind of talking about the same, we're all using the same language.

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00:14:11.760 --> 00:14:15.129

Loren Green: Oh, there's 1, you know, as far as like structuring the asset list.

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Loren Green: It was

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Loren Green: embarrassingly long me going through and doing this stuff before I ever had heard. There is an actual iso standard

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Loren Green: for how to structure an asset list, and it's the I was looking up. I had to look it up last night just to make sure I had the numbers right.

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Loren Green: It's like the Iso 14, 2,

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Loren Green: the I 14, 2, 24. It's a predominantly. It was actually initially written for petroleum and and natural gas and stuff like that. But it actually sets out a structure which that would be cool, because there again, you know.

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Loren Green: I've had a lot of. Oh, yeah, yeah, we know about that Iso standard. But then, when you look at the asset list, it's like, well, it's not

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00:14:58.570 --> 00:15:01.620

Loren Green: structured like that. It's not. There's, you know.

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00:15:01.960 --> 00:15:09.670

Loren Green: So it's cool, you know about it. But have you changed anything to fix it to make it reflective of that? So like having an actual.

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00:15:10.110 --> 00:15:13.930

Loren Green: you know, a concrete standard of how things should be done. And then, you know

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Loren Green: part of the things, too. Over the course of time, you know we had. We have guys come in and and

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00:15:19.680 --> 00:15:22.840

Loren Green: get promoted, or move to a different company, or whatever.

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00:15:22.940 --> 00:15:26.909

Loren Green: There's not a standard like naming convention

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00:15:27.320 --> 00:15:44.180

Loren Green: sometimes, too. So when new equipment comes in, I'm going to call it different than you know than Ray might would call it. She's used to using this as a naming convention she gets promoted, and then, when I'm the one doing it, then I have a different mindset, or whatever I start putting stuff in, so you can see through over the course of time how

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00:15:44.210 --> 00:15:56.450

Loren Green: like the naming conventions change or like whatever numbering system would be different. So kind of going back through and making sure that the actual asset list is is cleaned up and consistent

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00:15:56.470 --> 00:16:24.690

Loren Green: throughout the process there. So you know, map begin by mapping the site where the equipment is out, actually looking at, you know, for sure what we have. And I think Ray's got something later on. We kind of show a little bit about how like, there's some really cool technology out there now where they start doing, you know, plant mapping and digital twins, which there again, that's 1 of the things I kind of got really excited about what what Red List can do is compared to, you know, some of the other software like saps or maximos, or some of the others, where you actually.

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00:16:25.000 --> 00:16:28.770

Loren Green: you know, and one of the things, too, out of here upon it. Why, I get kind of

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00:16:29.810 --> 00:16:48.400

Loren Green: I don't know, passionate or overly excited about this for me. I, you know, coming up in the Navy we had a written a solid Pm. Deck, and it's written out step by step how to do stuff so ideally. If you can read, then you can do these procedures, and you don't necessarily, you know you don't have to guess at it, or whatever. That's a foundation for

your training program.

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00:16:48.720 --> 00:17:07.239

Loren Green: And if you can, I mean, God forbid! If you can actually incorporate pictures and images or video along with that that just shortens up that learning curve. And with all the transition and transfer. And you know the the silver tsunami that everybody's talking about, where us all great bears are retired and rolling off into doing other things.

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00:17:07.440 --> 00:17:10.190

Loren Green: How do you? How do you replace that knowledge.

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00:17:10.550 --> 00:17:30.969

Loren Green: You get a guy that's been in the plant for 30 years, and he retires and rolls out. And then, you know, Billy Lubetec comes in. He's going to shadow you for a couple of weeks, and you're supposed to take 30 years of plant knowledge and dump it into that little nugget, and in a matter of you know, 2 weeks, and then he's supposed to be able to go out there and execute just like you did. It's not going to happen. You need to have a way to capture that information.

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Loren Green: Let's see here, kind of run out through the asset sections, making sure, like the components are actually listed and and broken out. And then, you know, having the right Pm's again. That kind of ties back with doing your you know your Fmea. What are the failure modes? Making sure that we've got Pm's in place to address those failure modes and to correct those things from happening, and then ideally incorporate a criticality assessment along with that.

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00:17:59.090 --> 00:18:09.669

Loren Green: So here, you know the criticality assessment. So, looking at, you know, just in addition to production bottlenecks, because a lot of times. I think that's you know. That's what

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00:18:09.800 --> 00:18:12.779

Loren Green: kind of what we default to most everywhere

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00:18:12.890 --> 00:18:20.829

Loren Green: I've been through, you know. They can point to a you know a pump or gearbox, or a piece of equipment, and say, Okay, well, this one here, you know, if this thing dies, this shuts the whole plant down.

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00:18:21.050 --> 00:18:32.210

Loren Green: Okay? Well, that's that's cool. But I mean, that's easy to identify. But there's other pieces that come into play in that. And you could, depending on what you're using. If you just simply use the dollar value

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00:18:32.500 --> 00:18:50.730

Loren Green: the replacement value on, you know, whatever a Goulds, 30 or a Goulds mark 3, or you know. Sorry I got them way backwards. A Derko mark 3 or Goulds 3,196. Those are pretty standard. But what is that thing doing in the process. So you know, it might be a I don't even know what they go for anymore. Whatever $15,000 pump

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00:18:50.960 --> 00:19:02.009

Loren Green: that's going to be standard across the board. But if that that pump dies that shuts down a multimillion dollar process. So, depending on where your your dollar threshold is, somebody might not

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00:19:02.400 --> 00:19:05.350

Loren Green: might not know that. And then, you know, sometimes, when you have.

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00:19:05.510 --> 00:19:12.149

Loren Green: you know, like we're we're kind of in the infancy stage of trying to build out our Pm's and build out our maintenance program.

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00:19:12.300 --> 00:19:35.919

Loren Green: You get a guy, a relatively young engineer, somebody that's kind of brand new to the plant that's bringing the stuff in there. They may not be aware of all of those different, you know, production, bottlenecks and everything. So they just kind of have to default to, you know, a dollar value or some other criteria. So, looking at, you know, what are the, you know the replacement cost? Obviously, what is the impact. If we, if it shuts down the safety.

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00:19:35.920 --> 00:19:50.650

Loren Green: you know, if it does, rarely does one rarely ever does a piece of gear die, that there's not some cascading or cascade of chaos that takes place, this ripple effect of what it's going to do to the rest of the system, and that so.

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00:19:50.920 --> 00:20:10.570

Loren Green: taking a look at you know, looking, you know again, what's what's the cost, the replacement, the safety, the human value, or you know, the human factors that come into play, and all that kind of stuff, and incorporating that into your criticality assessment. And then maybe we call it we, you know, one of the things we put into was called the Orm Operational Risk management. And it's kind of like, you know.

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00:20:11.360 --> 00:20:24.540

Loren Green: if you're trying to deliver mail, you know, there's a dog in the yard. So you're looking at, you know. Okay, well, is this dog likely to bite me? Well, if the tail's wagging? Probably not. If it's got its teeth bared, you know. There's a possibility you're going to bite. Okay? Well, then, we have to look at

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00:20:24.720 --> 00:20:39.419

Loren Green: how bad is that going to hurt if it's a you know, small dachshund or something might not be that big a deal. If it's a cane, Corso or Rottweiler that could hurt. So you're kind of looking through those steps and using sort of that same type of mentality to kind of do your you know your criticality assessment?

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00:20:41.010 --> 00:20:46.830

Loren Green: Let's see here, and then one of the other pieces, too. You know the the redundancy. A lot of times

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00:20:47.120 --> 00:20:59.170

Loren Green: like in the Navy. We had redundant equipment kind of for a reason, because if you're in combat, this pump dies, I need to make sure that we have a spare. We have another one in place that I can just open the valves and restart that pump so the ship can keep doing what it's doing

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00:20:59.410 --> 00:21:02.600

Loren Green: a lot of times in manufacturing plants.

116

00:21:02.760 --> 00:21:11.370

Loren Green: That redundant equipment is not actually that's supposed to be, or that was designed to be in there for increased production.

117

00:21:11.470 --> 00:21:17.940

Loren Green: so that we can have more throughput. Make more widgets make more gallons of whatever. It's not necessarily truly a spare.

118

00:21:18.730 --> 00:21:23.589

Loren Green: but and then so, but having to look at that, so you know, is that in really

119

00:21:24.130 --> 00:21:30.100

Loren Green: intended to be a spare piece, so I have redundancy in there, or is that the

120

00:21:32.850 --> 00:21:36.479

Loren Green: Is it a sparrow? Is it extra like the hidden plant, I guess, per se.

121

00:21:43.420 --> 00:21:46.119

Loren Green: And this is one like once you've done your

122

00:21:46.230 --> 00:21:58.340

Loren Green: that criticality assessment. Once you've started looking at the gear, then going back here and figuring out. You know you've got your failure modes. So how can we identify those failures? And looking at things like, you know the vibration

123

00:21:58.630 --> 00:22:01.440

Loren Green: and some of these things, too, you can. And there's kind of a

124

00:22:01.750 --> 00:22:07.899

Loren Green: whether they're, you know, proactive or predictive, which way you're doing it. So you know, like the imbalance of stuff.

125

00:22:08.190 --> 00:22:24.340

Loren Green: Well, that's 1. If you're I mean, when we were working in the pump shop, that would be one of the things that we would look at. We'd actually, as we were assembling, you know, putting the Impeller on the shaft and all that to actually spin them so that we could make sure that they were balanced before we actually put them, you know. Put them together in the pump.

126

00:22:24.570 --> 00:22:47.930

Loren Green: and looking at them, to tell, you know, to determine that misalignment. And a lot of these things as you go

through, you know, like the oil analysis, whether you're doing wear or contamination, that when they're in specifically, you would. Do you know you're doing your own analysis. So what are we looking at? Are you looking at particle concentration, moisture, content? That would be the contamination. So if you can keep the oil cleaner, cooler, drier.

127

00:22:47.980 --> 00:22:56.299

Loren Green: that's going to help the equipment to live longer. So proactively, let's monitor the contamination. Let's make sure we're keeping the oil clean and cool and dry.

128

00:22:57.350 --> 00:23:25.799

Loren Green: predictive side of that. If you start doing the wear particles and we're start, we do the wear analysis piece of that. If the if you leave the contamination alone, it's going to affect the lubricant which will begin to affect the plant and the the equipment. So vibration kind of the same thing you can use. You know your vibration thermography that I'm going to skip the temperature monitoring for a minute, but motor current analysis, ultrasonic and that you can use all of those things. And it's

129

00:23:25.910 --> 00:23:30.210

Loren Green: whether you're using them proactively or predictively. I think it's just

130

00:23:30.810 --> 00:23:38.789

Loren Green: how you apply that information. If you look at, I mean, whatever you've got a you've got a pump and it's running.

131

00:23:39.070 --> 00:23:52.770

Loren Green: and it's got an imbalance issue, or it's whatever you kind of determine. One of the big ones I find a lot of times is the pipe stress causing issues and causing problems with it, because, you know, it's well that's a whole other

132

00:23:53.050 --> 00:24:05.010

Loren Green: that that could be a whole other topic of conversation there. But that defensive machine design is kind of where I'm looking, kind of where I'm leading into this. When you find out that there's an issue with one piece of equipment. If you've got a bank of

133

00:24:05.730 --> 00:24:24.849

Loren Green: 3 pumps, 5 pumps, or whatever. If you've got one pump that's got an illness, if you will, you determine that through vibration, thermography, or one of these other one of these other technologies. Doesn't it make sense that there's a possibility that those other pumps in that same row or other pieces of equipment in the plant would suffer from that same illness.

134

00:24:25.570 --> 00:24:40.439

Loren Green: So take that information that you get from the vibration and thermography and those technologies, and apply that to proactively defend these other pieces of equipment against that same illness. You can inoculate your gear

135

00:24:41.780 --> 00:24:46.650

Loren Green: to guard off other sicknesses and and help to keep them, you know, keep them in good shape. 136

00:24:47.100 --> 00:24:53.710

Loren Green: The temperature monitoring one go a little bit beyond that and actually have a

137

00:24:54.100 --> 00:25:04.750

Loren Green: a check sheet, basically that when you're running around the Lube text. One of the big things that I like about having lube techs specifically designated lubrication technicians running around

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00:25:05.260 --> 00:25:10.649

Loren Green: most times. They're the only ones that are really like proactively looking at the equipment.

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00:25:10.830 --> 00:25:38.050

Loren Green: So you know your plant managers, reliability engineers a lot of times, even your like, your maintenance techs. They're on their way to go fix a piece of gear. They're not really specifically like inspecting the equipment where realist, if you have your Lube techs out there doing the things they're doing. They should be the ones doing the vast majority of the inspections. They're running around making sure the breathers in good shape that it's got oil in it, that the oil is clean and healthy and looks good and stuff when they're looking at the gear for that.

140

00:25:38.460 --> 00:25:41.899

Loren Green: That's also I mean they're standing there looking at it. So why not

141

00:25:42.660 --> 00:26:01.040

Loren Green: add, you know, are all the fasteners in place? What's the coupling guard look like? Does it have all the insulation on it, is it? You know the temperature? Is it running within parameters? Does it sound weird? Is it growling, grinding, making weird noises look weird, smell funny, or whatever those are all things that could be addressed and could be checked out.

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00:26:01.750 --> 00:26:02.680

Loren Green: And

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00:26:04.360 --> 00:26:17.219

Loren Green: they are the ones I mean. They're they're the boots on the ground. They're the ones that to me they're the most important people in a maintenance organization, because they're the ones that are actually out there actively looking at the equipment. They're the eyes and the ears of the maintenance organization.

144

00:26:17.750 --> 00:26:29.539

Loren Green: I had a was going down my little diatribe there on that, and had a bunch of the millwrights and stuff kind of got bristly with me a little bit. So it's like, well, you mean to tell me that the Lube techs are going to be telling us what to do.

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00:26:30.660 --> 00:26:31.340

Loren Green: Hey?

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00:26:31.490 --> 00:26:45.070

Loren Green: Yeah, kind of, you know, it's still they're gonna identify the issues. It's still gonna have to go through

whatever planning scheduling process and stuff to be able to have the. You know the work orders generated. And for that, but essentially, yeah, they're going to be finding the things that are the problems

147

00:26:45.510 --> 00:26:54.240

Loren Green: that need to be fixed. And you know you can. That's there again. They're the only ones to most places that I've seen, that they're actively

148

00:26:54.560 --> 00:27:17.019

Loren Green: making the rounds, running routes and looking at the equipment. And realistically, I think that's a that's a lost opportunity. Because if they're already, if you've got a Lube team, you've got loop techs out there running and doing that stuff if they're not capturing that other. You know the other information, as far as you know, the temperatures and soft foots, and or not necessarily soft foot, but you know, fasteners and guarding, and all that kind of stuff, the actual

149

00:27:17.500 --> 00:27:21.540

Loren Green: material condition of the equipment. That's that's a lost opportunity.

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00:27:23.650 --> 00:27:35.830

Rae Barton: I actually have a question for you here, Lauren. In our experience it seems that sometimes the lubrication technician position is kind of reserved as like an entry way like an entry level job.

151

00:27:36.201 --> 00:27:44.610

Rae Barton: Which can kind of create some issues when you're putting some of the least experienced people in that position. Can you talk a little bit about that? And what you've seen.

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00:27:45.230 --> 00:27:46.110

Loren Green: Yeah, it's

153

00:27:47.036 --> 00:28:02.520

Loren Green: it's I've seen it like kind of the 2 extremes. It's either the old hand fixing to retire so we'll give him the cushy job, or the easy job, or whatever, or you know, you get the brand new guy in. It's you know. It's well it's lubrication. Who cares. Because with that, now.

154

00:28:03.510 --> 00:28:29.780

Loren Green: the places where it's like the new guy that comes in that's not really doing stuff. Those are the ones. I think honestly, that the the maturity of the program is reflected in the age of the technician kind of coming in. So you know, they come in. They don't really know stuff. And those are the guys that are running around doing the grease until you see it and haven't really built out the program. I think now, there's a couple of pieces there, I think that, you know. If you bring somebody in that's young, then

155

00:28:29.870 --> 00:28:49.029

Loren Green: that's cool, because, you know a lot of times. That's a new entry position. They have something where they can be responsible and accountable for a program. And you know, like that. And you know, that's that's cool, and it's a first.st It beats flipping burgers or something. So it's like a real job. So you get to feel like you're doing something that's cool, but not having

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00:28:50.260 --> 00:28:57.299

Loren Green: without having the Pm's written out, so that you have those step-by-steps or the pictures or stuff. You're kind of setting that guy or girl up for failure

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00:28:57.680 --> 00:28:59.860

Loren Green: by not, you know.

158

00:29:00.550 --> 00:29:20.370

Loren Green: and and the way to look at it, too, I mean you run around with it like with a grease gun. If you have your Pm's, and it's written you'll grease electric motors. Well, you know a grease got even a cheap grease gun that can. You can generate 5,000 pounds of pressure with that, if you get good ones that you can generate up to 15,000 pounds of pressure with a grease gun. So

159

00:29:20.550 --> 00:29:30.899

Loren Green: your lube Tech. If you don't train them, they can. I mean, that's essentially realistically, I mean, like, absolutely, realistically, the Lube Tech has the life of the plant in their hands with that grease guide.

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00:29:31.120 --> 00:29:32.280

Loren Green: Really.

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00:29:32.440 --> 00:29:44.920

Loren Green: So if they go through, and if they're doing it, you know, properly lubricating the equipment, then you get the lifecycle extensions. And all these good things. If they're not. And you're not investing in the care and feeding and training of those loop techs. They're essentially assassinating equipment.

162

00:29:45.060 --> 00:30:06.830

Loren Green: Just run around with a grease gun, just you know, pow pow pow killing bearings which you know that ultimately has. You know the the cycles down even the downtime and all that other stuff, and missed opportunity missed orders. Late deliveries! There's huge ripple effects of that just by taking, you know. Here, Billy, here's a grease gun. Go forth and do great things. It's there again. It's a huge missed opportunity.

163

00:30:06.950 --> 00:30:21.350

Rae Barton: Yeah, I I have another story. I keep thinking stories as you're talking. Had another call with another another partner that was talking about their clients, and they had, their hydraulic

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00:30:21.540 --> 00:30:46.999

Rae Barton: reservoir. And the oil reservoir were right next to each other. So you can imagine what happened. They weren't clearly labeled. There wasn't good training in place, so someone would dump hydraulic fluid into the oil reservoir or vice versa oil into the hydraulic reservoir about once a month, and then they'd have to flush the entire system. And it was $300,000 every month because of that mistake that just kept continuing to happen.

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00:30:47.520 --> 00:30:48.034

Loren Green: It's

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00:30:49.850 --> 00:31:17.729

Loren Green: there's easy solutions for that, realistically, too. I mean, outside, I mean, that's where you know some of the stuff like that we do with, you know, like with this case, the stuff we do like doing the loop storage and handling design and color coding your lubricants. That's kind of an easy one. I call it like my, the Lorenism, for that, you know the lucky charm system. If you have, you know, like the hydraulic system you're talking about. If that's the the blue moons and the gear oil that you would put in the one next to it is the green clovers.

167

00:31:17.830 --> 00:31:31.239

Loren Green: Then you kind of you know. Hey? Look, I shouldn't be putting that one in there, and you know you can. There's companies out there that offer, you know, different quick connect fittings. So if you're going to hook up the hoses to it, or something like that, that you can't

168

00:31:31.570 --> 00:31:52.280

Loren Green: cross, connect the hoses from one to the other. So you create that physical barrier like a pokyo kind of a thing or one for grease. That's really easy. There's so many different like Zirk fittings or types of fittings that you can use the traditional zirk fitting. Use that for your electric motors. If you're going to use a high temp grease, use a button head if you use this one, use a flush type.

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00:31:52.910 --> 00:31:56.489

Loren Green: The price difference between those is pretty negligible and you can't.

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00:31:56.710 --> 00:32:01.319

Loren Green: It makes it really difficult to hook the wrong grease gun to the wrong, to the wrong spot.

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00:32:01.670 --> 00:32:07.879

Loren Green: So there are things that you can do to kind of prevent that. And you know, it's

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00:32:08.590 --> 00:32:26.429

Loren Green: it happens. I mean, it happens a lot. It's like, you know, oils, oils, greases, grease. It's all slippery. Who cares? You know what's so? What if it's you know, whatever? What if we put gear oil in our hydraulic system, you know? Who cares? It's it's but there again, that's kind of reflective of the maturity of the program, where, if those things are happening.

173

00:32:26.930 --> 00:32:28.030

Loren Green: there's it.

174

00:32:29.270 --> 00:32:37.920

Loren Green: Having documented Pm's with the what, the how much, the where, the when, with pictures, and all of those kinds of things can help to stop that.

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00:32:38.780 --> 00:32:39.480

Loren Green: Oh.

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00:32:42.510 --> 00:32:46.756

Loren Green: oh, yeah, this I

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00:32:48.290 --> 00:32:57.299

Loren Green: well, do something with the data. So this way you're talking specifically about the oil analysis stuff. Now, there's a couple of pieces to that, like when you

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00:32:58.570 --> 00:33:24.420

Loren Green: you know, there's the, there's a lot of value of the data when the oil analysis results come back. One. There's a couple of things that I kind of have, I guess, issue with or not necessarily issue. But it can be problematic is most all of the oil analysis. Results have some stop light kind of a thing on it red, yellow, green, and if the results come back and they're not any red on there, or if they're all green, okay, cool, we throw it in a closet, or we throw it in the filing cabinet, or we don't do anything with them.

179

00:33:24.690 --> 00:33:48.019

Loren Green: This particular little scenario the little story was even worse than that, but this year I spent 2 days. I was working for an oil company here in town, as their technical resource and a customer had contacted us and wanted us to pull oil samples. So there was a really, really, really grubby, dirty, nasty, filthy, metalworking plant.

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00:33:48.370 --> 00:34:11.080

Loren Green: and I spent 2 days climbing around and pulling all their oil samples sent them off, and when all the results came back I compiled all the results, and then spent another day putting together a report with recommendations, you know, based off of this particle. Count for this one, you should filter it for this long. Based on this, you should probably clean the oil or change the oil out in here this and that, and I put a lot of work into it.

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00:34:11.480 --> 00:34:18.770

Loren Green: drove over, dropped off the report in case they had any questions. I was like, Okay, thank you. And the meal threw it at the bottom of the filing cabinet. I was like.

182

00:34:19.440 --> 00:34:24.389

Loren Green: you don't. Oh, no, no, we just have to. We just we only have to do that once a year for insurance purposes.

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00:34:24.710 --> 00:34:52.250

Loren Green: I was like, what if that was the case? Then? I mean? Why, bother just you know it doesn't matter at that point. Just put oil in a bottle and send it off. If that's the case and not I mean, why bother even taking this time to take the samples, to go through all that effort, and definitely for me from my side? Why did I bother going through all of that to try to do stuff with this oil analysis. If they're just going to like, check the box, and you're just trying to do it for insurance purposes

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00:34:52.550 --> 00:35:08.199

Loren Green: now, though. So that's kind of the like. The worst case scenario the other side, I mean more common. What I see a lot of times, though, is when they do come back again. If it's just the you know. Oh, well, that one's always yellow. We don't pay any attention to it. Okay, well.

185

00:35:08.460 --> 00:35:10.419

Loren Green: why is it always yellow?

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00:35:10.860 --> 00:35:22.879

Loren Green: Do we? Do you need to set the targets? Because those limits that the triggers for whether it's red, yellow, or green. Those should be variable. They should be allowed to be variable, based off of what you guys are trying to accomplish

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00:35:23.230 --> 00:35:42.590

Loren Green: from a reliability standpoint. So we're either. If you can't ever get there. And just that's just the way it is. That's the world it lives in. Then fine. So be it. Then change that target so that it doesn't come back as a yellow or in an alarm condition, or figure out what it is that we need to do with it, and a lot of time all of those numbers across

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00:35:42.810 --> 00:35:44.940

Loren Green: those results. When they come back.

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00:35:45.130 --> 00:36:05.840

Loren Green: Just I'll use your example, Ray. We're talking about the hydraulic system. Well, generally, most of your hydraulic fluids don't have a detergent package in them. You want them to shed water to separate water out from them. So if you have a detergent package like engine oil does a really good job, it's got a lot of detergent in it. It holds onto water really? Well.

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00:36:07.100 --> 00:36:14.110

Loren Green: if you get calcium, which is one of the more commonly used detergents in a hydraulic system, it's going to cause that to hold on to water.

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00:36:14.660 --> 00:36:20.709

Loren Green: Well, because of the fact that that's generally considered an additive and not part of a hydraulic fluid generally.

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00:36:21.020 --> 00:36:34.050

Loren Green: you may not have a trigger set for that. So if there's any of that that shows up on the oil analysis result, it may not ever flag. But if you look at it and you start to see calcium showing up in your hydraulic fluid? Where'd that come from?

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00:36:34.520 --> 00:36:50.309

Loren Green: Are we using the same 5 gallon bucket to top up our hydraulic systems as we are gearboxes. So we have cross contamination taking place, though those numbers in there there's actually value in those. And that's I, said. I kind of. I get a little. I have a love-hate relationship, I guess, with that.

194

00:36:50.480 --> 00:36:58.460

Loren Green: The red, yellow, green thing, so provided the targets and everything are set fine. That's cool to give you a real quick reference. But there is still value in taking time to review those numbers.

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00:37:03.590 --> 00:37:04.819

Loren Green: and you're never done.

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00:37:05.800 --> 00:37:07.730

Loren Green: That's kind of the the

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00:37:08.000 --> 00:37:27.170

Loren Green: like when we do the assessment. If I'm going to build out a full program, we come in and we'll take. Do the initial assessment take a snapshot of what the Lube program looks like now and then run around, collect all the data, do all the calculations develop what the lubrication program you know the storage and handling and all that stuff, and then give time for the organization to put that into play, and then

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00:37:27.250 --> 00:37:44.010

Loren Green: you should do another assessment on the bookend. So here's where we started. Here's where we are now and then. That's right. There, that's the new baseline. So now, what can we do to move that program to the next level. So that continuous improvement you should always, if you're not growing, you're dying. So you should always be kind of working towards trying to make that better.

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00:37:46.358 --> 00:37:52.250

Rae Barton: Yeah, we actually just had a discussion today, or the client where

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00:37:52.480 --> 00:38:16.790

Rae Barton: we were talking about. And it's the same thing. They also do services and I think I think this is just kind of universal where you never get an accurate asset list because things always change. You'll go through. And do you know, one survey, one check through the whole plan, and you'll get a list that's accurate for that moment, and then something will change again. And you and you need to find ways to be able to update that quickly.

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00:38:17.191 --> 00:38:40.729

Rae Barton: And there are, you know, and it's not always easy, especially in some systems. So they have a lot of power. You know. Sap is kind of notoriously difficult to manage and update. I've worked with businesses that with their speciality is just getting sap up to date. And if you're not doing that continuously, then yeah, you just your site is going to keep changing. And you, you know, your data is gonna fall behind.

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00:38:43.470 --> 00:38:44.430

Rae Barton: Okay?

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00:38:46.620 --> 00:38:50.339

Rae Barton: So we did want to show you guys a a demo today.

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00:38:51.420 --> 00:39:10.719

Rae Barton: So we we started off this, if I go back a couple of slides looking about knowing what you have. And this is what I wanted to focus the demo on today, because this is the 1st step of you know, maturing your system. So I wanted to show you how we kind of handle some of the things of of how we let you know what you have in the Red List system.

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00:39:11.133 --> 00:39:15.830

Rae Barton: If you do have any questions at all at any time. Please feel free to put them in the Q. And A.

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00:39:17.650 --> 00:39:36.629

Rae Barton: So this is red list. Hopefully, everyone can still see my screen here and can still see the assets. So the very 1st thing that we do the kind of foundational thing is, make sure that every asset on your site has its own digital profile. And on this profile there's a few things you can add. There's some

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00:39:36.790 --> 00:39:56.769

Rae Barton: fields that already exist in here that you can put in to put in the information that you need to keep it tracked. You can also add a profile photo or videos, or, you know, autocad drawings, anything that you want this this asset profile so that it's easily identifiable as to what asset you're talking about.

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00:39:57.501 --> 00:40:14.958

Rae Barton: And then, if for some reason, the baked in fields are not enough. You can always also create custom fields. We try and make red list as custom easily customizable as possible, so you can make sure that you have everything that you need in the system.

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00:40:15.400 --> 00:40:33.349

Rae Barton: it's also very easy to edit any information that you have in the system, and manage your custom fields as well. We try and make it as visually interfaceable as possible, so that you're not struggling to find the right asset to find the right fields to put in it should be as intuitive as possible.

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00:40:35.183 --> 00:40:38.753

Rae Barton: The next thing that we do to try and make

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00:40:39.190 --> 00:40:52.660

Rae Barton: knowing what you have as easy as possible. Is we then break down assets into sections and then components some assets you can see on this, you know, beverage filling machine. It's got multiple different sections.

212

00:40:52.660 --> 00:41:15.999

Rae Barton: So we try and and on, those sections are going to be grouped components that you can then have together. So you know, you know when you're looking at the asset, what sections of the asset go together, what components of the asset go together, and our components again, are very easy to edit, if you need to. We try and make everything as easy to edit as possible. You can also add photos.

213

00:41:16.230 --> 00:41:26.149

Rae Barton: And I, wanna I'm gonna show you another asset? In a second. That actually has annotated photos where it shows you exactly where you're supposed to complete the preventative maintenance task.

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00:41:26.370 --> 00:41:32.530

Rae Barton: So we've got a section. I can see that I've got 4 components. You know, on this

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00:41:32.650 --> 00:41:33.910

Rae Barton: filling machine.

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00:41:34.480 --> 00:42:01.330

Rae Barton: And each of these components has a specific preventative maintenance task. And again we make it easy to edit, find, and edit these tasks. So when you've got a new machine that comes in, or you want to change out the products that you're using on a specific component, you can come in and do that. So I've got this check and top off with a grease gun that's supposed to take 30Â min. I think that's a bit of a high amount of time to

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00:42:01.827 --> 00:42:07.540

Rae Barton: normally. These could be like 2 to 3Â min long, and then how frequently it's supposed to happen.

218

00:42:07.840 --> 00:42:13.020

Rae Barton: And then I've got the part in here. It looks like this. One doesn't have a part. Let me see if there.

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00:42:13.190 --> 00:42:17.599

Rae Barton: I think I I can show it on the other asset that I wanted to show. So I'm gonna.

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00:42:17.720 --> 00:42:18.470

Loren Green: Ray.

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00:42:18.470 --> 00:42:19.060

Rae Barton: Yeah.

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00:42:19.060 --> 00:42:23.950

Loren Green: If I could. One of the things, too. That's kind of important about that. A lot of times. People just leave those numbers

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00:42:24.290 --> 00:42:42.630

Loren Green: just like the 30Â min thing. So put those in as kind of a placeholder. But realistically, the you guys like you guys should be adjusting those, because then you can figure out, you know, a lot of times well, with the Navy.

That's how they figure out the manning of a ship is by how many maintenance. Our part of how many

224

00:42:42.630 --> 00:42:59.510

Loren Green: part of how they figure the Manning is, how much maintenance do you have to do? And if those numbers aren't accurate, then you don't have an accurate count of how many man hours worth of maintenance do we actually have? And you could use that? I mean, if you go through, and you put those numbers in there. If they just say 30, then you say you've got

225

00:42:59.750 --> 00:43:04.929

Loren Green: 20,000Â h worth of lubrication activities that need to be done, and that may not be accurate.

226

00:43:05.120 --> 00:43:05.830

Rae Barton: Yeah.

227

00:43:05.830 --> 00:43:07.030

Loren Green: Won't be accurate, so.

228

00:43:07.030 --> 00:43:21.669

Rae Barton: And then you're looking to hire people that you don't need or the opposite of that. Maybe you'll have something that you know says it takes 8Â h, but only takes 2, and nobody lets, you know. So you know, your technician takes 8Â h to do 2Â h worth of work.

229

00:43:21.900 --> 00:43:24.039

Rae Barton: We see that very frequently, too.

230

00:43:24.630 --> 00:43:37.899

Rae Barton: This is. This is part of what we call an asset template. So we come in and link a template that's already built out. So I don't have to build every asset again and again. You can create a template if you've got multiple of the same kind, and then just apply it.

231

00:43:37.960 --> 00:43:54.800

Rae Barton: So that's why this task looks a little different. It's grayed out. It's because it's part of a template. But this one should have, you know, talking about the 50 pumps of grease into the single bearing. It's hard to put 50 pumps of grease if the instructions are telling you to only put, you know, 0 point 1 1 ounces.

232

00:43:55.750 --> 00:44:07.780

Rae Barton: So we can put in very, very specific pieces of information to let you know those loop text, know if they're brand new coming into site? Exactly how much they're supposed to be applying for this task?

233

00:44:08.425 --> 00:44:13.844

Rae Barton: You know. And we can also say, does this affect production or not, and toggle that on and off?

234

00:44:14.740 --> 00:44:22.469

Rae Barton: And then, if for some reason again, these baked in fields aren't enough, we like to help customers customize, we can put in what's needed for the task

235

00:44:22.964 --> 00:44:44.289

Rae Barton: to make sure that your technicians have everything. This is an example of as well the images that you can annotate. We actually do this on our mobile phones when we come in and chart facility. All of this functionality is actually available on the Red List mobile app. Because we want it to be easy to chart and do really good, solid charting. That's very visual and and

236

00:44:44.450 --> 00:45:06.099

Rae Barton: part of why it's so important to have this visually is that my degree was in psychology. About 80% of our brains processing power is actually used to process visual information. And the reason why almost every you know app and computer program that you use, I mean, I can even see them on zoom right now. There's symbols for everything we like

237

00:45:06.140 --> 00:45:25.369

Rae Barton: visual information. We learn very well with visual information for the most part. So that's why we want to make sure that it's almost like you're kind of following a GPS system. When you're going and doing these routes, I can see the images. I can see the information, and I know exactly where I'm supposed to be for this route, because I've got the pictures telling me.

238

00:45:26.050 --> 00:45:26.940

Rae Barton: okay.

239

00:45:28.640 --> 00:45:35.079

Rae Barton: And then I think that was everything that I wanted to show you in the red list app.

240

00:45:35.220 --> 00:45:44.600

Rae Barton: The last thing that I wanted to show you guys is our digital twin technology. This is brand new. We've been working on it for a while, and there's still more that we

241

00:45:44.760 --> 00:46:02.330

Rae Barton: want to build in talking about that visual information, making sure that you write the right asset. We can come in, and we we partner with a company called Matterport. We can come in and take 3D scans of your facility, even get into really difficult places with this camera

242

00:46:02.500 --> 00:46:04.790

Rae Barton: and measure small spaces.

243

00:46:05.130 --> 00:46:07.460

Rae Barton: Do digital walkthroughs.

244

00:46:07.570 --> 00:46:21.850

Rae Barton: You can even have it so that the walkthrough. The 3D. Walkthrough is is determined. When you're doing a training, you can build a 3D. Walkthrough training for your loop tech, so it's not like they can go anywhere and click on anything. It puts them through a set path.

245

00:46:21.990 --> 00:46:26.329

Rae Barton: and then I can integrate the information that I have in red list

246

00:46:26.510 --> 00:46:30.739

Rae Barton: with the assets I have. So some examples here

247

00:46:31.560 --> 00:46:36.470

Rae Barton: is, I've got this, you know, training video that I've got for this pump 248

00:46:36.790 --> 00:46:44.281

Rae Barton: that I can have them watch. I can integrate my sensor data. So vibration temperature.

249

00:46:45.080 --> 00:46:46.639

Rae Barton: you know any sort of

250

00:46:46.930 --> 00:46:50.690

Rae Barton: condition monitoring that you can think of. We can integrate and have it show up.

251

00:46:51.322 --> 00:47:12.609

Rae Barton: I can add more training documents like autocad documents and things like that. I can look at this looks like it's another video. And then his, you know an example of what maintenance can look like. Where you can open up, and it it integrates with the red list tool to show you what's due, what's overdue. And we can even have different

252

00:47:13.180 --> 00:47:31.950

Rae Barton: versions of this or overlays where you could instead of having all this information, you could have a help map where it integrates all that data and does the kind of like green, red, yellow. You'd want to make sure that it. Those you know, those triggers that you've got in the system are really well. Fine tuned like, Lauren said. You don't just want to be like.

253

00:47:32.440 --> 00:47:50.907

Rae Barton: well, you know, this is yellow, so I can ignore it, for now you still wanna make sure that you're you're looking into the data. But I can come in and see. Okay, why is this machine looking like it's unhealthy. What is the data telling me about this machine about what we're doing in our processes. So again, very visual.

254

00:47:51.580 --> 00:48:00.200

Rae Barton: making sure that you're able to help people understand the site outside of just functional locations that are written down or pieces of paper and checklists.

255

00:48:00.711 --> 00:48:07.400

Rae Barton: And this we do get very feedback from the very good feedback from this even just

256

00:48:07.520 --> 00:48:13.299

Rae Barton: just getting a digital twin in place. Because there's there's other things that you can do as well. You can actually

257

00:48:13.500 --> 00:48:24.078

Rae Barton: create. This is a very simple one, but you can, if you're designing new spaces to build out, or you wanting to bring in a new machine, you can also create

258

00:48:24.850 --> 00:48:53.810

Rae Barton: I'm trying to think of the right word for this Lauren schematics. There we go. You can create schematics for it. You can download the schematics and spatial information that if you're working with, you know, contracted architects. You can upload those files to their system that they can use to help design out the space for any

improvements that you might be doing. So lots of really good things that we're doing here to. Because we we really want to help technicians do their job well.

259

00:48:53.910 --> 00:49:09.569

Rae Barton: And we really, wanna wanna help you guys with your reliability? We're not just trying to be gimmicky and be like, look at this cool, new thing. We we understand that it's difficult to train new text. It's difficult to get them to understand all the information and what they need to do. And for most of the times, you know.

260

00:49:09.920 --> 00:49:27.699

Rae Barton: trying to memorize an entire facility just doesn't really work because you come up with all these different words using different words to describe this, you know the same machine. You're pumping grease until you see grease, you know, working just off. What you can remember is it's kind of setting yourself up to fail.

261

00:49:28.510 --> 00:49:40.029

Loren Green: Was it a lot of? It's the tribal knowledge, I mean, some places. Thanks. I mean, there's there's a lot of places we've talked about the sap, and that there's a lot of places that I've worked with that don't even have. I'm actually working with one. Now.

262

00:49:40.740 --> 00:49:43.320

Loren Green: I got a list that was an excel spreadsheet.

263

00:49:43.470 --> 00:49:43.800

Rae Barton: Is, that.

264

00:49:43.800 --> 00:49:51.539

Loren Green: The motors and the reliability. He actually had to go out there and climb down along the line to compile this list because they don't currently have it.

265

00:49:52.540 --> 00:49:54.160

Loren Green: So it's like, you know.

266

00:49:54.690 --> 00:50:01.180

Loren Green: how do you bring somebody new in and train them when you don't have all that stuff? And they're getting. So it's like you're just trying to. You're winging it essentially.

267

00:50:02.390 --> 00:50:23.649

Loren Green: So having stuff like this, it just it shortens up the learning curve. You've got images so you can like walk up to a pump or hydraulic system and know what good looks like. That's a healthy breather that's good filters. This is what oil looks like when it's good. So you have something that physically a visual that I can compare it to, so that this is what the ideal state looks like, and that's what the equipment looks like. So

268

00:50:23.690 --> 00:50:34.620

Loren Green: what's what are the gaps? They're easy to to figure out, and you can make the make, you know. Mark off whatever issue. Let the planner Scheduler, or you can address it there, depending on how the system, how your

organization is set up.

269

00:50:35.720 --> 00:50:36.660

Rae Barton: Awesome.

270

00:50:38.221 --> 00:51:00.619

Rae Barton: So we did. Wanna you know, I don't see any questions in the chat. But I I want you guys to be able to take advantage of Lauren. While he's here. Do you guys have any questions? You know, Lauren really is an expert and you know, reliability management and lubrication management. So any of you guys have any questions for him that he can answer for you today.

271

00:51:08.700 --> 00:51:10.860

Rae Barton: Okay, doesn't look like we do.

272

00:51:11.830 --> 00:51:17.186

Rae Barton: But obviously, we wanna send you guys away with some homework.

273

00:51:19.309 --> 00:51:28.239

Rae Barton: Lauren. When we we built this webinar together, you said you wanted them to think about your ass their asset list for a minute. What would you like them to think about.

274

00:51:28.240 --> 00:51:46.819

Loren Green: I just. I'm sure I would. I would be willing to bet that everybody, anybody listening, or anybody that may watch in a few. There are things that you know right out of the gate that I would bet money that you know there's things there's equipment in your plan. If you put new stuff in, or there's assets in your list that don't exist anymore.

275

00:51:47.040 --> 00:52:03.419

Loren Green: But just think about like the health of the asset list. Do we have all the equipment identified? Do we have it? Does it accurately? Reflect what we have on the floor? And then think about those Pm's, too, like, you know. Are they detailed out enough that somebody could actually go out and execute that? Pm, the way it's written?

276

00:52:03.620 --> 00:52:06.530

Loren Green: Do you have, you know, is it grease electric motors.

277

00:52:07.430 --> 00:52:08.960

Loren Green: Something along those lines. Oh.

278

00:52:09.570 --> 00:52:33.140

Rae Barton: Perfect. And then also, if you guys feel like you need help setting up a maintenance management program, a lubrication management program. This is Lauren's email, [laurengreen@deskcase.com,](mailto:laurengreen@deskcase.com) and then I'm also I'm going to plug attain again. It's a great event to come to. So if you want to go to go.getredlist.com forward slash attain 25. We'd love to have you come.

279

00:52:34.120 --> 00:52:51.689

Rae Barton: That's everything that we had for today. Again, we really appreciate, you guys taking the time to join us. We hope that you learned something and enjoyed it today feel free to reach out to us. If you'd like to learn any more, and we hope you have a wonderful rest of your day. Thank you, Lauren.

280

00:52:51.690 --> 00:52:52.570

Loren Green: Thank you. Guys.