## National Oilwell Varco, Inc. Analyst Day 2018

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Thank you, Loren, and thank you, everybody, for sticking it out so far. Hopefully I won't lose you throughout the presentation. We did get some applause associated with the announcement that this was the final session, so we'll see how it goes.

For this final session, we have a pretty simple agenda that I want to follow which is really to take a look back at some of the things that we've accomplished over the last several years to really help you guys understand how we've positioned the company for the future. Then I'll share some thoughts about how we actually see NOV's future before I turn it back to Clay for some final reporting thoughts.

As I mentioned, we want to first spend a little bit of time looking back and that's not to dwell on the past or relive glory days but to really frame how we've positioned the company again for the future. It was an extremely rough once-in-a-generation type of downturn, but we accomplished a tremendous amount over the last four years.

We took painstaking efforts to right size the organization and we've reduced headcount by about 30,000 employees during the course of the downturn, not a fun thing to have gone through. But during the depths of the downturn, we cut approximately \$1 billion in SG&A cost. And we reduced our total payroll-related cost structure by over \$3 billion per year.

We also closed over 400 facilities around the world. In the process, we high-graded into our most efficient manufacturing plants around the globe and we reworked our supply chain and manufacturing processes to build in permanent efficiencies around the organization. Those efficiencies helped us harvest over \$2.3 billion in free cash flow during the last several years.

As Clay pointed out, that's one of the highest free cash flow to revenue ratios in the oilfield during this time period. This helped us make sure that we preserve our bulletproof balance sheet which provided us with the ability to continue making very thoughtful and strategic investments and decisions in how we reshape the organization and positioned ourselves for the future. We'll talk more about these investments in just a moment.

First, let's take a minute to look at where we were in 2014 and compare that to where we are today. In 2014, as you previously saw, roughly 60% of our revenue came from offshore markets.

Today, we've more than flipped that over to where about 65% to 67% of our revenue is coming from land markets around the world.

In 2014, roughly 70% of our revenue came from the international markets and only around 30% from North America. Today, about 45% of our revenue is coming from the North American marketplace.

And lastly, our business mix is much more balanced than it was previously. Whereas in 2014 over half of our revenue was coming from our Rig Technologies businesses; today, that number is less than one-third. Yes, to a certain extent this shift in our mix is certainly a result of changes of where activity is taking place and what the market has allowed, but we've also been very thoughtful and deliberate about how we've positioned our business for how and where activity will take place, both here near-term and long-term in markets around the world.

We think we've successfully repositioned and right-sized the organization during an extremely challenging market environment and we continue to invest in our future. More importantly, we've preserved our core capabilities and our core capacities. The company has really matured and evolved, but we retain the same DNA, the same operating philosophy and vision, that drove the historical success of this organization.

During the past three segment presentations, you saw some really powerful vision statements by each of our segment Presidents. And, of course, they all fall underneath one common focus here at NOV which is to deliver the best technology and equipment to the global energy industry. We know that if we continue to provide solutions that create better economics for our customers, NOV will continue to be a very successful organization going forward.

While some things have certainly changed, and the organization has evolved, our mission and approach to our business and our core capabilities remain the same. In addition to understanding our position in the marketplace, we think it's really important to understand how we actually execute our business.

We believe our organization has a pretty unique operating philosophy for a company of our size and scale. We embrace a very decentralized operating structure that's built on a foundation of 16 highly-focused individual business units that have an extraordinary amount of technical expertise in areas where they're focused.

We think this approach provides several advantages including that each business has a very limited number of competing priorities which enables the ability to obtain and advance technical leadership in areas in which they're focused. The business units can also move very, very quickly and efficiently and continue to advance that leadership.

Our approach also creates the environment in which our managers really get to act as entrepreneurs in what is a very large global organization. With decentralization comes quite a bit of autonomy but we make sure that we hold our leaders of these businesses accountable for the success of their operations.

Each of our 16 business units are grouped into one of three segments based on common customer needs. Segment management layer is intentionally very thin and its purpose is to really leverage and coordinate efforts that combine the company's capabilities across the business units. The reason for that is to allow us to be able to develop better customer solutions than individual business units could deliver on their own and to help business units leverage the segment's and NOV's broader global infrastructure to make sure that we don't build unnecessary redundancies across the organization and really be able to leverage shared resources where it's really relevant and efficient.

Our corporate group is focused on providing specialized technical and administrative expertise that's leveraged across the organization. An example of this technical expertise is really our corporate technology group. That's the group that really serves to develop and identify and advance platforms which can be leveraged and shared across the organization.

Sometimes these platforms are initiated and developed by our corporate technology group. Sometimes these platforms are opportunities that are developed within discrete business units that are then identified by the tremendous corporate group and elevated to be leveraged and shared across the organization.

Two examples of some of these common platforms that I'm talking about have already been touched on through the course of the day. One of them is our MAX<sup>TM</sup> big data platform. That was developed by our corporate technology group along with a few of our business units and is now really being used by every single one of our business units across the portfolio for their big data analytic needs, both internal needs as well as external-facing needs for our customer base.

Another example is our closed-loop automated drilling platform which really harnesses the bleeding edge technical capabilities in Joe's Rig Technologies businesses as well as from several business units within Isaac's Wellbore Technologies business to be able to pull together a platform that we don't think anybody else on the planet is capable of producing today. A lot of good cross business unit, cross segment collaboration.

We think our operations get the best of both worlds. It has a really nimble and entrepreneurial approach to the operating structure, but it also has some really capable and powerful corporate capabilities that are on par with, or ahead of, any other company on the planet.

The last thing I will mention about the corporate group is that, along with our board of directors, we're also obviously responsible for prioritizing our initiatives and efforts, managing risks and allocating capital and resources to drive the highest rates of return possible for you, our shareholders. We are able to help set a higher-level strategy.

So, speaking of strategy, I would like to reemphasize a couple of points that Clay made earlier this morning. Our strategic framework is really an element of our operating philosophy that has been pretty constant over an extended period of time at NOV.

First of all, our entrepreneurial culture that I just talked about really relishes building market leading technologies and solutions that help our customers from an economic perspective and also help us become a trusted go-to technology partner for our customers.

We have a real sense of urgency about finding solutions that address our customers' greatest challenges, and implicit in delivering the best technologies is effectively the ability to build considerable size and scale and scope, which we think helps solidify and advance sustainable competitive advantage.

It does that by being able to provide cash flow and resources that further help fund leadership and provide other capabilities. Customers know that with our size, scope, and scale we are there for them anywhere in the world where they operate. That really helps create strong incentive for customers to help standardize on our equipment because they know that we'll be there for them.

We think we hold a very unique and valuable position in the marketplace as the leading global independent provider of technology and equipment to the energy industry. "Independent" is a really key word that I want to emphasize and will harp on that a couple of times as we go through this presentation this afternoon. We provide our equipment to all and, as such, our businesses tend to thrive if we have a very large and well-diversified customer base and have opportunities in which we can further drive fragmentation in certain market verticals.

While our customers tend to work in one of the most capital-intensive industries on the planet, we tend to operate a capital light manufacturing-based business model that drives above average return on capital and cash flow metrics relative to the bulk of the OFS&E space.

Lastly, having a strong capital structure supported by robust cash flow enables us to be opportunistic and sustain investments in new technologies even through a horrific downturn which serves to further enhance and advance our market position.

Let's now take a look now at some of the investments that we've made over the last several years. I think it might surprise some of you to know that NOV's investments in organic growth and development initiatives had far outweighed our investments that have been made in M&A over the last several years.

Since the end of 2014, we've invested over \$2 billion in engineering, which includes field engineering and other activities that are critical to advancing and commercializing new products and technologies.

And it also includes approximately \$200 million of really ground floor level R&D spend. We've also invested over \$1 billion in capital expenditures with roughly 70% or 700 million of that spend going towards growth initiatives and other initiatives that build in permanent efficiencies across our operations.

We also spent about \$700 million on acquisitions on about 34 highly strategic, focused acquisitions during the last several years. One of the things that I really want to emphasize on this slide is that the R&D, CAPEX, and acquisition investments are not at all done independently from one another.

We really prioritize organic growth and view M&A as a means to help opportunistically accelerate something that we have already planned to do from an organic standpoint. I'll walk with you through a few examples of what I mean by that.

We have a pretty simple framework that we use to evaluate growth initiatives. Effectively, if we can find the opportunities in which we can deliver proprietary solutions to help operators lower their cost of supply and address critical pinch points, be a better owner or vendor, fragment a consolidated market, or leverage our core competencies and infrastructure to drive efficiencies or accelerate growth, we typically find an initiative in which we can derive some meaningful value.

If we find initiatives that check multiple or all of the boxes here, we become extremely confident of our ability to deliver some meaningful value from that type of initiative.

These four values here probably look pretty familiar to you because they're effectively four out of the six items on strategic framework that you saw a couple of slides ago. And that's obviously not a coincidence.

Once we identify a compelling initiative, we set out to develop multiple paths to market for that key initiative. First and foremost, we develop a plan for how we can capitalize on the opportunity organically. Typically, it drives the highest rates of return when we go to that direction. However, it also takes longer to go to that direction. So, once we start executing on our organic plan, we then attempt to use M&A to opportunistically accelerate the execution of that strategy.

Lastly, we always look to leverage NOV's existing resources such as our global infrastructure, supply chain, and customer relationships to accelerate the development or commercialization of new products and technologies.

We think our directional drilling and completion tools initiatives represent exactly what we're talking about here pretty well. I'll next walk you through a couple of examples of what we've accomplished in that regard.

As Clay mentioned, being able to precisely and efficiently place low tortuosity horizontal wellbores in the targeted formation is one of the most critical activities for E&P operators. It's

also very evident from the growth in spend in directional drilling. Over the past decade, we've seen directional spending per well increase over two and a half times. It's also a very large and growing market as we touched on earlier. It's about a \$9 billion market in 2018 with some really good growth prospects.

And it's also largely enabled by some critical enabling technologies. Here we have a Spears quote that says that about 70% of directional drilling service dollars are associated with rotary steerable tools.

The directional drilling product space is also highly complementary to our existing product offering, particularly our bits and motors business. And we can therefore leverage our existing customer base and our infrastructure to accelerate the growth of our position in this market. Isaac showed you his map with his positions all around the world in every major oil and gas basin.

For us to add the capabilities we need to support a directional drilling tools business, we need a couple of hundred thousand bucks to add some calibration equipment to get up and running. If we were starting from scratch, rather than a couple hundred thousand bucks, we'd be talking about several million dollars for each location around the world. We have a built-in platform that we can leverage very effectively to significantly accelerate the growth of what Isaac is about to do over the next few years.

Lastly, the directional drilling tool space is a consolidated market with the big four participants in this marketplace capturing about 64% of global revenue. We think these numbers are a little bit distorted. As Clay mentioned earlier, the big four in the US tend to rent their key enabling tools to independent directional drilling service providers because they're really the only ones that had those tools available up until this point in time.

We've got to keep in mind that directional drillers are renting products from organizations that they effectively compete directly against. So, we are highly confident that those independent directional drilling service companies would much rather rent from an independent provider of technology and equipment that they can be assured will not come into the marketplace and compete against them.

I also want to highlight the international markets in which the big four are much more reluctant to rent their enabling technologies to independent parties, and as a result they have a much larger market share, which helps indicate that this is a market that is pretty ripe for a new entrant into the marketplace.

Lastly, this is a manufacturing and product-driven business - an area where we historically thrive. We are capitalizing on the volatility of the oilfield by entering into the marketplace during a pretty good time. What that means is we think we have made market entry in at a time that it cost us a lot less than if we had entered into it several years earlier or potentially several years later.

You can see how these market characteristics that I just described tie directly to our strategic framework. In other words, this is an opportunity that clearly checked every single box in our framework.

Let's next talk about exactly how we executed the strategy. As I mentioned, we didn't really feel like we were starting from scratch given the infrastructure that we had. But also, there are some other key components to a bottom hole assembly that we have long had leadership positions in.

Our ReedHycalog drill bits have pioneered fixed cutter bit technologies and hold industry-leading positions in drilling motors and critical enabling technologies such as our agitator friction reduction system.

We've even had a small position or presence in the MWD space since 2007 where we've offered an MWD system that uses electromagnetic waves to provide its telemetry capabilities. While we didn't have a meaningful position in the \$9 billion directional drilling market, we certainly had a very strong leadership position in the downhole drilling tool space, which is a \$3.7 billion market, and the \$3.2 billion drill bit space. And again, in these spaces these are the exact same customers that would be needed to pursue related to our directional drilling tool business.

More recently, as you heard from Isaac earlier, we pioneered other enabling technologies that are also directly related to directional drilling services. Wired drillpipe certainly helps enable some capabilities on directional drilling front as well as our ASM and ESM type tools and systems and capabilities.

But what was really needed for us to round out and being able to provide a comprehensive bottom hole assembly solution for our customers were the key products highlighted in this box through primarily conventional MWD mud pulse technology, resistivity, and rotary steerable tools.

So, we used a combination of organic R&D and acquisitions to round out our product portfolio. Let's touch on BlackStar<sup>™</sup>. We acquired Tolteq in 2016 as Isaac mentioned. It's a very well-established business with a huge number of MWD tools already out in the marketplace. And we rounded out our MWD portfolio by completing an acquisition of Teledrift which provided a very low cost MWD tool design for vertical applications.

In international markets, we realized that 65% of rotary steerable jobs are run with LWD resistivity tools. Because of that, we felt it was really important for us to have our own LWD capabilities. During the downturn we identified a really great tool design that was being developed by a company that was really struggling during the downturn.

I think they realized that they would not have the means to continue to develop the product and ultimately bring it to commercialization. So, we acquired that technology in January of 2017 and accelerated the development by leveraging our internal resources.

We successful introduced that product earlier this year and booked our first sales in Q3 of 2018, as Isaac mentioned earlier. From the table you can see that we also have multiple offerings at various stages of development related to our steerable tools, some of which were developed 100% organically and others via acquisitions. For others, like our LWD tool and our VectorZIEL<sup>TM</sup> rotary steerable tool, we used a combination of M&A and internal R&D capabilities to finalize the development, testing and bring that product to market.

One of the key resources that we highlighted earlier is our R&D test facility that we have down the road here in Navasota, Texas. At this state-of-the-art facility, we have numerous labs, test stands and a rig that does nothing but drill to test new products and technologies.

So, how exactly do we use this resource? As I mentioned, similar to our LWD tool, the VectorZIEL tool that we acquired really wasn't ready for primetime when we came across it. It had a really limited track record and we found it had frankly insufficient reliability.

However, our engineers really saw some promise in the technology and the approach these entrepreneurs were taking in terms of building the tool. And they had a great deal of confidence that if we were to leverage any of these capabilities and resources we could pretty quickly and efficiently enhance the capabilities of the tool and dramatically increase its reliability.

So as soon as we signed the letter of intent to acquire these tools we began working on just doing that. Over a period of 12 months we were able to dramatically improve the reliability, as is demonstrated by the chart on the right-hand side of the slide which plots mean time to failure.

You may have heard us mention during a conference call last week that the work was recently commercialized and completed some successful field trials which converted into our first sales, so we're off to a great start here.

By the way, one of the things that I will mention about our test facility in Navasota is earlier somebody had asked a question about the fact that the complexity of the products and solutions that we sell has really advanced quite a bit. It was asked how has our sales force evolved and how has our approach evolved? Clay did a great job of answering that question but one of the things that we should highlight is this facility.

When we are talking about complicated systems and integrated packages, there is no better way for a customer to become comfortable with that than by going out and touching and seeing the latest and greatest what NOV has to offer and being able to provide them with reams of data about the effectiveness from real drilling activities.

We've built out a comprehensive portfolio of directional drilling tools using both M&A, where we completed five transactions for about \$55 million, and using our internal capabilities cost effectively, which has positioned us as the only independent provider of comprehensive Bottom Hole Assemblies [BHAs].

We also have a compelling pipeline of proprietary technologies that are still under development, that we believe can and likely will drive meaningful improvements in costs and efficiencies for E&P operators.

We're still in the early innings of executing on this directional drilling initiative, but we think we are really well positioned to capitalize on what we think will ultimately be a pretty massive opportunity for NOV over the coming years.

As I mentioned, we also saw the completion tools market as another area that checks all the boxes that we'd like to see in a growth initiative.

I think everyone is well aware that completions comprise the single largest cost to getting a well on production in the North American marketplace. Not only are completions an economic driver for oil and gas companies from the cost side, but completions are also the single largest determinant of what percentage of hydrocarbon resources are ultimately recovered from a well, which tends to be the primary driver of economics for operator customers.

As we've touched on earlier, when operators shift into development mode, completions become much more challenging and much more important due to the potential from interference from nearby wellbores. So there certainly is a need and a hunger for precision placement and the ability to control frac propagation lines.

Another attribute of this market like directional drilling is that it's a pretty consolidated market with the top four participants controlling about 62% of this \$8.6 billion market. And, like directional drilling, the international marketplace is even more consolidated than North America.

Most people think of the market as actually being a fairly fragmented market, something that was touched on in of the earlier Q and A sessions. And if you look at the sheer number of participants in the conventional plug-and-perf portion of the business it certainly does appear that way. But there are really only about six competitors in this space that provide really differentiated sleeve type technology and NOV is obviously one of those. We think we can be a disruptor in this area and provide innovative solutions that better address customer pinch-points of our ultimate end customer.

The last thing that I will mention is, like directional drilling tools, the completion tool space is also a market in which world-class manufacturing capabilities are really combined with excellent field service and repair needs which is exactly the type of environment which NOV typically thrives. So very similar characteristics in completion tools to what we saw in the directional drilling space and we also executed on this initiative in a very similar manner. We completed three acquisitions for about \$85 million. We also used our internal R&D capabilities to bring additional products to market and we leveraged our infrastructure to dramatically expand the geographical presence of this operation.

As Kirk mentioned previously, we've gone from four countries in which we sell completion tools to 27 over a very short period of time.

We are also in the very early innings of executing on our strategy in the completion tool space and we also think this opportunity is as compelling as what we see in the directional drilling space.

In addition to directional drilling and completion tools, we've spent the last several years rapidly advancing a number of initiatives in a number of different areas around the company.

You've heard about many of these from Joe, Kirk, and Isaac. Those include NOVOS<sup>™</sup>, our predictive analytics capabilities, our condition-based monitoring capabilities, closed-loop automated drilling services. But we've also really worked hard to improve our competitive positioning in certain markets through consolidation, including in the drill pipe space. We have also leveraged our scale to pursue unique opportunities in certain local markets such as Saudi Arabia.

Throughout the last several years, we've advanced a number of important initiatives which have us really well-positioned for the future. Much of what we focused on is equally, if not more important, to the international markets as it is to North America. And that's really important because while we believe in the recovery in North America is far from done, it is maturing. The international markets are really just starting to wake up, which is why right now is a pretty exciting time in the cycle to pay attention to NOV.

We are a provider of capital equipment and we are a global enterprise, meaning our recovery is really just getting started. Recoveries tend to start in the most efficient, shortest cycle markets, which is clearly the US at this point in our lives.

Additionally, recoveries start with improving activity which is obvious that requires reactivation of existing equipment and consumables to support those assets. As the cycle matures, it expands into other, slightly longer cycle markets. Once capacity is absorbed folks need to expand their asset base, resulting in new sales of capital equipment.

Looking at this chart, if we had a "you-are-here" dot to place on it, it would be in the lower left quadrant. It's just another way of saying that we think we are nearing a time in cycle where it will be NOV's time to shine.

As we sit here today, there is certainly less than perfect visibility in the next year, but we'll give your our best view on 2019. We are going to lay out a number of assumptions that are going to be necessary in order for us to achieve the forecasts that we are about to share. And we'll go ahead and jump right into it. Here we go.

For our Wellbore Technologies segment, we expect North America to be relatively flat to slightly up to where we are today through at least the first half of 2018. After additional infrastructure is built out to alleviate some of the takeaway constraints in West Texas and other markets, we expect activity to improve, which create the opportunity for a much better pricing environment to emerge on the second half of the year. We also expect a corresponding increase in overall activity.

We also expect a much more meaningful expansion of the nascent recovery that appears to be unfolding in both the international and offshore markets. Lastly, we expect accelerating growth in drillpipe sales as we move through 2019.

If this scenario materializes, we expect Wellbore Technologies to deliver 12% to 18% top-line growth with EBITDA leveraged in the 30% to 40% range. This flow-through is lower than what this business has delivered since the very depths of the downturn and the reason for that is we expect incrementals to be a little challenged in the first half of the year while we wait for international budgets to get finalized and for takeaway constraints to be alleviated, but by the second half of the year certainly expect incrementals to be more towards the top end of that range, if not beyond.

For our Completion & Production Solutions segment we expect the high levels of tendering activity that we have been experiencing over the last couple of quarters to finally convert into orders in early 2019. If that does stick, that will result in a nice revenue ramp in the second half of the year.

We also expect our Intervention and Stimulation Equipment business to be a bit soft through the first half of 2019 but, once operators really begin attacking the huge backlog of drilled but uncompleted wells, we think we'll see demand inflect pretty shortly for the products in that business unit. If this happens we would expect to see an 8% to 12% top-line growth with incrementals in the 25% to 35% range.

In our Rig business we assume we'll continue to see solid demand for rig upgrades in the US. We also expect to see increasing frequency of demand for new build rigs in the North American marketplace and we expect and hope to see international tenders for land rigs begin to move forward in earnest.

Last and certainly not least, we also need to see more recovery in the offshore markets to drive meaningful increases in demand for reactivations and upgrades. If this plays out, we should see 7% to 13% growth with relatively low incrementals as we are still working to move excess inventory and our higher margin backlog is winding down a little bit.

We think in order for this above scenario to really play out, we'll need to see WTI at or above \$65 a barrel and global CAPEX spend to increase a little over 10% between 2018 and 2019. If this does play out, we would expect to see consolidated company revenue of between \$9 billion and \$9.5 billion, and EBITDA between \$1 billion and \$1.3 billion.

As we look a little bit further into the future, it's worth touching on how we expect each of our individual segments to perform.

Our Wellbore Technologies segment is primarily an early cycle consumables product business that typically leads in the early phases of recovery. Since the depths of the downturn which was Q2 of 2016 for us our Wellbore Technologies business is up 65% as I mentioned before, incrementals 40% plus, so the business has inflected pretty hard.

Growth in this type of business tends to moderate relative to capital equipment businesses as the cycle matures. However, as I said before, I really want to make it crystal clear that this segment has quite a bit of running room associated with continued improvement in the North American marketplace, an international recovery that has really just getting started, and its longer cycle drillpipe business that is really just beginning to take off.

Our CAPS segment has a meaningful aftermarket business, but at the end of the day it's really primarily a provider of capital equipment. You saw from Kirk's presentation that we've had a solid recovery associated with the land markets and no recovery in the offshore space. I would also point out that the vast majority of improvement in the land markets has really come only from North America and has been predominantly associated with pressure-pumping equipment. We think there is a lot more room to run across the segment.

So far, from the depths of the downturn CAPS is up about 36% from our trough in Q2 with 26% incrementals which we think reflects a business that's really in the early phases of its recovery.

Lastly, our Rig Technologies business obviously has a great aftermarket operation, but the base business is still a very long cycle backlog-driven business.

As Joe pointed out, the segment had a sizable backlog which has worked down, and as a result this segment bottomed in Q2 of this year which was a year and three quarters later than the other two segments. Since that time the business is up 32% and we are hoping that some of the backlog will begin rebuilding as we move forward in time.

With that understanding, let's take a look at how we see things playing out over the next three years. We'll start with some assumptions. If we're in a healthy demand environment where we have sustained improvement and commodity prices and global CAPEX spending, and there are no major surprises or disruptions, we could see a combined company annual revenue growth rate between 11% and 16% with incrementals in the 30% to 35% range, which means we would

see somewhere between \$11 billion and \$13 billion in revenue and \$1.8 billion to \$2.5 billion in EBITDA.

If we achieve this type of result over the next three years, you'd probably expect that our capitallight organization would generate quite a bit of free cash flow which we think warrants a good discussion on how we prioritize our allocation of capital.

It won't be a surprise to those of you that know us pretty well that number one of our list is to defend our balance sheet. It's incredibly important for us to maintain high investment grade credit ratings in order for us to not only survive the extreme cyclicality of our industry, but also so that we can be opportunistic and continue to improve our competitive position regardless of the environment that we are in. Additionally, it's very important to our customers as they often entrust us with projects worth hundreds of millions of dollars that are delivered over multiple years, so they want to know that their counterparty is going to be there.

As we sit here today we are very comfortable with our balance sheet. We have an annualized net debt to EBITDA ratio of significantly less than two times. But over the coming quarters we really want to continue to see our gross debt to EBITDA ratio improve down below our target of two times. A little more EBITDA is obviously what it's going to take in order for us to meet that metric.

Next on our list of priorities are organic investments. As we discussed we always seek and prefer organic growth is that's what has consistently resulted in the highest rates of return for our shareholders.

After making sure that we can fund our key organic growth initiatives, we then look to deploy capital and the strategic high-return M&A for which we believe we have a pretty strong historical track record.

After funding CAPEX and M&A, if we start to see ourselves accumulating additional excess capital we'll look to return that capital to our shareholders via dividends and share repurchases.

As you saw in the last slide we feel pretty good about the outlook for NOV, so I think this type of opportunity could materialize. Our board also shares that view and, as a result, this morning our Board authorized a three-year \$500 million share repurchase program.

There are a few items I want to highlight related to how we'll approach these repurchases. As I mentioned just a moment ago, we prioritize high return CAPEX and M&A investments above the return of capital. If we see the potential for attractive investment opportunities to emerge we'll defer or slow repurchases.

Additionally, I've pointed out that our credit metrics still are not yet quite where we want them to be, so we're unlikely to repurchase any meaningful amount of stock until we achieve those metrics, likely in the mid-2019 timeframe.

Finally, if you think about our forecast, you can imagine that without significant pick-up in acquisition spend our free cash flow is going to meaningfully outpace our buyback program. If things play out that way you can expect us to have further dialogue with our board regarding the expansion of our return of capital programs.

At this point I am hoping that what I just shared with you was slightly more detailed than even what you guys were expecting to see.

In the final section of this presentation we want to provide you with a little bit more. We want to take a different sort of look at the future in a slightly longer-term look.

Throughout the day you've heard about the broad range of operations and how well we have them positioned for the future. You have also all probably recognized the importance of optionality in the oil and in particular in making investments in the oil field.

As we flip through the final section of this presentation, I want you guys to think about optionality and the potential embedded with an NOV. I think everybody here has heard the saying "history does not repeat, but it sure does rhyme."

As we think about the history of the oil field the rhyme that we always hear is that the highly efficient tools that are developed for the really challenged reservoirs of North America inevitably gain traction in markets around the world.

Let's think through a few scenarios. What if international E&Ps adopted horizontal drilling to expose more of the reservoir to their well-bores like North American operators have done for the past 13 years?

Well, you saw this slide earlier from Isaac, it just shows that horizontal drilling has gone from 10% of wells in 2005 to 90% of wells in 2018. On this gray line which shows US land well cost, well, they've moved and locked step with horizontal drilling and over the last 13 years we've seen a four-fold increase in service intensity.

Now that's the US. What's happened in international markets? Well, pretty much nothing. It's been flat during the last 13 years.

So, if we saw service intensity in international land markets increase four-fold like it did in the US, global CAPEX spending would be \$65 billion higher than it is today. It's what I touched on earlier total global CAPEX spend is only about a quarter of a trillion dollars so that's over a 30% increase on capital spending.

Next, what if international land-drilling markets re-tooled their rig fleets with modern AC rigs that are capable of drilling those long horizontal wells? Well, today if you look at the global land drilling fleet in North America, first of all, you have 70% of active rigs that are AC driven rigs. In

international markets where the average rig is about 10 years older than what we have in North America only about 14% of those rigs are AC driven.

So, if we retooled international land rig fleet to be comparable to the North American fleet it got the fleet up to 70% AC driven, the world would need 750 new land rigs.

At \$22 million per rig that's a \$17 billion opportunity. Keep in mind also that an international market's typically running higher spec rigs than a 1500 horsepower rig. So, you can assume that 22 million would bump up a bit.

Next, what if rotary steerable tools, which deliver the best well board geometries sort of proliferate because a reliable independent provider of these tools emerges on the scene? Better yet, what if another new low-cost technology like a downhole adjustable motor would emerge that also wins new adherents, just like our agitator tool did back in 2008? You heard a little bit about our agitator tool earlier today. It was a real disruptive technology that we introduced back in 2007 I want you guys to understand what happened with this tool.

We'll take you back to the same chart - percentage of US wells drilled horizontally. You also see that the average length of a horizontal well also moved in lock step. Next slide on this red line which represents the percentage of horizontal wells that use NOV's agitator tool.

We went from a market that didn't exist at all back in 2007 to the point where about 55% of every well drilled today in North America uses our agitator tool. That tool has really enabled long lateral efficiencies associated with drilling long laterals. A good example of what can happen when you introduce a disruptive technology to the market and effectively create a new market. And that's exactly how Isaac positioned SelectShift<sup>TM</sup>. We do think it's potentially a disruptive technology. So, if NOV's SelectShift achieved similar market adaption as what we achieved with our agitator tool, it could represent an opportunity of about \$750 million per year.

Next, what if drilling contractor's adaptive machine learning and automated their operations freeing up drillers to become directional drillers? Well, first of all, why would they want to do that? When you go back several decades ago, looking at an old mechanical rig, we were drilling about 146 feet per day. Think about drilling a 10,000 foot well, it's a little under 70 days to drill that well.

Fast forward to today, with the advent of modern technology and much better equipment, average rigs drill at almost 600 feet per day. Think about that. It's the same 10,000 foot well. That's 17 days.

Also, keep in mind that the well that we're drilling today most likely has a very long and challenging horizontal, vertical big curve that you've got to drill. Back then, when you're drilling 146,000 feet per day, you didn't have that.

So, let's take a look at what's happened over a more recent time period. The numbers are just as stunning. Average lateral length has increased 29% from 2014 to 2018 while rig day rates are down 5%. The amount of time a rig spends on each well is down 12%.

And the amount of spend per well has declined 16%. And all of that leads to a decrease of 35% in terms of dollars spent per foot drilled in the North American or US marketplace. Somebody is realizing a lot of benefit from that cost savings, right?

Where is that cost savings going? Well, certainly, the E&P operator is a direct beneficiary for that. But there are also other costs that are not reflected in just what's happening to our contract drilling firms. Directional drillers have been one of the primary beneficiaries from this change that's occurred.

The directional drilling spend per foot drilled is up 21%. And if you combine that with the fact that the average lateral length is up 29%, the amount of footage that we're drilling, the average directional drilling spend per well is up over 60%.

If contractors would move into the directional drilling service space to capture some of that value they have effectively lost, that would create 323 potential new customers for NOV's new directional drilling toolkit.

By the way, earlier, we were talking about there being 131 independent directional drilling companies. Well, it depends on how you look at it. Right? Because what we have up on the screen here is effectively an app.

And we refer to it as the Uber app of directional drillers. It's pretty interesting. This company basically hires or outsources contract directional drilling personnel. Every dot on this map represents where one of these directional drillers live.

We just clicked on one of them, kind of made an interesting choice in Joe Smith. He lives somewhere in Missouri. We're not going to tell you exactly where. And you can see the line in terms of where he has recently travelled.

He is a directional driller that is currently working a job in the Illinois Basin. So, these folks are readily available for drilling contractors to bring on board and to equip them with the tools and technology that NOV now provides to be able to put them to work and generate additional revenue.

Next, what if international operators adopted multi-stage hydraulic fracture stimulation to open large surface areas of their formation to the wellbore? Well, I think everybody is pretty familiar with the pressure pumping landscape in the US and how it's evolved, but there are a couple of things I want to highlight about the past. Look at 2005. In 2005 there is only about 2 million hydraulic horsepower in the marketplace. Today, there's 18.8 million hydraulic horsepower, and that's active horsepower. Compare that to roughly 1,050 rigs running in the marketplace. That means for every rig that's running within the US, you need about 18,000 hydraulic horsepower to support that rig.

If you look at the international markets, you see a little bit of a different story, right? You've got 780 land rigs running right now and you have roughly 3.3 million hydraulic horsepower. You only have about 42.50 hydraulic horsepower per rig.

Look at 2011. It looks a whole lot like 2005 back in the US. Things continue to evolve in the international markets as they have in the US and if international markets achieve the same completion intensity as North America, the world is going to need an additional 11 million hydraulic horsepower and pressure pumping capacity. At a thousand dollars per horsepower, that's an \$11 billion opportunity.

Next, what if E&P's fully adapted multi-stage sliding sleeve systems that precisely place and control fracs, to eliminate frac bashing and provide better reservoir drainage?

We talked about earlier, this is a huge and rapidly growing market, about \$9.6 billion. Also, we touched on earlier that the market - yes, from the outside looks like it's a pretty fragmented market with over 30 providers providing solutions in the traditional plug-and-perf market.

As we also highlighted, there are really only six providers of technologically capable sliding sleeve systems of which NOV is clearly one won. If E&Ps fully adopted sliding sleeves and we were able to share this \$8.6 billion market with five current competitors, that would translate into a \$1.4 billion per year opportunity for NOV.

What if the offshore fleet were to reactivate 200 rigs? You guys know that there's a lot of rigs out there and utilization is pretty low. There are about 288 stacked rigs and, as Joe highlighted earlier, the upper end of our range through 2022 in terms of reactivations, there's roughly 200 rigs.

If you take effectively pretty close to the midpoint of the ranges for both jack up and floater reactivations and put these rigs back to work, that would be a \$2.5 billion opportunity.

Next, what if high-speed data transmission from the bottom of the drill string became the standard for safety and efficiency, as is the case for one of our large customers that we've touched on earlier today?

What if the offshore industry adopts a lower cost, lower risk vendor-based model for constructing FPSOs the same way the industry adopted our vendor-based approach for offshore drilling rigs that led to the build-out of 360 offshore rigs on time and on budget?

What if data-driven solutions that could predict failure became a requirement to reduce downtime? What if the offshore industry adopts new production management technologies that eliminate expensive and bulky topside equipment by placing processing capabilities on the sea floor like our sea box solution? Why wouldn't the industry do these things?

And if the industry did, why wouldn't NOV be able to achieve or exceed prior peak earnings?

It's really impossible to predict the timing or precisely quantify the impact to NOV of some of these things that I just described. But if you are to do some back-of-the-envelope calculations, I think you'll see it's pretty easy to rough out how these what-ifs have the potential to drive over \$10 billion of incremental annual revenue for NOV. If this were to play out, it could result in us achieving or surpassing our prior peak earnings.

With that, I'll turn over to Clay for some final comments.

Clay Williams: We'll take a few minutes to answer any final question before I close. Joe Rovig: Yes, sir.

[Question & Answer portion begins

[Question & Answer portion ends]

Clay Williams: A day like today doesn't happen without a lot of hard work from a lot of people. You saw a lot of creativity of our team here at NOV throughout the course of the day, through the clever animations illustrating our products. They are really cool race car videos.

I want to thank our corporate marketing department and our animators, Paul Dufilho, Michael Gaines, Erich Schraub, Stephanie Schaffler, Nick Schmidt, Trond Hille, Weihan Lin, Brittany Murray, Bailey Hollister on our slides, and Sahir Waseem, Katy Weintritt on photography. And then our event organizers, Allison Hablinski, Cassandra Casey, Abigail Brooks, Katie Rose.

I want to thank [Assad Mohan] for some of the analysis that you saw throughout the day, a lot of hard work by a lot of people. I also want to thank our business unit presidents for joining us today. You had an opportunity to visit with many of them over lunch and at the breaks, and our presenters.

Bust most of all, I want to thank Loren Singletary and Sam Delisio for organizing today's event. So, thank you, Sam. Thank you, Loren.

I also want to thank all of you. Hopefully, you learned something today. That's really been our goal, to maybe learn a few things about our business that you didn't know. Maybe to get a fresh perspective on what NOV is doing, but hopefully what you saw today is an organization that's leaner, meaner, that's energized.

You've seen I think the world's best services team in action and a group of folks that I am just so pleased and humbled and honored to work with every day.

But NOV has a unique business model. We are a disaggregator. We're bringing capabilities to the oil field services part of that ecosystem and enabling more competition in that arena through the best technology.

And that's very unique and it gives rise to some really pretty compelling competitive advantages that you saw throughout the day and a very strong free cash flow model. So, as we find ourselves here in 2018 on the edge of recovery, a lot of hard work over the past few years, a lot of pain through the downturn. But very, very excited about the future of this organization, and I hope you share that view.

Thank you for coming. I wish everybody safe travel on your way back home.