

EFFECTS OF COVID-19 ON INDUSTRY

G. WADE CALDWELL, PRESIDENT OF NATIONAL ASSOCIATION OF ROYALTY OWNERS*

Good morning. Thank you very much. And thank you for having me. I appreciate the invite and appreciate the topic. For those of you that are looking at practicing in oil and gas or currently practicing in oil and gas, I would like to do a shout out to look at joining NARO—National Association of Royalty Owners. I am the president this year. It's a nationwide group. The organization solely represents royalty and mineral owners. And they have a chapter in North Dakota, an active chapter. And I think its primary focus has been on education. And they put on some great seminars as well, particularly for practicing attorneys, not only as a good way to, to get meet other mineral and royalty owners in your state, but also for the information that the seminars contain.

So, with that being said, I've been asked to prognosticate, speak on, however you want to put it about the effects of Covid-19 on the oil and gas industry. And I think that there are many, for those of you that are looking at practicing oil and gas, beside just the obvious price, horrendous price dip that we went through. Any shock to the market like that has a lot of effects, some obvious some not so obvious. And that's what I'd like to go through today.

I. BANKRUPTCIES WERE FEWER THAN HAD BEEN PREDICTED

The first thing that now that we're definitely on the recovery side with prices in the 60s for oil, that the COVID price shock brought about was there was all these predictions from the media about a huge wave producer bankruptcies. I think that there were some 40 odd filings of different types of oil and gas entities, whether they be midstream electric producers, you know, drillers, you name it, which is not an insignificant number. But overall, in my view, the bankruptcies were much fewer than had been predicted. There's really only about eight to ten exploration companies that filed bankruptcy. We created a newsletter and sent it to our clients to try to track these bankruptcies in the major events, the biggest one, of course, being Chesapeake. But the main thing that stood out to me from this, what I would call a moderate wave of bankruptcies, was the very clear trend towards everybody files in Houston and it's a prepackaged Chapter 11 and it goes to the same judge,

* A recording of Mr. Caldwell's presentation can be found online at: <https://youtu.be/aRxB9tYL2JM?t=2934>.

and he has his docket down to the point where these companies are in and out of bankruptcy within a period of anywhere from five to nine months, including Chesapeake which has already had its plan approved and is on the way to exiting bankruptcies. But anyway, the bankruptcy Judge Jones there in Houston has developed quite a reputation for being the go-to court for filing of bankruptcies. If you are looking at this from the bankruptcy standpoint, if you represent an owner or you represent some creditor that is owed money by the company that's filed, be prepared to go to Houston. There was a trend for a while for these to be filed in Delaware; that trend seems to have been slowed in favor of filing these prepackaged chapter 11s in Houston.

The other thing that stood out from the moderate wave of bankruptcies was that many involved sales to the lenders or actually a[n] auction of the company assets, so it was really a liquidation. But it stayed as being administered as a chapter 11. That's important because chapter seven becomes much more of a free for all—it's really then about what category claim that you have. And...but these prepackage sales to lenders or auctions have been become pretty common.

One thing, if you're representing a mineral owner or another creditor in a producer bankruptcy, to look out for is "what class of claim do I have?" And of course, most states have statutes that make mineral and royalty owners secured creditors or administrative claims in the bankruptcy. So that's why in all these prepackaged chapter 11s, it was almost without exception, they would file, they would issue a press release, the press release would contain a long statement, assuring that the mineral and royalty owners were going to continue to get paid during the bankruptcy. And in most cases that happened, but not all. We had many cases where people had leases with operators that filed where the well had been drilled and had been producing for some time, but they had not started paying him yet. And so, we've been successful in getting them in pay status, even during the bankruptcy without having to go through the claim process. But you know, that's one thing to look out for.

The biggest thing to look out for if you represent a mineral or royalty owner in chapter 11, is you have to look out for your claims getting washed out, particularly underpaid royalty claims, or what I refer to as non-operator claims. And this has been a peculiar twist. In the early days of the land rush in the Permian, which is what I'm most familiar with, you had companies competing for leases, and sometimes one company would get in and get the majority of the leases, but another company would go ahead and take leases in there. And the idea was, "well, everybody's making money. If we can't get the majority of the leases, we'll let the other company drill the well and operated and we'll just participate, we'll pay our share of the drilling costs

and participate as a working interest owner. So therefore, we'll go ahead and take leases." Well, what happens when the market turns? Companies look at the well and say, okay, we've decided not to participate, and then they file bankruptcy. And then they've got this lease where they're obligated to pay the royalty owner from the date of first production, but they haven't paid them because they're not the operator, and they're not the one receiving the income. So, we've had that issue. We've actually had operators file motions to reject oil and gas leases in those cases. And plus, you have the additional issue of trying to get a claim through. So, I would just point out that, you know in general, those issues involving bankruptcy that were because of the COVID pandemic, have been overall better than expected, but not without their own particular quirks.

II. CONSOLIDATION OF INDUSTRY SPEEDED UP

The second major effect that COVID-19 has had on the industry is that it sped up the consolidation of the industry. And that's probably no surprise to any of you if you've read the headlines. But it almost became a[n] alternative—either you go through a prepackaged chapter 11, or you find somebody to acquire you. And a lot of companies use the opportunity to healthier companies to go and snap up the weaker companies. And this trend was most pronounced in the Permian, where you had the most fragmented ownership of leasehold interests. I think it's been less so in the Bakken and up in the Marcellus and in the Haynesville, also for the lack of—less activity in those places, but certainly, it's sped up the consolidation of the industry nationwide, because a lot of these acquiring companies don't just operate in one basin, they operate in multiple basins.

III. OPERATORS ALLOCATED CAPITAL TO THE MOST PROFITABLE AREAS

The third major effect that I have seen from the Covid pandemic, is that it changed the way that operators are allocating capital to require them to look at allocating that capital to the most profitable areas, i.e. the most profitable plays. And this is Wall Street driven and also the big hedge funds that, you know, back in the boom days a hedge fund or one of these big money funds would go and pick three or four executives that they liked from other oil and gas companies, give them 300 million dollars, and say "go out and start a company." It was very, very common. And a lot of them felt they had this money and so they had to go out and lease up a big position to be able to start developing and building their company. And then the different patterns fragmented. Some companies leased up a big block and then just never really

drilled wells. They just sold their leasehold positions to bigger players. Some of them then did go out and try to drill and prove up their acreage and then sell the company after they felt they'd proved up the acreage. And some of them actually survived and became a standalone company. But that's all come to a screeching halt. Because of the nearly decade-long disappointing returns on these investments, the money has dried up, which has caused the operators to be much more selective in how they allocate their capital and where they spend their money. When it comes down to oil and gas practice, that means that the gas areas, the gas plays, and the Bakken suffered. They got less than their, what you could argue, fair share of capital allocation, because they were not as profitable as other areas, i.e. the Permian.

I was practicing in 2014, when the big price crash hit. And it caused a boom in my practice, because all of a sudden, all the operators were scrambling that were not in the Permian to get a foothold in the Permian, because the Permian has multiple layers of potential shale plays. They wanted to get their foot in and saw that as the most profitable future development area. That trend has continued. In other words, that the fall-off that you would have expected from the severe price shock that we had affected the certainly the gas plays the most, because gas prices have been depressed for so long, but also the good oil plays like the Bakken, because they didn't have the diversity and, in some cases, in a lot of cases, didn't have the returns that the Permian could offer.

IV. ALLOWED PIPELINE INFRASTRUCTURE TO CATCH UP

Another major effect of the COVID slowdown was that it allowed the gas infrastructure pipeline to catch up to the rapid growth from the around 2011 through 2018. This was particularly pronounced in the Permian, where you had seen gas prices well below market for many years. If Henry Hub was selling at 2.80, for a long time, the Permian operators were getting 40, 60, 80 cents for their gas, and a lot of times gas went negative. In other words, they're having to pay to have their gas taken away. That caused all sorts of problems, a lot of flaring. That, of course, the environmental groups have latched on to as a major issue. But anyway, the slowdown in development has allowed those pipeline projects to be completed and has led to nationwide, more stable and better gas market prices. So, it's had a good effect in that sense. Between the wells that were shut in, that were producing associated gas, and just the slowdown in drilling, the completion of these pipelines and the takeaway capacity now is in balance in these markets. And so, unless we get a huge price spike that causes another boom, I would foresee that we're going to see much more stable gas prices over the next few years, which is a good thing. It adds certainty to the operators, it adds certainty that

the midstream companies, it adds certainty to buyers of natural gas that are buying gas on contracts, and it adds a firmer base and less fluctuation. Although that's a little bit of a misnomer—the gas market remains one of the most volatile. You think the oil market is volatile, you should follow the gas market. The gas market has wild up and down seasonal swings. And it's quite a market to follow, but it is much more stable, and the markets are much more in balance than they were.

V. SPECULATIVE LEASING AND DEVELOPMENT DISAPPEARED

The other effect of the operators allocating capital to the most profitable areas is that the phase of speculative leasing and development has basically disappeared. In the early days of the shale plays, it was a land rush. People went out and leased millions of acres of land, not really knowing how it was going to produce. And they would go out and drill wells, not really knowing how they were going to produce. Therefore, you got a lot of leasing activity that just, you know, they weren't sure when they were going to be able to drill on it, if ever. That's pretty much gone by the wayside. What we're seeing today in leasing activity, is the operator that has a particular section or particular two sections that they want to go and drill a two-mile lateral on. And they will come and make an offer for that particular tract. The offers are not what they were back in the boom days, of course, but on the other hand, they're more certain that they're going to drill a well there. So, the offers, the bonus offers, have not dropped off as much as you might expect. But what it means is that you're going to get a lease offer for a section or two sections; you're not going to get a lease offer for 20,000 acres anymore. Those days have largely gone by. So, as it says here, they're leasing only the areas they want to drill, not the ones they might drill.

The other effect that that's having is, you know, they've got choices. These operators grade their acreage, because prices are, you know, in the 60s, which some plays you can make money at that, but it's still somewhat marginal. They're only drilling and developing the high-grade acreage. If you are representing a mineral or landowner and you're driving too hard a bargain, you might cause the operator to move on to the next deal, because they're only going to pay so much. They're looking at holding down their costs in any way that they can. And that includes bonuses. We're even starting to see some pushback on the 25% royalty that have become fairly standard, at least in Texas. And you know, we're seeing pushback in different areas. Really, it's spread throughout—surface damages that they'll pay a surface owner have declined. Pipelines are offering less money for pipeline right of ways. So, it's a filtering effect that's pretty widespread.

VI. ARE WE IN A COMMODITY SUPER-CYCLE INCLUDING OIL AND GAS?

So that's kind of the more close-up issues about the COVID pandemic. So, let's step back and talk about maybe a bigger, big picture issue. And that is, are we heading into a commodity super-cycle in the economy, including the oil and gas industry? And there's been a lot written about this, and a lot of speculation about this in the last year. If you've followed the market, you'd known that energy companies were the worst performing area in the stock market for the last 10 years. And that commodities in general were poor performers in the last 10 years. I'm not sure what all the ages of the audience out here, but I remember 1973 when the Arab oil embargo hit, and oil prices tripled overnight from the Middle East, and gas lines. And then the 10-year wave of inflation that that unleashed on the economy, on Jimmy Carter and Ronald Reagan. When I got out of law school in 1984, my first house mortgage was at 14% interest. And I could go down to my local savings alone and get CDs at 8, 9, 10 and 11% being paid on interest rates. So, you know, what that led to was this massive wave of inflation that lasted for nearly 10 years before it was finally brought under control at the end of Ronald Reagan's first term. And during that period of time, commodities, including the oil and gas industry, went through a super-cycle of price increases. And so, there's, you know, a lot of speculation that that's going to happen in the oil and gas industry, which I guess would be good news to all of us or those of us practicing in that area. And there's a lot of factors that really point in that direction.

The first is that prices for oil have really been marginal since 2014. You know, they bumped around in the 40 to mid-60 range, which is really not a comfortable enough range for an operator to really make money, and a lot of them spent the money that they were given to try to do so and turned out that they really couldn't make the money or make the returns that they promised. But now we're going into year seven of marginal prices. And so, what has that caused, the marginal private oil prices for the last seven years? It meant that only the best areas were getting developed. And the A grade or the high-grade acreage is the one that got drilled. So, what that means is that a lot of that is already heavily developed. And we're seeing a lot of the operators have gotten the information now what's called "parent-child interference" between horizontal wells, where you drill the first well, and then you come back, and you drill the second well later on after the first well has been producing for a year or two. And you end up with, it hurts the production on the old well, and the new well doesn't produce that well either. So, the parent-child interference has become a big issue in the oil patch. But because the best areas are the ones that have been developed, that means that more

and more we're seeing that operators going to have to turn to the marginal areas to be able to drill new wells and to replenish their inventory.

The other factor, of course, is the flood of government stimulus money that's coming out, along with the COVID vaccine, taking hold in the economy, rapidly coming out of its slumber. We've seen Treasury Bills go on an interest rate spike in the last five to six months. Also, commodities broad based have increased—copper, lumber, you name it—they've increased in a lot of different areas. There's a lot of people that feel that we're possibly headed into a phase like we went through from 1973-1983 of a commodity super-cycle where we're going to have inflation, or at least higher inflation. And in higher inflation, generally, commodities do better and are considered a better inflation hedge.

So, another factor here is, of course, the new administration and even the states that continue to crack down on oil and gas development due to environmental concerns. New Mexico has started restricting development. And then, of course, the big issue currently is the Biden executive orders, halting new leasing in federal lands. Federal lands between the offshore production and the onshore is 20% of U.S. production. Now, personally, I wasn't aware of that we ever had a deal with Russia and the Middle East, and Venezuela for them to cut their production. And so, I see it more as just a self-inflicted wound that's going to be made up by production from foreign sources that probably are a lot worse at capturing carbon or reducing carbon emissions than we are. But nevertheless, these development restrictions in the U.S. and with pressure on other countries, are probably going to feed into this potential super-cycle in commodities.

Another big picture item is a lot of talk about what's going to be the effect of electric cars, a lot of speculation that we're going to have a rapid adoption of electric cars, electric trucks. I still have my doubts. I think it's, you know, a long-term process of transitioning to that. But there's a lot of people that would say that electric cars may hurt the oil business but actually may help natural gas, because natural gas is still a very significant portion of the electric grid generation and is probably going to continue to be just for reliability purposes, if nothing else. If you ever hit what they call "peak oil" or "peak consumption" of that natural gas, that the decline is likely to be a lot less than natural gas, than it's going to be in oil.

The markets are already starting to show, early signs of that super-cycle. If you look at any commodity fund over the last five to six months, they are showing big gains. And the gains are broad based because of the economic recovery. And also, I think people are buying into commodities because they do you think that we're going to get into an inflationary cycle. And that's really before the economy gets going. So, if you're looking to position your

practice, and you want to do oil and gas, this may be a good 10 years, but you have to be careful and you have to be selective about what areas you go into.

VII. ACCELERATED SHIFT AWAY FROM “LOCAL” OIL AND GAS PRACTICE TO STATEWIDE OR NATIONWIDE

The other effect of the COVID pandemic has been an acceleration, for lawyers, of this shift away from what I consider the local oil and gas practice to a statewide or nationwide practice. And this was underway a long time before COVID hit. Back in the, up until the 1980s or 1990s really, if you had a lease offer, you went to the local lawyer who knew the local market, who probably owned the local title company. None of the deed records were online. I know some states have mineral owner registries; Texas does not have that. And so basically, you went local, if you had minerals in that county to try to get it leased or developed. That’s rapidly gone away. Deed records have gone online. There’s been this entire shift where mineral landowners don’t even realize it but their records, and their production data from their production have become a commodity unto itself. The data has become a commodity. And it’s been packaged and resold by companies such as Enverus, and the other companies that have mineral management software. They’re taking—scraping the data from these various state regulator websites, repackaging, and selling it to operators, to mineral and landowners, to mineral buyers, you name it. It’s like the Zillow of the oil and gas industry that’s being developed before eyes out there.

But what that means for attorneys is that it’s becoming less and less important for you to have the local office or the local lawyer to be able to practice in an area that has oil and gas development. You layer on top of that what is going to probably become a much more permanent shift to remote work that everybody’s now learned that they can accomplish things by working remotely. It has a lot of reverberations, both for the oil and gas practice and for the economy. But particularly for all oil and gas lawyers, you should look and consider that the days of having to go local to get something done are probably over with. That means that you if you want to live in a bigger city, like I do, you can have clients all over the state. I represent only mineral and landowners, many of them I never meet – it’s by telephone, zoom calls, email. And it involves lease interest all over the state of Texas that I hardly ever travel to. But because of deed records being online, and the market data that’s increasingly available out there in terms of, I can pull up my Enverus account, I can check all the drilling activity, I can see who’s leasing and that section and all the sections around it, I can go to other sources and get the lease bonus data. The days of having to live in the small town or in the oil patch to practice oil and gas, I think are rapidly coming to a close.

VIII. CONCLUSION AND Q&A

So, I know that I probably strayed a little bit from the topic. And also, I know I've got some time left here. But that's the main takeaways that I would point out and would be glad to field any questions or answer any questions you have.

Question: What questions are you fielding as far as post-production deductions from your mineral owners?

Answer: The price crash caused a lot of operators to go back and reexamine their leases. And we've seen a lot of operators that have started taking deductions on older fields that weren't taking deductions in the past. And we have a lot of very concerned mineral landowners out there. There's been a lot of case law development about post-production deductions in the state of Texas over the last few years. Basically, the case law here has developed that your lease needs to be very clear that the post-production deductions are allowed. And you need to not have any language in your lease that talks about the pricing at the wellhead because that opens the door for deduction of post-production deductions, at least in Texas. There's a recent Texas Supreme Court opinion called BlueStone that I would recommend for reading. It has an excellent analysis of how you analyze a lease to determine whether it allows post-production deductions in Texas. And it breaks down the analysis into—what does the lease say? Where do they value the point of sale of the product in the lease? And it goes through about three or four factors that helps you analyze that. So, you know, to answer the question, yes, we're seeing a lot of post-production deduction issues crop up because of the squeeze that operators are going through trying to squeeze more money out of their operations.

Question: In your view, what is primarily contributing to the increases in the price at the pump?

Answer: The primary increase in gas prices has been, of course, the recovery in oil prices is and always will be the biggest factor, but margins that refiners are able to make have increased quite a bit because the demand for oil is not the same as the demand for gasoline. And sometimes the demand for gasoline, when the economy recovers, outstrips the supply of oil. And so, you get these widenings of the gap, the margins, at the refinery level, and that's what we're seeing currently, that is causing gas prices to increase faster as a percentage than oil prices have.

Question: You have seen many booms and busts. Are there similarities with those and our recent boom/bust?

Answer: Yes, the recent COVID bust was very similar to the oil bust in 1981 where oil went from 35, which was basically an all-time high at that

time, down to \$8. We've had a tremendous boom in oil production in Texas and other places throughout the '70s, up through about 1981. And that was a very severe bust; it caused really far more bankruptcies, it caused bank failures, it actually was the precursor to the S&L failures that started in about 1984. You had the oil bust in 1981 that led to a lot of oil patch bank failures that led to an overheated real estate market that continued for about three years, because of the ability to write off your investment in real estate projects so quickly. And then when they reversed that, in 1984, you had a sudden and very severe, really the most severe in my lifetime, real estate bust, even worse at least in Texas, it was worse than the 2007 bust. Because Texas, and particularly San Antonio, was cushioned by the emergence of the Eagle Ford shale and the shale plays which brought us out of the 2007 recession a lot earlier than the rest of the country.

Question: You touched on the possibility that less lucrative minerals will potentially be drilled in the future. Have we started to see any movement towards this yet?

Answer: Yes, technology continues to improve. In your lifetime, you will see these different layers of shale that are today considered uneconomic, or the less productive areas get developed. It's a combination of price and technology advances that's going to lead to that. So yes, we're seeing in the less—in the Permian it was all the Wolfcamp A and upper B that got drilled early. Now we're seeing people going back to the Bone Spring, we're seeing people trying the Wolfcamp D. If gas market can recover and stay above \$3 for an extended period of time, there's of course massive amount of natural gas yet to be developed in the U.S. So, and that includes the Permian, but the Marcellus is really the gorilla in the room when it comes to gas production.

Question: Are you aware of gas deduction cases where deductions exceed value of royalty owners' share of gas royalties?

Answer: Yes, the negative royalty phenomenon we had here when the gas takeaway was so poor, and producers were having to pay to have their gas taken away. We did have a number of operators try to do negative royalties in the checks. In other words, they would pay the royalty on the oil. But then if the gas, if they were losing money on the gas or were having to pay to have the gas taken away, they would deduct from your oil royalty and put a negative amount for the gas royalty. And we had a number of those. And there's actually some that have started being litigated. My position always was "hey, my lease says you're going to pay me a royalty, not deduct me a royalty, and you can't do a negative royalty." I think where it probably will come down is if you have a lease that doesn't allow post-production deductions, they should not be able to do a negative royalty. Now, if you have a lease that does allow post-production deductions, and let's say the gas market

tanks, and they're only getting 30 cents an MCF, but yet it costs 50 cents to transport it and get it into the pipeline, then they may be able to pass on that negative 20 cents as a deduction on your royalty statement. But you know, that's an area really yet to be developed. And I'm not aware of any published opinions yet about the negative gas royalty cases, but there were several that were filed here.

Question: Recently, the Biden administration and the US Army Corps of Engineers chose not to close down the Dakota Access Pipeline while that EIS is being completed. What do you expect to happen next with Judge Boasberg and the courts? And what will it mean for the industry?

Answer: Well, I know the travails of the Dakota pipeline have been long, and the Keystone. I haven't really followed the case up there as to what the judge is going to do. I just have a bigger picture of it that, if the oil in Canada has a market, it's going to get here some way. And would you rather get it here through truck and rail or would you rather have it here through a pipeline? I just look at it that way.

Question: Recently the majors are getting into offshore wind, will they be able to reinvent themselves? And what are long term implications for shareholders?

Answer: Yes, I think that the majors are going to make an earnest and sustained effort to diversify into renewables. You know, the tax incentives looks like they're going to be extended on and on. And they have a lot of, those companies have a lot of technological expertise in transporting and building energy infrastructure. And so, yes, I do expect them to get into offshore, I expect them to get into wind and solar, as well. I expect them to get into carbon capture as a way of making money. You know, actually the best use of carbon capture is to help reinvigorate old oil fields. I know it sounds a little counterintuitive, but for every three tons of CO₂ that you put in the ground, you only get a one ton back in terms of increased oil production. But it's probably the readiest market for CO₂ capture and injection.