



W.E.A.

Western Energy Alliance presents the  
2014 ROCKY MOUNTAIN HALL OF FAME



# Oil and Gas Investor

1616 S. Voss, Suite 1000  
Houston, Texas 77057-2627  
713-260-6400  
Fax: 713-840-8585  
[www.oilandgasinvestor.com](http://www.oilandgasinvestor.com)

#### Editor-in-Chief

LESLIE HAINES

[lhaines@hartenergy.com](mailto:lhaines@hartenergy.com)

#### Group Managing Editor

SUSAN KLANN

[sklann@hartenergy.com](mailto:sklann@hartenergy.com)

#### Editor-At-Large

NISSA DARBONNE

#### Corporate Art Director

ALEXA SANDERS

#### Senior Graphic Designer

FELICIA HAMMONS

#### Photography

BRIAN PAYNE

TOM FOX

LOWELL GEORGIA

STEPHEN COLLECTOR

#### Production Director

JO POOL

[jpool@hartenergy.com](mailto:jpool@hartenergy.com)

#### Vice President, Publishing

SHELLEY LAMB

[slamb@hartenergy.com](mailto:slamb@hartenergy.com)

#### Director, Business Development

MORGAN MASCIO

[mmascio@hartenergy.com](mailto:mmascio@hartenergy.com)

#### Director, Business Development

ERIC ROTH

[eroth@hartenergy.com](mailto:eroth@hartenergy.com)

#### Director, Business Development

NELLA VELDRAN

[nveldran@hartenergy.com](mailto:nveldran@hartenergy.com)

#### Manager, Business Development

KEVIN HOLMES

[kholmes@hartenergy.com](mailto:kholmes@hartenergy.com)

## HART ENERGY

#### Editorial Director

PEGGY WILLIAMS

#### President and COO

KEVIN F. HIGGINS

#### Chief Executive Officer

RICHARD A. EICHLER

Copyright 2014, Oil and Gas Investor  
Hart Energy Publishing LP, Houston, Texas.

# TABLE OF CONTENTS

|                              |    |                                  |    |
|------------------------------|----|----------------------------------|----|
| Bruce D. Benson.....         | 4  | Raymond Plank.....               | 30 |
| James S. (Jim) Brown.....    | 6  | Paul Rady.....                   | 33 |
| Ted D. Brown.....            | 8  | Dave Schaenen.....               | 36 |
| Robert J. (Bob) Clark.....   | 11 | Charles S. (Charlie) Searle...38 |    |
| A.G. (Al) Golden.....        | 14 | William R. (Bill) Smith.....     | 41 |
| Harold Hamm.....             | 17 | Margot K. Timbel.....            | 44 |
| Curtis R. Hill.....          | 20 | James J. (Jim) Volker.....       | 46 |
| Michael S. Johnson.....      | 22 | Barth E. Whitham.....            | 49 |
| David B. Miller.....         | 25 | Paul J. Zecchi.....              | 52 |
| William G. (Bill) Odell..... | 28 | Robert L. (Bob) Zorich.....      | 54 |

## ABOUT THE ARTIST

Hello, my name is Kurt Brown. I have been involved with art in some capacity my entire life and photo/video for over 30 years.

Being creative on many levels while enjoying the great outdoors has allowed me the opportunity more than once to be part of what Mother Nature has to offer!

Being on location can be challenging and rewarding at the same time. I really never know what I am going to encounter until I arrive! Being able to work with whatever light is available for me has allowed me the opportunity to explore every creative avenue I have. Thus, understanding that to capture the essence in a visual way is also the opportunity for me to praise the moment!

Creative vision for me is not something I take for granted. Rather, it is something I enjoy sharing with those around me!



Kurt D Brown

Photo/Video Productions Inc. ■ [www.kurtdbrownphoto.com](http://www.kurtdbrownphoto.com)



# Movers and Shakers in The Rockies



In the 1990s the Rocky Mountain region was touted as the natural gas machine for the United States. Today, it is in the forefront of surging oil production. Although for many years the Rockies have stood out as a premier oil and gas producing region, it's never been truer than today, when the exciting Bakken Shale has exceeded all expectations, the booming Niobrara play is not far behind and the Powder River Basin is undergoing a revival of its own.

The Rockies' vast potential could not have been maximized were it not for the intellectual capital—and the true grit—of the many leaders of oil and gas companies that drill here. Their savvy and willingness to start that rig turning to the right, or lay that pipeline for thousands of miles, are an impressive testament to the Rocky Mountain spirit. No Fourteener is too high for these folks!

They are surrounded and amplified by a unique group of associated service and midstream companies, bankers, legal mavens, regulatory officials and educational leaders who also contribute mightily to the region's overall success, safe operations and environmental stewardship.

That's why it is important for Western Energy Alliance to recognize these leaders. Created in 2004 and held every five years, Western Energy Alliance's Rocky Mountain Hall of Fame calls forth the entrepreneurs who have made significant contributions to the oil and natural gas business in the West over the past 35 years, as well as in the communities where they operate.

This year, the Alliance will induct 20 individuals into the Hall of Fame, who join the 94 honorees since the inaugural class in 2004. These 20 incomparable legends range from executives of very large public companies who are pioneers in the booming Bakken and Niobrara plays, to individuals who lead private companies that seek opportunities in the international arena, to the people who provide the capital to make it all happen.

Hart Energy, which saw its start in Denver some 40 years ago, is proud to assist Western Energy Alliance in recognizing these 20 honorees with this commemorative piece. Reading their stories is a pleasure, to be sure, but they are inspirations as well.

*Leslie Haines*

**Leslie Haines**

Editor-in-Chief, *Oil and Gas Investor*

# Letter from the President



In the short period of time I have worked in the oil and natural gas industry, I have had the privilege to meet so many amazing people who have accomplished astounding things in our industry.

The 2014 inductees into the Rocky Mountain Hall of Fame deserve the recognition they will receive tonight for their vision, planning, execution, leadership and risk-taking. I remain impressed by their similar core character traits and recipes for success in this highly competitive industry.

The history of this industry is full of incredible stories of determination and grit. Surviving the ups and downs takes a special kind of leader. Adapting to the amazing technological developments requires unrelenting focus. And navigating the never-ending changes in politics and policy requires a good sense of humor!

Western Energy Alliance's mission is to improve the business climate for companies operating in the West by advocating for policies that support expanded exploration and production. Our advocacy promotes the benefits of western oil and natural gas while educating the public and policymakers about responsible development to provide Americans with affordable energy. From championing public lands access to opposing overregulation, the Alliance supports independents through a variety of political, legislative, regulatory, outreach and other activities.

As Western Energy Alliance celebrates our 40th anniversary, I would like to offer a special thank you to our Chairman of the Board, Jack Ekstrom of Whiting Petroleum. Jack has been a long-time leader and friend of our organization and a driving force behind this spectacular event.

Western Energy Alliance celebrates our new inductees, and we're pleased you have joined us for what promises to be an incredible celebration of achievement and leadership in the oil and natural gas industry in the Rockies.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Wigley'.

**Tim Wigley**  
Western Energy Alliance President



# WESTERN ENERGY ALLIANCE

## *The Voice of the Industry in the West*

**W**estern Energy Alliance takes pride in its reputation as the industry source of credible, accurate information on oil and natural gas issues in the West. Congress, the media, and stakeholders across the region know they can turn to the Alliance to understand exploration and production on public lands, the job impact of new federal environmental regulations, and how an endangered species listing and many other issues will affect western communities.

As the voice for the western oil and natural gas industry, Western Energy Alliance continues to address the challenges and opportunities that are unique to energy development in the West. The Alliance communicates to policymakers in Washington and across the region the real opportunities for job growth, economic stimulus, and government revenue provided by the western oil and natural gas industry.

Western oil and natural gas exploration and production from the 13 western states continues to play a dynamic role in the U.S. economy, producing \$84.3 billion in output nationwide and spurring activity in many other industries, including agriculture and manufacturing. The western E&P sector supports 268,110 American jobs that pay \$20.7 billion in wages to working families across the nation.

Oil and natural gas companies strive to be good economic and environmental stewards in the places they operate through continuous innovation and community engagement. Despite their efforts, they face ever more burdens from the federal government, especially in the West, where so much of the land is controlled by the federal government. The Alliance spreads the good news about industry's stewardship and impresses upon regulators the need for effective rules and policies that protect the public and environment while enabling the production of abundant, affordable energy for the American people.

Western Energy Alliance is an agile organization with an assertive stance on improving business conditions for the western oil and natural gas industry. Some of our top initiatives include:

**Regional Outreach:** As our name indicates, we've built an alliance of stakeholders across the region in state and local government; academia; ranching; other industries; think tanks; and sportsmen's, civic, business, issue advocacy and other groups. These allies share an interest in a vibrant western economy with robust job creation. Western Energy Alliance works with these allies to amplify the message of a strong oil and natural gas industry.

**Hydraulic Fracturing:** The onslaught against fracking has been intense and coordinated, and we as an industry have also been coordinated. Western Energy Alliance works with national and state trades to counter misinformation in the public, and to fight local and state fracking bans and regulation.

**Federal Legislative:** Western Energy Alliance is the go-to source for Congress on western oil and natural gas issues. We've been instrumental in passing positive legislation, and we testify regularly before Congress, support oversight hearings, and serve as a valuable information resource in D.C.

**Federal Regulation:** The West has significant oil and natural gas potential. However, overregulation at the federal level threatens to prevent the achievement of that full potential. Western Energy Alliance is engaged in any federal regulation that affects the E&P sector.

**Legal Defense Fund:** In the face of hostile federal policies and overregulation, Western Energy Alliance has had to turn to the courts on numerous occasions of late. Our current legal actions include challenging EPA's use of the Clean Air Act to regulate methane emissions; deferrals of federal leases; access to federal lease units; and access to information on endangered species listings.

The Alliance is proud to honor the Hall of Fame inductees; we will strive to ensure our advocacy is worthy of their dedication to this great industry. ■

## *HB* BRUCE D. BENSON

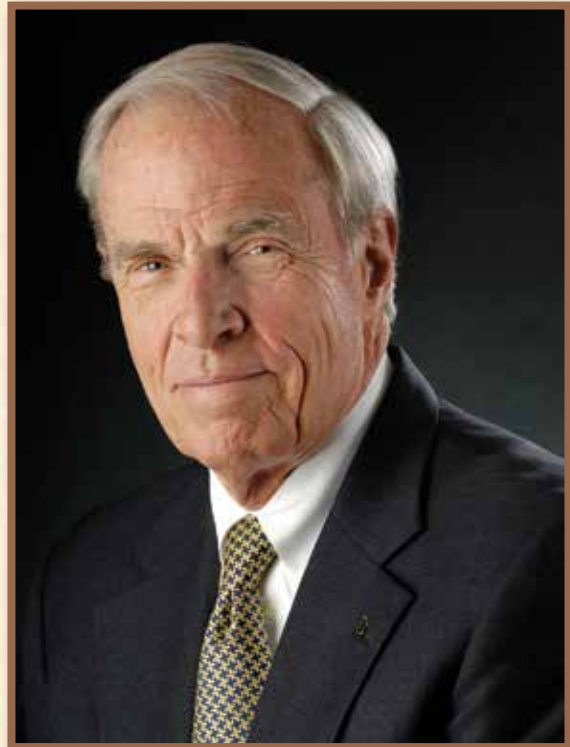
**W**hile working on his master's thesis at the University of Colorado Boulder, Bruce Benson showed his advisor, Dr. Bruce Curtis, his map for an oil play in Kansas. Curtis was chairman of the geological sciences department at the time. "I had drilled 10 producers and one dry hole. He was shocked. He told me to just forget about the thesis and keep drilling." That was in 1966.

In 1997, the university named its new earth sciences building for Benson and gave him the opportunity to name the old facility. Benson and his wife, Marcy, chose to name it for Curtis, who retired from teaching in 1983. "He taught me a lot about exploration and subsurface petroleum geology that allowed me to do what I've done."

Benson's interest in oil and gas geology began as a roughneck on a drilling rig in 1958 in Wyoming. He was 20 at the time and was fascinated by the on-site geologist's work. He went on to receive his bachelor's in geology from CU in 1964 and, while working on his master's, launched Benson Mineral Group in 1965 with the play in Kansas. From there, Benson grew the company to 10 business units—from drilling and operating some 1,000 wells to providing oil-field services.

In the early 1980s, he sold nine of the divisions and some of his production, retiring his \$30 million of debt before the downturn and diversifying his interests into holdings in other industries. In his remaining oil and gas business, he kept some 400 wells and increasingly took non-operated positions in new wells.

In 2008, he was named his alma mater's president. "I never dreamed of doing anything like this. I've been here for nearly six and a half years and am the longest-serving CU president in more than 50 years." During his tenure, Benson has led efforts toward operational efficiencies, cutting bureaucracy and improving business practices. He and wife Marcy have chaired two CU fundrais-



ing campaigns of \$1 billion or more, including *Creating Futures*, which exceeded its \$1.5-billion goal in 2013.

Benson received an honorary doctorate of humane letters from CU in 2004 and, in 2009, was named to the Colorado Business Hall of Fame. He chaired the state's Republican Party four times and was the party's nominee for governor in 1994. He has also served as chairman and president of the Boy Scouts of America.

**Investor** What's a play of which you're particularly fond?

**Benson** We developed a field in Oklahoma that had a very high water saturation. Nobody thought you could produce it. It has a 90% water cut—or 4,000 barrels of water and 300 to 400 barrels of oil as well as a half-million cubic feet of gas per day. We drilled 286 wells in that field that produced 15 million barrels of oil and more than 50 billion cubic feet of gas.

No one thought you could dispose of the water the way I was disposing of it. We put disposal wells in the Arbuckle that would handle 25,000 barrels per day on vacuum. The peak field production was 4,000 barrels of oil and 125,000 barrels of water per day. The wells paid out in less than two months.

**Investor** What more may be possible with high-volume fracked horizontals?

**Benson** Not all horizontal drilling is a panacea. I farmed out a bunch of acres in Oklahoma to other operators. They spent about \$40 million and got 100 barrels a day of production, which obviously was not economical. Horizontal drilling and large frack jobs have changed the industry. We now produce more oil than we import.

*"You have to get people to stop and think, and I don't think we do a good-enough job of that."*

**Investor** Are you surprised that producers need at least \$4 gas and \$75 oil now?

**Benson** No. With the new technology, we need these prices to be able to exploit these reserves.

**Investor** You've drilled in nearly a dozen states. Have you drilled outside the U.S.?

**Benson** Just once. Some buddies talked me into putting some money in a well in Colombia. I learned they were shooting people in the area. I was praying for a dry hole and to get the hell out of there. As luck would have it, they got a teaser and fooled around with it for a while. They finally plugged it.

**Investor** What advice do you give to CU students?

**Benson** I can sum it up in the short speech I have given at more than 45 commencement ceremonies: Listen to all sides of an issue; you will accomplish more if you don't care who gets credit; watch for unintended consequences; if you make a mistake, admit it, apologize, fix it and move on; seize opportunities; be a leader; surround yourself with great people and work as a team; contribute to your community; and, in the end, your honesty, your word, your reputation and your integrity are your most valuable assets, so don't lose them.

Additionally, I tell students I have a high regard for the liberal arts. I encourage science students to take courses in government, English, history, everything. Be a well-rounded person.

I also forced my students, when I was a TA in graduate school, to learn how to think.

I wouldn't test them with just multiple-choice or true/false questions. They had to write an essay with every test and solve a problem. The people who had been getting As were suddenly getting Cs and Ds. The ones with common sense who had been getting lower grades were suddenly getting higher grades.

You have to get people to stop and think, and I don't think we do a good-enough job of that.

**Investor** What more can industry do?

**Benson** We need to teach people how to be leaders and show them how to be leaders.

I also stress community involvement. That's why I chaired the [Republican] party four times and volunteered in so many organizations. ■

## *JH* JAMES S. (JIM) BROWN

**J**ames S. (Jim) Brown has participated in the fracked, horizontal, American-energy revolution from the oilfield-services side with Halliburton Co., completing thousands of the wells that now contribute to more than 8 million barrels of U.S. oil and more than 80 billion cubic feet of U.S. gas a day.

Brown began his oil and gas career with The Western Co. of North America Inc., a pioneer in the acidized frack, and, later, worked for BJ Services Co. In 1996, he joined Halliburton as business-development manager for the western U.S. area, just as the company's Denver office was enlisted by Lyco Energy Corp. to look at implementing a nascent, fracked, horizontal, oil-well concept in the tight, narrow, middle-Bakken window in Richland County, Montana.

While that effort led to the modern Bakken play that continues in Montana and grew into its larger footprint in North Dakota, Brown was named president of Halliburton's Western Hemisphere operations in 2008. For its D-J Basin operations, Halliburton opened a 75-acre campus in Fort Lupton in 2013.

Based in Denver, Brown, who received his bachelor's degree in business administration in 1977 from the University of South Dakota, says collaboration of oilfield-service operators and oil and gas producers is important in a well's success. "I'm a firm believer that alignment and partnerships are required in this business. So much of today's processes and technology have shifted from the operator to the service side of the equation.

"Looking back over my career, the industry has been successful when operators and service companies have aligned to achieve their objectives, whether it's production targets, lowering the cost per barrel of oil equivalent, improving on a type curve or protecting our environment.

"Through resilience and resourcefulness, this industry has overcome every challenge and will continue to do so for years to come."



**Investor** Did you expect the U.S. would one day reverse its fairly flat gas-production level and declining oil-production profile?

**Brown** Anyone who has been in this industry for a long time has gone through the volatile cycles of North American gas. Today, we've cracked the code of how to accurately place horizontal wells in the gas-bearing zones and expose exponentially more pay versus a vertical application.

Coupled with technologies and efficiency around the completions, it has allowed us to recover more of the gas in place. For most of my career, we've chased 1 to 2 billion cubic feet estimated ultimate recoveries. Today, we're drilling 6 to 10 billion cubic feet wells. We're flush in gas.

And it's the same for the oil market. Decades ago, we knew the shale was there, but the technology didn't exist to economically extract it. Now we have a multitude of liquid plays with years of economic inventory. The volatility in North America is gone.



**Investor** Are U.S. producers just barely scratching the surface of what is still possible from unconventional resources and techniques?

**Brown** On a relative basis, one could argue we're in the infancy of optimizing these shale resources. Having said that, we're on the verge of becoming energy independent in the U.S., and I don't think that was on anyone's radar screen 10 or 20 years ago. Unconventionals have turned everything around. It seems like every day we're uncovering a new play. Just a few years ago, nobody had heard of the Eagle Ford. Today, it is one of the biggest resources in the world.

I've always been honored to be a part of our "can do" strategy. It's part of our DNA to look at every problem as an opportunity to charge ahead with a solution. We collaborate with individual customers to customize solutions, and many of today's technologies have come out of those collaborations.

**Investor** What are some of the threats to monetization of U.S. hydrocarbon resources today?

**Brown** The biggest threat is onerous regulation and policy that inhibits U.S. oil and gas development.

If this industry is going to continue to flourish, we will have to step out into less traditional

*"You have got to be willing to work hard, and put in the time."*

Unconventionals in the U.S. have taken off due to four big advantages. First, we have the rock—and the scale, efficiency and technology to unlock it. Next, we have mature infrastructure to get oil and gas to market. Third, we have a supportive regulatory environment and the political will that enables safe, commercial development. And, finally, there's a market-clearing price for a fair economic return.

**Investor** Halliburton took the patent on hydraulic fracturing in the late 1940s and fracked horizontals for Bakken oil in Montana in 2000. What puts Halliburton ahead in innovating?

**Brown** We focus on the end game—how to help our customers make their assets more economically viable. It's not just about going out and performing a service. It's really looking at our customers' assets in terms of how we can become more efficient and make better wells.

areas to work—into urban areas and states that aren't familiar with the economic benefits of oil and gas. And I think it's on us, the industry, to help the public understand what we do, that it can be done safely and responsibly, and that we have the environment at heart.

And there's no doubt that the ability to export hydrocarbons is a major factor in the future of our business. LNG has great potential. There's a ready market out there for North American natural gas, and I think we're making the right moves toward exporting.

On the oil side, the U.S. clearly has the ability to become an exporter as well. With the unconventionals, the production is there.

**Investor** What advice do you give to newcomers to industry?

**Brown** You have got to be willing to work hard and put in the time, but there is not a better place to be than in the energy field. ■

## *TED* TED D. BROWN

**W**estern Energy Alliance's 2013 Wildcatter of the Year, Ted Brown, joined Noble Energy Inc. in 2005 after already amassing more than 25 years in the oil and gas industry. With a bachelor's degree in mechanical engineering from the University of Wyoming, Brown began his career with Amoco Production Co. and, then, also held engineering, operations and management positions with Union Pacific Resources Group, Barrett Resources Corp. and Williams Cos. Inc. before becoming senior vice president, operations, of Patina Oil & Gas Corp.

Upon Patina's merger with Noble in 2005, Brown was named vice president of the U.S. division. In 2008, he was named senior vice president of its northern region and, in 2013, was named senior vice president and senior advisor to the CEO and president.

He currently serves on the executive committee of the Colorado Oil & Gas Association, is chairman of Coloradans for Responsible Energy Development and a board member of Colorado Concern.

Planning to retire in January from Noble, Brown says, "As I look back on my 35 years in the industry, we have leveraged technology in ways that I never could have imagined to produce energy resources—beginning with how to extract natural gas from extremely tight rocks to producing oil and natural gas from formations that we never thought possible."

Brown's career has been U.S.-focused. "Our domestic resources—combined with ever-advancing U.S. technology—have placed the country firmly on the path to energy security. We are blessed as a nation to have this energy equation in place."

**Investor** What's a best practice you'd still like to see figured out?

**Brown** I would like to see us work together as an industry to further reduce impact and



improve efficiencies through consolidation of gathering pipelines and facilities. In areas where Noble Energy has contiguous acreage, we are implementing integrated-development plans.

Each IDP is developed with a comprehensive design for infrastructure that incorporates central processing facilities, multi-well pad horizontal drilling and a full network of pipelines to move oil, gas and water—reducing surface use and truck traffic. I believe companies operating in the same vicinity can work together to apply this same type of concept.

**Investor** Your potential in the Niobrara is enormous.

**Brown** The D-J Basin is now recognized as a premier oil and natural gas play. The strong oil and liquids components make it competitive with any onshore play. In 2010, Noble Energy's estimated net, risked resources in this play were approximately 0.8 billion barrels of oil

equivalent. Today, our net risked resources have tripled to approximately 2.6 billion barrels of oil equivalent in a very short period of time.

**Investor** What turned Noble's attention to a horizontal Niobrara program?

**Brown** Vertical wells were only recovering 1% to 2% of the oil and natural gas in place. We initiated an aggressive technical effort designed to gain a much deeper understanding of the resource. I was fortunate to lead that effort with some highly skilled individuals in our company who, to this day, are still unlocking the potential of this play.

We knew we had something in 2010 when we completed the Gemini horizontal well in

be advocates for our industry through our Ambassador program.

**Investor** Of what fields are you most fond?

**Brown** In addition to the tremendous success in the D-J Basin, I was fortunate to lead a highly skilled technical team while at Barrett Resources and, later, Williams, unlocking the resource potential in the Piceance Basin. To maximize recovery, we moved from developing the field on 320- and 640-acre spacing to 10-acre density.

When we submitted our 10-acre pilot project to the Colorado Oil & Gas Conservation Commission back in 2000, 10-acre density in tight-gas rocks was unheard of. A lot of those

*"Having those conversations that expose the public to your world and your career is crucial."*

the Niobrara Formation. Producing 100,000 barrels of oil equivalent in its first four months online, it was the largest well in Wattenberg Field at the time.

**Investor** Noble is very active in community outreach and education in the basin.

**Brown** One of the biggest challenges for our industry is securing and maintaining our social license to operate—winning the hearts and minds of the general public. We're engaged in three initiatives to help Coloradans learn more about how we responsibly find and produce oil and natural gas resources in the state. We partnered with Anadarko [Petroleum Corp.] to form Coloradans for Responsible Energy Development (CRED.org), launched Noble-Colorado.com and train our employees to

in the industry said it could not be done. With a very focused effort, we were able to prove up over 3 trillion cubic feet of gas in a span of less than seven years. We had a lot of fun and were transforming our thinking every day—literally.

**Investor** What do you suggest to newcomers to industry?

**Brown** Be a sponge; absorb every single aspect of the industry at every opportunity.

It is also extremely important in this day and age to participate in the political process and make a difference in decisions that will affect the industry and, ultimately, your career.

Having those conversations that expose the public to your world and your career is crucial to our social license to operate. ■



**R**obert J. (Bob) Clark's career began in 1967 in his home state with a natural gas utility, Northern Illinois Gas Co., now known as Nicor Gas Co., which sent him to Colorado in 1980 to work with Nicor Exploration, a sub that was investing in E&P companies. In 1983, Nicor Exploration acquired a company that was constructing a gas-gathering system in Oklahoma. "That was my first foray into the midstream business. I liked it, so I stuck with it," he says.

In 1985, he joined Ladd Petroleum Corp., working under John H. Moore (Hall of Fame, 2009). The company had been founded by J.B. (Bert) Ladd (Hall of Fame, 2009). "John is still a very good friend. We have lunch maybe once a month. My wife and I brought him and his wife to the [Hall of Fame] event [in 2009]. He was pretty proud," Clark says.

Clark joined Snyder Oil Corp. in 1988 after Moore retired and, in 1995, he launched his own gas-gathering company, Bear Paw Energy LLC, operating primarily in North Dakota. He sold it in 2001 to Northern Border Partners LP, which was later acquired by Oneok Partners LP. "At that point in North Dakota, there wasn't this Bakken play," he notes.

He formed Bear Cub Energy LLC next and sold it to Regency Energy Partners LP; his third start-up, Bear Tracker Energy LLC, was sold in 2013 to Summit Midstream Partners LP. His newest start-up, 3Bear Energy LLC, is chasing opportunities. "We're limited because of a non-compete in six counties in North Dakota and two counties in Colorado, so we currently can't operate in the North Dakota Bakken or the Colorado Niobrara. That expires in March 2015. We're looking in the Rockies as well as in Texas and Oklahoma and have submitted several proposals."

Clark grew up in a farming community outside Peoria where Kathy, his wife of 49 years, was his high-school sweetheart. He received his bachelor's in accounting from Bradley University



where the U.S. Green Building Council-certified alumni center bears his name and he serves on the board of trustees. He received his MBA from Northern Illinois University.

Clark took a job with Nicor in 1967 because of the opportunity to work in the internal auditing department. "I felt I could get a better understanding of the business in internal auditing as opposed to straight accounting."

**Investor** Might your next opportunity be back at home in the southern Illinois Basin? New drilling is expected there when the state writes its guidelines for modern fracking.

**Clark** I've looked at Illinois a couple of times in the past. Unfortunately, Illinois' government seems to operate similarly to our federal government. It will be interesting to see.

**Investor** Are you surprised to see natural gas prices at \$4 and better—at least better than a buck?

## *RJ* ROBERT J. (BOB) CLARK

**Clark** I've seen a lot of years when gas prices were well below a dollar. We're a cyclical business and we have to manage through the cycles. The good news is that technology continues to improve. We learn how to do things better. I fully expect that trend to continue.

**Investor** Your first company, Bear Paw, was gathering gas in the Powder River Basin as well as in the Williston.

**Clark** Yes, at the time that was the new coalbed methane play.

**Investor** So you worked with Paul Rady (Hall of Fame, 2014) and Glen Warren in that play?

**Clark** Yes. I'm currently on Paul's board [at Antero Resources Corp.].

*"We learn how to do things better. I fully expect that trend to continue."*

**Investor** Have you been tempted at times to own and operate oil and gas wells yourself?

**Clark** No [laughing]. I have personally participated in a few wells and have had, probably, more success than failure. It was just a personal investment for me for some tax benefits rather than trying to become a producer.

I've always enjoyed the gas gathering and gas processing part of the business. We more recently got involved in oil and water gathering too. That's been important in these plays, like in North Dakota and the Eagle Ford, where a large number of wells are being drilled and the production is so large.

North Dakota is producing more than 1 million barrels of oil a day now. That's a lot to put on trucks. It's expensive. In North Dakota, because of the weather in the winter and

because of weight limits in the spring, you can't take full loads out of the battery. As much as both the producer and the state want to collect their revenue, if you can't get the oil removed from the battery, you may have to shut in the well. No one wants to do that.

**Investor** The midstream industry is making many headlines today for deals and new projects.

**Clark** This is due to the advent of the relatively new financing alternative, the master limited partnership.

To make their quarterly distributions, MLPs have to grow and, to grow, they have to build or buy existing assets. They typically prefer to buy assets because it's quick and can immediately generate cash flow.

**Investor** All four of your Bears have been private companies.

**Clark** Yes. That was a conscious decision. Being a public company is very costly and time consuming. I would rather operate a company with private investors, create value and sell those assets at a price that generates an acceptable rate of return.

**Investor** What has been the secret of your success?

**Clark** My secret in life has been to have an understanding wife who has allowed me to put in the time and effort needed to get the job done and a team of qualified, loyal people who helped to make it happen. In business, you have to be honest, have integrity and be committed. If you say you're going to do something, you have to do it. And don't put off to tomorrow what you can do today. ■



## *WJ* A.G. (AL) GOLDEN

**A** native of Illinois, A.G. (Al) Golden joined Mobil Oil Corp. as a landman in North Dakota in 1953, just after the state's first oil discovery, and started his own company, Golden Land & Oil Co., in 1960. He told Minnesota Public Radio in 2006 of when he first struck oil. "It sends chills and thrills and prickles up and down your spine, and you think you must have died and gone to heaven."

He went on to drill 21 consecutive dry holes, he added. "I've had some terrible disappointments. Drilled a well right in the center of four wells. It was what we call a gut-shot cinch. A 'can't miss' kind of deal," he said. "I was horribly disappointed."

Golden did well enough, but he primarily left his mark in North Dakota's and the Rockies' advancement in legislation and policy that improved producers' ability to commercially operate. Golden was on the board of the North Dakota Oil & Gas Association, president of the Rocky Mountain Oil & Gas Association and the North Dakota Landman's Association, and chairman of what is now the North Dakota Chamber of Commerce. He served on the Interstate Oil & Gas Compact Commission, beginning in 1970 by appointment by Gov. Bill Guy and through Governors Link, Olson and Sinner.

In 2003, he was the first inductee to the North Dakota Petroleum Council's Hall of Fame. The council's Al Golden scholarship program, which it launched in 2008, made nine awards this year to North Dakota students pursuing oil and gas careers.

Upon his death in 2012, at the age of 84, the Bismarck Tribune reported, "Many knew Al Golden as the grandfather of the North Dakota oil industry. Those who knew him personally remember him for his friendly smile."

Ron Ness, NDPC president, said in the article, "There's a whole generation following in the footsteps of Al Golden. The industry as a whole



always looked up to Al as the model of how to be engaged and involved and get things done."

John Morrison, the NCPC's 2006 inductee into its Hall of Fame and a partner in Rockies-focused law firm Crowley Fleck PLLP, worked with Golden on the NDPC and in the North Dakota Oil & Gas Association. Getting started in private law practice in 1981, after service with the state, "Al was one of the first people I ran into," he says.

**Investor** His service was under several governors. Parties get along that well in North Dakota?

**Morrison** It's a small state and one of Al's great attributes was his ability to work with anyone. He was definitely a Republican. But he had a good relationship with the governors and he did a great job of representing industry to both parties.

He saw that strong trade associations could accomplish more for the industry than one company. He always put the interests of the industry as a whole ahead of any of his personal, financial



interests; any advancement in the industry would help him personally. His concern was with keeping a favorable regulatory and legislative environment for oil and gas in North Dakota and doing whatever was possible to get change.

**Investor** North Dakota developed incentives for horizontal drilling. Was Mr. Golden influential in that?

**Morrison** An oil-extraction tax was passed in 1981; it was a disincentive to development. The industry worked hard to get it repealed and it appeared that it wasn't going to work so, in 1987, we began pushing for some legislative incentives.

In 1987, a horizontal drilling play began in the Bakken and, in the mid-1990s, there was horizontal drilling in the Red River B in Bowman County. Al saw tax incentives as a way to generate some new activity; he was instrumental in getting these incentives passed.

**Investor** Advocacy for greater land access isn't as prominent as, say, 14 years ago.

**Morrison** I think some of the emphasis was taken off it in the early stages of the shale plays because there was so much private acreage available. But there are still a lot of these shale plays under public land and it's beginning to become noteworthy again. For example, [North Dakota] Congressman [Kevin] Cramer has a bill pending now to minimize the amount of time in issuing a federal permit for spacing units that have a minimal amount of federal land in them. That will be a very valuable tool. You need a federal permit to cross those tracts and there are extraordinary delays.

**Investor** Of what was he most proud?

**Morrison** From a professional standpoint, I think Al was most proud of his involvement in trade associations. He was president of the Rocky Mountain Oil & Gas Association and

*"Get involved in your industry and be an advocate for good laws that protect the environment."*

**Investor** Did he imagine North Dakota would become one of two states leading new U.S. oil supply?

**Morrison** I don't know if he imagined the level of development, but he was eternally optimistic and, even when oil and gas activity was at its lowest in the state, he always felt it would come back. He always believed in the future of the North Dakota industry.

**Investor** What else would he want done?

**Morrison** Al was very active in public-land issues and felt it was important for industry to have access for oil and gas development. It's still a huge issue in North Dakota and other Mountain states.

chairman of the Greater North Dakota Association at the same time. Those are two very important jobs to do at once.

**Investor** What would he suggest to newcomers to industry?

**Morrison** Al placed a high level of importance on industry working together. He would tell anyone that today: Whether it's a landman association, an oil and gas association, your professional society, get involved in your industry and be an advocate for good laws that protect the environment but also recognize the importance of a strong, domestic oil and gas industry. ■



**C**ontinental Resources Inc. began prospecting in the Williston Basin in the mid-1980s. It had made a couple of oil fields in the basin when Burlington Resources Inc. had an idea of putting horizontals in Red River B in western North Dakota in the mid-1990s and it and Continental ended up co-developing Cedar Hills Field.

The company soon joined the prolific, new, Elm Coulee Field play in the middle Bakken in eastern Montana in the early 2000s and took the idea into Divide County, North Dakota, where it re-entered an old dry hole, deepened it and turned the bit into a lateral in the Bakken there.

Harold Hamm, chairman and chief executive officer, says of the early days of the modern Bakken play in North Dakota, “There were times we were discouraged with this well or that well but, overall, we saw a continuous, gradual improvement with everything we were doing. We knew we were onto something very big and it was going to happen.”

*Big, indeed: The company’s first-quarter 2014 production was 152,500 barrels of oil equivalent a day and year-end 2013 proved reserves were 1.08 billion barrels of oil equivalent, primarily in the Bakken.*

*Hamm founded Oklahoma City-based Continental in 1967 as an oilfield-service shop and began drilling wells in 1971. He is also chairman of midstream operator Hiland Partners LP, a past chairman of the Oklahoma Independent Petroleum Association and was a founding board member of the Oklahoma Energy Resources Board and president of the National Stripper Well Association. He also founded and is chairman of the Domestic Energy Producers Alliance.*

*In 2011, he was inducted into OIPA’s Wildcatters Hall of Honor, the association’s highest recognition.*

**Investor** What still needs to be figured out?

**Hamm** The optimum combination of well spac-



ing in multiple zones to efficiently drain a single spacing unit in the Bakken. This involves density tests that we and others are doing as well as testing new technology in completions, which are enhancing recoveries. The answer will vary throughout the play, but it is the key to efficient production growth in the basin and it is also critical to minimizing surface impact.

**Investor** You’ve worked onshore in the U.S. your entire career. Any interest in exploring abroad?

**Hamm** No. We have the ideal economic system in the U.S. in terms of capitalism and private property rights, enabling landowners, mineral owners and the states to benefit from the development of resource plays—not just the national government. In North Dakota, the Bakken has created wealth for thousands of citizens. You simply don’t have these advantages in most foreign countries, and they’ve been essential to the U.S. energy renaissance.

**Investor** You're rolling out unconventional resource technology in the southern Woodford in Oklahoma.

**Hamm** We've found a company-builder in the Scoop [play] in Oklahoma, and I think there will be additional new opportunities on a significant scale.

can export all the flour it wants. Put simply, the savings from exporting crude oil will be passed on to American consumers, instead of refiners.

**Investor** Advice for newcomers to industry?

**Hamm** Seek out mentors. I started out after high school driving tank trucks for Johnny

*"Learn from the men and women whose innovation has launched America's energy renaissance."*

**Investor** What took you to Montana and North Dakota in the early 1990s?

**Hamm** To find oil and really large fields. Continental has been fortunate in bringing these goals to fruition. Our production is now 70% oil and 30% natural gas, which is just opposite the ratio prior to our going to the Rockies. Today, Continental owns 1.2 million net acres in Montana and North Dakota in the prolific Bakken field. In addition, our Red River units produce 17,000 barrels of oil a day. Today, with that leasehold, Continental is the largest leaseholder, driller and producer in the Bakken.

Geer and learning about oil and gas production. Then, there was Floyd Harrington, who worked for Chris Well Service; Rocky Rockhold, who was a field foreman for Texaco and gave me a wealth of knowledge; Don Longdon of Western Co. and one of the best well treaters I've ever known; and Jack Ferchau and Jack Hodgden, who taught me about geology and operating wells.

They were incredibly generous men. They were willing to teach a hungry young man about the industry, to teach me what they'd spent so many years learning. I would urge newcomers to take the opportunity to learn from the men and women whose innovation has launched America's energy renaissance and changed the world.

**Investor** Threats to the onshore U.S. industry?

**Hamm** America is at a crossroads. Do we cap oil production or allow exports? Outdated crude-export restrictions have prevented domestic oil exploration and production from achieving its full potential thus, slowing potential job growth, restricting supply and negatively affecting global refined-product balances, which sends the wrong message to our trading partners around the world.

**Investor** Some of the best advice you received?

**Hamm** When I was a teenager, the famous artist John Frank of Frankoma Pottery came to speak at my high school. He talked about his love of the arts and building things; that was his passion.

We're exporting more than 4 million barrels of refined petroleum products a day. The crude-export ban is like telling American farmers they can't export their wheat, but Pillsbury

I thought, "What could I be passionate about? I'm going to high school and I'm working at a truck stop." But I looked at the oil and gas development south and northeast of Enid and that captured my imagination. ■



## *CH* CURTIS R. HILL

**C**urtis Hill's career began with Mobil Oil Corp., after graduating from Texas Tech University with a bachelor's in petroleum engineering. Upon 11 years with Mobil in production engineering, he joined Tulsa-based White Shield Oil & Gas Corp., managing drilling and production, primarily in Indonesia and Singapore.

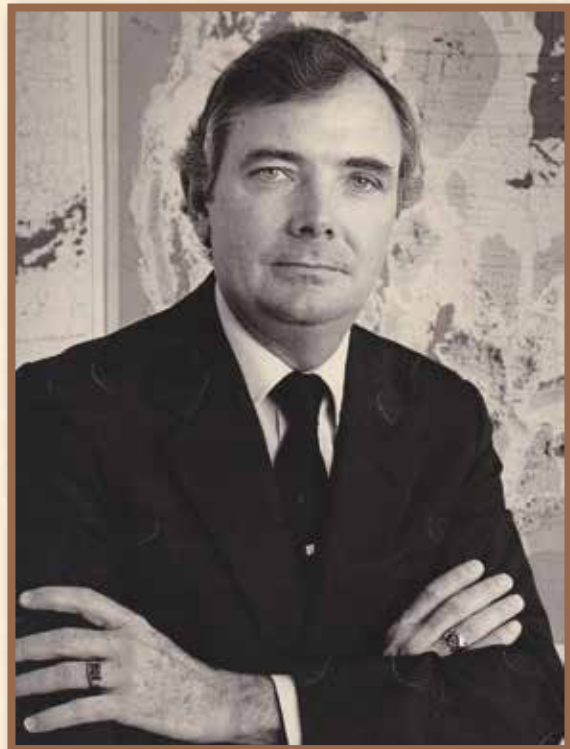
In 1974, he joined Denver-based Exeter Drilling Co. and completed an advanced management program at Harvard. In 1982, he became Exeter's president and chief operating officer. Peoples Energy Corp. had purchased it in 1981 and owners Fred Mayer (Hall of Fame, 2004) and Dusty Biddle (Hall of Fame, 2004) retired from the company.

"Of course, as you might recall, that's about the time the industry started its major decline, never to see the good times of the '70s again," Exeter reported in early 1992 in its employee magazine in an obituary and celebration of Hill's service. Hill had passed away Dec. 12, 1991, after fighting cancer for three years and as the result of complications from a bone-marrow transplant.

"Curtis, as president of Exeter, was instrumental in the transition from a small, privately owned, family-type management to a large-corporation management. He had to make tough decisions on wage cuts, layoffs and major cutbacks in general. These were hard times for everyone and it was obvious that it weighed heavily on Curtis."

Hill and Mary Ann, his wife of 32 years, had two daughters, Renea and Kathleen. "During Curtis' fight against the cancer that so drastically changed his health and life, it became very apparent what a well-liked and respected man he was. His secretary of 15 years, Louise Ackerman, was literally inundated with phone calls daily about his condition. He had many friends, both in and out of the oil industry, and 'class' was a word that was often used to describe him.

"His style, intelligence and knowledge were a wonderful blend, and you could always learn



something from him in just a normal conversation. [Louise] reflects fondly of her years with Curtis. "Curtis was an advisor in so many ways. No matter what you asked him about, he always knew something about it. He was a thinker and—yet—did some of his very best written work under pressure."

The company concluded, "We salute Curtis R. Hill and his leadership. The quiet man of style and integrity will be missed immensely."

Ed Kautz, executive vice president, U.S. and international oilfield services, for Ensign Energy Services Inc., had assumed Hill's position at Exeter. Occidental Petroleum Corp. had purchased MidCon Corp. in 1986, including its Exeter subsidiary. Exeter had grown to 49 drilling rigs and, in its J.W. Gibson Well Service Co. unit, 78 workover and well-servicing rigs, under Hill. The MidCon purchase was Occidental's entry to the workover and well-service business. Nabors Industries Ltd. bought Exeter in 1996.

*Kautz was the 2005 chairman of the International Association of Drilling Contractors. His career in the oil field began with meeting Hill in 1976 after receiving his mechanical engineering degree from Colorado State University and getting a job at Exeter. He joined Ensign upon Exeter's sale to Nabors.*

**Investor** What was Mr. Hill's leadership style?

**Kautz** He was a great, level-headed guy. He would listen and he was down to earth. The guys in the field could talk to him and he could talk to the corporate guys. He liked to be in the field, to talk to the roughnecks and look at the rigs. We did a lot of work for Amoco [Production Co.] in those days and he had a good relationship with the Amoco peo-

**Investor** Are you pleased with Mr. Hill's induction into the Hall of Fame?

**Kautz** I'm pretty proud of it. He is very deserving of it. At the time, it was IPAMS and he was very active in the IADC. He was a strong believer in supporting the industry and the communities we worked in.

**Investor** What would he think now of drilling wells a mile or more to the right or left?

**Kautz** He would have found it to be a great time to be a drilling engineer. He would be right in the middle of it, thinking about how we could drill it, design it, and how we could provide that service—how we could help the operator do that. He would be plum excited.

*"When you're stumped, get a box or a bucket, sit at the end of the location, and just think about things a bit."*

ple. He was a big mentor of mine; he was always easy to talk to, easy to get along with and pretty pragmatic in the way he did things. He got me to where I am today.

**Investor** What were some of the fields Exeter drilled?

**Kautz** Exeter did a lot of turnkey drilling in the D-J Basin and he was a really great engineer; he was pretty instrumental in what we were doing. We had also worked in the Wamsutter area in Wyoming.

**Investor** Back then, Exeter participated in well design?

**Kautz** We had a production company, Buckhorn Exchange, too. Sometimes, we had a piece of the well we were drilling.

**Investor** Do you sometimes encounter a problem and think, "What would Curtis do?"

**Kautz** I do.

**Investor** And what would he do?

**Kautz** You might be on a rig and he would tell you that, when you're stumped, get yourself a box or a bucket and sit at the end of the location and just think about things a bit. Don't rush in and do something when you're not sure of what you're doing. Reflect on it and think about it. Kick it around with some of your peers and get advice before you go forward.

Keep an open mind, be flexible, research what you need to do, proceed with caution and, once you've got it figured out, go full speed ahead. It didn't take him long to analyze things and, then, move forward with it. ■

## *MSJ* MICHAEL S. JOHNSON

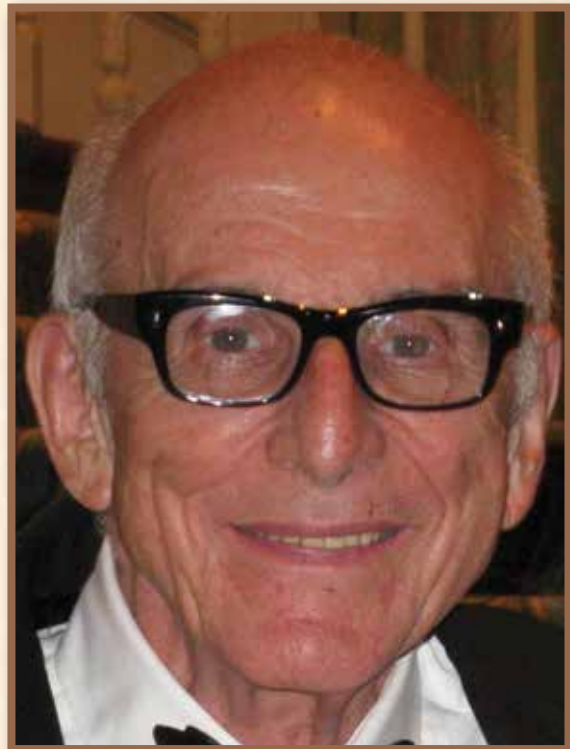
**M**ichael S. Johnson has been an oil and gas consulting geologist since 1963. Success, beginning in 2000, of horizontal drilling in the Bakken reservoir at the Elm Coulee Field in Montana sparked a new era of oil exploration in the Rockies. Johnson immediately started searching for an analog to Elm Coulee.

Stephan Nordeng, staff geologist for the North Dakota Geological Survey, wrote in a January 2010 report, “Michael Johnson noticed that wireline logs of the middle Bakken in Mountrail County resembled those from the Elm Coulee Field in Montana. Even though the organic matter in the Bakken shales appeared [to be immature], the recovery of free oil in drill-stem tests and some minor production led Johnson to pursue a Bakken play in Mountrail County.”

Johnson’s study of the lightly explored eastern half of Mountrail County suggested the potential for enormous oil fields—and the acreage was unleashed. Johnson writes in his autobiography, *Obscurity to Fame in the Oil Business*, “For a month or so, I was confounded. I would walk around downtown Denver’s 16th Street Mall, hands in my pockets and head down. One of the biggest questions was ‘Why was all this acreage open?’ The last oil and gas leases had expired three or four years previously.”

EOG Resources Inc. bit on his Ross Field prospect in northern Mountrail County, making a discovery there in October 2005; it came back for Johnson’s Parshall Field prospect several miles south, making the field discovery in June 2006 in a unique trap at the intersection of the basin’s thermal maturity and immaturity. In June 2014—excluding wells and production still in confidential status—Parshall Field’s 292 wells had made 88 million barrels of oil, according to state records.

Born in 1926 in Missouri to Greek immigrant parents, his family moved to the bustling oil center of Tulsa. He set off for college in 1944



and, by March 1949, received both his bachelor’s and master’s degrees in geology from Ohio State University.

Hired by Amerada Petroleum Corp., he was sent to its new office in Billings, Montana.

When Johnson returned to work in 1953 from his service with the U.S. Army, he was assigned to Amerada’s new office in Williston, North Dakota. While he had been gone, the company had made the first commercial oil discovery in the state with its Clarence Iverson 1 in April 1951.

**Investor** What drew you to look into the possibility of a new Bakken play in North Dakota? **Johnson** Activity in the oil industry was increasing. Horizontal drilling was being developed and and in the Barnett, fracking techniques were being perfected. It was a moment when perseverance, timing, geologic review and good fortune all meshed to create a career triumph. The Bakken shale was known to contain billions of



barrels of high-gravity oil. What was needed was an engineering breakthrough to recover it economically. Horizontal drilling was emerging as the answer.

In 2003, Lyco Energy Corp. was successfully completing horizontal Bakken wells in Richland County, Montana. From my experience in the basin, I lit on an area 110 miles east, in Mountrail County. It was 1,200 square miles—about 800,000 acres. Within that area, we selected and were able to lease about 43,000 acres for only \$10 per acre!

**Investor** You were named Explorer of the Year by the AAPG in 2009 for your many discoveries—in particular, Parshall Field. That's quite an achievement.

*"The inherent high risk of prospecting for hydrocarbons demands honesty, intelligence and skill."*

**Johnson** EOG deserves credit for discovering Parshall Field. My contributions were having the geologic idea first and, with the help of Henry Gordon, president of Strata Resources, and Tulsa geologist Bob Berry, buying a large acreage block, totaling about 43,000 acres, at a ridiculously low cost, then getting the prospect drilled by EOG.

**Investor** What keeps you passionate about exploring for oil and gas—for more than 65 years now?

**Johnson** My career as a petroleum geologist has been fulfilling and rewarding. I enjoy the hunt and challenge of prospecting for hydrocarbons. Its inherent high risk demands honesty, intelligence and skill. It has required mastering geologic data, developing ideas and pursuing

promising prospects, preparing compelling proposals to industry, and selling prospects.

This quest then leads to both the thrill of oil discoveries and the disappointment of dry holes. I've enjoyed competing in the ups and downs of the oil industry.

**Investor** Are you surprised by the resource-play revolution?

**Johnson** Not surprised but pleased. Internationally, the U.S. is the world's leader in oil technology. Horizontal drilling and new fracking technology have revolutionized oil and gas exploration not only here but in the entire world. They have created a new era of energy abundance in the U.S. Using this technology, domestic oil and NGL produc-

tion has increased to almost 11.5 million barrels a day and continues to increase. The Bakken, Eagle Ford and West Texas have doubled or tripled domestic oil reserves in the last eight years.

**Investor** Advice for industry newcomers?

**Johnson** For students considering a career in applied geology, perseverance and tenacity are essential. The oil industry offers an exciting future. New areas, such as the polar regions and the deep waters of the offshore, will be explored. Another promising area is Nevada.

Future reservoirs, like the shales and mudstones of the sedimentary basins of the U.S., will be explored using horizontal and fracking technology. Except for the political strife, we live in good times. ■



**W**ith a BBA and an MBA from Southern Methodist University, David Miller began his career as an oil and gas lender with Republic Bank of Dallas in 1973, where he soon became vice president and manager of its Republic Energy Finance Group and opened the bank's loan-production office in Denver. In 1981 he co-founded Denver-based E&P company Maze Exploration Inc. with Bob Zorich (Hall of Fame, 2014) and in 1988, while co-founding EnCap Investments LP with fellow Republic alumni Zorich, Marty Phillips and Gary Petersen, he was president of PMC Reserve Acquisition Co., a partnership of EnCap and the late wildcatter Frank Pitts.

Miller says some of the best advice he received as a newcomer in industry was given to him by Pitts. "There simply was no finer gentleman in the oil and gas business than Frank Pitts. I had the good fortune of being friends and business partners with him. He always stressed the importance of treating people fairly and with respect—from the top of your organization to the bottom.

"His sense of fairness was ever-present in his business dealings as well. His view was you always wanted both parties to come away from a negotiation—or 'trade' as he called them—feeling good because there is nothing more valuable than long-term relationships. We certainly took his advice to heart as evidenced by all the repeat management teams EnCap has.

"Mr. Pitts also talked about the importance of having balance in your life. He was a firm believer that you could build a very successful business and, at the same time, be devoted to your family and give back to your community. My partners and I have tried to follow in his footsteps in that regard."

Giving back for the Millers has included their lead gift to the recent renovation and expansion of the basketball arena at his alma mater, where the Millers have also endowed numerous schol-



arships and professorships. Miller was a three-year starter for the Mustang basketball team, including when winning the Southwest Conference Championship in 1972. He currently serves on the SMU board of trustees and is vice chairman of the executive board of the Edwin L. Cox School of Business. He also serves on the National Petroleum Council.

He currently serves on the board of Halcon Resources Corp. and has served on the boards of Petrohawk Energy Corp., 3Tec Energy Inc. and Denbury Resources Inc. as well as on those of many privately held E&Ps. In the firm's 26 years, it has provided funding to some 215 operators, including George Solich's (Hall of Fame, 2009) Cordillera Energy Partners LLC, Barth Whitham's (Hall of Fame, 2014) Enduring Resources LLC that is chaired by Don Wolf (Hall of Fame, 2004) and Bob Boswell's (Hall of Fame, 2009) Laramie Energy LLC.

*The firm has raised 18 institutional-investment funds totaling approximately \$21 billion and currently manages capital on behalf of more than 250 U.S. and international investors.*

**Investor** You began investing in shales back in 1999. That was prescient.

**Miller** For the first 10 years or so of our business, we largely backed companies that had growth and value-creation strategies centered on buying reserves. The competitive dynamics made that business model increasingly more challenging in terms of generating equity-type returns, so we shifted gears around the turn of the century and started to back low-risk drilling strategies in the various resource plays.

We did our first shale deal in the Barnett in 1999 with Dallas Production Inc. and, then, we subsequently marched from one economically advantaged resource play to the next.

Another important transition for us was our move, beginning in 2006, away from gas to oil and liquids-rich plays. My partners and I didn't see the bottom falling out of the

**Investor** While your portfolio companies are still involved in exploration, is their repeatability more like exploitation?

**Miller** Right. But I would add scalability as another attractive feature of the resource plays, coupled with a risk profile that, if managed properly, is a good fit for private equity. When I got into the business in 1973, the drilling success rate in the U.S. was one in 10. Along came 3-D seismic and the success rate improved to five in 10, but that still didn't work for private equity. Now, our portfolio companies will drill hundreds of wells a year without drilling a so-called dry hole.

In the resource plays, you're going to find hydrocarbons virtually every time you drill a well. That doesn't mean, however, that every well is going to generate economic returns. The challenge has become more about determining how you maximize reserve recoveries on the most cost-effective basis. Certainly, the new completion technology has been transformational, and there are all kinds of questions around completion design.

*"An increasing part of our due-diligence process is getting our arms around regulatory risk."*

gas market to the extent that it did in 2008, but we didn't think asset values that were predicated on \$10-plus gas prices were sustainable. At the same time, our newer portfolio companies were having difficulty with gaining entry into the premier gas plays, so we began to both aggressively harvest companies that principally owned dry gas and focus increasingly on backing companies that were going to pursue oily and liquids-rich projects.

**Investor** How much weighting do you give regulatory risk?

**Miller** It has become more and more challenging for our portfolio companies and, therefore, an increasing part of our due-diligence process is getting our arms around regulatory risk. There are some areas where the regulatory environment is such that we don't want to be there but, for the most part, the challenges are manifested in added costs and time delays, so those just have to be factored into the economic equation. ■



*Photo courtesy of Continental Resources Inc.*

## WJ WILLIAM G. (BILL) ODELL

**W**illiam G. (Bill) Odell's first job in the oil field was in Creek County, Oklahoma. "Never did I dream at the time that I'd get as involved as I have. We've come a long way since then." He was 16 at the time.

"I worked on a cable-tool rig my next-door neighbor owned. One summer, he asked me if I wanted to work and I did. I made 25 cents an hour. I was what they called a 'go-for'—'go for this, go for that.' I'd get a paycheck. Some weeks it was \$10."

While working on his bachelor's degree from the University of Oklahoma, Odell took a summer job with a seismograph crew in Wyoming. That was in the early 1950s. "I've been in the business a long time and seen many things happen—more things surprising than not."

He then received his LLB degree from the University of Oklahoma's College of Law in 1954 and went to work in land for Gulf Oil Corp. and Carter Oil Co. and in legal for Humble Oil Co. and Mobil Oil Corp.

In 1966, he joined a Denver law firm that had been formed a couple of years earlier and specialized in oil and gas law. The firm, Holmberg & Poulson, became Poulson, Odell & Peterson LLC and he practiced in natural resources until his retirement last year. During that time, Odell served as chairman of the legal committee of the Rocky Mountain Oil & Gas Association and the State Land subcommittee of the Mineral and Natural Resources Section of the American Bar Association.

"I started in 1947 with my first job in the oil patch, so that's been 67 years. It's in my blood."

**Investor** Did you think the Bakken would be figured out?

**Odell** No. I worked in the mid- and late-'80s in North Dakota for Sun Oil Co., which had a play in that area. One of my law partners, Rand Case, and I spent weeks up there,



examining titles, not only for the Bakken. That play just went away. It's a complicated business, which is what keeps it so interesting.

**Investor** What's a field a client worked in that most impressed you?

**Odell** Bell Creek Field in Powder River County, Montana. It's about 40 miles southwest of the Cedar Creek anticline. Sam Gary [Wildcatter of the Year, 1983] was a leading independent and we represented him in that field. It has produced both primarily and secondarily and is now under CO<sub>2</sub>, tertiary development. It was producing as much as 47,000 barrels a day in primary recovery. It is a heck of an oil field. Sam had drilled 33 dry holes in it before he struck oil.

**Investor** You had left Mobil just prior to that.

**Odell** Yes, in early 1966. Things had pretty well gone to hell. Major oil companies were

closing offices. Mobil wanted to move me to Corpus Christi, Texas, but I had worked in 10 different areas at that point and my wife and I, with four young children, had lived in four different places. I wasn't ready to move for the fifth time, so that's what pushed me into business for myself.

ation. So far, we've been able to work through those, but it's a constant battle.

**Investor** What do you suggest to newcomers?  
**Odell** You have to be tenacious and flexible and realistic as to what your battles are. And, by being flexible, I mean to be willing to adapt

*"You have to be tenacious and flexible and realistic as to what your battles are."*

**Investor** Is \$100 oil—and for several years now—surprising?

**Odell** I never believed it would have gone over \$100. Some of the smart guys probably knew, but I never thought we would be where we are today. I'd say, overall, we're going to always be surprised—going one direction or another. Like the Bakken: We are fortunate that there are people in the business who believed it could be done.

**Investor** Has the U.S.-production needle been turned to the right for a short while or for a long time?

**Odell** I believe, the way things are working in this country, we're going to be producing this much for our lifetimes—and other people's lifetimes too.

**Investor** What are some threats to onshore U.S. production?

**Odell** The main threats are political, environmental and tax-

to changing business conditions. When you have four children who want to go to college, you had better be willing to be flexible.

We've been through the good times and the bad times. It's a wonderful business and a wonderful time to be in the business. I can think of all the people we did business with and worked for; they are strong, outstanding people. ■



## *RF* RAYMOND PLANK

**T**he 1954 co-founder of Apache Corp., Raymond Plank, retired from the company in 2009 and settled into his ranch near Sheridan, Wyoming, where he wrote his autobiography, *A Small Difference*, from notes in a diary he had been keeping since he was six. Published in 2012, Plank says that, upon his retirement, an Apache manager wrote to him, “Mr. Plank, how can one measure the trickle-down value to humanity of a successful company?”

“How many past, present and future generations of Apache families, contractors, mineral owners and others have or will have raised and educated children, married sons and daughters and supported aged parents and grandparents partly by the wealth created by you and Apache?”

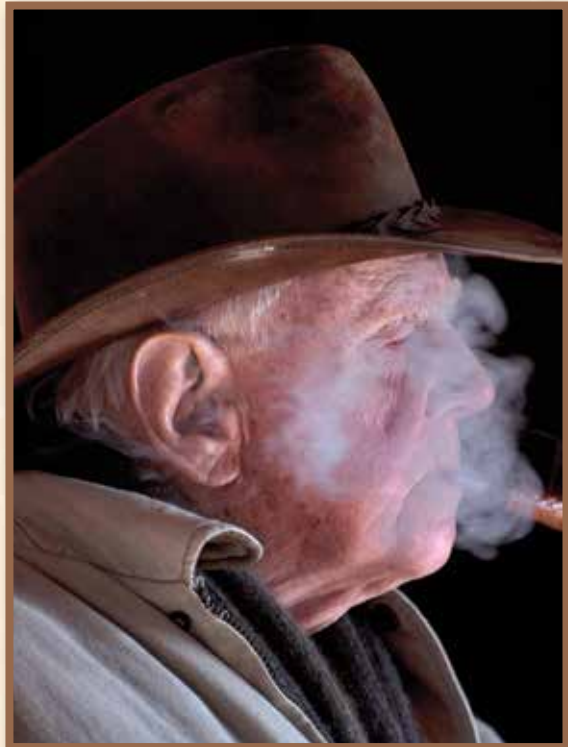
“How many teachers or students will someday change the world? It has been said that every person on Earth is only six steps away from contact with every other person. In your case, I believe the degree of separation is much closer.”

The 60-year-old Apache’s alumni number in the thousands, including Cordillera Energy Partners LLC founder George Solich (Hall of Fame, 2009) and the late F.H. (Mick) Merelli (Hall of Fame, 2004), founder of Cimarex Energy Co.

Plank, who was 32 at the time Apache was started, quotes Teddy Roosevelt before commencing his tale: “Better to have lived one hour of glorious strife than never to have lived at all.”

With Truman Anderson and Charles Arnao, Plank formed Apache with \$250,000; upon his retirement, the company’s worth had become \$50 billion and its past and existing operations have spanned the globe. Today, while he is fond of Apache’s success, he emphasizes also giving back to the communities in which it works, such as through the company’s million-tree program that was started in 2005 and has resulted in Boy Scouts and other volunteers planting more than 3.7 million trees.

Plank is also a trustee of the Wyoming non-profit Ucross Foundation and founder of The



*Fund for Teachers.* He says his father told him to make a difference on behalf of others.

**Investor** Of Apache’s many successful plays, how did one of these come about?

**Plank** There was one in West Texas where we had a fair amount of acreage and we were running out of time. The proposal was that we would need to drill 25 wells, but we needed to do this without running the cost of drilling up in the area. I said, “Why don’t you plan on drilling 100 and buy the rigs.”

They thought about that for a while. We probably needed a half-dozen rigs. So they did and they drilled 100 wells.

**Investor** You’re a voracious reader these days.

**Plank** There is no substitute for lifetime learning and, when you have an interest in a particular topic, you should pursue it. You should further your knowledge. Also,



knowledge by itself is insufficient; it ultimately must be honed by judgment—putting one foot in front of the other and learning as you go.

*“There is no substitute for lifetime learning and, when you have an interest in a particular topic, you should pursue it. You should further your knowledge.”*

The '70s and '80s were my fastest-learning decades and most rewarding decades. You don't have to worry about growing old if you're not going to let your mind rot. If I weren't learning, I wouldn't be around, because it's my mind that allows me to still get around.

**Investor** You're quite fond of Apache's support of building schools for rural girls in Egypt.

**Plank** Yes. Suzanne Mubarak [wife of the former Egyptian president] was a part of that. We've funded more than 200 of these one-room schools now—grades 1 through 12 altogether. The girls are different ages, but they're all just learning how to read.

**Investor** What is your opinion of the state of the oil industry?

**Plank** We need to recognize the industry's ability to contribute to our quality of life. The industry is in a revolutionary period. The technologies that have been around for decades have now been synthesized so that we have the capacity to be energy independent.

At the same time, we have the responsibility, the opportunity to do that and be environmentally sensitive, and that goes with any and all forms of resource extraction.

**Investor** What's your outlook on U.S. energy policy?

**Plank** We don't have an energy policy and we are not going to get one. But you can-

not forego use of energy to create wealth and jobs. It would be better if the use of Earth's bounty is welcomed and less of a hostile thought. The industry is a whipping boy.

I'm trying to influence—at least somewhat—that the political mess out there come together so we can deal with the horrible problem of the deficit and creating jobs. This administration has a fundamental hostility toward corporate America.

**Investor** Can we achieve energy independence? Do you approve of exporting LNG?

**Plank** The answer is yes and yes. The reserves are there.

**Investor** What advice would you give to someone building an E&P?

**Plank** You have to understand the importance of having a plan. You front-load your ambition with your consideration of what you hope to accomplish. But the plan is not worth much if you can't make decisions. And you have to be able to adapt like Eisenhower did in World War II. It's kind of like when you have your first kid—you've got to learn how to be a parent. ■



**P**aul Rady, chairman and chief executive officer of Denver-based Antero Resources Corp., began his oil and gas career with Amoco Corp., exploring the Rockies and Midcontinent with a B.A. from Western State College of Colorado and an M.Sc. from Western Washington University, both in geology. From 10 years with Amoco, he joined explorer Bill Barrett and the team at Barrett Resources Corp. in 1990 as chief geologist and was the company's chief executive officer when departing in 1998 to form his own E&P, Pennaco Energy Inc.

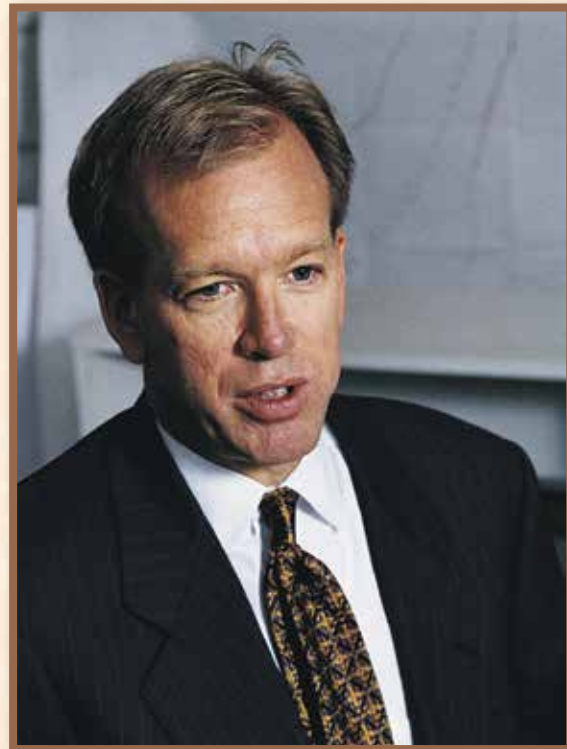
Glen Warren, an investment banker with Lehman Brothers and a former landman for Amoco in its New Orleans office, left Wall Street to join Rady in the venture. Within just three years, the pair had leased and developed a coalbed-methane portfolio in the Powder River Basin and sold Pennaco to Marathon Oil Co. for \$500 million.

In 2002, they formed Antero Resources Corp., accumulating a 66,000-net-acre, Barnett-shale position in Tarrant, Parker and Johnson counties. By the spring of 2005, with 65 million cubic feet a day of production and 440 billion of proved reserves, Rady and Warren sold the position and midstream assets to XTO Energy Inc. for more than \$1 billion in cash and stock. From there, they set out to explore another shale-play frontier: the Marcellus in Pennsylvania.

Antero now has 9.1 trillion cubic feet equivalent of proved reserves in the Appalachian Basin, producing nearly 1 billion cubic feet a day net for it from the Marcellus and the underlying Utica shale. Of its 488,000 net acres in Appalachia, some 146,000 contain additional Utica potential.

**Investor** What's a best practice you'd still like to see figured out?

**Rady** In the beginning of my career, we dreamed and fantasized about what could be



achieved with horizontal drilling. By the '90s, of course, the industry figured that out.

Now it's water. How can we re-use more water? And use lower-quality water, such as brines, brackish water, sewage effluent and reclaimed coal-mine water, to put it to good use?

**Investor** Looking back on your CBM days, did you know the U.S. would one day turn the needle on its mostly flat natural gas production?

**Rady** I had no idea. CBM was an anomaly in that we could develop a play that gave us an inventory of thousands of locations, which was a huge luxury for an independent. In the past, most of us didn't have deep drilling inventories and we had no idea of what we would be drilling beyond two or three years out. That was the domain of the majors; they had deep, legacy inventories and could schedule projects five or seven years out.

Now, as an industry, we have many, many years of inventory. The big step-change has been horizontal drilling and then we added the ability to recognize the best shales and how to complete them.

**Investor** Are you surprised to see the onshore U.S.—rather than the Gulf—leading a new American energy profile?

**Rady** I was surprised 10 or 15 years ago when it all began. Now it's a way of life and the way of the future.

**Investor** How much more is possible from unconventional resources and unconventional-play techniques?

**Rady** We're still early. Can we find more prospective basins, formations and zones? Can we go to increased density, shorter lengths between frac stages, and bigger and better frac techniques to increase the recovery factor?

Also, as our industry's midstream infrastructure grows, can we take better advantage of every component of the natural gas

**Investor** What are some threats to onshore-U.S. monetization of hydrocarbon resources today?

**Rady** The more we can convert to natural gas, the better. The conversion candidates include marine shipping, long-haul freight, public and private-vehicle fleets, power plants, and residential and industrial heating.

By increasing demand, we can have adequate natural gas prices that will support development in the less economically attractive basins and plays. That will greatly expand the U.S. resource base and allow much more of it to be put to good use.

And water is, of course, scarce and precious, as I mentioned. Can we recycle more? Use more brackish or lower-quality water? Build water pipelines to move water regionally from very wet regions to dry ones? What is realistic and possible?

**Investor** What do you suggest to young people as to how to continue efforts to prove U.S. energy security?

**Rady** Learn the traditional skills in geology and engineering, but continue to innovate.

*"Get your education in early; don't prolong it or put it off. In your career, your job is to find opportunities; anyone can do evaluations."*

stream? Examples include more NGL, Y-Grade, long-haul pipelines; more fractionators; more ethane crackers and petrochemical plants; and new liquids lines to ship liquids to the Canadian oil sands for use as diluent.

These will all come over time and many projects are already under way.

**Investor** What advice would you share as to how to have a successful career as well as a fulfilling life?

**Rady** Get your education in early; don't prolong it or put it off. In your career, your job is to find opportunities; anyone can do evaluations. In life, find out what makes you happy and pursue it with a passion. ■



## *WJ* DAVE SCHAENEN

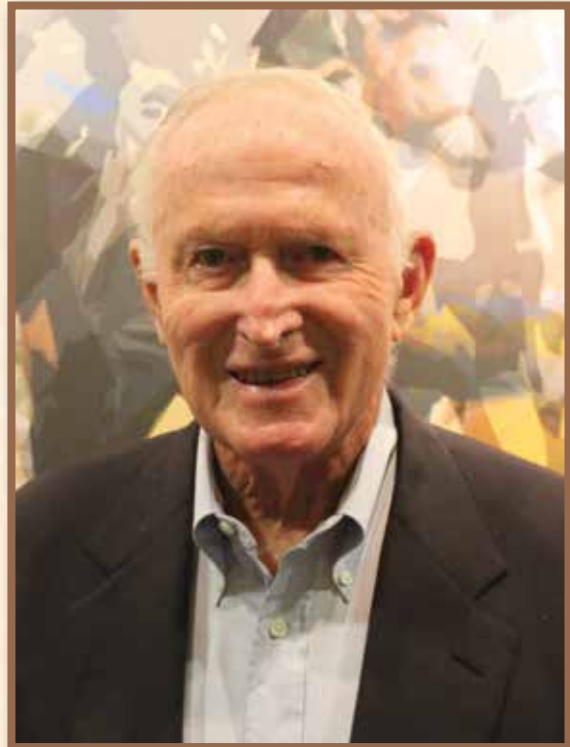
Shell Oil Co. hired a young MBA graduate, Dave Schaenen, in 1952 in its New York City office. “They said they were sending me to Billings, Montana. I said, ‘Where in the hell is Billings, Montana?’ Except for those two years when they had me in Casper, I’ve been here ever since.”

Shell had just made the oil discovery in what proved to be the prolific Cedar Creek anticline. Schaenen had received his undergraduate degree from Rutgers University in agriculture and the MBA from Cornell. Growing up in New Jersey, he wasn’t familiar with the oil and gas industry but got his “first taste” one summer during grad school, working for an oilman in Lubbock, Texas. “He told me how to check land records and some of the basics of land work.” Schaenen liked the work. Shell hired him as a landman.

In Billings, he met his bride of 60 years and quit Shell in 1960—’lest it transfer him to New Orleans or Houston. He joined independent Mule Creek Oil Co., which had been in the business some 40 years, primarily in Wyoming and also in Montana, North Dakota and South Dakota. “I stayed with them for 22 years.” He joined another independent and then set out on his own as DLD Enterprises LLC.

Mostly retired now, Schaenen currently serves on the board of the Montana Petroleum Association and is a past president. He has also served as president of the Rocky Mountain Oil & Gas Association and, for 11 years, on the since-disbanded National Public Lands Advisory Council, including two years as its chairman. “We met three or four times a year at different locales to look at problems that were facing the Bureau [of Land Management] and the Department of the Interior, supposedly to make recommendations to the secretary.”

Of his service, he says, “One of my bosses said that, if you’re going to make a living in an industry, you have to put some time back into it. I think he came to regret that, because I got so involved that I was out of the office a lot.”



**Investor** Did Interior heed the advisory council’s recommendations?

**Schaenen** A couple of them. We looked at timber, energy, agricultural policies. They had asked us if they should take the [U.S.] Forest Service out of the [Department of] Agriculture and put it into Interior, but we came to the conclusion that that was probably too political. The rest of our recommendations, for one reason or another, they didn’t find feasible.

But it was a very interesting part of my life. I enjoyed it immensely. I met great people who were involved in other areas of public lands. It was fun to be involved outside of my specific area of interest.

**Investor** What does the BLM still need to be better at?

**Schaenen** The approval of applications for permits to drill. It takes forever. I can’t tell you whether it’s a policy promulgated out of

Washington or they don't have enough people or both. I'm not as close to that as I used to be.

**Investor** How have public lands access issues changed over the years?

**Schaenen** There's a lot to do with these shale plays on state and private land. And the BLM is too much of a hassle. You have an attitude in Washington that they want to get rid of fossil fuels. As Nancy Pelosi said, "We need to develop more natural gas so we can get rid of fossil fuels." These are the kind of people who are setting our policy in Washington.

**Investor** You were a career landman?

**Schaenen** I was. I'm a very poor geologist. When I went on my own, I realized my knowledge of geology was very limited. I participated in too many dry holes—using my own money.

**Investor** That's when they're dry.

**Schaenen** That's right.

*"If you're going to make a living at an industry, you have to put something back into it."*

**Investor** Landmen tend to be extremely gregarious. Did it come to you naturally?

**Schaenen** It did. You have to like people. I seem to have gotten along with everybody or, if I didn't like them, I stayed away from them. When I worked for Shell, for two of those years I settled damages on the Cedar Creek anticline. This was with the people who had no minerals; all they got for our efforts was surface damages. You had to get along with them. I never went to a place I couldn't go back to. When my daughter got into the [land] business [for ConocoPhillips], she

said she couldn't believe how many people still remembered me, which I took as a compliment.

**Investor** When did you retire?

**Schaenen** I have no idea. I still dabble a little bit. I've discovered that some of the old overriding royalties I've had from many years ago now have some Bakken wells in them in Richland County [Montana] and Mountrail County [North Dakota]. That has happened to a lot of my compatriots who are my age or are no longer around, who bought minerals 50 or 60 years ago based on, maybe, a Red River play, which didn't pan out. All of a sudden, we're getting all of this Bakken production. It's wonderful.

**Investor** What should young people know about the industry?

**Schaenen** It's important that we support our industry organizations. A lot of people I know benefit from the Montana Petroleum Association, but they don't belong to it. I don't under-

stand why. They seem to want to let somebody else do the work and not make a contribution.

I go back to what my boss told me years ago: If you're going to make a living at an industry, you have to put something back into it. You can't just take from it; you have to put back into it.

Historically, our industry has not done a good job in explaining what it does and how it affects the everyday citizen. People seem to think the gas at the pump just shows up; they don't know how it got there or anything about the people who make this contribution. ■

## CS CHARLES S. (CHARLIE) SEARLE

**C**harles S. (Charlie) Searle, executive vice president of Guaranty Bank & Trust Co. in Denver, first learned about banking from his father, a homebuilder and banker in Cortez, Colorado, in the mid-1950s. At the time, the enormous Aneth oil field in southeastern Utah had just been discovered and Cortez was growing as its hub for oilfield services.

*"I learned so much from him and one of the things that has stuck with me over the years is that you have to know the people you're doing business with. I'm happy to spend the time, getting acquainted, but if it's 'now' it's 'no.' That's the way my dad did business and it still works."*

Searle received his undergraduate degree from Colorado College in 1971 and soon won a job with Central Bank in Denver. "[The late] Marvin Owens [Hall of Fame, 2004] hired me." In 1978, Owens assigned him to the energy group. During his time with Central Bank, Searle received his post-graduate degree from Southern Methodist University and served in the Army Reserves for 10 years. Central Bank was acquired by First Bank System in Minneapolis in 1988 and is now known as U.S. Bank.

He retired from U.S. Bank in 2006 but was quickly recruited by a former colleague to Guaranty, "so all of my career has been with U.S. Bank and Guaranty Bank. I've only had two jobs my whole life," Searle says.

*What is the source of his success in more than 40 years of lending? "My dad and Marvin Owens, they are the two most important men in my life; I learned so much from them. It's about building relationships and building confidence in the people with whom you work and with whom you partner. There is no substitute for relationships in this business."*

**Investor** First, congratulations, Charlie. This is exciting.

**Searle** It is. I'm flattered. I've been here in Denver in the oil and gas business since the early '70s. It's been an honor.



**Investor** How did you choose banking as a career?

**Searle** I was familiar with it from my dad's experience and I appreciate our role in the industry in terms of providing capital. David Miller and Bob Zorich [both Hall of Fame, 2014] with EnCap [Investments LP] and I kind of all got started at the same time. They were with Republic Bank of Texas here in Denver.

We don't drill wells, but we provide the capital that's allowed that to happen.

**Investor** What has been the secret of your success?

**Searle** One of my theories is that anybody can loan money, but a bank—particularly in a specialized industry like oil and gas—has to know what's going on and help its clients gain knowledge. An energy banker needs to do that.

**Investor** Have you seen some formations not work for a client in the past but someone has figured it out now?



**Searle** Here's a good example. We had a client, BWAB Inc. [Jim Wallace, Jerry Armstrong, Joe Bander and Ray Brownlie, Hall of Fame, 2004], that was drilling vertical Bakken wells in North Dakota in the mid-'80s and had modest success. Technology has now led to one of the most prolific and sustainable producing basins in North America.

**Investor** So you've seen the needle turn?

**Searle** We were a very, very, small bank back in the day. A lot of our customers were drilling here in the D-J Basin and look at what's going on there now because of technology. It's another good example of what horizontal drilling can mean.

We also had clients down in the Barnett shale early on and we have clients today who are active in the Marcellus [e.g., Antero Resources Corp., Paul Rady, Hall of Fame, 2014]. It's been remarkable to see what has happened over time and how it's happened.

**Investor** Did you think independents would survive?

**Searle** I don't think I ever felt they wouldn't survive. The independents are so entrepreneurial. I always thought they would be an important part of the industry. We had a lot of

**Searle** In 1982, we were going through a boom in Denver. There were a couple dozen loan-production offices [LPOs] here. In 1986, there were four. Everybody in the world had wanted to get into the oil business. Our continuation goes back to the experience I talked about. We did business with companies that were careful and, in every one of these downturns, we learned more.

Back in the day, all anyone would talk about is how many wells they had drilled. "What's an income statement? Never heard of it." Now it's driven by cash flow and capital availability. That's not the way it had been.

We look at ourselves as a partner: Anyone can loan money; there has to be more value than that. I look at the '80s and all the LPOs. Our industry helped a lot of people get into trouble.

**Investor** Your clients were more careful, thus able to pick up properties in the consolidation?

**Searle** Absolutely. You know, you've got to know what's around the corner before you get to the corner and that's where people get caught. And that's where experience comes in and how we can help our clients. The role that finance plays is much more sophisticated today.

*"We look at ourselves as a partner: Anyone can loan money; there has to be more value than that."*

companies in Denver in the '80s that got into trouble—and they didn't do anything wrong. It was just a combination of things, particularly low oil prices and high interest rates.

**Investor** Through so many cycles, you didn't abandon your clients.

**Investor** What do you advise young people?

**Searle** You have to build relationships and a management team that has experience. You can't come out of college and build an oil company. I don't see a lot of inexperienced start-ups; they're not going to get the capital. ■



## WILLIAM R. (BILL) SMITH *WRS*

**A** Denver native, William R. (Bill) Smith was born in 1924 at 2029 West 12th Street after his father, who had been a Colorado homesteader, moved to the city upon a crop failure. With an engineering degree from the Colorado School of Mines and service in the U.S. Army Air Corp., Smith went to work in the Rangely oil field for The California Co., in 1948. There, he and his bride, Joyce, and their first two children lived in a freezing trailer—literally: The walls would sweat and then freeze.

The Smiths returned to Denver in 1950 and—after working for the USGS, the U.S. Bureau of Mines and other jobs, including a stint as a highly successful cab driver—Smith was hired in 1954 as the Colorado Oil & Gas Conservation Commission's (COGCC) chief engineer. In 1968, he was enlisted as deputy state engineer for the Colorado Division of Water Resources and, in 1983, Chips Barry, director of the Department of Natural Resources, asked him if he would serve as director of the COGCC. Smith accepted. Gov. Dick Lamm's signature on the appointment included a note to Barry: "Go ahead. I always liked him."

Smith retired from the state in 1989 after 31 years of service—18 of these with the COGCC and 13 with the Division of Water Resources. Among accomplishments he cites in a memoir he wrote for his children is winning EPA approval for Colorado to have primary jurisdiction over underground disposal of produced water.

He had a stroke in 2002 and suffered from Parkinson's disease until his death in 2012. Joyce Smith passed away this spring; she was 86. Brian Smith, the fifth of the Smiths' six children and a graduate of his father's alma mater, is a 20-year engineer in the D-J Basin, currently for Anadarko Petroleum Corp. He now participates in state rule-making for industry, "bringing information in, being a voice and working with them in a constructive way." Three of Bill Smith's grandchildren also chose an oil and gas career.



**Investor** State regulation of oil and gas drilling is a debate these days in Colorado.

**Brian** Dad worked with oil and gas companies in the '80s and '90s to lay the groundwork for strong progress. A lot of people have accepted and realized that we have great regulations in Colorado that are very strong. We need to build off this strong base wisely.

**Investor** The COGCC's mission was to protect a variety of interests. Did he find it daunting at times?

**Smith** The mission is to foster the responsible development of Colorado's oil and gas resources through the efficient exploration and production of oil and gas resources in a manner consistent with the protection of public health, safety and welfare, and the prevention of waste. All this is done while protecting mineral owners' correlative rights, and preventing and mitigating adverse environmental impacts. The COGCC



## WILLIAM R. (BILL) SMITH

seeks to serve, solicit participation from and maintain working relationships with all having an interest in Colorado's oil and gas resources.

Dad epitomized this. He was always on everyone's side, not fighting but working with them. He believed we have to have good regulations to ensure all of this could happen.

**Investor** He was also active in setting high standards to practice engineering in the state?

**Smith** He was very committed to solutions that can come from engineering, so he was involved in the requirements for being a certified professional engineer. He was most passionate about that.

anybody. I would walk to lunch with him and it would take an eternity. He knew everyone on the street and in the restaurant, and he had to talk to each of them. He was very personable. He would always try to put himself in the landowner's position or the other person's position and understand his point of view.

He was a native of Colorado. His dad was a homesteader. He always wanted what was best for Colorado. I remember that he was unusual in that he really believed in working with the EPA to be good stewards of the land and resources.

I think he was most proud of the way he brought industry together to find reasonable solutions to the many challenges that arose. He

*"A well-engineered solution can bring progress and safety to new levels."*

He was also very passionate about developing the right regulation based on facts and figures and on a single point where everyone could find a common ground and everyone knew what was expected. It was regulation that worked and was consistent.

What we're struggling with now is that a lot of municipalities want additional regulation. The regulations now are managed very well at the state level and are designed to protect all the points stated in the COGCC mission statement. Some municipalities are understanding this and are beginning to work with the COGCC and industry. The challenge is to help others understand this as well.

**Investor** What was it about his personality that made it possible for him to bring such diverse groups together?

**Smith** He loved to talk and he could talk with

played a key role in organizing, from a grassroots level, a common voice for industry though some newly created organizations including COGA [the Colorado Oil & Gas Association].

**Investor** Of what in his career do you feel he was most proud?

**Smith** It was his ability to serve industry through proper regulation that was well engineered, reasonable and prudent. I think the efforts he was involved with were stepping stones and precursors to the various issues that have arisen in the past few years regarding the importance of having one set of rules, administered and monitored by the state, rather than local governments.

**Investor** What would he suggest to newcomers to industry as to how to be successful?

**Smith** A well-engineered solution can bring progress and safety to new levels. ■



*Photo courtesy of Anadarko Petroleum Corp.*

## MARGOT K. TIMBEL

**M**argot Timbel gives a presentation as part of the Denver Petroleum Club's mentorship program. Titled "Three Points of Contact: An Early-Career Safety Briefing," she includes advice she would give her younger self. "Ask questions, ask them again, ask follow-up questions, dig deeper and ask them diplomatically," she says. "Striving for balance in your life is important, difficult and rewarding work; don't give up on balance. Also, fail: Be willing to fail and pick yourself up and move on.

"Ask others for help, clarify and revisit your purpose, keep your head up, do no harm and support your industry."

Timbel retired earlier this year from a 35-year career in the oil and gas industry, beginning with 20 years with Amoco Production Co. after receiving her bachelor's degree in geological and geophysical science from Princeton University. With Amoco, she was the exploration manager for Madagascar and East Africa and, beginning in 1991, was a general manager responsible for several Amoco operations in the Midcontinent and Rockies.

From Amoco, she joined Anschutz Exploration Corp. where she served in roles culminating in several years as senior vice president. Currently, she consults as MKT Solutions Inc.

A mother of two and wife of Ned, Timbel enjoys her time outdoors in all seasons in Colorado and in the summer in the Adirondacks. She is involved in volunteer work with veterans and has served in multiple volunteer capacities at Colorado Academy, a pre-K through 12 independent school.

**Investor** A play you'd like to see figured out?

**Timbel** I love the complexity of the subsurface investigations necessary to validate an exploration concept as well as the myriad elements necessary to bring a project to a successful conclusion. I am quite certain that places where we've been encouraged by shows or sub-economic production will be reexamined in the decades to come. Patience and new insights



with fresh eyes—these attributes are rewarded in this complex business.

Western Montana and anywhere a Cretaceous—or any age—source-rock intersects the top of the oil-maturity window will continue to grab industry attention with new pulses of investment and technical investigation.

**Investor** Did you expect the U.S. to turn its production needle to the right?

**Timbel** I find myself advising others, "You don't know what you don't know." When I begin a sentence with "I assume," I pause and address my underlying assumptions to determine if they are really sound. I never did believe that we—the industry—or the pundits or statisticians knew "the whole story" about the perceived, inevitable and irreversible decline of oil and gas reserves in the U.S. or the world. We tend to underestimate the impact of innovation.

I suspected that what we didn't know was likely to surprise us. Of course, I failed to anticipate or

even fully appreciate the astounding impact of horizontal drilling and completion technology.

In 1989, I looked at Rocky Mountain basins that might be suitable for horizontal drilling as this was just emerging as a reliable drilling technique. It was during the early part of my career and geologists were not schooled—in academia or on the job—in an integrated situation with drilling- and completion-engineering working alongside, hand in hand, with exploration.

*“Ask questions, ask them again, ask follow-up questions, dig deeper and ask them diplomatically.”*

I was clueless then. Innovation in fracture stimulation equipment and design has contributed greatly to exploration success. I believe there is much more to come in the engineering aspect of enhancing productivity.

**Investor** Are you surprised it is the onshore U.S. rather than the Gulf leading new supply?

**Timbel** This vibrant energy industry is always evolving. The deepwater environment is a special place requiring dedicated, super well-capitalized investors and the best technology imaginable. It is like going to the moon and back to work deep, underwater, intricate, salt-influenced reservoirs with geo-pressure.

The onshore renaissance of the last 10 years is a pragmatic one: accessibility, repeatability and excellent returns. It has benefitted from some techniques pioneered in the offshore just as offshore benefits from onshore innovations.

**Investor** What more can be done?

**Timbel** There is always more to be done, such as in increasing capital efficiency by reducing costs—and not just dollar costs but social costs.

This is where the industry is, appropriately, directing more attention. For example, advances in water recycling are critical to continued completion efficiency and fulfilling social expectations about the sustainability of our industry.

Just last month, while walking along a street in Denver, I heard young people enthusiastically talking about innovations in dust management. Capturing fugitive emissions from wellsite equipment is currently fueling economic

growth right here in the Front Range. The exploration team must think about these surface aspects of their project when they propose a subsurface investment to their management.

**Investor** What are threats to the U.S. industry?

**Timbel** A big threat to a healthy energy industry here in Colorado and in the nation is the overall lack of understanding about where energy comes from, how we use it, how to conserve it, how to find it and how vital it is to the local, national and world economy. Energy and the impact it can have on a community at any scale makes energy the source of great ambition and political upheaval historically and in the present.

Decision-makers at every level—students, homeowners, parents, teachers and business, community and governmental leaders, regulators, policy-makers, environmentalists, industrialists, researchers, philanthropists, voters—they all need to increase their understanding of energy resources, their distribution, production, costs and benefits. Everyone needs to raise their understanding of energy and its role in the economic, environmental and social well-being of the planet. ■

## JJ JAMES J. (JIM) VOLKER

**J**ames J. (Jim) Volker, chairman, president and chief executive officer of Whiting Petroleum Corp., joined the Denver-based company in 1983 as vice president of corporate development, three years after it was founded by the late Ken Whiting (Hall of Fame, 2004) with J.B. (Bert) Ladd (Hall of Fame, 2009). Bought by utility Alliant Energy Corp. in 1992, the E&P was spun out in an IPO in 2003 to fund its enormous, new Bakken potential. Whiting had just made two middle-Bakken wells in Richland County, Montana, with potential to produce some 700,000 barrels of oil apiece.

In January 2006 in North Dakota, Whiting spudded what became its Sanish Field discovery in Mountrail County. Its third well, Peery State 11-25H, came on in May 2007 with an IP of 1,081 barrels. By June 2014, Sanish Field hosted more than 500 wells; among these, Whiting operated more than 400. Cumulative production, excluding from wells in confidential status, was more than 94 million barrels of oil.

President and CEO at the time of the IPO, Volker has presided over Whiting's growth from the Bakken and Niobrara to 110,000 net barrels of oil equivalent a day and a market-cap acceleration from \$284 million to \$10 billion. At press time, Volker was closing a \$6-billion Bakken expansion with the purchase of Kodiak Oil & Gas Corp., which will add 40,000 additional daily barrels of oil equivalent in the Williston Basin and make Whiting the No. 1 Bakken producer.

Volker (Wildcatter of the Year, 2012) received his bachelor's in finance from the University of Denver and his MBA from the University of Colorado. The company's awards include the 2013 Forest Service National Forest Minerals Award for operations in the Wasatch National Forest; numerous awards for building wildlife habitat in Colorado and North Dakota; and the 2013 Pro Patria Award from the North Dakota Committee for Employer Support of the National Guard and Reserve.



**Investor** What are Whiting's best practices?

**Volker** There are two. First, we believe in being good stewards of our assets: to grow, enhance, protect and safely develop them for the benefit of our shareholders' net asset value per share. Second, we reward top-quartile performance from our employees with top-quartile compensation and benefits. Our employees have responded with long-term, top-quartile performance and loyalty. Without high-quality people, we could not accomplish the first mission.

**Investor** Whiting is also in the Niobrara play in Colorado. Do you find Rockies plays to be more advantaged than other U.S. and international plays in their petrophysical or geographical nature?

**Volker** Rockies plays are usually large in areal extent and have significant original-oil-in-place values per drilling-spacing unit with relatively high net revenue interests so, yes, in some ways



they are advantaged. Likewise, we have Permian, Gulf Coast and Midcontinent plays with similar characteristics. We work hard to develop exploration prospects with those advantages.

**Investor** Whiting was first to figure out Sanish Field east of the Nesson anticline. What was it about that leasehold that gave you confidence that the Bakken would pay upon implementation of modern fracturing technology?

**Volker** The early, improving results of our Sanish wells. They went from a few hundred barrels per day to 1,000 and then more than 2,000 barrels of oil equivalent a day using new techniques.

**Investor** You've also been bold in the use of multiple laterals. What more can be done in the Bakken and Three Forks?

**Volker** Currently, "more" for us means a combination of multi-stage, plug-and-perf jobs, tub-

for our U.S. economy and a revenue producer for the U.S. that can cut our domestic-outspending and our balance-of-payment issues.

**Investor** What are some threats to onshore-U.S. monetization of hydrocarbon resources today?

**Volker** The rewards afforded by the U.S. economic system are the best way to allocate capital to the most economic and best environmental solutions. Interference by those who want to take away valuable mineral rights from companies, individuals and families who lease or own mineral rights is a great threat to our nation's way of life.

**Investor** What do you suggest to newcomers to industry?

**Volker** Get a solid understanding of oil and gas operations and reservoir engineering. Also, study the land and financial sides. This broad and working knowledge will serve you well.

*"Let oil and gas flow to all the best markets. Prosperity and more freedom will follow."*

ing-conveyed fracks, up to 90 frack stages and slickwater fracks. The industry is making all the right moves: pad drilling to keep the surface green for farming and ranching and large-scale gas capture for economic and environmental reasons. For fracking we use clean water, clean sand and additives that are found in cereals and pancake mix. We should have called our completions "3E" for "environmental energy enhancement."

Our completion methods are the safest and most effective way to stimulate oil and gas flow from the unconventional reservoirs we are developing today. These new methods are a real, long-term company builder for Whiting, a job engine

**Investor** What is some of the best advice you've been given—regarding your career or toward having a fulfilling life?

**Volker** I quote Ken Whiting: "Don't force it, Jim."

**Investor** What else should readers know?

**Volker** If we want to see unfriendly systems fall and free markets rise, we should compete worldwide for oil and gas markets and sell people worldwide our quality-of-life-improving technology. Let oil and gas flow to all the best markets. Prosperity and more freedom will follow. Don't try to make it look like the U.S.; be satisfied when quality of life improves in many countries. ■



*Photo courtesy of Anadarko Petroleum Corp.*

*Just a day after selling a 67,000-net-acre position in the southern Midland Basin for \$2.5 billion to American Energy Partners LP, Barth Whitham said, “We’ve still got quite a bit to do in the Permian.”*

*Whitham’s Enduring Resources II LLC has two additional Permian blocks, another one in the Midland Basin and one in the Delaware Basin.*

*Its attention will turn now mostly to the Delaware Basin. “We sold a pretty substantial piece of our production, but we typically have a portfolio of projects we’re working on so, if we sell one, we pivot into some of the other assets we have.”*

*The 10-figure deal follows Enduring’s \$1.4-billion exit from the Eagle Ford play to Statoil ASA and Talisman Energy Inc. in 2010. Whitham founded the Denver-based company in 2004 with Brian Bess and Phil Tatar—fellow, former leaders at Westport Resources Corp.—and Alex Campbell and Frank Hutto after selling 13-year-old Westport to Kerr-McGee Corp for \$3.7 billion in 2004.*

*Co-founding Westport in 1991, Whitham began his career in 1979 with Pennzoil Exploration & Production Co. and Pembina Resources Ltd. He received his B.S. in engineering and an M.S. in economics from the Colorado School of Mines. He serves on the boards of Ensign Energy Services Inc., Intrepid Mining Inc. and First National Bank Co.*

**Investor** Enduring also has a large position in the Uinta Basin.

**Whitham** Right now, because oil is the more valuable commodity than gas, it makes us work more in our Texas positions than in our Rockies positions. They’re gassier and in a more complicated regulatory environment. We’ve got quite a bit still to do in the Permian.

We look at present value and how much present value we’re creating from the investment. There are some big gas basins in the Rockies but, with this gas price and the cost of gathering, processing and transporting those



BTUs right now, they just can’t compete with oily BTUs in resource plays. Those gas plays will have their day but, with the Marcellus and some of the other plays and the associated gas from the liquids plays, it might be a while before some of these Rockies gas plays will compete for capital.

**Investor** Is there yet more that can be done in U.S. basins?

**Whitham** Oh, yes. Internally, we continue to improve and adapt best practices to reservoirs that are going to benefit the most from horizontal drilling and evolving completion methods. Look at what we’re doing now with micro-seismic, tailoring completions to specific intervals, changing perf clusters, density and spacing, and the ability to place more proppant.

**Investor** Who do you admire?

**Whitham** I’ve had the benefit of some great



*HW* BARTH E. WHITHAM

relationships and mentors. I love the community we have in this industry. It feels like a small industry to be in for 35 years. [Enduring chairman and Hall of Fame, 2004] Don Wolf's been my partner and, early on, when we started Westport, I had Mike Asher as a partner.

**Investor** You did this in South Texas too.

**Whitham** I've been fortunate I've had the chance to work a lot of basins with some great geologists and geophysicists. In South Texas at Westport, we were working mostly Wilcox bright spots but, with more seismic and with more data, we started

*"I've been fortunate I've had the chance to work a lot of basins with some great geologists and geophysicists."*

Cortlandt Dietler [Hall of Fame, 2004] was probably the most active director in our early days and Tom Petrie [Hall of Fame, 2004] as a director at Westport. I also had some great mentors at Pennzoil. There have been companies that have been very focused on the application of technology in developing resources.

**Investor** What are favorite basins and fields?

**Whitham** The Greater Natural Buttes is a good example. We had had some experience in the Uinta Basin with Pennzoil and re-mapped the basin, looking for an opportunity. The Natural Buttes Field had been a Wasatch-focused field, but we got a little position through an acquisition that allowed us to test our theory—based on our experience in the Green River Basin—on if it would produce from the deeper, Cretaceous section. It gave us the confidence to buy El Paso/Coastal out and take what had been a Wasatch field and turn it into a larger, Mesaverde field.

We thought we had done big things at Westport when we took that field to 100 million cubic feet a day but, with some great execution and more capital, Anadarko [Petroleum Corp.] has moved that thing to 700 million plus a day.

I'm proud to see something like that.

understanding what the source-rock migration looked like. We drilled some Austin Chalk wells and put together the rest of the model.

One of the exciting things about starting over at Enduring was knowing places we could go back to where the geological model showed a big hydrocarbon system and, with the right technology and some access to capital, we could build projects. The Austin Chalk and the Wilcox system led to an Eagle Ford project.

We came back to the Permian with the idea of working the Bone Spring, Wolfcamp, Spraberry. This is a great industry in that all that cumulative knowledge and experience you get creates more opportunities with technology and partners to create a better extraction model.

**Investor** Best advice you've been given?

**Whitham** There is so much. I grew up in an agricultural community in Kansas. In my family, we were taught to be proud of the quality and quantity of your work. Your work ethic and who you are will define where you will go in this business. We get competitive in plays. But we all want to share best practices with each other. If I figure something out, I can talk to offset operators. I can't show you my seismic, but it doesn't mean I can't help you with your execution. I'm not going to let you stumble around and not help you. ■



*Photo courtesy of Anadarko Petroleum Corp.*

## *JF* PAUL J. ZECCHI

**P**aul Zecchi apparently knew a career whisperer when considering what to study in college and where. In Massachusetts, Zecchi's only familiarity with oil and gas was that "the oilman" would deliver fuel oil to their home. A counselor and family friend considered Zecchi's likes and dislikes and suggested he study petroleum engineering at Marietta College in Ohio. "I said, 'Okay. Bye.' And that was it."

Zecchi completed his undergraduate studies in 1970 and, while working in management and engineering for Schlumberger Ltd. (Johnson division), Tenneco Inc. (Tennessee Gas division) and Parker Drilling Co., he received his master's in management science in 1979 from Rensselaer Polytechnic Institute in New York.

With a partner, he co-founded West Texas-focused Midland Resources Inc. in 1983 and sold his stake in it in 1988 to form Central Resources Inc., focused on acquiring domestic production. Beginning in 1997, Central transitioned its focus to international production and development. Argentina was the first stop.

A former president of Western Energy Alliance and active in many industry organizations, Zecchi and his wife, Patti, lead a family foundation, The Petunia Foundation, which invests a portion of Central's profits into educational projects in third-world countries, including in Nepal and in several countries in Africa and Latin America. The Zecchis have also contributed to Apache Corp.'s schools-for-girls program in Egypt, having been enlisted in the 200-plus-schoolhouse program by Apache founder Raymond Plank.

"A lot of the places where we work, there are a lot of people who go without," Zecchi says. "When you're making good money developing their natural resources, you must consider returning a significant portion of that to the local folks, who are so desperately in need. It's really fantastic to see what good you can do."



In 2012, Zecchi was awarded an honorary juris doctorate from Marietta College. At press time, he was at his home in Connecticut after a business trip to South Korea and before working his way back to Denver. "It's been a busy year. It's going to finish up well. If things go the way I think they should, by the end of next year we should be at a multiple of our current size. We'll see what happens."

**Investor** What prompted you to look abroad?  
**Zecchi** Domestic oil and gas acquisition prices were going up significantly and we were a little frustrated. Internationally, lower acquisition costs are usually offset by the higher cost of operations. But—and a big "but"—the potential prize can be so much greater. Central bought a field in Brazil very similar to a West Texas San Andreas field. If it had been a San Andreas property, the price would have been four

to five times greater. At the end of the day, we find that we can do better in a lot of the international arenas.

We tried to return to the states this year and we were getting shut out. Central is a private company and we just could not compete with the MLPs and trading houses for these mature assets.

*“One has to look at all the good the oil and gas business has done. It has been a tremendous asset for the world.”*

**Investor** What is the secret to having a successful life?

**Zecchi** My dad—a stubborn, hard-working, blue-collar guy—taught me the ethics of hard work, patience and perseverance. For most of my childhood and adolescence, he worked two full-time jobs. I never saw anyone work as hard as he did. But he practiced his ethics as he told me many times, “If you can’t say something good about someone, say nothing at all.”

And, with his limited amount of free time, he read and expanded his mind. Because of his outlook, I recall one of my favorite quotations; it’s from Benjamin Disraeli, the former British prime minister: “Nurture your mind with great thoughts for you will never go any higher than what you think.” Keep your mind fully engaged at all times.

**Investor** And in business?

**Zecchi** You have to look at the downside case—the “what if” scenario. Central applies that to any acquisition that we do. As an

example, we acquired some Canadian properties about six years ago. We believed that the gas scenario we used—all the way down to \$3—was extremely conservative. Were we ever mistaken. The price didn’t stop until it hit \$1. And, when the plants that were processing our gas shut down, we couldn’t even sell our gas for a buck. It was something we never anticipated.

I guess the other thing is to trust no one. If you don’t personally know someone with whom you’re dealing, then you must be careful and take extra precautions. Otherwise, you will be burned.

**Investor** What else?

**Zecchi** As Patti points out, this industry isn’t like the ladies department of a fine department store. It’s a dirty, smelly, messy, expensive, dangerous business. You have to speak directly. If you mince words, such as on a drilling rig, and you don’t say what needs to be said, people can die.

And, when people criticize the oil and gas industry for being dirty, polluting and environmentally unfriendly, I like to point out that, if not for John D. Rockefeller, whales would have long ago become extinct and there would not be one tree standing in North America. Energy had to come from somewhere.

One has to look at all the good the oil and gas business has done. It has been a tremendous asset for the world. ■

## *WJ* ROBERT L. (BOB) ZORICH

**B**ob Zorich's entry into oil and gas was in 1974 with Republic Bank of Dallas where he soon became vice president and division manager in the energy department, including in the London office where he assembled major-project financings for North Sea operators until 1981. Zorich had joined the bank with a bachelor's in economics from the University of California at Santa Barbara and a master's in international management, with distinction, from the American Graduate School of International Management in Phoenix.

In 1981, he co-founded his own E&P company, Denver-based Maze Exploration Inc. Selling it in 1986, he joined pension-fund manager Trust Company of the West as its senior vice president in charge of the Houston office. Soon, he reunited with three Republic Bank colleagues—Marty Phillips, David Miller (Hall of Fame, 2014) and Gary Petersen—in an investment firm of their own, EnCap Investments LP, with the idea of aggregating private equity from institutional investors to back early-stage E&P companies.

Oil and Gas Investor editor-in-chief Leslie Haines wrote six years ago upon the firm's 20th anniversary, "Still loyal friends after knowing each other for 35 years, the EnCap partners almost finish each other's sentences."

Zorich says, "What we've done with EnCap, it's a testament to the value of partnerships in business. I think the four of us have been successful not because of each of us separately but because of us together. We share common values. It's similar to marriage: It's not always pretty but, if you stick it out, it can be highly valuable to you and the people around you.

"The value of partnerships in business is probably under-reported."

Zorich has served on the boards of Oasis Petroleum Inc., Enerplus Resources Fund, Todco, GFI Oil & Gas Corp. and dozens of additional EnCap portfolio companies. In its 26 years, the firm has provided funding to some 200 operators,



including Halcon Resources Corp., Petrohawk Energy Corp., Common Resources LLC, George Solich's (Hall of Fame, 2009) Cordillera Energy Partners LLC, Barth Whitham's (Hall of Fame, 2014) Enduring Resources LLC that is chaired by Don Wolf (Hall of Fame, 2004), Bob Boswell's (Hall of Fame, 2009) Laramie Energy LLC and Plains All-American Pipeline LP.

The firm has raised 18 institutional investment funds totaling approximately \$21 billion and currently manages capital on behalf of more than 250 U.S. and international investors.

**Investor** Tell us about the new, U.S. oil and gas "economic pantry."

**Zorich** Horizontal drilling and fracking have changed the business so much. As a result, you now have various formations in what I would consider to be an "economic pantry." You have a pantry loaded with different formations. You have your \$2-gas shelf, \$3 shelf, \$4 shelf and so forth.



There are a lot of formations out there that will be drilled later. Industry is trying to put more product on the \$2 and \$3 shelves.

**Investor** Are you surprised the shales have been figured out during your career?

**Zorich** Absolutely. When gas prices started to increase in the early 2000s, the industry started to experiment and follow George Mitchell's lead. It's been a very interesting piece of our careers.

*"What we've done with EnCap, it's a testament to the value of partnerships in business."*

**Investor** Are you optimistic about oil and gas futures?

**Zorich** You have a lot going on that is affecting prices—the value of the dollar, U.S. supply and demand, global supply and demand, the cost to drill, how much you find for that cost, monetary policies. Technology has really altered the economic landscape of oil and gas in the U.S., which is why production is growing and we have become much more competitive on a worldwide standpoint than we were when we were drilling conventional formations with conventional practices.

It gives the U.S. a huge competitive advantage going forward. Innovations in the U.S. will help other people take advantage of new hydrocarbon supply, drive down their costs and help their economies as well.

**Investor** Are there threats to this improved, American energy balance?

**Zorich** It sure seems like that's true, given regulation and the world economy and with world peace at risk. It's primarily a risk for U.S. oil futures but, over time, it would affect

natural gas markets more and more if we export natural gas in bigger quantities.

**Investor** How do you factor for these risks?

**Zorich** We try to mitigate cyclical risks by investing steadily throughout all of the cycles and not trying to pick the bottoms or the tops. We're consistent investors. We take advantage of the positive cycles through exits, but we consistently invest a percentage of each fund

through the cycles so we never have too much of any fund exposed to one cycle.

**Investor** Of what fields in which you invested are you most fond?

**Zorich** The Barnett, Haynesville and the Eagle Ford for starters. We were very early in all of those plays because we saw the economic benefits. The wells were more expensive but were far more superior; the investment made a lot of common sense. Now, nothing compares to the Wolfcamp, Eagle Ford, Marcellus, Bakken and the Utica in terms of being impressive.

**Investor** What do you suggest to newcomers as to how to have a successful life and career?

**Zorich** I think about my own kids. What do you tell them? Obviously, you tell them about values—that you should work every day, work hard, treat people the right way and follow your heart. You should do the things that make you happy within those other constraints, and you will be successful.

The values my parents passed down to me are why I've had a good life. ■

## *W* PAST INDUCTEES

Western Energy Alliance is pleased to present the **2014 Rocky Mountain Hall of Fame**. On September 13, 2014, Western Energy Alliance recognized the individuals profiled in this commemorative edition for their accomplishments, leadership and commitment to the Western oil and gas community.

# 2004 *Rocky Mountain Hall of Fame Inductees*

|                         |                           |                                 |
|-------------------------|---------------------------|---------------------------------|
| EDWARD J. ACKMAN        | GEORGE H. FANCHER JR.     | W.A. (TEX) MONCRIEF JR.         |
| GEORGE G. ANDERMAN      | SAMUEL GARY               | ROBERT L. NANCE                 |
| PHILLIP F. ANSCHUTZ     | MAURY GOODIN              | J. LARRY NICHOLS                |
| JERRY D. ARMSTRONG      | WILLIAM C. GOODIN         | MARVIN F. OWENS JR.             |
| WILLIAM W. BALLARD      | DOYLE T. GROGAN           | THOMAS A. PETRIE                |
| JOSEPH H. BANDER        | FREDERIC C. HAMILTON      | CONLEY P. SMITH                 |
| WILLIAM J. BARRETT      | DONALD R. HART            | JOHN C. SNYDER                  |
| ROBERT L. BAYLESS       | THOMAS JORDAN             | VERNON F. (MOOSE)<br>TAYLOR JR. |
| WAYNE T. (DUSTY) BIDDLE | JEROME A. LEWIS           | KYE TROUT JR.                   |
| RAY O. BROWNLIE         | RICHARD H. LEWIS          | H.A. (DAVE) TRUE                |
| JERRY G. CHAMBERS       | KENNETH D. LUFF           | HARRY A. TRUEBLOOD JR.          |
| COLLIS P. CHANDLER JR.  | JOHN W. MARTIN            | JAMES W. VANDERBEEK             |
| RAYMOND CHORNEY         | FREDERICK R. MAYER        | THOMAS G. VESSELS               |
| RICHARD P. CULLEN       | NEIL A. (MICK)<br>MCMURRY | JAMES B. WALLACE                |
| MARVIN DAVIS            | F. H. (MICK) MERELLI      | ROBERT J. WEIMER                |
| CORTLANDT S. DIETLER    | J. GREGORY MERRION        | KENNETH R. WHITING              |
| THOMAS A. DUGAN         | PAUL MESSINGER            | DONALD D. WOLF                  |
| RAYMOND T. DUNCAN       | REX MONAHAN               | HARVEY E. YATES                 |

These 20 distinguished individuals join 94 prior inductees, recognized and inducted into the *Rocky Mountain Hall of Fame* in 2004 and 2009. Our sincerest appreciation and congratulations to each of these individuals who has helped shape our community and the region.

# 2009 *Rocky Mountain Hall of Fame Inductees*

|                              |                       |                      |
|------------------------------|-----------------------|----------------------|
| DONALD B. ANDERSON           | JOHN M. FOX           | J.R. (DIGGER) SMITH  |
| ANTHONY G.<br>ANDRIKOPOULOS  | ALBERT R. GREER       | GEORGE H. SOLICH     |
| ROBERT S. BOSWELL            | MARK HELLERSTEIN      | DONALD G. SPENCE     |
| ZACK K. BRINKERHOFF JR.      | JOSEPH N. JAGGERS     | NEAL A. STANLEY      |
| MERLE C. CHAMBERS            | FRED C. JULANDER      | L. PAUL TEAGUE       |
| THOMAS E. CONGDON            | J.B. (BERT) LADD      | J.C. (JAY) THOMPSON  |
| ALEXIS M. (ALEX)<br>CRANBERG | JAMES D. LIGHTNER     | DAVID L. TRUE        |
| KENNETH I. DANNEBERG         | JOHN H. MOORE         | DIEMER D. TRUE       |
| PETER A. DEA                 | JAMES E. NIELSON      | H.A. (HANK) TRUE III |
| PIETRO VICHI DOMENICI        | E.A. (TIP) POLUMBUS   | JACK A. VICKERS JR.  |
| CLAYTON GLENVILLE<br>DORN II | A. RALPH REED         | MARVIN E. WOLF       |
| DONALD L. EVANS              | JAMES E. SCHROEDER    | GEORGE M. YATES      |
|                              | ALAN K. SIMPSON       | JOHN A. YATES        |
|                              | A.B. (PETE) SLAYBAUGH | PEYTON YATES         |

# THANK YOU TO OUR UNDERWRITERS

