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This week's Mining News

NEWS NUGGETS
Compiled by Shane Laidley

Exceeding expectations
Southeast Alaska mines boast increased precious metal output for 2015

Alaskan Grade Products FOR EVERY JOB

ARS Alaska Rubber
A MINING SUPPLY

Southeast Alaska mines are boasting increased precious metal output for 2015. Read more in North of 60 Mining News, page 9.

CINGSA appeals RCA native gas sales ruling to Superior Court

Cook Inlet Natural Gas Storage Alaska LLC has appealed to the Alaska Superior Court over a Regulatory Commission of Alaska order relating to the disposal of native gas found in the CINGSA gas storage facility, south of the city of Kenai. The disputed RCA order rejected a proposed but disputed procedure for the sale of the native gas and instead imposed an RCA-determined scheme. The term "native gas" refers to original gas in place in the subsurface storage reservoir, as distinct from gas injected into the reservoir in connection with storage facility operations.

The dispute over disposal of the native gas originated during the drilling of one of the storage facility's wells in conjunction

see SALES RULING page 19

Oil, construction lead 2,500 job losses forecast in '16 on prices

Alaska stands to lose 2,500 jobs in 2016, the first time the state has had year-over-year job losses since 2009. Economist Caroline Schultz of the Alaska Department of Labor and Workforce Development said in the January issue of the department's Alaska Economic Trends magazine that the 0.7 percent decline in jobs follows a 1,700-job gain in 2015.

She said anticipated job losses are tied to low oil prices and to a lesser extent to declining oil production.

"Sustained low oil prices impinge Alaska's economy on two fronts: directly, through cuts to oil industry investment and employment, and indirectly, through state government budget deficits that lead to spending cuts."

Alaska gained jobs in 27 of the last 28 years, Schultz said, but

see JOB LOSSES page 19

FINANCE & ECONOMY

BP cuts Alaska jobs

Company needs to reduce costs in response to the continuing low oil prices

By ALAN BAILEY
Petroleum News

BP plans job cuts in Alaska in response to the falling price of oil. According to an internal BP email to employees, the cuts will result in a 13 percent reduction in employees and agency contractors. All employees will know their employment status by the second quarter of 2016, with the majority of those impacted leaving the company by the middle of 2016, the email says.

The email says that, currently, cash generated from the company's Alaska business is insufficient to meet the needs of the company's Alaska investment, thus requiring the company to borrow funds from the BP Group. The email emphasizes that,

In September ConocoPhillips announced a decision to reduce its workforce by 10 percent, to reduce its operating costs.

while improving the company's cost base to maintain the long-term viability of the Prudhoe Bay region, the organizational changes will not compromise the safety of people or the oil infrastructure.

On Jan. 12 there were multiple media reports that BP had announced that it would be cutting 4,000 jobs in its worldwide oil exploration and production business in response to falling oil

see BP CUTS page 18

EXPLORATION & PRODUCTION

Placer program OK'd

ASRC Exploration gets blessing from state for one-well program this winter

By ERIC LIDJI
For Petroleum News

The state of Alaska has approved an exploration program at the Placer unit.

The decision allows ASRC Exploration LLC to proceed with plans to drill the Placer No. 3 exploration well this winter at the North Slope unit northeast of the village of Nuiqsut.

The approval covers an outline described in a plan of operations the Arctic Slope Regional Corp. subsidiary had submitted to state officials toward the end of last year. The company must still obtain various individual permits — including an Alaska Oil and Gas Conservation Commission drilling

Placer No. 3 will be the first exploration well operated by ASRC Exploration.

permit — before work in the field can actually begin.

The program includes three weeks of construction on an ice road and ice pads and two weeks of mobilizing a drilling rig to the location, which sits nearly at the end of the existing North Slope road system beginning at Deadhorse. The company will be using the Brooks Range Petroleum Corp.-operated Mustang pad at the nearby Southern Miluveach unit for housing, equipment maintenance

see PLACER PROGRAM page 20

PIPELINES & DOWNSTREAM

Taking underdog route

TransCanada sues Obama administration over Keystone XL, seeks NAFTA win

By GARY PARK
For Petroleum News

Anticipating an after-tax write-down of up to \$2.9 billion for the final quarter of 2015 and after 7 years of being messed around by the United States government, TransCanada has lashed out in all directions, launching a trade challenge and filing a separate lawsuit over the Obama administration's refusal to issue a permit for the Keystone XL pipeline.

The announcement comes just as newly elected Prime Minister Justin Trudeau is trying to mend fences with the U.S. and is preparing for a March state dinner in Washington, D.C., at the same time the U.S. and Canada are working with Mexico to forge a North American energy and climate pact

To date, no company outside of the United States has ever succeeded in a NAFTA challenge, although the agreement requires the NAFTA partners to treat foreign and domestic companies alike.

that would lay the groundwork for a continental energy market.

By initiating an action under Chapter 11 of the North American Free Trade Agreement, TransCanada is playing the ultimate underdog role.

And the White House is certain on that score, arguing that President Barack Obama and his

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Alaska - Mackenzie Rig Report

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
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Alaska Rig Status

North Slope - Onshore

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
Doyon Drilling			
Dreco 1250 UE	14 (SCR/TD)	Prudhoe Bay 02-20	BP
Dreco 1000 UE	16 (SCR/TD)	Standby	BP
Dreco D2000 Uebd	19 (SCR/TD)	Alpine CD5-11	ConocoPhillips
AC Mobile	25	Kuparuk 2S-01	ConocoPhillips
OIME 2000	141 (SCR/TD)	Kuparuk 2S-13	ConocoPhillips
	142	Rig Up	ConocoPhillips
TSM 7000	Arctic Fox #1	Stacked	

Kuukpik Drilling	5	Mobilizing Placer Well #3	ASRC Exploration LLC
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Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
Nabors Alaska Drilling			
AC Coil Hybrid	CDR-2	Kuparuk 2F-18	ConocoPhillips
Dreco 1000 UE	2-ES (SCR-TD)	Deadhorse	Available
Mid-Continental U36A	3-S	Deadhorse	Available
Oilwell 700 E	4-ES (SCR)	Deadhorse	Available
Dreco 1000 UE	7-ES (SCR/TD)	Kuparuk	ConocoPhillips
Dreco 1000 UE	9-ES (SCR/TD)	Deadhorse	Available
Oilwell 2000 Hercules	14-E (SCR)	Deadhorse	Available
Oilwell 2000 Hercules	16-E (SCR/TD)	Mustang location	Brooks Range Petroleum
Oilwell 2000 Canrig 1050E	27-E (SCR-TD)	Point Thompson	Exxon
Oilwell 2000	33-E	Deadhorse	Available
Academy AC Electric CANRIG	99AC (AC-TD)	Deadhorse	Available
OIME 2000	245-E (SCR-AC/TD)	Oliktok Point	ENI
Academy AC electric CANRIG	105AC (AC-TD)	Deadhorse	Available
Academy AC electric Heli-Rig	106AC (AC-TD)	Deadhorse	Available

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
Nordic Calista Services			
Superior 700 UE	1 (SCR/CTD)	Prudhoe Bay Drill Site 9, Well 01	BP
Superior 700 UE	2 (SCR/CTD)	Prudhoe Bay Drill Site B, Well 27	BP
Ideco 900	3 (SCR/TD)	Milne Point Drill Site MP-F Pad, Well 45	ConocoPhillips

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
Parker Drilling Arctic Operating Inc.			
NOV ADS-10SD	272	Prudhoe Bay DS 18	BP
NOV ADS-10SD	273	Prudhoe Bay DSW-59	BP

North Slope - Offshore

BP			
Top Drive, supersized	Liberty rig	Inactive	BP

Doyon Drilling			
Sky top Brewster NE-12	15 (SCR/TD)	Stacked	

Nabors Alaska Drilling			
OIME 1000	19AC (AC-TD)	Oooguruk ODSN-02	Caelus Alaska

Cook Inlet Basin – Onshore

Miller Energy Resources			
Mesa 1000	Rig 37	Mobilized to North Fork to begin drilling this winter	Miller Energy Resources

All American Oilfield LLC			
IDECO H-37	AAO 111	In All American Oilfield's yard in Kenai, Alaska	Available

Aurora Well Services			
Franks 300 Srs. Explorer III	AWS 1	Stacked out west side of Cook Inlet	Available

Nabors Alaska Drilling			
Continental Emsco E3000	273E	Kenai	Available
IDECO 2100 E	429E (SCR)	Kenai	Stacked

Saxon			
TSM-850	147	Ninilchik Unit, Bartolowits pad drilling Frances #1	Hilcorp Alaska
TSM-850	169	Swanson River	Hilcorp Alaska

Cook Inlet Basin – Offshore

XTO Energy			
National 110	C (TD)	Idle	XTO

Spartan Drilling			
Baker Marine ILC-Skidoff, jack-up		Spartan 151 Upper Cook Inlet KLU#1	Furie

Cook Inlet Energy			
National 1320	35	Osprey Platform RU-1, workover	Cook Inlet Energy

Mackenzie Rig Status

Canadian Beaufort Sea

SDC Drilling Inc.			
SSDC CANMAR Island Rig #2	SDC	Set down at Roland Bay	Available

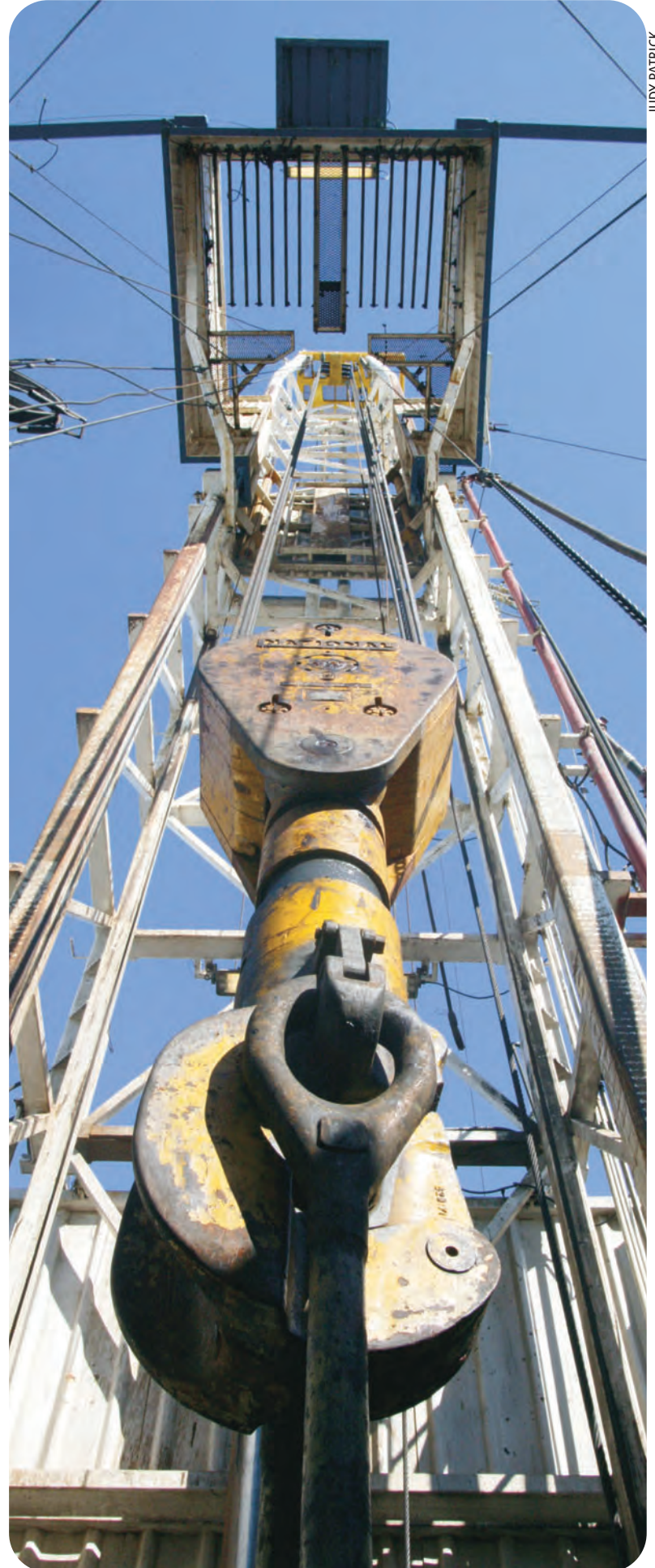
Central Mackenzie Valley

Akita			
TSM-7000	37	Racked in Norman Well, NT	Available

The Alaska - Mackenzie Rig Report as of January 13, 2016.
Active drilling companies only listed.

TD = rigs equipped with top drive units WO = workover operations
CT = coiled tubing operation SCR = electric rig

This rig report was prepared by Marti Reeve



JUDY PATRICK

Baker Hughes North America rotary rig counts*

	Jan. 8	Dec. 31	Year Ago
United States	664	698	1,750
Canada	166	83	366
Gulf of Mexico	27	25	53

Highest/Lowest

US/Highest	4530	December 1981
US/Lowest	488	April 1999
Canada/Highest	558	January 2000
Canada/Lowest	29	April 1992

*Issued by Baker Hughes since 1944

INTERNATIONAL

Gas subsidies cut as oil hits 12-year low

Bahrain and Oman are reducing government subsidies on gasoline, becoming the latest Gulf Arab countries to try to cut back on spending and offset the effect of oil prices, which have fallen to their lowest level since 2003.

On Jan. 12, gas prices at the pump rose by up to 60 percent in Bahrain, climbing to \$1.25 per gallon (125 fils per liter) for regular gasoline and \$1.60 per gallon (165 fils per liter) for premium fuel. Hundreds of people lined up at gas stations a day earlier to fill their cars before the higher prices went into effect.

The tiny island-nation in the Persian Gulf ended subsidies on meat and poultry in October, increasing consumer prices between three and four-fold. Bahrain plans to make further cuts in electricity and water subsidies in March.

Meanwhile, Oman said it would reduce gasoline subsidies starting Jan. 15, with prices set to rise by 33 percent for premium fuel and 23 percent for regular fuel.

The moves come as crude prices closed Jan. 11 at \$31.41 a barrel on the New York Mercantile Exchange — the lowest in 12 years.

The dip in global oil prices has cut into the revenues of oil-exporting countries, including many Gulf Arab states where citizens have become accustomed to generous government subsidies and state handouts.

To reduce their growing budget deficits, the United Arab Emirates and Saudi Arabia reduced fuel subsidies last year. Kuwait's parliament said Jan. 12 that it, too, is planning to study subsidy reform.

—ASSOCIATED PRESS

LAND & LEASING

State OKs Kuparuk PA expansions

Modified definitions of productive areas of unit will accommodate new developments in progress around major North Slope oil field

By **ALAN BAILEY**

Petroleum News

Alaska's Division of Oil and Gas has approved the expansion of two participating areas in the Kuparuk River unit, operated by ConocoPhillips Alaska on the central North Slope. The expansions accommodate recent developments in the unit, as ConocoPhillips continues to find ways of teasing more oil out of the huge but aging Kuparuk River oil field. A participating area defines a region within a unit from which hydrocarbons can be commercially produced.

Kuparuk PA

One of the expansions applies to the Kuparuk participating area, the main participating area in the unit, originally formed in 1981 and defining the primary producing region of the Kuparuk field. Within this participating area oil is produced from two early-Cretaceous sand units straddling a geologic discontinuity called the lower Cretaceous unconformity.

Through the acquisition of 3-D seismic data and advances in drilling technologies, ConocoPhillips has been able to develop thinner net pay intervals along the margins of the field reservoir, the division says in its approval notice for the participating area expansion.

This development work which has resulted in the participating area expansion request includes the drilling of the Shark Tooth well in 2012, about four miles southwest of the 2K drill site, the drilling and completion of three additional wells, and an expansion project that can accommodate up to 24 wells. ConocoPhillips requested and has been granted a participating area expansion of about 4,850 acres in portions of five state leases to accommodate this development, the division says.

Drill site 2S

In October ConocoPhillips announced the start of oil production from drill site 2S. The participating area expansion approval

says that production of about 8,000 barrels of oil per day is anticipated from the site.

On the south side of the unit, horizontal drilling has demonstrated new oil production capabilities from both of the Kuparuk reservoir sands — the division has now approved an about 4,800-acre expansion in four leases to accommodate additional planned drilling.

And on the west side of the Kuparuk River unit ConocoPhillips drilled and completed the 2M-36 well in early 2015 and, having demonstrated production from this well, plans two additional wells in the same area. To accommodate this development the participating area is being expanded by 1,690 acres in one lease, with an expansion of 640 acres in two other leases for additional wells planned to start in 2016.

West Sak

The second expansion approval applies to the West Sak participating area, an area of the upper Cretaceous West Sak sands which currently produce viscous oil, both in the Kuparuk River unit and the adjacent Milne Point, Prudhoe Bay and Nikaitchuq units. Expansion of the viscous oil development is focused around drill sites 1C, 1D and 1H, the division says. The expansion involves the addition of 5,805 acres to the participating area in a total of eight state leases.

ConocoPhillips and the other Kuparuk working interest owners have already approved a development project in the area of the 1H drill site, including a 9.3-acre expansion of the drill site and the installation of surface facilities to support four horizontal multilateral production wells and 15 vertical injection wells, the division's approval document says. Drilling is expected to begin in the second quarter of 2016, with production coming on line in the first quarter of 2017. Peak production is expected to reach about 8,000 barrels per day. ●

Contact Alan Bailey
at abailey@petroleumnews.com

#1

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Kristen Nelson	EDITOR-IN-CHIEF
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Tom Kearney	ADVERTISING DESIGN MANAGER
Renee Garbutt	CIRCULATION MANAGER
Ashley Lindly	RESEARCH ASSOCIATE

ADDRESS

P.O. Box 231647
Anchorage, AK 99523-1647

NEWS

907.522.9469
publisher@petroleumnews.com

CIRCULATION

907.522.9469
circulation@petroleumnews.com

ADVERTISING

Susan Crane • 907.770.5592
scrane@petroleumnews.com

Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

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CORRECTION

NEWS not yet in production

A production story in the Jan. 10 issue of Petroleum News incorrectly said that production from the Kuparuk River unit includes satellite production from NEWS. NEWS is not yet in production. Petroleum News apologizes for the error.



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GOVERNMENT

Talerico: Heavy lifting awaits committee

House Resources co-chair says Alaskans need clarity on constitutional amendment pitch to change role on binding future Legislatures

By STEVE QUINN
For Petroleum News

House Resources co-chair David Talerico didn't have the natural gas pipeline bill — House Bill 3001 — before his committee during the special session, but the committee still held one of the more telling hearings that revealed concerns over communication and transparency from leaders with the Alaska Gasline Development Corp., who have since been replaced.

Talerico, a Healy Republican, says he and his co-chair Bennie Nageak of Barrow will be plenty busy seeking more answers, starting with a quarterly update from the partners of the AKLNG project.

Talerico says while he supports oil and gas tax credits, he will have his share of questions as lawmakers consider changes proposed by the administration.

In an interview with Petroleum News, Talerico spoke of these developments plus the prospects of putting a constitutional amendment freeing the state's hands and locking in long-term taxes to advance the AKLNG project.

Petroleum News: Let's look back first at the special session particularly since your committee held some pretty insightful hearings, even if the bill wasn't before House Resources. What were your takeaways from the special session?

Talerico: It was very successful. I know some people didn't think it went along smoothly, but I thought it went along rather smoothly. Of course there were a lot of Finance meetings and I was fortunate enough to be able to attend most of those. Of course the big thing was TransCanada. I think it got to a point where the best thing for all parties involved was their exit. They seemed to do that very courteously, which I thought was very important. I think the administration was courteous to them as well.

You know, TransCanada is a big player in moving gas and oil, in particular gas. Will TransCanada once again be involved in moving oil and gas in Alaska at some time in the future? Maybe. Not during my time but they certainly could be a player. So I think it was an amicable split. I'm not sure it started out that way. It might have been a little rougher earlier in the year.

What this did was clear the way for us to move forward with a clearer picture of who is involved and how do we do that. I certainly think TransCanada added quite a bit of value to the project from the beginning. There is a particular level of expertise brought to us. I would say that was a successful session.

It will be interesting to see what everyone's perspective is now that we get into the session and dig into more AKLNG stuff. I think we've got them scheduled in the week after we start. We'll be updated on lots of stuff. We want to do that right away, hit the ground running and find out what's happening. I think between the special session and this session, I'm sure there are quite a few legislators who have more questions, even though the looming budget problems are on the top of everyone's mind. I haven't talked to a legislator who doesn't have their own ideas about the budget.

Petroleum News: So with AKLNG having partners from the industry and the state, what would you like to hear from the state?

Talerico: It's probably a different arena for us being in the partnership. Our level of participation, quite honestly, has to match the level of participation. We have to do it in a very cooperative spirit. We can't just throw demands out. We also have to listen. That's what successful partners do.

The old expression is don't give up the farm. Well we don't want to give up the farm. We want to be a full participating partner. Our structure is different from a private enterprise partnership, so that's where it could potentially be frustrating to those partners because we don't have a board of directors or president who says "OK underlings, do this." We have to do our work for the people of Alaska.

We have to carefully maneuver our way around this. There really is quite a bit of time involved, more so than would be with some other things, but that's going to be required for this to be successful. We'll need to stay engaged more so than with other things we do.

My biggest wish is that darn gas wasn't so far away. People ask me why don't we just move that gas. If we didn't have to move that gas so far away to get it to a customer, it would make it so much easier. I do have confidence in the partners we do have for understanding the market real well, having the ability to produce that product and market it. What they have to tell us about the marketability of this gas is critical.

Petroleum News: With that in mind, is there anything particular you would like to hear from the producers in your upcoming hearings?

Talerico: Mostly what I would like to hear is the progress they have made. The



REP. DAVID TALERICO

people they have on their team are pretty phenomenal as far as the construction of the project, getting the permitting in place, getting the FERC approval. Their team is not the marketers. They are the construction guys. They know how to build the structure that moves the gas. Now what I would like to hear from the producers is the potential that's out there. We all want to hear about the potential. Who is our baseline customer? Are we going to be able to find that baseline customer? For the benefit of Alaska, it's about having a large volume and knowing for a fact that we can get into the market.

That's what it's all hinging on. Where are we at there? When those folks from that team come in and say we've figured out how to lay a 42-inch line under Cook Inlet. That's wonderful news. Another concern that I have is everywhere we are going to put this gas line, everybody has been contacted for this right of way. I want to make sure we have all of our ducks in a row. It would be a shame to get to a point where someone says we've got this one entity where

they have this private property and we haven't quite cleared that yet.

So I'd like to make sure all the right of way is secured. As far as design for things like the compressor stations and other engineering, I'd like to have good assurances we've got all that. We are still trying to figure out who is going to build this pipe? How are we going to transport it? How does it move? How does it get in place? I think people on the labor side would like to have more information. This is one of the largest construction projects in the world. Nobody is going to do this willy-nilly. Nobody is going to say on a Tuesday

we are going to build a pipeline so where are all the workers on Wednesday morning.

You know, we are still in pre-FEED. A big decision is going to be made whether we go into the FEED. My perspective on this is this doesn't produce instant income. This is a long-term project with the income out 10 years when it

see TALERICO Q&A page 17



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GOVERNMENT

DOE funding for AK rural energy efficiency

The U.S. Department of Energy is making available \$4 million in funding to assist with rural Alaska energy efficiency initiatives, under an energy efficiency competition for small Alaska communities. The DOE sponsored competition, called the Remote Alaska Communities Energy Efficiency Competition, forms part of President Obama's commitment to fight climate change and assist remote Alaskan communities, DOE says.

The Alaska Energy Authority is assisting DOE with community outreach in support of the initiative.

"Energy efficiency is the most effective way of reducing energy costs, especially in high-cost rural Alaska communities," said Sara Fisher-Goad, AEA executive director, in a Jan. 6 press release. "This collaboration with DOE allows AEA to use our experience working with rural Alaska communities to provide reliable, affordable and efficient power to Alaskans."

Under the terms of the DOE competition, rural Alaska communities can become "community energy champions" by pledging to reduce energy use by at least 15 percent, with pledges due by Jan. 26, AEA says. Communities that have made the pledge become eligible to compete for technical assistance and to apply for grants for energy efficiency projects.

DOE plans to make available up to \$600,000 for technical assistance for up to 20 communities that enter the competition. Assistance can potentially go towards conducting audits of buildings; doing energy use benchmarking; holding community energy fairs; and assisting with business plan development, project financing opportunities and risk assessment.

In the final phase of the competition, DOE will award up to \$3.3 million in competitive grants to up to five communities for the implementation of energy efficiency plans.

Deputy Secretary of Energy Liz Sherwood-Randall said that the competition forms "an integral part of DOE's enduring partnership with Alaska."

"The Department of Energy is committed to helping remote Alaskan communities deploy sustainable solutions tailored to the state's unique energy profile," she said. "Climate change effects near the Arctic Circle can be gradual and quiet like changes in fisheries, and they can be seismic and sudden, like the calving of a glacier."

Information about the competition is available on the DOE website at energy.gov/AlaskaCompetition.

—ALAN BAILEY

NATURAL GAS

Shell gains 'crucial' facility permit

Kitimat liquefaction, tanker terminal site receives facility permit from British Columbia Oil and Gas Commission; 30 conditions

By GARY PARK

For Petroleum News

The Shell-led LNG Canada project has gained a key permit allowing it to start preparation work at the project's liquefaction and tanker terminal site at Kitimat, on the northern British Columbia coast.

Although final corporate investment decision is still awaited, LNG Canada is the first in the long list of LNG ventures to receive a facility permit from the British Columbia Oil and Gas Commission.

The approval outlines the requirements for design, construction and operation of the planned facility.

A spokeswoman for LNG Canada said it is a "crucial" element of the project, following an environmental green light from federal and provincial authorities last June.

She said the partnership is comfortable with all 30 conditions included in the permit, including those on noise management and emergency response plans.

LNG Canada carries an estimated price tag of US\$40 billion — far greater than the C\$36 billion attached to the Petronas-led Pacific NorthWest LNG, which is also edging closer to sanctioning of its initial phase of 12 million metric tons a year — and includes two processing trains, each able to produce 6.5 million metric tons of LNG annually, with provision for another two trains in the future.

The joint venture company consists of Shell and affiliates of PetroChina, Korea Gas and Mitsubishi.

First Nations endorsement sought

The spokeswoman said the project is still seeking a permit from Fisheries and Oceans Canada, along with assurances that the project is endorsed by First Nations, is being built cost effectively and that the timing is ripe for such a facility.

She said the company has acknowl-

edged from the outset the importance of partnering with the Haisla Nation which has generated a strong, open working relationship.

The official said that despite the global decline in energy markets that is not good news for British Columbia's fledgling LNG industry, LNG Canada is "very enthusiastic as well as absolutely committed to the fact that we need to have a facility like this to export our gas ... otherwise we wouldn't pursue it as ambitiously as we are."

Of the 20 proposals launched in British Columbia, four have received environmental approval from the province's Oil and Gas Commission and two have received a go-ahead from the Canadian Environmental Assessment Authority, with federal decisions pending on Pacific NorthWest and the Woodfibre LNG project in Howe South north of Vancouver.

'Remarkable' progress cited

British Columbia Natural Gas Development Minister Rich Coleman said the industry made "remarkable" progress last year and is poised to take even bolder steps this year.

"If you were to listen to the critics — the 'scrooges' of economic development — they would tell you that progress has stalled and the government should relinquish the B.C. Jobs Plan's ambitious goals for growth and market diversification (which includes targets of 100,000 new related jobs and C\$100 billion in revenue from LNG over 30 years)," he said.

"Those pessimists, to be frank, are short-sighted, reluctant to admit LNG is making progress, creating jobs and securing long-term prosperity."

For the government of Premier Christy Clark, clear-cut progress is vital this year to improve its chances of re-election in mid-2017, especially given that her hopes for jobs and revenue, which she said could eliminate British Columbia's debt

see SHELL PERMIT page 7

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● FINANCE & ECONOMY

Fighting over multistage fracking patents

Packers Plus wins judgment before Federal Court of Canada; other disputes pile up as companies try to gain edge in operating costs

By GARY PARK

For Petroleum News

The Federal Court of Canada has delivered a landmark ruling in favor of technology pioneer Packers Plus Energy Services which sued a rival company for patent infringement, ending the current stage of a hard-hitting legal spat.

The privately owned Packers Plus, with Schlumberger as a small equity holder, which has laid claim to inventing the first reliable system for multistage fracturing, won a C\$7.7 million judgment against Canuck Completions.

The verdict will likely be closely examined by participants in a host of other legal tussles and comes on the heels of an agreement five months ago by Calgary-based Pason Systems to pay C\$115.8 million to Houston-based multinational National Oilwell Varco, ending 10 years of litigation over three alleged patent infringements involving automatic driller technology.

These actions are attracting considerable attention at a time when exploration and production companies are engaged in a frantic search for ways to lower their operating costs through research and development and open the way to a revival in the oil and gas business.

The United States is swamped by similar battles where countless oil services companies are trying to lock up exclusive rights to technology breakthroughs that are laying the groundwork for production of oil and gas deposits previously considered uneconomic or impossible to access.

Bloomberg News has estimated that Schlumberger, Halliburton and Baker Hughes secured 1,257 patents in the United States in 2014, more than doubling the tally of a decade earlier.

Other actions possible

In the Packers Plus case it is not clear

Bloomberg News has estimated that Schlumberger, Halliburton and Baker Hughes secured 1,257 patents in the United States in 2014, more than doubling the tally of a decade earlier.

whether the company intends to take action against competitors who have been using similar fracturing methods.

In its defense, Canuck Completions — now a branch of Houston-based TMK Completions — claimed the Packers Plus patents were invalid because similar technologies pre-dated the emergence of Packers Plus and has counter-sued for the damage to its reputation.

David Yager, an entrepreneur and consultant in the oilfield services sector, said the upstream business has made considerable gains over the past five years since horizontal wells using multistage fracturing displaced vertical wells.

He told the Financial Post that advances in drilling and completion over the last five decades now account for 75 percent of the wells drilled in resource plays, largely because the work can be completed so much faster.

Packers Plus technology

Packers Plus, co-founded by engineer Dan Themig, said its proprietary method involves dropping a fluid-filled ceramic ball the size of an orange into a horizontal well, following which sand is pumped down at high pressure to fracture the rock.

When the initial fracturing stage is completed, another ball is launched — a process that is repeated at high speed multiple times.

Packers Plus, with 800 global employees — about 100 in both Canada and the United States — has applied the technology in the Bakken and Montney fields.

least two more years.

Much of that robust outlook is tied to Clark's singular hard-headed approach to managing budgets, unlike her New Democratic Party rival John Horgan, who seems ready to run budget deficits to stimulate infrastructure activity. ●

Contact Gary Park through publisher@petroleumnews.com

Industry observers say rival companies have since refined the methods to meet demands for lower drilling costs.

2012 patent

Packers Plus obtained a patent for its invention in 2012, claiming in a court statement filed in July that “this is a meritorious invention which has received wide acclaim from persons skilled in the art and has been copied by a number of companies including (Canuck Completions).”

It said the patent gives it the “exclusive right, privilege and liberty of making, constructing and using the claimed invention and selling it to others.”

Packers Plus argued before the Canadian court that Canuck did not have the skilled staff or resources to develop the technology and sought an injunction to prevent further use.

Canuck countered that the packers Plus patent is invalid and the technology is not new, claiming the methods was first used in the United States in the late 1990s.

In addition, the defendant said its methods are different.

Canuck also accused Packers Plus of making false and misleading statements to discredit its business, products and services and of engaging in “malicious, high-handed, egregious and outrageous conduct, deserving of sanction.”

Intellectual property

Themig said the court has scuttled

Canuck's allegation that Packers' patent has no validity.

He said the intellectual property belongs to his company even though the “development of these (fracturing) methods and the apparatus and process that have been widely adapted by the industry.”

The court also ordered Canuck to repay Packers C\$495,000 for costs — an amount already paid — dismissed the counterclaim and ordered Canuck and others to stop infringing on the patent.

Themig said that regardless of the 63 “families” of patents and many offshoots, the “drop ball” technique is one of the most significant because it allows operators to break up tight formations and produce the oil and gas.

He described the technique as one of only a few key methods that have impacted the global supply of oil and gas.

In fall 2013, Packers also started a lawsuit against Essential Energy Services for alleged violations of the same patent. A trial date has been set for February 2017.

Essential, in a countersuit and statement of defense, claimed that the “methodology and equipment on which the patent is based has been in use in the oil and natural gas industry prior to the patent's effective filing date of Nov. 19, 2001.” ●

Contact Gary Park through publisher@petroleumnews.com

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SHELL PERMIT

and create a wealth fund, were the key to election victory in 2013.

But, aside from LNG, British Columbia has emerged as the leading economy among Canada's 10 provinces, a position which the Conference Board of Canada is certain B.C. can retain for at

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● FINANCE & ECONOMY

EIA: US crude production, prices falling

Agency says Brent forecast at \$40 this year, \$50 in 2017; low oil prices resulted in first annual production decline since 2008

By KRISTEN NELSON

Petroleum News

Brent crude oil prices are forecast to average \$40 per barrel this year and \$50 per barrel in 2017, the U.S. Energy Information Administration said Jan. 12 in its Short-Term Energy Outlook.

The agency said North Sea Brent crude oil averaged \$38 per barrel in December, down \$6 per barrel from November “and the lowest monthly average price since June 2004.” Brent averaged \$52 per barrel in 2015, down \$47 per barrel from the 2014 average of \$99 per barrel, “as growth in global liquids inventories put downward pressure on Brent prices throughout much of the year,” EIA said.

The agency attributed the drop in prices in December to the Dec. 4 meeting of the Organization of the Petroleum

The agency said North Sea Brent crude oil averaged \$38 per barrel in December, down \$6 per barrel from November “and the lowest monthly average price since June 2004.”

Exporting Countries at which the cartel indicated it would continue the policy of defending market share in a low oil price environment and as global oil inventories continued to build. EIA said inventories rose by an estimated 1.9 million barrels per day in 2015, and are expected to continue to grow this year, with the largest inventory builds in the first half of the year, keeping the Brent price below \$40 per barrel through April.

EIA said West Texas Intermediate crude is forecast to average \$2 lower than

Brent this year and \$3 lower in 2017. The agency said it had previously assumed that the 2016 discount of WTI to Brent would be \$5 per barrel and said the lower forecast discount “is based on the relative storage availability in the United States compared with other regions that encourages placing crude oil in the U.S. market in a period of global oversupply.”

US production down

“Because of low crude oil prices, U.S. crude oil production is forecast to fall almost 700,000 barrels per day this year, the first annual decline since 2008,” EIA Administrator Adam Sieminski said in a statement.

U.S. crude oil production averaged an estimated 9.4 million barrels per day last year, EIA said, and the forecast for 2016 is an average of 8.7 million bpd, dropping to 8.5 million bpd in 2017, 1.2 million

bpd below the April 2015 level, the highest monthly production since April 1971.

EIA said it estimates that U.S. crude oil production fell 80,000 bpd in December from November levels.

The agency said its 2016 and 2017 forecasts reflect a decline in Lower 48 onshore production driven by low oil prices and only partially offset by growing Gulf of Mexico production.

Estimates for U.S. production include EIA surveys of oil production from the largest oil producers in 15 states and the federal Gulf of Mexico, which show U.S. production began falling in May. Lower 48 production has fallen nearly 500,000 bpd, with those declines partially offset by production growth of 100,000 bpd in the Gulf of Mexico since April.

Lower 48 impacts

EIA said WTI prices fell below \$40 per barrel in December and are expected to stay below \$40 through mid-2016, with most onshore Lower 48 production expected to decline. Companies expect reduced cash flows in 2016 and 2017, the agency said, and many have scaled back investment, deferring major investments until there is a sustained price recovery.

“The prospect of higher interest rates and tougher lending conditions will likely limit the availability of capital for many smaller producers, giving rise to distressed asset sales and consolidation of acreage holdings by more financially sound firms,” the agency said, with the count of oil-directed onshore rigs and completions expected to be below current levels this year and in 2017.

Drilling and production activities will focus in core areas of major tight oil plays, EIA said, noting that despite the 2015 rig decline, core counties in the Bakken, Eagle Ford, Niobrara and Permian have seen rig counts stabilize. The agency said that in those areas there have been falling costs and technological and process improvements expected to lead to faster rates of well completions “and less-rapid production declines rela-

see **OIL PRICES** page 13



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NEWS NUGGETS

Compiled by Shane Lasley

New explorer seeks gold reserves in prolific Goodpaster District

Gold Reserve Inc. Jan. 13 reported plans to acquire the LMS gold project in the Goodpaster Mining District near the Pogo Mine in Interior Alaska. Gold Reserve Corp., a wholly owned subsidiary of Gold Reserve Inc., has agreed to pay Raven Gold Alaska Inc. US\$350,000 to acquire the LMS gold claims, together with certain personal property. Raven Gold, a wholly-owned subsidiary of Corvus Gold Inc., will retain a three percent net smelter return royalty interest on precious metals produced and recovered from LMS and a one percent NSR on any base metals produced and recovered from the property. Gold Reserve also gained an option, for a period of 20 years, to purchase 1 percent of the precious metals royalty at a price of US\$4 million. "The expansion of the Corvus Gold royalty portfolio is a continuation of the company's strategy of enhancing shareholder exposure to future gold production while minimizing dilution and cost risk associated with its non-core assets," explained Corvus CEO Jeff Pontius. LMS is an early-stage gold exploration property consisting of 36 contiguous state mining claims about 25 miles (40 kilometers) southwest of the Pogo Mine in Interior Alaska. Gold Reserve, based in Spokane, Wash., is an exploration and development company incorporated under the laws of the Yukon Territory and listed on the TSX Venture Exchange. "Like our earlier transactions, the partner is a key aspect of the deal, and with Gold Reserve, an emerging mine developer with a strong financial base, we believe we have the right group to do the right job," Pontius said. Gold Reserve and Corvus expect to close the transaction upon final approval of the TSX Venture Exchange.

Pebble CEO: New watchdog report on EPA is 'embarrassing failure'

U.S. Environmental Protection Agency, Office of Inspector General, Jan. 13 said it could not find any evidence that the EPA was unfair while conducting the Bristol Bay Watershed Assessment, a study of the potential risks large scale mining might pose the abundant fish resources in the Bristol Bay region of Southwest Alaska. "Based on available information, we found the EPA addressed no evidence of bias in how the

see NEWS NUGGETS page 10

PRODUCTION

Exceeding expectations

Southeast Alaska mines boast increased precious metal output for 2015

By SHANE LASLEY

Mining News

Higher grades, increased milling rates and improved recoveries add up to a banner year for both the Kensington and Greens Creek mines in Southeast Alaska.

Kensington, the youngest of the two mines located near Alaska's capital city of Juneau, got off to a slow start when owner Coeur Mining Inc. was finally able to begin operations in 2010. In recent years, however, the mine has steadily increased its gold output while reducing the costs to mine the precious metal – improvements that are expected to continue in coming years.

Greens Creek, which has established itself as a model of excellence when it comes to being a low-cost and environmentally-sound silver mine, is the cornerstone operation for Hecla Mining Co.

"Greens Creek continues to drive Hecla's strong, consistent production performance," said Hecla President and CEO Phillips Baker, Jr.



PHILLIPS BAKER JR.



MITCHELL KREBS

Raising the bar

Kensington, located some 45 miles north of Juneau, produced 126,266 ounces of gold in 2015, far exceeding the expectations of Chicago-based Coeur Mining.

Going into the year, Coeur anticipated annual gold production at Kensington to total between 110,000 oz. and 115,000 oz. However, as 2015 wore on, it became clear that gold output at the high-grade underground mine was going to top the high end of the forecast, prompting the company to increase its

guidance to 115,000 oz. to 125,000 oz. for the year. When the final tally was taken, the gold recovered from Kensington outweighed even these heightened expectations.

During the fourth quarter, the mine produced 33,714 oz. of gold, a 17 percent increase from the 28,799 ounces produced during the third quarter. This increase is primarily due to an average gold grade of 0.22 oz. per short ton gold grade during the final three months of 2015, which is about 16 percent higher than the 0.19 oz/t grade during the previous quarter.

Coeur is executing a plan to tap into much higher grade ore in the historic Jualin Mine, which is situated about 8,250 feet from the current mining area at Kensington.

"Currently, Jualin is estimated to contain approximately 289,000 tons of inferred resources with an average grade of 0.62 ounces per ton, which is over triple Kensington's average reserve grade," Coeur Mining CEO Mitchel Krebs explained.

Coeur has advanced the decline about 1,500 feet towards this high-grade deposit since underground development work began in August.

"Once we gain better access from underground, we will begin to more efficiently drill Jualin to better define and hopefully expand this new high-grade discovery before mining begins in 2017," Krebs added.

Coeur anticipates this underground infill and expansion drilling to begin in the coming weeks.

The higher grade Jualin resources that are currently anticipated to be mined are expected to boost Kensington's yearly gold production to 149,000 oz. in 2018.

Coeur Mining produced 4 million oz. of silver and 91,551 oz. of gold across all of its operations during the fourth quarter of 2015. For the full year, the company's five operations produced 15.9 million oz. of silver and 327,908 oz. of gold. In 2016, Coeur expects to produce 14.6 million-16 million oz. of silver and 320,000-347,000 oz. of gold.

see MINE OUTPUT page 10

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www.alaskaminers.org

NORTHERN NEIGHBORS

Compiled by Shane Lasley



20,000 g/t gold drilled in Valley of the Kings

Pretium Resources Inc. Jan. 8 said the fifth set of results from an underground infill drill program at the Valley of the Kings deposit of its Brucejack gold project in northwestern British Columbia continues to confirm the style and grade distribution of the gold mineralization in the area currently being tested. The best intercept from this round came in hole VU-545, which cut 21 meters averaging 494.91 grams of gold per metric ton uncut, including 20,287 g/t gold uncut over 0.5 meters. Other highlights include: hole VU-539 cut 14.22 meters averaging 477.29 g/t gold uncut, including 10,700 g/t gold uncut over 0.50 meters; and hole VU-537 cut 18.99 meter averaging 98.52 g/t gold uncut, including 3,200 g/t gold uncut over 0.50 meters. To date, results from 149 holes (26,833 meters) of the 2015 infill drill program for the Valley of the Kings have been reported with 25 intersections grading greater than 1,000 g/t gold. An additional 26,000 meters of definition drilling from four underground drill stations is in progress and is expected to be completed in the first-quarter of 2016. When completed, roughly 200 vertical meters over a strike length of 250 meters will have been drilled at 7.5- to 10-meter centers.

Pocket of high-grade copper lifts Minto output

Capstone Mining Corp. Jan. 13 said strong performance at its Minto Mine in Yukon Territory and Pinto Valley Mine in Arizona helped the company meet its guidance for 2015 copper production despite setbacks at the Cozamin Mine in Mexico. The three mines produced 26,000 metric tons of copper during the fourth quarter and 92,900 metric tons for the full year. At Minto, a pocket of high-grade underground ore in excess of three percent copper in close proximity to existing development was opportunistically mined and processed. As a result, Minto produced 4,400 metric tons of copper during the final three months of 2015, making it the strongest quarter for the mine. Total 2015 production at Minto was 16,400 metric tons of copper, exceeding the annual guidance of 15,500 metric tons. Stripping of the Minto North pit is proceeding well and the lower-grade ore was reached in December. Pinto Valley produced 60,800 metric tons of copper in 2015 and Cozamin produced 15,700 metric tons of the metal for the year.

Chidliak kimberlite produces large diamonds

Peregrine Diamonds Ltd. Jan. 12 reported that an 814-metric-ton bulk sample from the CH-7 kimberlite pipe at the Chidliak diamond project in Nunavut returned an overall grade of 0.88 carats of diamonds per metric ton. A total of 717.65 carats of commercial-size diamonds were recovered, including 53 diamonds larger than one carat and 183 diamonds over a half carat in size. The largest gem quality diamond recovered was 5.33 carats. Other notable diamonds include: a 5.02 carat off-white transparent octahedron with minor inclusions; a 2.01 carat white-colorless, transparent octahedron with no inclusions; and two yellow transparent octahedra, one at 0.52 carat, the other at one-half carat. Significant diamond breakage was observed, including a gem-quality diamond that may have originally been larger than six carats. A substantial portion of the parcel is gem-quality diamonds and a population of colored stones is present.

see **NORTHERN NEIGHBORS** page 11

continued from page 9

MINE OUTPUT

Between 115,000 and 125,000 ounces of Coeur's 2016 gold is expected to be produced at Kensington.

Record silver

Greens Creek, meanwhile, produced 8.5 million oz. of silver in 2015, the highest annual output since Hecla Mining purchased 100 percent ownership of the mine in 2008.

Greens Creek's robust production helped propel Hecla's companywide silver production to a record 11.6 million oz., well above the 10.5 million to 11 million oz. that the company anticipated.

The silver recovered at Greens Creek in 2015 topped the previous year's production by roughly 600,000 oz. This increased output more than made up for a 211,000 oz. drop in silver production at Hecla's Lucky Friday operation in Idaho. The net gain also set a new annual silver production record for the Idaho-based miner.

"Despite a difficult metals market, Hecla's production continues to grow, setting the second consecutive annual silver production record," CEO Baker said.

This roughly 7.6 percent jump was not simply the result of feeding more ore through the mill. In fact, the tonnage milled in 2015 was down about 11 percent compared to 2014.

The grade of the ore milled in 2015 was 13 percent higher, which accounts for some of the increased silver production. Improved recoveries, however, gets the credit for the bulk of the added silver in 2015.

Improvements to silver recoveries at Greens Creek began late in 2014, when Hecla modified the flotation circuit to scalp more of the lead concentrate. In April, the

company further enhanced efficiencies of the flotation circuit through the use of carbon dioxide to control PH levels in the lead concentrate. All told, these upgrades resulted in an eight percent jump in silver recoveries by the middle of 2015.

"For a mine producing over seven million ounces of silver a year, an eight percent increase in silver recovery is a significant value driver, especially when coupled with the higher grades," Baker said at the time.

Greens Creek also recovered 60,566 oz. of gold in 2015, a 3.1 percent increase over the 58,754 oz. produced the year before. This helped push Hecla's companywide gold production to 189,162 oz. for the year, exceeding the 185,000 oz. the longtime precious metal miner was anticipating.

Casa Berardi, Hecla's only mine that primarily produces gold, reported output of 127,891 oz. of the yellow metal in 2015, a slight drop from the 128,244 oz. that the Quebec operation produced a year earlier. On the bright side, the 42,282 oz. recovered at Casa Berardi during the final three months of 2015 is the highest quarterly production since Hecla acquired the mine in mid-2013.

On Dec. 10, the San Sebastian Mine in Mexico began processing ore and produced 75,552 oz. of silver and 705 oz. of gold before the year came to a close.

With a fourth operating mine in its portfolio, Hecla is looking to have another banner year in 2016.

"All three mines exceeded guidance and San Sebastian has begun production," said Baker. "We are continuing to see results from our strategy of investing in production growth, causing our silver-equivalent production to be the most in our 125-year history. This growth, along with cost controls and focused investment, puts Hecla in a good position now and when metals prices rebound." ●

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NEWS NUGGETS

EPA conducted guidelines and followed its assessment of the Bristol Bay watershed, or policies and procedures that the EPA predetermined the assessment when conducting the Bristol outcome," the watchdog penned in a summary of the report. This finding is in sharp contrast to

conclusions from previous investigations by former U.S. Secretary of Defense William Cohen and others. "After a very thorough review, I do not believe EPA used the fairest and most appropriate process," wrote Cohen, who was hired by the Pebble Partnership. The contrasting conclusions will likely be considered in a lawsuit in which the Pebble Partnership

see **NEWS NUGGETS** page 11

Contact North of 60 Mining News:

Publisher: Shane Lasley • e-mail: publisher@MiningNewsNorth.com
Phone: 907.229.6289 • Fax: 907.522.9583



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Shane Lasley	PUBLISHER & NEWS EDITOR
Rose Ragsdale	CONTRIBUTING EDITOR
Mary Mack	CEO & GENERAL MANAGER
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Bonnie Yonker	AK / INTERNATIONAL ADVERTISING
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Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Renee Garbutt	CIRCULATION MANAGER
Mapmakers Alaska	CARTOGRAPHY

ADDRESS • P.O. Box 231647
Anchorage, AK 99523-1647

NEWS • 907.229.6289
publisher@miningnewsnorth.com

CIRCULATION • 907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com
Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

Several of the individuals listed above are independent contractors

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NORTHERN NEIGHBORS

Processing of the bulk sample was performed by the Saskatchewan Research Council. The 717.65-carat parcel is being shipped to Antwerp, Belgium, for an independent diamond valuation by WWW International Diamond Consultants Ltd.

Junior taps more oxide copper at Yukon Territory mine project

Copper North Mining Corp. Jan. 11 said results from a second phase of 2015 drilling at Carmacks continues to demonstrate the potential to significantly expand known oxide mineral resources at this copper-gold-silver project in the Yukon Territory. The company said all 12 holes drilled during the second phase tapped near-surface oxide copper mineralization at the south end of Zone 13 and the north end of Zone 12. Highlights from the drilling include: 23.85 meters of 0.73 percent oxide copper; 0.16 grams per metric ton gold and 2.6 g/t silver from a depth of 44.6 meters in hole CN15-32; 22.34 meters of 0.59 percent oxide copper, 0.13 g/t gold and 2.36 g/t silver from a depth of 42.26 meters in hole CN15-33; and 19.46 meters of 0.54 percent oxide copper, 0.13 g/t gold and 2.02 g/t silver from a depth of 21.34 meters in hole CN15-34. Zone 13 drilling is located roughly 700 meters southeast of a proposed open-pit mine for zones 1, 4, 7 and 7A at Carmacks. Zone 12 is located 200 meters further south. Copper North said it is unclear whether the gap between zones 13 and 12 will connect as a continuous zone. According to a preliminary economic assessment completed in 2014, zones 1, 4, 7 and 7A encompass a measured and indicated resource of 11.98 million metric tons averaging 1.07 percent total copper (0.86 percent acid-soluble copper). A new resource estimate that includes the 2015 drilling in zones 12 and 13; drilling in Zone 2000S; and historical drill holes is in progress. Copper North believes the shallow oxide resource encountered in these zones has the potential to extend the life of the proposed Carmacks mine.

Freeport opts out of Tanzilla copper project in northern BC

Kaizen Discovery Jan. 8 reported that Freeport-McMoRan of Canada Ltd. has terminated an earn-in option on the Tanzilla copper-gold porphyry project in the Golden Triangle area of northwestern British Columbia. The 4,625-hectare Tanzilla property covers a seven-kilometer- (4.4 miles) long alteration zone. Silica Ridge is the primary target along this alteration zone. Induced polarization surveys confirmed the presence of a strong chargeability high to depths of at least 500 meters at Silica Ridge. The 2015 program at Tanzilla included 1,878 meters of drilling in three holes, with two-holes targeting the central Silica Ridge alteration zone and one-hole exploring the Gopher Zone, located about 2,750 meters to the southeast. The property is located 68 kilometers (42 miles) north of Imperial Metals Corp.'s Red Chris copper-gold mine.

Banks Island files for bankruptcy

Banks Island Gold Ltd. Jan. 8 reported that its directors have determined the company needs to file for bankruptcy. D. Manning & Associates Inc. will act as trustee in bankruptcy. Fred Sveinson, Jason Nickel, and John Anderson have since resigned from the Banks Island Gold board of directors. President and CEO Benjamin Mossman is currently the sole director of the company. Since 2010, Banks Island has been working toward reaching commercial production at its Yellow Giant gold-silver property in British Columbia. The company began bulk sampling in 2014 and received permits that year for the construction of a 200-ton-per-day grinding and flotation plant, an underground mine, and associated facilities. By January 2015, the company declared commercial production. However, by late July those operations were suspended.

Fortune produces battery grade cobalt from Nico concentrates

Fortune Minerals Ltd. Jan. 8 reported that battery-

grade cobalt sulfate heptahydrate has been produced from a cobalt sulfate product previously mined in a pilot plant from concentrates originating at its Nico gold-copper project in Northwest Territories. The premium-grade cobalt sulphate heptahydrate sample, produced by SGS Canada Inc., exceeds the specifications of several large lithium-ion battery manufacturers. It was produced to provide a product for testing by a potential off-take customer. The sample also was produced to test minor changes to the process flow sheet for Fortune's proposed refinery in Saskatchewan. Fortune plans to develop Nico as a vertically integrated project comprised of a mine and concentrator in the Northwest Territories and the Saskatchewan refinery, where it plans to process concentrates from the mine to higher value products including gold, cobalt, bismuth and copper. The cobalt market has increased significantly over the past two decades, primarily due to metals used in high performance rechargeable batteries for portable electronic devices, electric vehicles and stationary storage cells.

Junior evaluates developing gold mine at Ulu project, NU

WPC Resources Inc. Jan. 7 reported that it has hired Tetra Tech Inc. to evaluate the potential of developing a mine at the Ulu gold property in Nunavut. In 2015, a measured and indicated resource of 2.5 million metric tons averaging 7.53 grams per metric ton (605,000 ounces) gold was calculated for Ulu. Consideration will be given to utilizing the milling equipment available at the past-producing Lupin Mine, located about 150 kilometers (95 miles) south of Ulu. Recent metallurgical sampling of four 25-kilogram samples collected from a historic test pile at Ulu resulted in gold extraction of 90.4 percent, including roughly 28.4 percent of the gold reporting to a gravity concentrate. WPC said the testing confirms historical results produced by Echo Bay Mines Ltd. in the 1990s. The study also will assess the geological model for Ulu, further investigate metallurgical performances, develop a new processing flow sheet and offer advice on further drilling campaigns. ●

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NEWS NUGGETS

alleges EPA worked secretly with anti-Pebble groups with the goal of banning or restricting development of Pebble prior to the permitting process. Judge H. Russel Holland, who is presiding over the case, found Pebble's allegations credible enough to issue a preliminary injunction ordering the regulator to halt efforts to use Section 404 (c) of the federal Clean Water Act to pre-emptively block or restrict Pebble permits. "The EPA Inspector General's report is an embarrassing failure on its part to understand what several congressional committees, an independent federal judge in Alaska, and an independent review by a former Senator and cabinet secretary have already found – that EPA acted improperly with regard to Pebble and was biased in its actions," said Pebble Partnership CEO Tom Collier. All parties agree that the activities of Phil North, a former Alaska-based EPA biologist, are suspect. "We did find that an EPA Region 10 employee used personal non-

governmental email to provide comments on a draft Clean Water Act Section 404(c) petition from tribes before the tribes submitted it to the EPA," the EPA Inspector General wrote.

Diamond Gold plans to build mill near Seward

Diamond Gold Corp. Jan. 8 unveiled plans to build and operate a 100 short-ton-per-day hard rock mill in the Seward Mining District. The Alaska-based gold and gem mining company is considering a number of locations for the mill, including: Moose Pass, Crown Point or Seward. Ore to feed the year-round mill will be purchased and mined from small gold-quartz mines operating in Hope, Summit Lake and Crown Point. The company is also considering the potential of shipping ore from the Port Wells district. A 20- to 25-person work force is expected to be needed and salaries are expected to average roughly US\$100,000 per year. Diamond Gold said it prefers to hire a local work force and will provide all required job and safety training. ●



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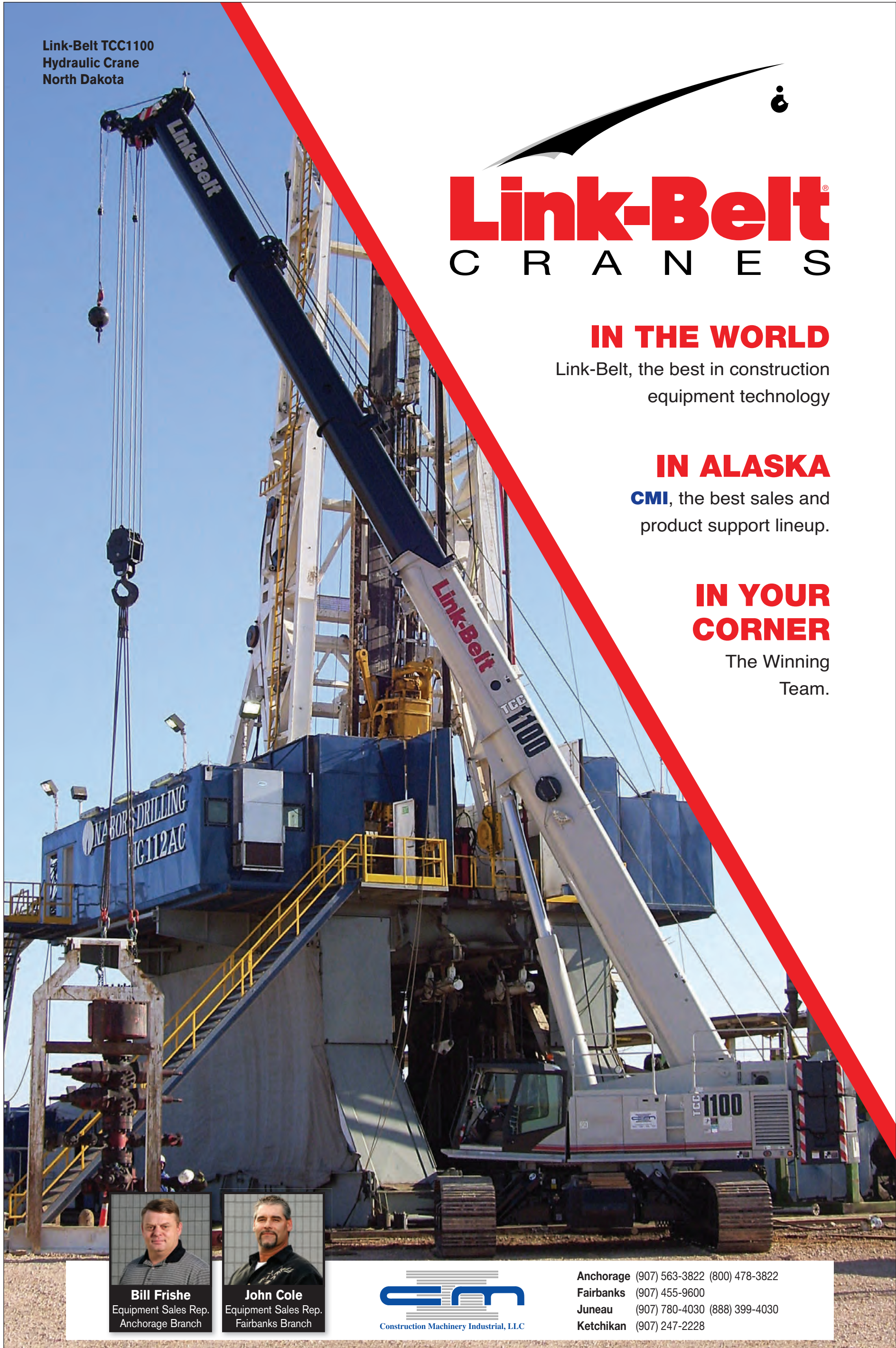


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● ENVIRONMENT & SAFETY

Alaska has Clean Power Plan options

Lawyer suggests that the state should adopt a thoughtful and considered response to its reprieve from participation in the plan

By **ALAN BAILEY**
Petroleum News

When the Environmental Protection Agency published the final version of its Clean Power Plan on Aug. 2 the agency exempted Alaska, along with Hawaii, Guam and Puerto Rico, from compliance with the terms of the plan. The plan, a centerpiece of President Obama's greenhouse gas reduction program, sets out to cut carbon dioxide emissions from existing U.S. power generation facilities.

The objective of the plan is to reduce greenhouse gas emission from power plants by 32 percent of their 2005 levels by 2030.

But, with the EPA's decision with regard to Alaska being a deferral of Alaska's plan involvement rather than a permanent exemption, Alaska should consider what strategy it wants to adopt, in anticipation of potential future EPA action over power generation emissions in the state, Craig Gannett, partner in Davis Wright Tremaine LLP, told Law Seminar International's Energy in Alaska conference on Dec. 7. And, although there are legal challenges to the plan, these challenges will likely end up in the Supreme Court, probably around 2017-18, Gannett commented. Regardless of the outcome of a Supreme Court decision, by the time that the decision is issued much will have been done to implement the plan, with the main provisions of the plan already having gone into effect, he said.

Greenhouse gas reductions

The objective of the plan is to reduce greenhouse gas emission from power plants by 32 percent of their 2005 levels by 2030. States can develop their own plans for how the emission reductions

will be achieved — the federal government will mandate a federal plan for states that fail to develop an approved plan within a required timeframe. Plan implementation is slated to start on Jan. 1, 2022, and there is a provision for early action in renewable energy and energy efficiency implementation, starting in 2020.

The plan allows multiple states to file joint plans, rather than file individually. It is likely that many states will link up, thus leading to a situation akin to a national greenhouse gas cap-and-trade system, Gannett said.

So, what should Alaska do in response? Although EPA said that it was excluding Alaska from the final rule for the plans because it lacked the information and analytical tools needed to quantify the means of achieving carbon dioxide emissions in the state, the state does have several power plants that would otherwise have required regulation under the plan.

Alaska's options

The state can simply take no action, Gannett said. In that case the state would fall further away from an inexorable long-term worldwide trend towards reductions in the use of fossil fuels, he said. And the EPA, seeing the lack of action in Alaska, could become motivated to end the reprieve from the Clean Power Plan sooner, perhaps imposing a more onerous rule on the state. At the same time, a lack of

allowances in Alaska from greenhouse gas emission reduction credits could impact investment in Alaska's electric energy sector, Gannett said.

A second option would be for the state to come up with its own greenhouse gas reduction plan, outside the Clean Power Plan and tuned to fit with Alaska's unique

circumstances. That would reduce EPA's motivation to end the Alaska reprieve for its plan and could encourage investment in renewable energy and energy efficiency in the state, Gannett said.

A third possibility would be for Alaska to agree to some form of participation in

see **POWER OPTIONS** page 15

EXPLORATION & PRODUCTION

AOGCC issues permit for Smith Bay well

A subsidiary of Caelus Energy LLC has received a drilling permit for Smith Bay.

The Alaska Oil and Gas Conversation Commission issued a permit on Dec. 22 for Caelus Energy Alaska Smith Bay LLC to drill the CT No. 1 exploration well.

The proposed well would be on ADL 392275, at the Ikpikpuk River delta. It would deviate to the southeast, although the bottom-hole location stayed on ADL 392275.

The independent NordAq Energy Inc. revived interest in the Smith Bay region after acquiring leases in recent years and sold a 75 percent interest in the project to Caelus in June 2015. Toward the end of the year, Caelus proposed a two-well-exploration program for this winter. A proposed Tulimaniq CT-2 well would be farther west in Smith Bay.

Nearby oil seeps and proximity to the prolific Barrow Arch make the Smith Bay region highly prospective for oil. But the region remains remote, even by the standards of the North Slope. Any oil discovery would need to be large to justify development costs.

—ERIC LIDJI

—A copyrighted oil and gas lease map from Mapmakers Alaska was a research tool used in preparing this story.



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continued from page 8

OIL PRICES

tive to other Lower 48 onshore areas.”

Natural gas

Henry Hub spot natural gas prices are forecast to average \$2.65 per million Btu this year and \$3.22 in 2017, EIA said, compared with an average of \$2.63 in 2015, with prices rising through much of 2016 from \$2 per million Btu at the beginning of the year.

Natural gas production growth is expected to be relatively flat this year partly due to low prices and declining rig activity, the agency said.

Total marketed production of natural gas hit a record high of 80.2 billion cubic feet per day in September before declining in October, and EIA said it is estimating that marketed natural gas production averaged 79.1 bcf per day, up 4.2 bcf, 5.7 percent, from 2014. Growth is projected to slow to 0.7 percent this year, the agency said, “as low natural gas prices and declining rig activity begin to affect production.” ●

Contact Kristen Nelson
at knelson@petroleumnews.com

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EXPLORATION & PRODUCTION

State issues permit for Shadura seismic

Alaska's Division of Oil and Gas has issued a permit to SAExploration Inc. to allow the geophysics company to do seismic surveying on state land in the Shadura area of the northern Kenai Peninsula this winter. The complete area of the planned seismic program straddles some of the northern portion of the Kenai National Wildlife Refuge and extends to but does not cross the bluffs along the northwestern coastline of the peninsula. According to a map accompanying the division permit approval document, the survey area encompasses a combination of federal, state, Native, municipal and private land.

Cook Inlet Region Inc. has commissioned the seismic program, Jason Moore, CIRI corporate communications director, told Petroleum News Jan. 13. CIRI, which owns some of the subsurface land in the survey area, is seeking natural gas resources, Moore said. CIRI is leaving its options open as to who might drill for gas, based on the seismic results, he said.

NordAq exploration

NordAq Energy Inc. had been exploring for gas in CIRI subsurface land in the Shadura prospect and had announced "a significant natural gas discovery" following the drilling of the Shadura No. 1 well in 2011. The company had planned to drill a Shadura No. 2 appraisal well and had obtained a permit to drill this well. But Alaska Oil and Gas Conservation Commission records do not indicate that the well has been drilled. Moore said that CIRI has revoked Nordaq's Shadura leases because the company has not met work commitments associated with the leases.

At the time this issue went to press NordAq had not responded to questions about its Shadura program.

3-D and 2-D seismic

CIRI's planned new seismic project involves the collection of about 16 square miles of 3-D seismic and about 42 linear miles of 2-D seismic, the division says, including about 2.5 square miles of state land. The bulk of the area appears to lie within the Kenai National Wildlife Refuge.

Helicopters will deploy and retrieve equipment and personnel involved in the surveying operations. Charges will be detonated one at time across the survey area as sound sources, with autonomous receivers recording the reflected sounds. SAE expects the survey to take place between Feb. 1 and April 15, the division says.

—ALAN BAILEY

NATURAL GAS

ConocoPhillips talks natural gas project

Hirshberg tells 'Meet Alaska' audience about company's major project experience, challenges company sees for AKLNG project

By KRISTEN NELSON

Petroleum News

The Alaska Support Industry Alliance's "Meet Alaska" conference heard a ConocoPhillips perspective on the Alaska LNG Project Jan. 8 from Al Hirshberg, the company's executive vice president for technology and projects.

Hirshberg reviewed two other major liquefied natural gas projects in which ConocoPhillips has participated.

Qatargas 3, an LNG mega-train with a capacity of 7.8 million tons per annum, included three unmanned platforms, 33 wells and two subsea pipelines. ConocoPhillips partnered with Shell on Qatargas 3, Hirshberg said, and also worked closely with ExxonMobil because of facilities that company was building.

Success factors at Qatargas 3 included working closely with the government, which in Qatar is regulator, tax collector and partner, he said. That project also had effective joint venture LNG marketing with the partners bringing marketing experience in selling both their LNG and the govern-

ment's.

Hirshberg also talked about Australia Pacific LNG, which announced Jan. 11 that it shipped its first LNG cargo, a partnership between ConocoPhillips, Origin Energy Ltd. and Sinopec. APLNG produces gas from coalbed methane wells, with more than 1,000 wells and two production trains with a capacity of 9 million tons per annum. ConocoPhillips brought LNG technology to that project, he said, and is downstream operator, having built and now operating the plant. Origin Energy is the project's upstream operator, drilling wells and building gas plants. The third partner, Sinopec, is a major LNG buyer.

Success factors included a strong joint venture partnership and showed the importance of early engagement with stakeholders. Because of the brackish water produced by dewatering coalbed methane wells the project included reverse osmosis plants to handle 100 percent of the water. That was a win-win situation, Hirshberg said, providing water disposal for the project and irrigation water in the area.

see GAS PROJECT page 18

PIPELINES & DOWNSTREAM

Facing off over pipelines in Canada

Clashes over plans to get crude to new markets intensify on both Enbridge's Line 9 and Kinder Morgan's Trans Mountain expansion

By GARY PARK

For Petroleum News

The arm-wrestling between Canada's largest oil pipeline operators and their array of opponents continues unabated with Enbridge insisting it will meet regulatory deadlines for Northern Gateway, while facing a showdown in the Supreme Court of Canada over the reversal of a line in Ontario and Quebec, and Kinder Morgan reeling from a high-level blow to its proposed Trans Mountain expansion.

Northern Gateway, which most observers have consigned to the scrap heap, has less than a year to start construction before a National Energy Board approval expires.

But Enbridge said it is determined the C\$7.9 billion twin pipeline to export 525,000 barrels per day of oil sands bitumen and import 193,000 bpd of condensate will meet the 209 conditions imposed by the NEB, as well as providing signed commitments before construction starts from shippers representing 60 percent of the export capacity to Asian markets.

An Enbridge spokesman said Enbridge's commercial funding partners and aboriginal equity stakeholders are still committed to Northern Gateway, while the company is "satisfied with the progress we are making" on other issues, notably benefits and land access deals with aboriginal communities.

Enbridge said that despite stiff resistance from coastal and north-central British Columbia First Nations, it has strong backing from other First Nations in British

Northern Gateway, which most observers have consigned to the scrap heap, has less than a year to start construction before a National Energy Board approval expires.

Columbia and Alberta.

However, the environmental group Dogwood Initiative said the pipeline's demise is in sight, largely because the company has yet to sign final shipping contracts with oil producers.

A Dogwood spokesman said 19 lawsuits have now been filed against the project and the new Canadian government is preparing legislation to ban oil tankers from operating off the northern coast.

"No oil producer will stick his neck out and pay for shipping capacity on a pipeline that will never be built," he said.

Enbridge said it has retained the backing of Cenovus Energy, MEG Energy, Nexen, Suncor Energy and Total E&P Canada, most of the leading oil sands players.

New Line 9 legal battle

On another front, Enbridge is facing a new legal battle over the reversal of Line 9 to replace imported crude with 300,000 bpd of oil from Western Canada and the Bakken to Ontario and Quebec refineries.

In taking its case to the Supreme Court, the Thames First Nation of Ontario is pitting itself against Enbridge, the NEB and the attorney general of Canada, arguing

that the federal government failed to honor its obligations to consult with First Nations over concerns about Line 9's affect on aboriginal and treaty rights.

A spokesman for Enbridge said the line has recently undergone a series of major upgrades to make it "even safer," while three years of consultations on the project were the "most extensive in the company's history," resulting in "considerable enhancements" to emergency response capabilities.

The Thames nation, despite losing a case in the Federal Court of Appeal to reverse the NEB approval of Enbridge's plan, said it has backing from regional, provincial and national assemblies of first nations.

Provincial opposition

The battlefield over pipelines has widened with the British Columbia government formally declaring its opposition to Kinder Morgan's proposal to almost triple capacity on its Trans Mountain system to 890,000 bpd to open export markets in the Pacific Rim region.

Environment Minister Mary Polak said the province believes Kinder Morgan has failed to provide the NEB with an adequate plan to prevent or respond to an oil spill.

She said no evidence has been presented to meet her government's insistence in 2012 that all new pipelines crossing the province would have to demonstrate they have "world-leading" prevention and response plans if oil was spilled on land or into rivers, lakes or the ocean.

Although most of the responsibility for

dealing with marine spills is shouldered by the federal government, companies should still provide some of the resources to handle a spill and Kinder Morgan has failed to "step up" to that job.

In addition, Polak said Kinder Morgan has failed to meet other conditions, such as obtaining First Nations support and providing British Columbia with a fair share of economic benefits.

Kinder Morgan said it has received letters of support from 30 aboriginal communities in Alberta and British Columbia, indicating they are satisfied with the consultation provided and have acceptable mitigation measures to handle spills.

But Ruben George of the Tsleil-Waututh First Nation, which claims lands at the terminus of the pipeline in Port Metro Vancouver, said "we are going to rely on the Canadian constitution to protect our indigenous rights. We are relying on the courts. No matter what it takes we are going to stop this project."

Seven other First Nations are among those who claim the regulatory review, which requires an NEB panel to deliver its recommendation to the Canadian government in May, is "fatally flawed."

However, Canada's new Natural Resources Minister Jim Carr said that projects in the review phase will "not have to go back to square one" regardless of a promise by Prime Minister Justin Trudeau to change the environmental assessment process. ●

Contact Gary Park through publisher@petroleumnews.com

• FINANCE & ECONOMY

Energy sellers sitting tight

By GARY PARK

For Petroleum News

Investors are positioned to spend billions of dollars acquiring energy assets across North America.

BMO Nesbitt Burns estimates there is C\$150 billion in private equity money and another C\$25 billion in pension funds available for deals.

Yet there is a prevailing wait-and-see mood in the market while oil prices keep tumbling to new lows and bidders “hold back because they believe the better assets are still to come,” said John Armstrong, head of Canadian M&A at the bank.

He said many investors apparently suspect that many companies, faced with “cutting into the muscle,” could be forced in the next six to 12 months to sell important assets, rather than those on the fringe.

Awaiting Suncor outcome?

For now, many players are thought to be waiting for the outcome of the hostile C\$4.3 billion bid by Suncor Energy to acquire Canadian Oil Sands, the largest shareholder in the Syncrude Canada oil sands consortium at 37 percent, while Suncor holds 12 percent.

The latest deadline for COS shareholders to tender to Suncor’s offer passed on Jan. 8 without Suncor garnering enough support.

Although Suncor declined to comment on the response, insiders believe it was endorsed by less than half the COS shareholders, well short of Suncor’s target of two-thirds.

Suncor immediately extended its offer to Jan. 27, with Chief Executive Officer Steve Williams suggesting the initial results did not amount to a resounding defeat.

That puts added pressure on Suncor to sweeten its bid, a move Williams has resisted since launching the play in October, saying the current offer is “full and fair. So the choice is clear.”

The latest deadline for COS shareholders to tender to Suncor’s offer passed on Jan. 8 without Suncor garnering enough support.

COS believes offer rejected

COS said that “while only Suncor has access to all the tender results, the best information that COS currently has is that a strong majority of COS shareholders rejected the substantially undervalued and opportunistic Suncor bid.”

The company said it believed that “immediate disclosure of the number of shares tendered is required under Canadian and U.S. securities law in this situation as a material fact that would reasonably be expected to affect the decision of shareholders to accept or reject the Suncor bid. ...”

Williams said in a statement that his company was “encouraged by the number of shares that have been tendered,” after previously telling reporters he would need a “high degree of confidence” that a deal would close to keep up the pursuit.

For now, Suncor continues to heap criticism on COS for its spotty results at Syncrude, insisting it can leverage its financial strength and experience running oil sands mines to improve performance at the aging plant.

Williams has pointed to a string of unplanned outages that lowered 2015 output to 248,300 barrels per day from Syncrude’s capacity of 350,000 bpd, making 2015 “their worst year in the last five years for production.”

He said meetings with some of Syncrude’s biggest stakeholders have shown “there is no support for an independent” COS. ●

Contact Gary Park through publisher@petroleumnews.com

ENVIRONMENT & SAFETY

Greenland water runoff may intensify

A team of international scientists has found evidence that changing conditions in Greenland’s ice cap may be reducing the capacity of a layer of granular snow near the ice cap surface to hold meltwater, thus increasing the runoff of the water, according to a paper published in the Jan. 4 issue of Nature Climate Change. Although ice melts at the surface of the ice cap, a significant portion of that water can refreeze inside the porous near-surface layer of granular snow, thus limiting the impact of the ice melt on sea level rise, the paper says. But in situ observations and historic data demonstrate that surface runoff begins to dominate meltwater storage before the available pore space becomes completely filled.

With two exceptional melt summers in 2010 and 2012, successive intensive melts have caused structural changes in the granular snow layer. At elevations above about 1,000 meters, the material has become denser, while at lower elevations, where melt has been most intense, the porous layer has lost most of its ability to retain meltwater, the paper says. At the lower elevations, the formation of near-surface ice layers has rendered the deeper porous space difficult to access, forcing meltwater into a surface discharge system and intensifying ice-sheet mass loss earlier than previously thought, the paper says.

—ALAN BAILEY

GOVERNMENT

Walker removes head of regulatory agency

Gov. Bill Walker has decided to replace the head of the agency that sets rates for public utilities and pipeline carriers in Alaska.

Chairman T.W. Patch of the Regulatory Commission of Alaska said he was notified by Walker’s office on Dec. 31 that he will not be reappointed when his six-year term ends March 1, The Alaska Dispatch News reported (<http://bit.ly/1IQaUC9>).

Walker has selected Rebecca Pauli to take over the position in March. She has been a state administrative law judge since 2002 and previously worked as private attorney representing telephone and electric utilities before the commission.

The commission will name a new chair after Pauli’s appointment.

“I have absolutely no agenda other than to do the job, and make appropriate decisions based on the facts presented,” said Pauli, 52, who claims to have no political connection.

Walker, in an emailed statement, did not expand upon his decision to appoint a new leader, except to say he felt it was time for a change.

Patch, a former U.S. Air Force judge advocate, was appointed by Republican Gov. Sean Parnell in 2010. He did not comment on the governor’s decision other than to confirm he had been notified by Walker’s office.

Patch is “taking steps to ensure there’s a smooth transition and I can get up to speed as quickly as possible,” Pauli said.

The five-member board sets power cost equalization rates and is often tasked with settling complicated rate disputes between powerful interests, including the in-state transportation rates for crude oil moved down the 800-mile trans-Alaska pipeline.

The commission had about 50 employees and a \$9 million budget in 2015.

—ASSOCIATED PRESS

continued from page 13

POWER OPTIONS

the Clean Power Plan, using arrangements that fit with Alaska’s circumstances. Alaska has some leverage to work with EPA on a plan that differs from EPA’s own concepts but forms part of the larger plan structure. That could meet Alaska’s needs while also, by being part of the larger plan, encourage Alaska renewables and energy efficiency development, and enable the state to participate in emissions trading with other states, Gannett said.

While not proposing one alternative versus another, Gannett suggested that Alaska adopt a thoughtful and intentional strategy in response to the Clean Power Plan, rather than just viewing EPA’s decision in its final version of the plan as “a bullet missed” for the state. ●

Contact Alan Bailey at abailey@petroleumnews.com

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Det-Tronics releases explosion-proof smoke detector

Det-Tronics recently announced the release of a photoelectric explosion-proof rated smoke detector. The Det-Tronics SmokeWatch U5015 detector is a class I division 1, 2 and zone 1 explosion-proof rated smoke detector that is suitable for hazardous, industrial and commercial applications.

The Det-Tronics SmokeWatch smoke detector has a unique design that operates effectively in both smoldering and rapidly growing fires. The device is certified to FM 3230, the standard in smoke detection performance. The photoelectric operation and signal processing features of the detector are an enhanced smoke detection technology appropriate for either large, integrated environments or smaller installations.

In addition, the detector is certified to an IP44 ingress protection level, which makes the detector suitable for heavy industrial applications such as offshore oil rigs, wastewater treatment plants, and other high-hazard environments.

The SmokeWatch U5015 smoke detector can be integrated into process control systems or a conventional fire panel through outputs that include 0-20 mA, a localized LED, and relays. Through its self-checking circuitry, the detector communicates its health status by conducting automatic optical and electrical fail-safe checks every one second.

For more information, visit <http://www.det-tronics.com>.



Motion Industries announces organizational changes

Motion Industries, is pleased to announce several key changes as part of the company's organizational structure alignment, according to Motion Industries' President and CEO Tim Breen. The changes were effective as of Jan. 1.

Randy Breaux assumed the position of senior vice president of marketing, distribution and purchasing. In this new role, Breaux will retain current responsibility for marketing and strategic planning, but gain overall responsibility for the additional areas as above. Breaux joined Motion Industries in 2011.

Tony Cefalu was named senior vice president of hose and rubber, shops and service centers. In this new position, Cefalu will continue to lead Motion's efforts for hose, rubber, and gaskets, and now has the added responsibility for shops and service centers including automation, fluid power, pumps and repair. Cefalu started his career with the Berry Bearing Co. in 1983, which became part of Motion Industries in 1993.

Kevin Storer was named senior vice president of U.S. operations, president of Mi Mexico. Storer's new role will expand to include all U.S. branch and field sales operations. He will continue to have complete responsibility for Motion's Mexico operations. Storer began his career with Motion Industries in the West Group in 1987.



RANDY BREAUX



TONY CEFALU



KEVIN STORER

Companies involved in Alaska and northern Canada's oil and gas industry

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TALERICO Q&A

starts to come in. It's about securing future revenue. Those are tough decisions for people to make: the upfront money we will need. Some folks feel like it's going to be hard to secure that if we do some bonding. I'm not sure, with the business partners that we have, if they make the decision that they think they can do something it's going to be hard to invest in.

They are an economic driver in their own right. They have invested some money. I know some people believe the invested money was to avoid being taxed for the resource that's in the ground. I don't think they are real loosey-goosey with their investments, either. I think they are fairly careful with their investments. It seems to me that ConocoPhillips kept a lot of their capital here in Alaska. I think they had other options so that's promising.

Petroleum News: A lot of projects globally have been shelved, but this one remains on the books. Is that a reflection of the commitment or because it's in the early more affordable stage?

Talerico: One of the things that Alaska has offered is a stable government. Some other places where people have to do these projects, I'm not sure the security forces aren't larger than the labor forces. If I were a board member of one of those companies, that would be an attraction. Getting down to the nuts and bolts of it, there are no bullets flying. We have our share of problems but we are not looking at a government overthrow at anytime. We are not looking at a military takeover. It's a not dictatorial run government. We don't have a royal family.

We provide some stability That particular stability provides confidence for some long term projects. I'm pretty sure these guys have been involved in projects where they couldn't say, "boy we feel really good about the current government that's in place and we don't think it will ever be overthrown." That's a big plus for somebody when they have an investment they don't feel like is going to be seized, overthrown or shut off by some marauding government force. I think that's a big deal.

I don't know that the Middle East has ever been stable in my lifetime. They have a lot of product over there. A lot of people have invested over there. There have found it to be friendly at times and incredibly unfriendly at times. So it does make us attractive.

Petroleum News: AGDC has undergone regular changes over the last year. Does that concern you or is that simply a matter of the governor getting settled in during his first year?

Talerico: Looking in the history in Alaska, there are usually administrative changes within state government. Right now, I would like us to stay consistent with people. Consistency has incredible value to it as well. I don't think changes surprise me too much. Those happen every time you change an administration, but I think we need to stay consistent.

I appreciate those people who recently exited. I don't see anyone who was not having good intentions to do this, but there are always differences of opinion.

Petroleum News: Well, you did hold a handful of hearings during the special session even as the bill was not in your committee. One of those hearings brought plenty of candor on issues of transparency and communication from the former

board chair (John Burns) and president (Dan Fauske).

Talerico: They were very honest and open about what they say that might have been the issues. So now we still want to move forward, but those issues are still things they identified. It would be nice to see resolution to a lot of those things. I've seen this happen in other organizations from my municipal days. Communication breakdowns can destroy you in a heartbeat. That open flow of communication has to keep going all the time. That was something the former board chair had discussed. The more people you have involved the harder it may be to communicate and that's the time you need to put your nose to the grindstone and make sure the communication is there.

The impressive thing is I've had the opportunity to talk to so many of these people. They are top-notch folks. They may not always agree on everything, but they do need to make sure that the communication is at the forefront. I don't want the board finding something out late that the AKLNG team had done and vice versa. If the board has some kind of action coming, it's not going to be a secret long, so bring people in.

That was one of the things that was glaringly obvious and they were so honest and upfront with us. Hopefully we move to a point where we have an open free flow of communication among everyone. They have to be in sync and be communicating. That's not always easy. People get busy with things. I understand that. What I end up telling people is speak to me in English and reasonably simple English. I'm not an engineer. We have to keep this in terminology everyone understands.

Petroleum News: Given what you've heard from the former president and board chair do you have edicts as co-chair from the people involved?

Talerico: One of the things I'd like to do, I tell folks anytime you have anything you want to tell me, don't hesitate to email, call or FAX. That's for anything. I'd like to know. We are going to be called upon to make some decisions. We still have some questions to ask. When they have information, even a fleeting thought, get a memo out to us. We will look at it and we will appreciate it. I've never heard anyone say don't contact me if you have a question. All the guys on the AKLNG and the AGDC board say if you have questions we'll get back to you as soon as possible. We need to improve that back and forth. I may not need to know to every minute detail, but I would like to have a reassurance and have people tell me we are working on it. Their testimony being that open and honest with us may have helped us turn that corner and we'll have that communication.

Petroleum News: Something else that could come before your community this session is the discussions on oil tax credits and revising the system. What are your thoughts on that?

Talerico: I've never been hesitant to say that the credits have worked well, even the Cook Inlet credits. I recall years ago I was visiting a friend in the Anchorage bowl when what they call the tri-borough mayors were doing advertisements on the rolling brownouts. It seems like different things were put in place and we've got a lot of gas. A lot of credit goes to the companies who reconfigured the wells and we've got a lot of gas. Again, from prospective residents, you try not to give away the farm. But you do have to recognize occasionally the credits can be an inspiration for people to come, get it right, get it fixed and produce something. I still have a lot of questions about cred-

its, how do they work, what costs are they to us. They are not all the same because of the location and the resource. Because of potential difficulty, some are more difficult to access than others. Some cost a lot more than others. I have grandchildren in this state. I don't want to create something they are going to pay for. I still have some questions about the credits. I haven't resolved all of it. As you can see (pointing to book of oil and gas regulations sitting in front of him), I do a lot of research on it.

Petroleum News: So you've got AKLNG and tax credits, is there anything else on the oil and gas front that is a priority for you this session?

Talerico: I think one of the biggest things, if we do move forward on this project, there has been a lot of talk about a constitutional amendment and binding a future Legislature by a previous Legislature. Being in a partnership role, we are in a different mode. They are talking about fiscal certainty. That's not an unusual thing when dealing with long-term contracts. I'm not sure what type of effort we will have to put out individually if we get to that point and we are going to bring that up during the general election next year.

That is going to be something people of Alaska are going to vote on, so we are

going to need a good explanation for them. Then it's up to them. It's such a volatile industry. Anything else you can provide for the long-term probably helps make an investment decision. At the same time, questions will arise that ask are we going to get bang for our buck if we do that. I think it's a good idea to get that out there and get that changed.

At the same time I'm sure we will hear some strong arguments about why it should not be changed. That is going to be an important thing with the partners that we have. That is one of those things that will be necessary. Binding the hands of a future Legislature is all based on a money thing. We do that constantly with the introduction of new laws. I would say that's a big one for the producers and it's a little different for us in a partnership role.

To be honest, at this particular point, I don't know how the public would respond but I don't think you just throw it out there without some really coherent explanation of why we think it's necessary. I think it's that important. We have to explain it in great detail. If you get that out there and everybody is counting on that, and then it fails, you're done. It shuts you down. ●

Contact Steve Quinn
at squinnwrite@gmail.com

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UNDERDOG ROUTE

administration acted lawfully in rejecting the pipeline, meeting the U.S. obligations to NAFTA.

NAFTA challenges

To date, no company outside of the United States has ever succeeded in a NAFTA challenge, although the agreement requires the NAFTA partners to treat foreign and domestic companies alike.

TransCanada, in signaling notice of its intent to seek US\$15 billion in damages, said it has been “unjustly deprived of the value of its multi-billion dollar investment by the U.S. administration’s arbitrary action in November to reject Keystone XL.”

The company also filed a lawsuit in U.S. Federal Court in Texas against four members Obama’s cabinet, including Secretary of State John Kerry, which seeks to declare that Obama’s refusal to issue a presidential permit was without legal merit.

Lawrence Smith, a lawyer with the firm of Bennett Jones, said the manner in which Obama dismissed the pipeline provides TransCanada with the ammunition to mount its cases.

He said that by basing his decision on the use of XL to deliver “dirty oil” from the Alberta oil sands to Gulf Coast refineries in the wake of the United Nations climate-change summit in Paris before Christmas, Obama had made a “discrimi-

natory” ruling.

Looking for a new president

Chris Hudson, of the Washington-based Hudson Institute, suggested TransCanada would “basically stop all dialogue between the two governments on pipelines” and related projects until a new president had been elected.

“The easier thing would have been to wait until there was someone new in the white House and then (TransCanada) could reapply for a presidential permit and get a quicker result” than the years it could face in a NAFTA hearing.

Bill McKibben, of 305.org, said any idea that NAFTA could be used to “overheat the planet’s atmosphere is, quite simply, insane. But the oil industry is so used to winning that I fear this kind of tantrum is predictable. Corporate power is truly out of control.”

Toronto trade lawyer Lawrence Herman said that although TransCanada is embarking on a “long shot” process, it does appear to have a solid case in arguing it was unfairly treated and Obama’s decision was politically motivated.

In its 27-page notice of intent to pursue the NAFTA challenge, TransCanada estimated it has spent US\$4.3 billion on the US\$8 billion venture to deliver 830,000 barrels per day of crude from the oil sands and the North Dakota Bakken to Texas refineries.

It was adamant that Obama was politically driven, acting contrary to the conclusions reached on Keystone XL by his administration’s own studies, with the State

Department concluding the pipeline would not significantly increase global greenhouse gas emissions.

In denying a pipeline permit Obama said: “America is now a global leader when it comes to taking serious action to fight climate change and, frankly, approving this project would have undercut that global leadership.”

Claims decision politically driven

TransCanada said the administration “sought to explain its perverse decision by saying that the pipeline was perceived to be bad for the environment and that it had to appease those in the international community who held that (false) belief.”

“The politically driven denial of Keystone’s application was contrary to all precedent, inconsistent with any reasonable and expected application of the relevant rules and regulations.”

The company said no U.S. president has “ever prohibited the development of a significant, predominantly domestic facility. Nor has any president ever prohibited the development of any cross-corner commercial facility on the ground that he must restrict foreign and domestic commerce to enhance his influence in foreign affairs.”

It said the NAFTA claim “asserts that TransCanada had every reason to expect its application would be granted as the application met the same criteria the U.S. State Department applied when approving applications to construct other similar cross-border pipelines — including the existing Keystone pipeline, which was approved in under two years” and has now transported 1.1 billion barrels of Canadian and U.S. oil.

Although Trudeau has expressed his support for Keystone XL, a spokesman for Foreign Affairs Minister Stephane Dion said only that the TransCanada lawsuit was “not entirely unexpected” and fell within the company’s purview.

Could be important long term

Greg Stringham, vice president of oil sands and markets with the Canadian Association of Petroleum Producers, told the Calgary Herald that the new legal twists will not help Canada secure new market access for its crude over the short term, but could be important in Canada’s ongoing relationship with its biggest energy export customer.

The dispute has given opponents of the proposed Trans-Pacific Partnership trade agreement a fresh argument on their lobbying to get Congress to kill the pact.

They say TransCanada is demonstrating how foreign companies could use the provisions of the TPP to challenge U.S. policy on the environment and other matters.

“I can’t think of many clearer signals that could have been offered to show how big a threat the TPP poses to our efforts to keep fossil fuels in the ground,” said Ben Beachy, a senior policy adviser to the Sierra Club.

The Communications Workers of America say the TransCanada claim is a case study in how the 12-nation TPP would give thousands more companies a new mechanism to challenge U.S. laws and regulations. ●

Contact Gary Park through publisher@petroleumnews.com

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GAS PROJECT

Success factors

Hirshberg listed mega project critical success factors and said they fell into three buckets: alignment among all the players; a strong effort to identify project risks and putting together a plan to manage risk; and economics — driving down the cost of supply enough that the project can be successful in the marketplace.

Challenges for the Alaska LNG Project, prior to final investment decision, include commercial agreements between all co-venturers, including the state; certainty around fiscal terms; FERC/state permitting issues; and global LNG project competition, he said.

With smaller projects commercial agreements could be pushed out in time, Hirshberg said, but with a project the size of AKLNG those agreements need to be locked down in the pre-front-end engineering and design phase.

He said he’d worked on a number of big important projects but called AKLNG unprecedented in terms of complexity and cost and said there was no room for loose ends.

Hirshberg also reviewed the global LNG market. The total world demand in 2014 was 200 million tons per year, he said, with the demand through about 2025 projected at another 200 million tons per annum.

Of that 200 million, about 140 million is already spoken for, he said, leaving about 60 million tons, of which Alaska is about 20 million tons.

Chasing that are announced discoveries of some 780 million tons per annum, of which about 210 million tons are in projects spending serious money on engineering, some three to four times the estimated need.

The ticket to admission, Hirshberg said, is the cost of supply and if AKLNG can’t drive down the cost, customers won’t be interested. ●

Contact Kristen Nelson at knelson@petroleumnews.com

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BP CUTS

prices. According to the Seeking Alpha website, 600 of the cuts will be in the company’s North Sea operations and the cuts will take place over the next year or two.

“We have recently informed staff that we plan to further reduce numbers in our upstream segment by 2017 as we continue to simplify our business, improve efficiency and reduce costs without of course compromising safety which remains our number one priority,” BP spokeswoman Dawn Patience told Petroleum News in a Jan. 12 email.

Alaska impacts

The dramatic and continuing fall in the price of oil has already impacted the Alaska oil industry. In September ConocoPhillips announced a decision to reduce its workforce by 10 percent, to reduce its operating costs. However, the company is also con-

tinuing with capital expenditure on development projects in the National Petroleum Reserve-Alaska, to the west of the Alpine field, and in the Kuparuk River field.

The new job losses at BP come on the heels of job cuts in 2015, as a consequence of the sale to Hilcorp Alaska LLC at the end of 2014 of BP’s interests in the Endicott and Northstar fields, and a 50 percent stake in the Milne Point and Liberty fields. Although a number of BP employees transferred to Hilcorp following the transfer of field ownership, there was a net loss of jobs.

On Jan. 11 the price of Alaska North Slope crude oil on the U.S. West Coast had dropped to \$29.76 per barrel. On Jan. 13 world oil prices were hovering just above \$30 per barrel, compared with a price in excess of \$100 in June 2014. And, with the current glut in oil stocks exceeding world oil demand, there is no end in sight for the oil price rout. ●

Contact Alan Bailey at abailey@petroleumnews.com

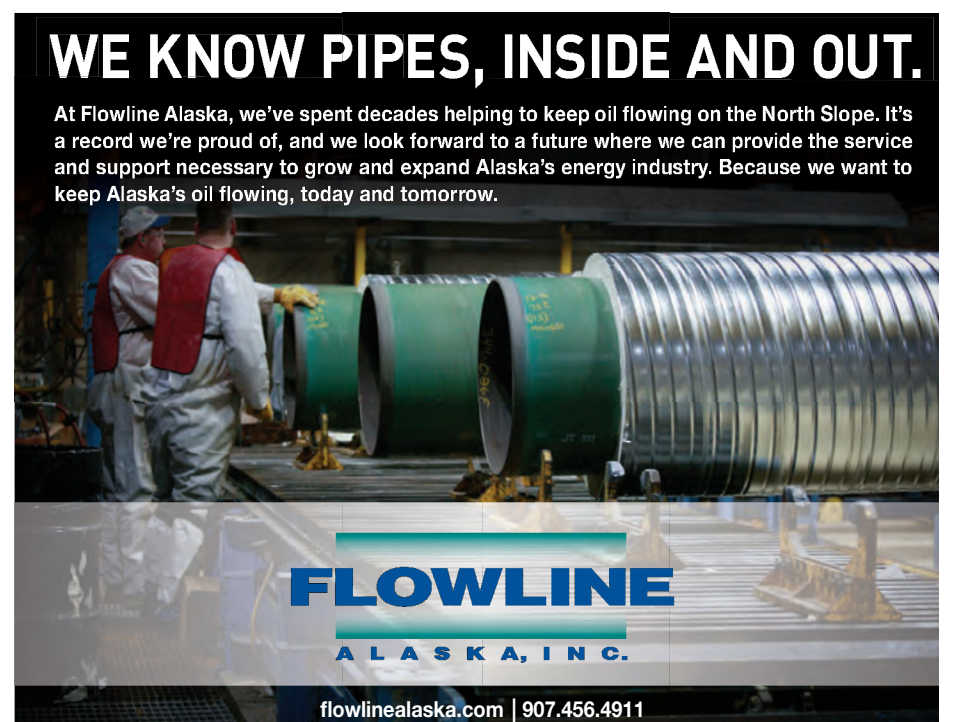


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SALES RULING

with the development of the facility. The well encountered an unanticipated pocket of undiscovered gas in one of the sand bodies in the Sterling C sands that were earmarked for gas storage and had been assumed to be empty. Ultimately, by the spring of 2014, CINGSA determined that the discovery amounted to a total volume of 14.5 billion cubic feet of gas, an unanticipated windfall gas resource.

It turned out that a substantial amount of the discovered gas could be used to overcome a technical problem that CINGSA had encountered because of some unexpected reservoir characteristics and related well performance — the additional gas would enable the company to achieve gas injection and withdrawal rates that the company had agreed on with its customers.

However, 2 bcf of the 14.5 bcf was surplus to requirements and could be sold.

CINGSA made a tariff filing with RCA, requesting permission to sell the surplus native gas, with the profits from the sales going to CINGSA. CINGSA argued that,

since the investors in the storage facility had underwritten the risks associated with the gas storage project, the investors were entitled to gain from any unanticipated windfall associated with the facility development. Moreover, the excess native gas was of no benefit to CINGSA's customers, CINGSA said.

But the state of Alaska and some of CINGSA's customers for firm gas storage services disagreed, saying that CINGSA's customers had themselves taken risks when signing up for CINGSA's services and that the profits from the native gas discovery should be used to offset the cost of storage for the facility's users. RCA has characterized the case as unique, with no previous regulatory proceeding or court case addressing the same circumstance.

At the end of August CINGSA and its customers filed a stipulation, setting out an agreement in which CINGSA could sell the surplus native gas, splitting the proceeds 50/50 between itself and its firm customers. The state and Tesoro, operator of a gas-consuming oil refinery on the Kenai Peninsula, objected, with the state saying that the proposed settlement raised new issues in the case and Tesoro arguing that CINGSA's

firm customers had, in effect, already paid for the drilling of the well that had found the native gas.

In early December RCA tossed both the contested settlement agreement and CINGSA's tariff filing, saying that it could not accept a contested stipulation and that the sale of native gas could not be incorporated in the storage utility's tariff. But the commission did agree that CINGSA could sell 2 bcf of surplus natural gas, albeit subject to conditions mandated by the commission.

Those conditions essentially require CINGSA to distribute the proceeds from the gas sales in proportion to the allocation of gas within the storage reservoir: CINGSA would obtain sales proceeds in proportion to the amount of base gas relative to customer gas in the facility, with CINGSA's firm customers splitting the remainder of the proceeds in proportion to their storage space reserved in the facility. The base gas proportion used in the calculation would itself be adjusted in proportion to the length of the customer agreements relative to the depreciable life of the facility. Base gas is the gas, belonging to CINGSA, pumped into the storage reser-

voir to maintain reservoir pressure.

In appealing RCA's decision to state Superior Court, CINGSA claims that RCA's order to distribute sales proceeds to third parties is unconstitutional in that the assets to be sold are "undisputedly owned by CINGSA." Moreover, the agency, in developing "an arbitrary and unfounded allocation formula," exceeded its lawful authority and "violated its own prior orders and regulations," CINGSA claims. CINGSA also claims that RCA has exceeded its lawful authority in a number of other respects, including the entire rejection of CINGSA's tariff filing; the rejection of the disputed settlement between CINGSA and its customers; and the ignoring of relevant Alaska and U.S. precedent.

RCA has previously stated that CINGSA found the native gas at the core of the dispute while engaged in an activity regulated by the commission. The commission, therefore, has the authority "to determine a just, fair and reasonable resolution" to the matters at issue, RCA has said.

—ALAN BAILEY

Contact Alan Bailey
at abailey@petroleumnews.com

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JOB LOSSES

faced with declining oil production combined with low commodity prices, the state is "producing less wealth than it used to, and the oil industry may not serve as a lifeline in the long run," resulting in employment dips being "more common in the next 28 years than they were in the last."

The oil and gas industry added more than 6,000 jobs in Alaska between 2005 and 2015, although employers cut more than 1,500 jobs following the 2008 fall in oil prices.

Schultz said the forecast loss of 1,000 jobs this year will return employment to roughly its 2012 level. She said the forecast is "relatively conservative," accounting for "significant industry cutback" this year, but allowing "for continued project work and the ever-increasing repairs and maintenance required by aging infrastructure in harsh environments."

The forecast loss in construction jobs is also related to oil, Schultz said, with many new 2015 construction jobs related to oil and gas development and occurred in the off-season.

"The same volume of off-season oil and gas-related work isn't likely this winter," she said, since construction is complete on ConocoPhillips Alaska's CD5 drill site at the Colville River unit and on ExxonMobil's Point Thomson project.

With both public and private investment pinched, construction is expected to lose

900 jobs this year, she said, a drop well within the range of historical average declines.

State government was down 700 jobs in 2015, the largest drop of any reported group, and is forecast to lose another 1,000 jobs this year.

Schultz said private industry job losses in 2016 will mostly be confined to companies affected by low oil prices, but a loss of 300 jobs in the professional and business services sector includes many losses in firms which support the oil, mining and construction industries with geophysical work, engineering, architecture and other scientific and technical services.

Department of Labor economist Neal Fried said while Anchorage employment has grown nearly every year since 1988, "continuing low oil prices make another year of economic growth unlikely."

Anchorage's employment grew despite low oil prices, industry layoffs and fiscal deficits in the 1990s, he said, but things are different today, with a larger state budget deficit, a record-high oil industry workforce, recent muted economic growth and oil production less than half of what it was in 1999.

Fried said that because Anchorage is headquarters for the state's oil and gas industry, "any layoffs would spur broader economic fallout." (See page 1 story on planned BP layoffs.)

Other dampers for the Anchorage economy include state government job losses and low prices for other commodities such

as mining and fishing.

Fried said employment levels at Prudhoe Bay have grown every year in the past decade except 2008, generating growth in Anchorage headquarters' jobs. Last year Prudhoe employment reached a new high, almost 13,000.

"The oil industry has largely buoyed the economy in Anchorage over the past two or three years, but that isn't likely in 2016, and the industry is forecast to lose about 400 jobs in Anchorage, or 11.8 percent," he said.


National oil industry employment has already slipped to 2012 levels, Fried said, noting that Alaska's oil industry job losses

may be slower because "Alaska's industry is more project-based, so it only shows job loss once existing projects end."

He said Anchorage construction is likely to slow, with building permits down, completion of large utility and commercial building projects and economic uncertainty.

Losses in oil and construction will have an impact on professional and business services, particularly in the architectural and engineering services areas, 22 percent of the industry, and "strongly tied to oil and construction."

—KRISTEN NELSON



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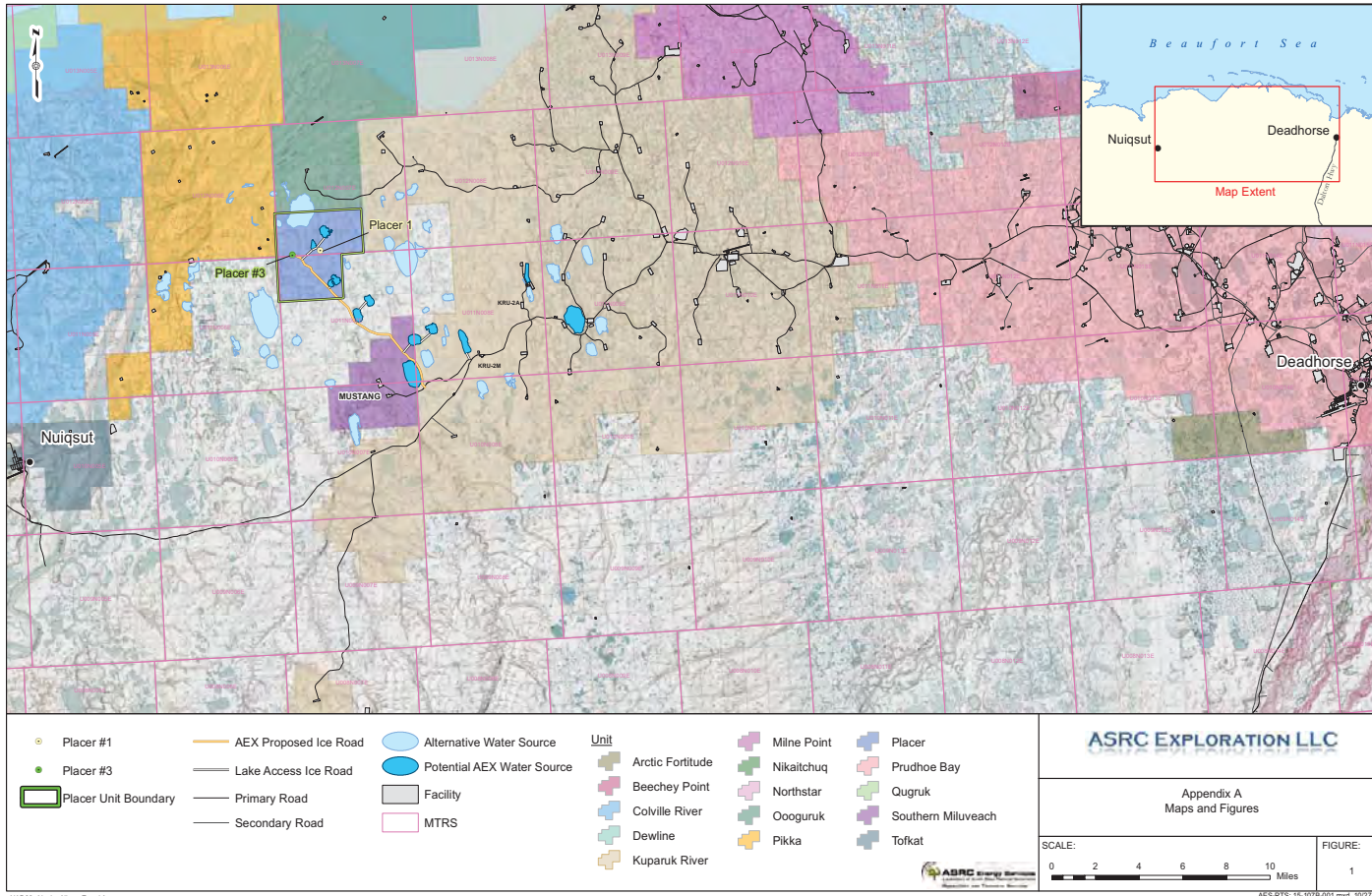


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PLACER PROGRAM

nance and storage throughout the duration of the project.

Drilling is expected to last approximately one month, followed by demobilization of the rig, well testing and temporary suspension of the well before complete demobilization.

The company is planning a 500 square foot well site of approximately 6 to 18 inches of ice and a second 150 square foot staging pad around the existing Placer No. 1 well. The company is planning a 35-foot wide ice road running approximately 9 miles from the Mustang Pad Access Road near Lake K210 to the new Placer No. 3 well site. The company is also planning a 1.3-mile spur road connecting Placer No. 3 to Placer No. 1.

That the program is heavily utilizing the Mustang road and pad fulfills one of the side goals of those infrastructure projects. The Alaska Industrial Development and Export Authority helped finance the road and pad to improve the economics of developing the Southern Miluveach unit as well as other prospects nearby, including the Placer unit.

Placer No. 3 will be the first exploration well operated by ASRC Exploration.

A decade in the making

ASRC Exploration is continuing an exploration effort started by ConocoPhillips Alaska Inc. more than a decade ago. ConocoPhillips drilled the Placer No. 1 and Placer No. 2 wells in 2004 in the narrow fairway between the Kuparuk River and Colville River units.

Today, the region is more crowded. The Placer unit borders the ConocoPhillips-operated Kuparuk River unit to the east, the Caelus Natural Resources Alaska-operated Ooguruk unit to the north and the Armstrong Oil & Gas-operated Pikka unit to the west. The Brooks Range Petroleum-operated Southern Miluveach unit is a short distance to the south.

The 6,900-foot Placer No. 3 well is intended to delineate earlier discoveries. The nearly vertical well will have slight displacement — approximately 60 feet — over its depth.

Although the program only covers a single well, the state expects ASRC Exploration to seek permission for additional exploration wells, if the current program is successful.

ASRC Exploration acquired the Placer prospect in a March 2006 lease sale. Arranging the exploration program took longer than expected. The company only acquired the Placer No. 1 well in June 2010, which pushed against the five-year term of the leases. An effort to form the Placer unit created conflict between the company and the state over how much of the area should be eligible for unitization. Those delays were compounded by unsuccessful efforts to negotiate a regional exploration program with other companies.

In November 2014, under a new administration, the state agreed to expand the Placer unit and required the company to post a \$2.5 million performance bond and meet a string related of work commitments culminating in drilling an exploration well by May 2016.

Placer No. 3 will be the first exploration well operated by ASRC Exploration. ●

Contact Eric Lidji
at ericlidji@mac.com

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DESTINATION: FAIRBANKS
ETA: 9:30 - 11:30 A.M.

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
6	6	7	8	9	10	11



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