Petroleum news

Celebrating 20 years: 1996-2016

page 3 Q&A: Dunleavy eager to hear pre-FEED results, future of Slope gas

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This week's Mining News

NORTH OF 60 MINING news

page 8 Goldcorp closes acquisition of Coffee gold mine project

www.MiningNewsNorth.com The weekly mining newspaper for Alaska and Canada's North Week of July 24, 2016

NEWS NUGGETS

Compiled by Shane Lasley

KISKA METALS CORP.

Kiska Metals and First Quantum Minerals have identified two porphyry targets at the Copper Joe project in Alaska – Morning Star and Evening Star. The most advanced of these prospects, Morning Star, lies to the southeast of (beyond) Frost Creek in the picture above.

Kiska, First Quantum to drill porphyry target at Copper Joe

Kiska Metals Corp. July 18 reported that an exploration team and equipment has been mobilized to begin drilling at Copper Joe, a copper-gold-molybdenum porphyry project located in the Alaska Range about 110 miles northwest of Anchorage. First Quantum Minerals has an option to earn up to an 80 percent interest in Copper Joe, and Kiska is currently operating the project. "We are very excited that FM (First Quantum Minerals) has decided to drill the Evening Star porphyry target at Copper Joe. It is a testament to the potential scale of this system," said Kiska Vice President of Exploration Mike Roberts. Mapping and geophysical work carried out by Kiska and First Quantum in 2015 defined two compelling porphyry targets – Evening Star and Morning Star. The Evening Star prospect encompasses a 2,500-meter-diameter area of intense phyllic alteration with an outer margin of significant D-style quartz-pyrite veining and a 1,000-meter-wide inner zone of significant banded quartz-molybdenite veining. A magnetotelluric geophysical survey shows that this inner zone is coincident with a discrete, 1,400-meter-wide low conductivity anomaly. Kiska and First Quantum drilled two holes in 2014 into what are now recognized as high-level breccia bodies and IP chargeability anomalies located marginal to the present target, and which contain no significant mineralization. Neither hole drilled in 2014 tested the above-mentioned conductivity low anomaly. The newly-appreciated Morning Star prospect occurs 2,200 meters to the southwest of Evening Star in a relatively low-lying area mostly covered by glacial till. The Morning Star is defined by narrow outcrop exposures in creek banks that contain chalcopyrite mineralization over a 400-meter-wide area. Previous grab samples collected from this area returned significant copper and gold values. Yet to be tested by geophysical surveys or drilling, Morning Star will be further investigated by geologists this year.

Ucore sets out to recover tech metals from the tailings of Alberta oil sands

Ucore Rare Metals Inc. July 18 said it has partnered with an undisclosed major Alberta oil sands producer to recover rare earth elements and other technology metals from

see NEWS NUGGETS page 8

PHOTO BY JUDY PATRICK, COURTESY OF KINROSS FORT KNOX

his molten fountain, poured on July 13, contains the seven-millionth-ounce of gold produced at Kinross Gold's Fort Knox Mine, located a few miles north of Fairbanks, Alaska.

PRODUCTION

7 million oz. of gold

In its 20th year of operation, Fort Knox Mine near Fairbanks is still pouring a million ounces of gold every two and a half years; more milestones likely

By SHANE LASLEY

Mining News

On July 13, a fountain of molten gold cascades into awaiting molds at the Fort Knox Mine, which is among the largest and lowest-cost gold operations owned by Kinross Gold Corp.

While gold pours such as this one are a regular occurrence at this roughly 1,100-ounce-per-day operation, somewhere in this particular glowing stream was the seven-millionth ounce of gold produced at the iconic mine, located a few miles north of Fairbanks, Alaska.

Fort Knox General Manager Eric Hill would like to see a second generation of workers at the Interior Alaska mine have the opportunity to witness more of these milestones.

"Fort Knox recently celebrated our 7 millionth ounce pour along with the many employees who have been with us since our very first pour in 1996," he told Mining News via email. "It is our honor to now have a second generation of employees joining us, and it is our hope to continue employing families for many years to come."

The seven-millionth-ounce of gold at Fort Knox was recovered during the mine's 20th year of production – both are milestones achieved well

see FORT KNOX page 9

The Fort Knox Mine is still pouring a million ounces of gold every two and a half years, with more milestones likely. Page 7.

Walker appoints French to AOGCC

HOLLIS FRENCH

Gov. Bill Walker has appointed Hollis French to the public seat on the Alaska Oil and Gas Conservation Commission.

Hollis, a former state senator from Anchorage, worked in the oil and gas industry before earning his law degree.

In making the appointment the governor said, "AOGCC plays an integral role in the state's natural resource development efforts, and Hollis' experience in Alaska's oil industry will make him a valuable addition to the commission."

The governor's office said that after moving to Alaska in 1978, French went to work on Shell Platform A, five miles off-

see FRENCH APPOINTMENT page 13

Walker names Hendrix O&G advisor

JOHN HENDRIX

Alaska Gov. Bill Walker said July 18 that he has named John Hendrix, formerly with Apache Alaska, as his chief oil and gas advisor, a newly created cabinet-level position.

"As Alaska navigates this new reality of low oil prices and production, the industry itself is grappling with ways to innovate amidst this economic downturn," Walker said in a statement. "I am pleased that John Hendrix will join my team to help steer the conversation between the state and the industry so the relationship is mutually beneficial. Given John's nearly four decades of oil and gas experience, his

see HENDRIX page 16

NATURAL GAS

Info squabble

State, producers square off over Prudhoe Bay natural gas marketing plans

By TIM BRADNER

For Petroleum News

CORRI FEIGE

State officials defended their requests for access to North Slope producers' confidential Prudhoe Bay gas marketing information in legislative hearings July 19 but the issue appears headed for a showdown, perhaps ultimately in the courts.

Corri Feige, director of the state Division of Oil and Gas, said the state has initiated a new policy of requesting oil and gas marketing information as a condition of annual approvals of Plans of Development.

The request was initiated at the request of "the administration," Feige said, a reference to the governor's office and the Department of Law.

A Plan of Development, or POD, is a kind of operating permit for oil and gas fields on state lands. The procedure is routine and is used as way for the division to be updated on field operators' activities.

This initiative, however, appears mainly aimed at obtaining information on the undeveloped 26 trillion cubic feet of Prudhoe gas

see INFO SQUABBLE page 16

EXPLORATION & PRODUCTION

Nikaitchuq wells in '17

Eni suspended drilling in late 2015 but expects a busy 2017 at offshore unit

By ERIC LIDJI

For Petroleum News

Expecting (or at least hoping for) an improved economic climate, Eni Petroleum plans to resume drilling activities at the nearshore Nikaitchuq unit in the first quarter of 2017.

The local subsidiary of the Italian major suspended activities at its North Slope unit and reduced its Alaska workforce by 10 percent in 2015 "due to the current oil price environment," but expects to restart activities next year "with hopes of a more favorable oil prices environment," the company told state officials in a recent plan of development.

As envisioned, the 2017 program would include six wells from the Spy Island drill site: one producer (SP03-FN9), two injectors (SI02-SE5 and SI06-FN8) and four laterals (SP33-W3L1, SP30-W1L1, SP16- FN3L1 and SP27-N1L1) added to existing wells. A future phase of the project could convert as many as eight more wells to multilaterals.

Eni is also considering a Nikaitchuq North project, although the evaluation is currently in the data collection phase and could be far from any decision to sanction development.

For the remainder of this year, Eni is planning a 36-hour summer turnaround at its processing facilities and limited rig workover activity at two water

see NIKAITCHUQ WELLS page 15

NATURAL GAS

Taking the lead

From process to project: Walker wants to see market decision on Alaska LNG

By KRISTEN NELSON

Petroleum News

GOV. BILL WALKER

Short on details, Gov. Bill Walker's July 18 update on the state's Alaska LNG plans to the Anchorage Chamber of Commerce was long on vision, beginning with a reminder that moving forward with Alaska liquefied natural gas was one of the driving forces in his decision to run for governor in 2014. Getting Alaska North Slope natural gas to market has been on Walker's agenda since completion of the trans-Alaska oil pipeline in 1977.

In reviewing past efforts to commercialize ANS natural gas Walker said the state has a long history of processes, but none of them turned into projects. He said the state is in a process now, one that he inherited and is happy to continue with, referring to AKLNG, a joint venture of the state, BP, ConocoPhillips and ExxonMobil, with the state's 25 percent share based on taking its royalty share and production tax as gas molecules.

What past processes have in common, Walker said, is that they didn't result in a project, just a failed process that didn't get the Alaska project onto the marquee for the market to look at.

The governor said that's why, given the opportunity by its partners in AKLNG to take a different role,

see ALASKA LNG page 15

contents

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● GOVERNMENT

Educator engaged on resource issues

Wasilla Republican Dunleavy says he's eager to hear pre-FEED results, what may or may not lie ahead for marketing North Slope gas

By STEVE QUINN

For Petroleum News

Sen. Mike Dunleavy may not sit on a resources or energy committee but the member of Senate Finance and the Education Committee chair remains focused on resource issues enough that he often finds himself with a seat on a joint panel of resources committees. He stays the entire eight hours, asks questions and wants to know more. Dunleavy recently sat on the joint resources committee hearing for the AKLNG quarterly update. The next update could feature the closeout of the project's front end engineering and design phase. Dunleavy, a Wasilla Republican, spoke to Petroleum News about his concerns over the project and its prospects.

Petroleum News: Most of your focus since coming into office has been either education or finance, but also kept a close eye on resource development. You've attended hearings. What drives that interest when you've already got a pretty good work load on Finance?

Dunleavy: Alaska is a resource state. You can go back in history and see that was the United States' reason for purchasing Alaska: its resources and its potential. There were some geopolitical issues there, too: there was a check on Great Britain which would have expanded west into Alaska. But you're right. Education has been my career. I've been a government person my entire life. I've been a recipient of government revenue.

Where you get that revenue in Alaska is the resources, mainly oil. So if you have a healthy economy based on resource development, resource extraction, that means more revenue for the state. That's a huge reason for having that interest.

Petroleum News: OK, let's go back a few weeks to the AKLNG quarterly update. You were invited to sit on that panel, as were a few others not on either resource committee. Some accept those seats. Some don't. What made you accept it?

Dunleavy: Partly the same reason, but also, we are looking at potentially one of the largest projects ever attempted in the world, certainly in Alaska. It's one of the most expensive and one of the most risky. I mean there is potential for some huge payout if everything goes well and there is potential it could be the mother of all boondoggles if it doesn't. As you know, sitting on Finance, we are the ones who will appropriate all the money if this project has legs.

Petroleum News: With that in mind, in a broad sense, what were some of your takeaways from the meeting?

Dunleavy: Well, well we've got a new guy at the helm, Keith Meyer, who was recently brought on board by AGDC. But my takeaway is really the takeaway I've had for the last year or so is that I'm skeptical. I know some people want everyone to be a cheerleader for a project such as this. I certainly would love to be, but I'm also charged with looking out for Alaska and Alaskans. You have to be able to ask as many questions as possible and get those questions answered so that you feel comfortable moving through the different stages of a project like this.

SEN. MIKE DUNLEAVY

I'm skeptical. I have a lot of questions. I do have concerns. As I mentioned during that meeting right now I'm less optimistic for a whole host of reasons that the project will meet its timelines and that the project will move forward as I believe some envision. There are a lot of different views I think that people have on how this project should move forward and what it should look like.

There were questions that were posed to Keith Meyer, like what's the plan? Are we still going stick with working as a partner, the 25 percent quadrant with the other three partners? Initially I thought he said yes that's the plan. But then the subsequent discussion seems to indicate the administration is preparing for a departure from that route.

That again is going to mean more time — potentially — and more money — potentially — and we're not sure how that's going to turn out. We are going to be asked to appropriate more money. Last fall we had a quarterly update in the (Mat-Su) Valley, which I attended. At that point one of the issues that stuck out was well we went from what we thought was going to be a 42-inch line to a 48-inch line; therefore, the partners had to slow down and study the 48-inch line concept and see if that was a benefit to the project.

Well, according to Steve Butt that cost somewhere in the neighborhood of $20 million in time. I understand a project of this size that if a partner wants something looked at, the group is probably going to agree to that because they want to make sure everyone is comfortable moving forward. The point is the project spent $20 million and the research on that came back that it wasn't feasible.

So I have concerns. If you were to ask me right now would I vote to appropriate whatever money it took to "make this project" work I would have a hard time doing it. I voted no during the special session in the fall in large part to send the administration a message: you don't seem to have your act together; there are musical chairs; people are moving in and out constantly; there's people moving in and out constantly; there is turnover; there are differing ideas; there are new ideas.

To me, they are either somewhat confused or they are still figuring out where it is they want to go. Again that costs money. You've got to get this right. It's not like it's an oil project. Gas is a little different. Some would say it's a lot different. We've got to be very careful. Right now I'm not very confident this project is going to move forward based on what we heard in the meeting.

Petroleum News: You also had concerns over turnover, which you alluded to earlier. Talk about that.

Dunleavy: Well, when you have turnover, you have to bring in new people and they have to come up to speed and learn what's going on. Why is there turnover? Is that because there are individuals who may not agree with the direction the administration wants to go? We lost Marty Rutherford, she's gone. Mark Myers, he's gone. Rigdon Boykin, he's gone. Much of the ADGC board has turned over. So I don't know why these folks are leaving. I don't want to speculate. When you're in politics, there's always rumor.

But certainly with Marty Rutherford, something is up. Right? There was an editorial written by her and Pat Galvin questioning the governor's move on the tax credits, not paying the obligation on them.

What I'm seeing is people moving in and out and I'm not 100 percent sure why and that adds to the doubt and concern about appropriating large sums of money.

Petroleum News: What does it tell you when Pat Galvin and Marty Rutherford suddenly weigh in like this?

Dunleavy: I have to believe it tells me that they have concerns regarding the direction of the administration when it comes to the gas and, to a degree, oil. They may not necessarily agree where this administration wants to take the state of Alaska. The average American does a lot of tremendous amount of diligence in many cases just to buy a toaster. They will go consumer reports; they'll go online; they'll shop; they'll talk to their neighbors; they'll look at it. They'll get all the possible information they can get. They don't want to get a lemon. They don't want to waste money. They want the thing to function properly. The want a thing to do what the manufacturers say it will do.

If you're dealing with a $65 billion potential project, everybody should be asking questions. Everybody should be skeptical. The stuff should be laid out. We're approaching a major gate with pre-FEED. I think I picked up from Steve Butt talking on behalf of the producers — the majors — when I asked how do you see this going, I believe he basically said it doesn't appear so under these conditions. I believe he was referring to market conditions. You've got all of this going on, so you would have to close your eyes and pretend you didn't hear any of this to believe everything is perfect.

It doesn't sound like it is. I think we need to be asking more questions. I look forward to the results of the pre-FEED study to see if from the producers' point of view this has legs. It appears the administration is gearing up for at least one producer or others not wanting to move forward for reasons hopefully they will state. It appears the administration is gearing up to potentially go it alone. If that's the case, what do we know that they don't and so I think we need to be very skeptical, very concerned.

see **DUNLEAVY Q&A** *page 13*

● NATURAL GAS

Consultant questions state lead on AKLNG

Report by enalytica for Legislature fails to find advantages in state taking over AKLNG, doesn't think investors will see merit

By TIM BRADNER
For Petroleum News

An oil and gas consultant to the state Legislature said it's not uncommon for major liquefied natural gas project sponsors to realign their ownerships, as Gov. Bill Walker now proposes with the Alaska LNG Project, but that the state of Alaska faces a big credibility gap in attempting to take over the project.

The governor announced his desire for the state to take the lead on Alaska LNG July 18 in a speech to the Anchorage Chamber of Commerce, although the governor's intent has been known for several months.

Also, the state-owned Alaska Gasline Development Corp., or AGDC, has advanced a concept plan to the industry partners in Alaska LNG for the state to lead project work past preliminary engineering that is to be completed by the end of the year.

Tsafos could find only one project now underway with a structure similar to that being proposed by the state, in Cameroon

In an analysis given the Legislature earlier in July Nikos Tsafos, of the consulting firm enalytica, said the large Alaska LNG Project has, "reached a roadblock as a (industry) co-venturer stated they are not prepared to proceed to the next phase of development (the front-end engineering and design, or FEED, phase)."

"This is not surprising or unprecedented. Many companies are re-evaluating their investment plans given the drop in oil and gas prices," Tsafos wrote in his report to the Legislature.

"Nor is it uncommon for large projects to see changes in ownership and structure as they progress.

State options

"In response, the state has outlined two options, either it can take the lead and seek ways of reducing the cost, or delay the FEED and potentially delay the project," Tsafos wrote.

However, if the state now proposes to lead the project, and not delay it, it must demonstrate two things to succeed. "The first is that the state can execute. The state will have to set up and pay for an organization that replaced the current (industry) project team, a team that has at times employed 135-odd people with hundreds of years of (combined) experience," Tsafos wrote.

There are examples of firms with little or no experience developing LNG projects, relying largely on contractors, "yet the organizational challenges should be not underestimated," he wrote.

Tsafos cited the example of Cheniere Energy, which was headed by Keith Meyer, current president of the state's Alaska Gasline Development Corp.

"Cheniere Energy had more or less 200 employees in January 2010 before it proposed an LNG export project at Sabine Pass. In January 2016, with two LNG projects under construction and development, it had 888 full-time employees," Tsafos wrote.

Viability of commercial structure

Secondly, the state will have to demonstrate to potential LNG customers the viability of its proposed commercial structure for the project. "Most LNG projects are driven and majority-owned by the resource owners, with buyers and other investors holding smaller stakes," Tsafos wrote.

He acknowledged some exceptions where resource owners do not invest in the "midstream," typically because involvement in LNG projects exceeds producers' risk profiles. Tsafos could find only one project now underway with a structure similar to that being proposed by the state, in Cameroon, where a third party is building a floating LNG facility to produce about 1.2 million tons of LNG yearly, about 7 percent of that planned for Alaska LNG.

"Elsewhere in the world midstream-driven projects have generally failed," Tsafos wrote.

Initiatives such as those proposed by the state (Tsafos calls them "infrastructure-driven") make sense when commercial viability exists and buyers and sellers favor such a structure as a way to avoid committing their own capital and a third party steps in to facilitate the project.

May diminish chances of success

Overall, "it is not clear that the state's approach enhances the chances of success. If anything, it diminishes them," Tsafos wrote. Under a state-led project Alaska would be responsible for 100 percent of costs instead of 25 percent and the cost of failure would lie with the state rather than shared with the co-venturers.

The state's exposure could be $1 billion to $2 billion, "to pursue a project that, in the end, fails to advance," beyond the final engineering, he wrote.

"It is certainly possible for the state to find equity investors-buyers, other producers and so on. In general, however, buyers want small shares in LNG projects, often only a few percentage points, and given the size of Alaska LNG the state would need several buyers in order to off-load a meaningful share of the equity," Tsafos wrote.

"However, it is not clear that the state would have accomplished much. These are sophisticated investors who require adequate returns to compensate for the risk they are taking. Would these companies be willing to invest for sub-par returns in a project that the world's largest companies deemed to be too risky and/or uneconomic?"

In summary, Tsafos wrote that instead of waiting for market conditions to improve, "the state seems to have opted for taking the lead and reshaping the project's structure, and without much evidence that this is necessary to resolve the underlying problems facing Alaska LNG."

"In doing so, the state has made project success less likely, and it has taken on considerably more risk, on the assumption that it will be able to offload that risk to new players who have yet to be either identified or shown to be interested in taking on high risk for low return," Tsafos wrote. ●

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● LAND & LEASING

Arctic Fortitude leases expire

Appeal ruling concludes a decade of legal and regulatory disputes over North Slope unit; Armstrong and Buccaneer make deals

By ERIC LIDJI

For Petroleum News

The three leases in the former Arctic Fortitude unit expired in late June.

The expiration of the leases — ADL 389177, ADL 389178 and ADL 389179 — is retroactive to May 2012, when the state officially terminated the North Slope unit following four years of legal disputes from the state and operator Alaskan Crude Corp.

The San Antonio-based independent challenged the ruling, which led to a series of appeals. Those appeals were recently resolved, allowing the leases to be resolved, too.

The Alaska Department of Natural Resources terminated the unit after Alaskan Crude failed to meet work commitments. The company accused state agencies of setting up “roadblocks” that had prevented the company from testing an old well on the leases.

A group of four 70 & 148 LLC leases expired at the end of their primary term at the end of May. The leases — ADL 391408, ADL 391409, ADL 391410 and ADL 391411 — are part of the large package of North Slope leases the Armstrong subsidiary has been exploring with Repsol E&P USA Inc. and GMT Exploration Co. Inc. The leases were west of the White Hills region and north of the foothills of the Brooks Range.

The state approved a request from 70 & 148 to transfer a 5.25 percent working interest and 4.2 percent royalty interest in approximately 74 leases to partner GMT Exploration, including the leases included in the Pikka unit in the Colville River Delta region.

The state also issued 10 leases on the North Slope to Armstrong Energy LLC. The company acquired the leases in a November 2015 lease sale on the North Slope.

The Alaska Department of Natural Resources is considering a request from Buccaneer Royalties LLC to transfer a 1.75 percent royalty interest in ADL 17595 and a 3.5 percent royalty interest in ADL 391904, ADL 391609 and ADL 391611 to WR Production LLC, and a separate request from WR Production to transfer a 3.5 percent royalty interest in ADL 391904 to Peregrine Energy LLC. The leases are part of the Kenai Loop field.

The state is also considering a request from the liquidating trust for Buccaneer Resources Ltd. to transfer a 0.875 percent royalty interest in three leases — ADL 18790, ADL 391900 and ADL 384403 — to BlueCrest Energy Inc. The leases are part of the Cosmopolitan unit, which operator BlueCrest Energy recently brought into production.

Also in Cook Inlet, the state is considering a request from the Double D Family Trust to transfer 0.75 percent royalty interest for 24 Kitchen Lights unit leases to Kay Rieck. ●

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

● NATURAL GAS

British Columbia LNG gets further jolts

Final decision delayed on Shell-operated project due to rising cost, drop in LNG prices; LNG Canada will continue site preparation

By GARY PARK

For Petroleum News

The odds keep piling up against British Columbia’s dreams of ever becoming a global LNG player, with the Royal Dutch Shell-operated project delaying a final decision on the venture because of turmoil in energy markets.

That was accompanied by a clear warning from a retired industry executive that the crowded field of contenders will need to shrink before any proposal enters the commercial phase.

Shell, which owns a 50 percent stake in the LNG Canada consortium, and its partners Korea Gas, Mitsubishi and PetroChina, are unable to match the drop in natural gas prices around the world with project capital costs that are now estimated at C$40 billion, Chief Executive Officer Andy Caditz told a conference call.

“In the coming months, LNG Canada will continue key site preparation activities and work with its joint venture participants, partners, stakeholders and First Nations to find a revised path forward,” he said.

But no attempt has been made to set a deadline for a sanctioning decision, although the consortium is adamant that the project to export 24 million metric tons a year of LNG to Asia “has been delayed ... not cancelled,” Caditz said.

The clouds started to build over LNG Canada in June when Shell said it was backing away from any thought of growing its LNG business after acquiring British gas giant BG Group in February.

In 2014, BG also announced an indefinitely postponement of its own plans for Prince Rupert LNG to initially export 14 million metric tons a year, eventually growing to 21.6 million metric tons a year.

Separately, Doug Bloom, formerly president of Canadian LNG operations with Spectra Energy, whose pipelines carry 55 percent of British Columbia’s natural gas volumes, said it will take until the mid-2020s before a window opens on “big new tranches of supply.”

For now, the challenge facing the industry is to find ways to “really drive down costs,” while LNG proponents wait until global buyers absorb a torrent of new exports hitting markets, which has depressed spot prices far below the level needed to support project construction in Canada.

see **LNG JOLTS** *page 6*

GOVERNMENT

AOGCC sets hearing on regulations update

The Alaska Oil and Gas Conservation Commission has set a hearing for Sept. 27 on proposed updates to its regulations.

Proposed regulation changes are available on the commission’s website at www.aogcc.alaska.gov.

Questions about the proposed action must be received at least 10 days before the end of the public comment period at 4:30 p.m. Sept. 27. The commission said it would aggregate its response to substantially similar questions; questions and responses will be made available on the Alaska Online Public Notice System and on the commission’s website.

The proposed changes are in response to the commission’s periodic regulation reviews, and in general aim to update and clarify requirements, improve understanding and streamline implementation of regulations.

The proposed changes are in response to the commission’s periodic regulation reviews, and in general aim to update and clarify requirements, improve understanding and streamline implementation of regulations.

Comments on proposed regulation changes, including potential costs to private persons of complying, may be submitted in writing to the commission at 333 W 7th Ave., Anchorage, AK 99501, by facsimile at 907-276-7542 or by email to jody.colombie@alaska.gov. The deadline for comments is 4:30 p.m. Sept. 27.

The commission will also accept oral or written comments at the Sept. 27 hearing, which will be at 9 a.m. at the commission’s Anchorage offices at 333 W. 7th Avenue.

The commission’s regulations are in Title 20, Chapter 25 of the Alaska Administrative Code.

—PETROLEUM NEWS

LAND & LEASING

Draft EIS for possible inlet sale out

The federal Bureau of Ocean Energy Management has issued a draft environmental impact statement for a possible 2017 Cook Inlet oil and gas lease sale.

This is another step in a BOEM decision process on whether to hold a sale in federal waters in Cook Inlet.

A possible Cook Inlet sale is part of the Department of the Interior's current 2012-17 five-year oil and gas lease sale schedule. The other Alaska sales on the schedule, for the Beaufort and Chukchi seas, were cancelled in 2015.

Cook Inlet was listed as a special interest sale, one for which BOEM gauges industry interest prior to proceeding. In March 2012 the agency issued a request for interest for Cook Inlet, and based on responses to that request decided to proceed with the pre-sale process for the sale, which was initially listed as a potential sale for 2016.

The agency said responses it received identified areas close to existing leases in state waters, avoiding "nearly all of the areas designated as critical habitat for the beluga whale and the northern sea otter ... the critical habitat for the Stellar sea lion and excludes much of the subsistence-use area for the Native villages of Nanwalek, Port Graham and Seldovia, as requested by the Native villages."

A notice of intent to prepare an EIS was published in October 2014 and BOEM hosted scoping meetings in communities around Cook Inlet.

BOEM said it would publish a notice of availability of the draft EIS in the Federal Register July 22, which opens a 45-day public comment period closing Sept. 6.

Public meetings, all from 5-8 p.m., are scheduled for the Dena'ina Center in Anchorage on Aug. 15, the Alaska Maritime National Wildlife Refuge Island and Ocean Visitor Center in Homer on Aug. 17 and the Alaska National Guard Federal Armory in Kenai/Soldotna on Aug. 19.

The draft EIS and directions for public comments online are available at www.boem.gov/ak244/.

—PETROLEUM NEWS

● LAND & LEASING

Conoco acquires Tofkat prospect

State restricts leases because of earlier inability to explore in region

By ERIC LIDJI
For Petroleum News

Way back in 2002, the Alaska Department of Natural Resources added nearly 60,000 acres to the Colville River unit to incorporate four nearby prospects: Nanuq, Fiord, Oberon and Titania. While operator ConocoPhillips eventually developed Nanuq and Fiord as satellite fields, the company dropped the Oberon acreage after a disappointing exploration well and the Titania acreage after missing a similar work commitment.

The Alaska Venture Capital Group LLC later acquired the leases of the Titania prospect, created a joint venture partnership, conducted an exploration program and formed the Tofkat unit. But that work never yielded a development program at the oil prospect.

Now ConocoPhillips has once again acquired a piece of the Titania/Tofkat prospect. But the state is limiting the acreage the company can own for the time being, in part because of its previous inability to explore the prospect the first time around. While the Tofkat unit working interest owners asked the state to transfer 100 percent interest in all 22 leases at the unit to ConocoPhillips, the state only approved the transfer of seven leases.

Part 1: Titania

Phillips Alaska Inc. began discussing the Titania prospect in the summer of 2002, almost two years after bringing the Alpine field at the Colville River unit into production.

From the beginning, Phillips had planned a step-out strategy for the Colville River unit, where carefully timing the development of midsize satellites would

> *The Tofkat unit expired at the end of March 2016 — all units expire after five years of persistent inactivity, according to state regulations — and was terminated in early April.*

allow the company to maximize its infrastructure and processing equipment. When the company asked to expand the unit, in August 2002, the proposed acreage included two proven satellite fields (Nanuq and Fiord) and two promising exploration prospects (Oberon and Titania).

At the time, the best information about Oberon and Titania came from a 3-D seismic survey conducted in the winter of 2000 and 2001 as part of Nanuq exploration work.

When Phillips requested the expansion, it proposed several work commitments.

The company agreed to drill one Oberon exploration well by June 2003 and a second by June 2004. And it also agreed to provide a written commitment for a Titania exploration well by June 2003 and to actually drill the well by June 2004, with other commitments for delineation wells and forming a participating area to follow. In both cases, Phillips agreed to lose portions of the expansion acreage if it failed to meet its commitments.

By fall, after a merger, ConocoPhillips Alaska Inc. was proposing Titania as one of several North Slope exploration wells being permitted for the upcoming winter drilling season. The other prospects included Oberon, as well as the nearby Placer prospect.

see TOFKAT page 14

continued from page 5

LNG JOLTS

Global LNG trade moved a record 244.8 million metric tons last year, while another 142 million metric tons of capacity is already under construction, according to the International Gas Union.

Bloom said it is now more likely that the most viable of British Columbia's proposals will face delays of two to four years before companies unlock their spending.

During that time projects "may look for other ways to share the burden of erecting enormous plants or consolidating or combining," he suggested.

David Keane, president of the British Columbia LNG Alliance, agreed that plans must be built on a "strong business case and meet stringent economic tests before they can proceed," adding that the alliance's member companies are actively working to ensure projects are "properly sited, designed and constructed."

The next crucial test for the industry will be the Canadian government's announcement in early October of its ruling on Pacific NorthWest LNG, which is led by Malaysia's Petronas. ●

Contact Gary Park through publisher@petroleumnews.com

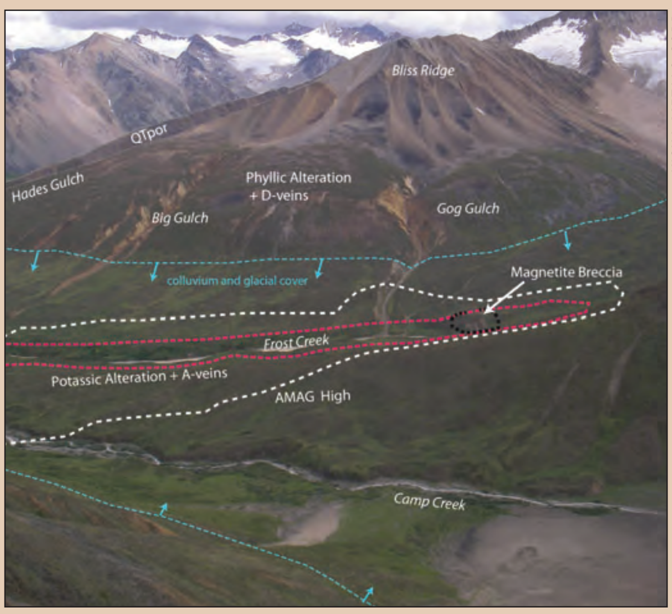
NORTH OF 60 MINING news

page 8 Goldcorp closes acquisition of Coffee gold mine project

www.MiningNewsNorth.com *The weekly mining newspaper for Alaska and Canada's North* **Week of July 24, 2016**

NEWS NUGGETS

Compiled by Shane Lasley



KISKA METALS CORP.

Kiska Metals and First Quantum Minerals have identified two porphyry targets at the Copper Joe project in Alaska – Morning Star and Evening Star. The most advanced of these prospects, Morning Star, lies to the southeast of (beyond) Frost Creek in the picture above.

Kiska, First Quantum to drill porphyry target at Copper Joe

Kiska Metals Corp. July 18 reported that an exploration team and equipment has been mobilized to begin drilling at Copper Joe, a copper-gold-molybdenum porphyry project located in the Alaska Range about 110 miles northwest of Anchorage. First Quantum Minerals has an option to earn up to an 80 percent interest in Copper Joe, and Kiska is currently operating the project. "We are very excited that FM (First Quantum Minerals) has decided to drill the Evening Star porphyry target at Copper Joe. It is a testament to the potential scale of this system," said Kiska Vice President of Exploration Mike Roberts. Mapping and geophysical work carried out by Kiska and First Quantum in 2015 defined two compelling porphyry targets – Evening Star and Morning Star. The Evening Star prospect encompasses a 2,500-meter-diameter area of intense phyllic alteration with an outer margin of significant D-style quartz-pyrite veining and a 1,000-meter-wide inner zone of significant banded quartz-molybdenite veining. A magnetotelluric geophysical survey shows that this inner zone is coincident with a discrete, 1,400-meter-wide low conductivity anomaly. Kiska and First Quantum drilled two holes in 2014 into what are now recognized as high-level breccia bodies and IP chargeability anomalies located marginal to the present target, and which contain no significant mineralization. Neither hole drilled in 2014 tested the above-mentioned conductivity low anomaly. The newly-appreciated Morning Star prospect occurs 2,200 meters to the southwest of Evening Star in a relatively low-lying area mostly covered by glacial till. The Morning Star is defined by narrow outcrop exposures in creek banks that contain chalcopyrite mineralization over a 400-meter-wide area. Previous grab samples collected from this area returned significant copper and gold values. Yet to be tested by geophysical surveys or drilling, Morning Star will be further investigated by geologists this year.

Ucore sets out to recover tech metals from the tailings of Alberta oil sands

Ucore Rare Metals Inc. July 18 said it has partnered with an undisclosed major Alberta oil sands producer to recover rare earth elements and other technology metals from

see **NEWS NUGGETS** *page 8*

PHOTO BY JUDY PATRICK, COURTESY OF KINROSS FORT KNOX

This molten fountain, poured on July 13, contains the seven-millionth-ounce of gold produced at Kinross Gold's Fort Knox Mine, located a few miles north of Fairbanks, Alaska.

PRODUCTION

7 million oz. of gold

In its 20th year of operation, Fort Knox Mine near Fairbanks is still pouring a million ounces of gold every two and a half years; more milestones likely

By SHANE LASLEY
Mining News

On July 13, a fountain of molten gold cascades into awaiting molds at the Fort Knox Mine, which is among the largest and lowest-cost gold operations owned by Kinross Gold Corp.

While gold pours such as this one are a regular occurrence at this roughly 1,100-ounce-per-day operation, somewhere in this particular glowing stream was the seven-millionth ounce of gold produced at the iconic mine, located a few miles north of Fairbanks, Alaska.

Fort Knox General Manager Eric Hill would like to see a second generation of workers at the Interior Alaska mine have the opportunity to witness more of these milestones.

"Fort Knox recently celebrated our 7 millionth ounce pour along with the many employees who have been with us since our very first pour in 1996," he told Mining News via email. "It is our honor to now have a second generation of employees joining us, and it is our hope to continue employing families for many years to come."

The seven-millionth-ounce of gold at Fort Knox was recovered during the mine's 20th year of production – both are milestones achieved well

see **FORT KNOX** *page 9*

NORTHERN NEIGHBORS

Compiled by Shane Lasley

KAMINAK GOLD CORP.

In the six years since this discovery hole was drilled at the Coffee gold project, Kaminak Gold outlined a deposit that would support an 184,000-ounces-per-year mine over an initial 10-year span and sold the project to Goldcorp in an all-shares deal valued at roughly half-a-billion Canadian dollars.

Goldcorp now owns Kaminak, Coffee gold project

Goldcorp Inc. July 20 said it has completed the acquisition of Kaminak Gold Corp. in an all-shares deal valued at roughly C$401 million when you consider the value of the Goldcorp shares on the day of the closing. As a result of the purchase, Goldcorp now has full ownership of the Coffee Gold project in Yukon Territory. According to a feasibility study published by Kaminak at the beginning of the year, the mine proposed for Coffee is expected to produce 184,000 ounces of gold per year over an initial 10-year mine-life. At a gold price of US$1,150 per ounce and an exchange rate of C$1.00 to US78 cents, the Coffee base case estimate generates an after-tax net present value at a five percent discount rate of C$455 million and an internal rate of return of 37 percent. "The acquisition of Kaminak and its Coffee project in the Yukon is consistent with our strategy of populating our asset pipeline with opportunities that are accretive to net asset value per share," said Goldcorp President and CEO David Garofalo. "With a large, geologically prospective land package in a mining friendly jurisdiction, the Coffee project has the potential to grow into a camp to deliver long-term significant sustainable

see **NORTHERN NEIGHBORS** *page 10*

Petroleum news

North of 60 Mining News is a weekly supplement of the weekly newspaper, Petroleum News.

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UCORE RARE METALS INC.

The SuperLig One plant uses resins that grab ions based on a number of traits. By creating resins customized to the product, Ucore and IBC Advanced Technologies can adapt the system to recover specialty metals from various sources.

continued from page 7

NEWS NUGGETS

Alberta oil sands operations. "This high profile project truly shows the versatility of SuperLig across a diverse range of feed-stock alternatives, including not just in-situ mining facilities, but process-flow and tailings management facilities as well" said Ucore President and CEO Jim McKenzie. "The substantial production volumes available through oil sands production, in combination with the extraordinary selectivity of SuperLig, offers a compelling large-scale industrial opportunity for the SuperLig platform." The partnership has obtained a federal grant through Canada's Industrial Research Assistance Program. The C$220,000 grant will reimburse costs for expenditures related to the creation of a low organic and carbon content leach solution from the oil sands process flow, and the separation of a selection of high-value metals using SuperLig. "Given the competitive state of world oil markets, liberating high-value commodities such as REE, titanium, scandium, niobium, vanadium, tantalum, and a host of other tech metals, offers the potential to change the economics of the oil sands process," added McKenzie. Under the terms of the partnership, Ucore and its Alberta oil partner will equally absorb the net costs of the project, after grant contributions. The separation of metals from the oil sands derived leach solution will take place at IBC Advanced Technologies' facility in Utah, which is where the SuperLig-One plant is in the final stage of separating critical rare earth elements from a pregnant leach solution derived from Ucore's Bokan Mountain project in Southeast Alaska.

Teck, GCI to bring high-speed internet to Red Dog area

GCI and Teck Red Dog Operations July 14 said they have reached an agreement that will bring high-speed broadband internet service to the Red Dog Mine and the community of Noatak in Northwest Alaska. GCI is already Alaska's largest telecommunications company, and this partnership is part of its broader strategy to connect Arctic communities to high-speed internet. "Red Dog is a world-class mining operation that requires world-class internet service, and this partnership is a win-win for GCI, Red Dog and the residents of Noatak," said Martin Cary, senior vice president of business services, GCI. In June, GCI announced plans to expand its Terrestrial for Every Rural Region in Alaska network to include 10 new communities in the Northwest Arctic Borough and Norton Sound region. This expansion will result in high-speed, data rich broadband service for schools and clinics in Buckland, Kiana, Noorvik, Selawik, Koyuk, Elim, Golovin, White Mountain, Stebbins and St. Michael. "Our team understands the challenges of building infrastructure and providing service to more than 100 miles north of the Arctic Circle. In addition to the 72 rural communities already served by TERRA, GCI is expanding TERRA to 10 more rural communities in 2016. When Red Dog and Noatak are complete, GCI's TERRA network will deliver high-speed internet to a total of 84 rural Alaska locations," Cary added. Once the network expansion is complete, which is targeted for 2017, Red Dog employees and Noatak residents will be able to stream rich media and stay easily connected with family and friends. The network also will advance the performance of online business, health, education and other services for both Noatak and Red Dog. "This partnership will help connect many more Northwest Arctic residents with important online services, while also providing business benefits to Teck Red Dog Operations and mine employees," said Henri Letient, General Manager, Teck Red Dog Operations. "Bringing high speed internet connection to Noatak is a strong example of the local benefits generated by Red Dog, and of our commitment to helping support local residents and communities," he added. ●

continued from page 7

FORT KNOX

beyond the original mine plan.

"We are very, very proud of those two achievements and most of all for being here a lot longer than we ever thought we would be in the beginning," Kinross COO Warwick Morley-Jepson said during a keynote address at the Alaska Miners Association's spring convention in Fairbanks.

Calling Fort Knox "one of the best run mines in the Kinross portfolio," the company executive hinted that more milestone celebrations may be in Fort Knox's future.

Golden years

In its 20th year of production, Fort Knox Mine could be considered past its prime. The roughly 400,000 ounces of gold being poured each year belies the dwindling ore grades of the aging mine.

The continued strong gold output is the result of the Walter Creek heap leach facility. Now, lower grade material that would have either been run through the mill or rejected as waste can be stacked on the heap leach pad, making space for higher grade ore in the mill.

Since its completion in 2009, the Walter Creek heap leach facility has produced roughly 750,000 oz. of gold and currently accounts for nearly 40 percent of the overall gold production at Fort Knox.

The Interior Alaska mine recovered 401,553 oz. of gold in 2015 and started this year at an even faster pace – recovering 87,800 oz. of the yellow metal through the first three months of the year. While seeming to not set a 400,000-oz.-per-year pace, the output is roughly six percent higher than the 82,673 oz. recovered during the same period a year earlier.

Gold production during the winter months is typically lower at Fort Knox due to the chilling effects of Fairbanks area weather on recoveries from the heap leach facility, an increasingly important portion of the production profile at Fort Knox.

According to a 2015 technical report, the mill portion of the operation would be phased out in 2017 and the last new ore would be stacked on the heap leach pad in 2019. Indications, however, are that a couple of years have been added to the life of the mine since that assessment.

Bartley Kleven, environmental manager at Fort Knox, told a crowd at the spring AMA gathering that the mill is currently scheduled to continue operations until about 2019.

"The current life-of-mine is out to 2020. Once we are done mining, we will have some subsequent years of heap leaching," Hill added.

Once mining ends, Fort Knox will continue recovering gold through ongoing heap-leach processing as long as the value of the gold recovered outweighs the cost of operating the pad. According to the technical report, this balance could be maintained until about 2027. Additional ore stacked on the pad and a continued strong gold price seems likely to push this final phase of Fort Knox out farther.

Fort Knox ended 2015 with 147.32 million metric tons of proven and probable reserves averaging 0.4 g/t (2.02 million oz.) gold.

Many years to come

Fort Knox General Manager Hill said Kinross continues to look for additional sources of gold that could push the mine's expiration date even farther into the future.

"Kinross' exploration is focused on brownfield projects around existing operations and we continue to look for ways to further extend our operation," he explained. "We believe Alaska is an attractive mining jurisdiction and a good place to do business – we have successfully operated Fort Knox for 20 years, and the mine is now 12 years beyond our original plan."

In addition to the reserves, Fort Knox had 95.82 million metric tons of measured and indicated resources averaging 0.5 g/t (1.42 million oz.) gold at the end of 2015. This is a significant increase to both the tonnage and grade compared with the 75.9 million metric tons of measured and indicated resources, averaging 0.37 g/t (912,000 oz.) gold available to the mine a year earlier.

While the economic viability of mining these resources have not yet been calculated, which could raise them to reserve status, the increased tonnage and grade is a good sign that the mill may keep churning out gold for a while longer.

The Gil gold property, located about five miles east of Fort Knox, and Gilmore, an area immediately west of the current mine plan are two such expansion targets.

Kinross purchased full ownership of Gil in 2011 and in 2014 gained authorization from the U.S. Bureau of Land Management to conduct mineral assessment work on Gilmore lands that were previously withdrawn for use by the National Oceanic and Atmospheric Administration.

While Kinross has yet to disclose any information on the advancement of these two potential mine extensions, the fact that Fort Knox is the second-lowest cost and among the highest-producing gold operations in its portfolio provides the global mining company plenty of incentive to keep the Interior Alaska mine going.

Kinross COO Morley-Jepson indicated that Fort Knox has at least a few more golden years left.

"The original mine plan projected mining to the end of 2008 at Fort Knox; here we are in 2016, looking forward to mining many years to come," he said. ●

continued from page 8

NORTHERN NEIGHBORS

value for our partners and stakeholders. Kaminak has done an excellent job engaging with First Nations throughout the initial exploration phases, which will serve as a solid foundation for us to build upon as the project enters the next phase of development." Goldcorp acquired all of the issued and outstanding common shares of Kaminak by issuing 0.10896 of a Goldcorp share for each outstanding Kaminak share. As a result, Goldcorp issued 20,997,312 Goldcorp shares to former Kaminak shareholders, who now hold roughly 2.5 percent of the 853,398,240 Goldcorp shares issued and outstanding, on an undiluted basis.

With Shamrock-Olive results in, Victoria prepares for phase 2

Victoria Gold Corp. July 20 posted another round of results from the spring 2016 Olive-Shamrock exploration program, this time from the Shamrock zone. Highlights from drilling at Shamrock include: 31 meters of 1.3 grams per metric ton gold from a depth of 28.9 meters in hole DG16-707C; 28.2 meters of 1.35 g/t gold from a depth of 93.5 meters in hole DG16-714C; 58.4 meters of 0.95 g/t gold from a depth of 38.5 meters in hole DG16-715C; 97.7 meters of 0.93 g/t gold from a depth of 31.8 meters in hole DG16-718C; and 55.4 meters of 0.92 g/t gold from a depth of 13.7 meters in hole DG16-724C. "The results from the Shamrock Zone are extremely encouraging, said Victoria Gold President and CEO John McConnell. "While it is still early days for the Shamrock target, we are pleased to confirm additional exploration upside in close proximity to the main Eagle deposit." Previously released highlights from drilling at the adjacent Olive zone include: 38.1 meters of 2.1 g/t gold; 144.5 meters of1.2 g/t gold; 73.8 meters of 1.6 g/t gold; and 167.5 meters of 0.92 g/t gold. In June, Victoria raised C$2.85 million to help fund a second phase of 2016 exploration focused on Olive-Shamrock and other targets at its Dublin Gulch gold project. "On the back of a successful phase 1 program, we are currently following up with an IP (induced polarization) geophysics program along strike from the Olive-Shamrock zone. The geophysics program will assist in delineation of further drill targets for a phase 2 drill campaign late this summer," said McConnell.

Colorado gets started at KSP, strong results begin to roll in

Colorado Resources Ltd. July 18 posted results from eight holes drilled at the Inel zone on the KSP property under option with Seabridge Gold Inc. Highlights from the drilling include: INDDH16-001 cut 11 meters averaging 6.12 grams per metric ton gold, 45.74 g/t silver and 2.18 percent zinc; INDDH16-002 cut 5.6 meters averaging 6.27 g/t gold, 2.79 g/t silver and trace zinc; and INDDH16-006 cut 5.4 meters averaging 5.7 g/t gold, 10.11 g/t silver and 1.53 percent zinc. A total of 37 holes have been completed since drilling began at Inel on June 19. "What an incredible first month we have had up at KSP getting a jumpstart on the exploration season with one drill rig completing 5,000 meters in 37 drill holes in just 30 days of drilling," said Colorado President and CEO Adam Travis. "We started work almost a month ahead of other explorers in the area so that we have lots of exploration season left to follow up on these very encouraging early results. With sufficient working capital on hand, we plan to keep drilling and are well on our way to earning majority control of one of British Columbia's best exploration projects."

COLORADO RESOURCES LTD.

Outcropping mineralization at KSP, a property in British Columbia's Golden Triangle that is prospective for high-grade gold veins and bulk tonnage copper-gold deposits.

TMAC raises C$60 million to advance Hope Bay gold project

TMAC Resources Inc. and Resource Capital Fund VI L.P. July 19 reported the closing of an C$80 million financing that involved issuing 3,975,000 TMAC shares and 1,325,000 Resource Capital shares at C$15.10 per common share. TMAC received roughly C$60 million of the gross proceeds and about C$20 million went to Resource Capital. The net proceeds of the offering to TMAC will be used to advance development of its Hope Bay gold project in Nunavut, specifically for exploration and development of the BTD Zone at Doris, and for general corporate purposes. As part of the offering, Newmont Mining Corp. purchased 1,159,000 shares. RCF and Newmont now hold 30.9 percent and 29.2 percent, respectively, on a non-diluted basis, of the 82,981,932 TMAC common shares issued and outstanding.

Skeena bolsters Golden Triangle exploration with C$3.9 million

Skeena Resources Ltd. July 18 said it raised C$3.93 million during the second tranche of an over-subscribed, non-brokered private placement. Through the first two tranches of the financing, Skeena has raised gross proceeds of C$7.73 million and the final tranche is expected to close soon. Funds raised from this financing will be used for drilling at the Snip gold property, as well as for exploration programs on the Spectrum and GJ gold-copper properties and for general working capital purposes. All three of the properties are located in the Golden Triangle region of northwestern British Columbia. Skeena said a first phase of prospecting, geological mapping and induced polarization geophysical surveying is nearing completion at Spectrum-GJ. Resource expansion drilling began at Spectrum on July 5.

Yukon-focused Klondike sells BC portfolio to Rise

Klondike Gold Corp. July 18 reported the sale of seven mineral properties in southeastern British Columbia – Red Point, Clubine, Ron Gold, Panda Irishman, Cruz-Midway, Thea, and Quartz Mountain – to Rise Resources Inc. As an initial payment, Klondike received C$50,000 in cash: 1.5 million Rise shares and 1.5 million Rise warrants, which allows Klondike to purchase 1.5 million additional Rise shares for C22.7 cents each until July 13, 2018. The common shares now owned by Klondike represent 4.56 percent of Rise's issued and outstanding shares on closing. To complete the acquisition, Rise Resources must pay an additional C$150,000 in cash, and issue 2 million additional Rise shares and 1 million Rise warrants in a year. Klondike Gold will retain a 2 percent net smelter return royalty, half of which can be purchased by Rise for C$1 million. "This strategy allows Klondike Gold shareholders significant leverage to a portfolio of highly prospective British Columbia gold and base metal properties while keeping the company's financial and exploration focus on its core Yukon assets," explained Klondike Gold President and CEO Peter Tallman.

Red Chris production up; Huckleberry Mine winding down

Imperial Metals Corp. July 15 said its three mines in British Columbia produced 39.76 million pounds of copper and 27,689 ounces of gold during the second quarter of 2016. The Red Chris Mine in northern British Columbia was the biggest contributor, producing 26.74 million lb. copper and 18,213 oz. gold, increases of 14 percent and 23 percent, respectively, during the first three months of the year. Mill throughput at Red Chris averaged 28,971 metric tons per day. Roughly 77 percent of the mill feed was mined from the Main zone, with higher grade East zone ore providing the balance. The ore grade averaged 0.59 percent copper and 0.40 grams per metric ton gold during the second quarter. Imperial's Mount Polley Mine in central B.C. produced 5.31 million pounds copper and 9,476 ounces gold from 1,573,542 metric tons of ore processed during the second quarter. The ore averaged 0.22 percent copper and 0.28 g/t gold during the quarter, compared to 0.31 percent copper and 0.33 g/t gold during the first three months of 2016. The Huckleberry Mine in western B.C. produced 7.71 million pounds copper during the second quarter. Mill throughput averaged 19,426 metric tons per day of material averaging 0.23 percent copper. The milling of stockpiled material at Huckleberry will continue until the end of August, at which time Imperial plans to suspend operations and place the mine on care and maintenance, pending an increase in the price of copper. ●

● TECHNOLOGY

Game-changer at Arctic broadband summit

Quintillion hero of Barrow summit; OneWeb has exciting project on horizon; private investors Guggenheim, NxtVn, Cooper on panel

By KAY CASHMAN
Petroleum News

In mid-July, tech industry experts, policy leaders and pan-Arctic executives and residents met for two days in Barrow, Alaska, to discuss the critical need for high-speed broadband across the circumpolar Arctic, and how to best prepare for the opportunities and challenges the new technology will bring. One technology could, in fact, be a game-changer, Tara Sweeney said following the summit.

An "exciting project on the horizon" was presented by Greg Wyler, founder of OneWeb. "He took us through his company's vision of revolutionizing the high-speed Internet industry, using low-cost, user-installed small satellite receivers. This idea, if it works out, could bring 21st century opportunities to locations and communities that would not have the access to this technology otherwise. It really could be a game-changer," she said.

Sweeney serves as chair of the Arctic Economic Council as well as executive vice president of external affairs for Arctic Slope Regional Corp. The council and its telecommunications working group were the organizers of the Top of the World Arctic Broadband Summit.

Quintillion on schedule to lay cable Prudhoe to Nome

Presentations included the latest on the Quintillion project, in which ASRC is a minority partner.

It "was particularly interesting to receive an update on the Quintillion Subsea Cable Project from the president and CEO of Quintillion, Elizabeth Pierce," Sweeney said. "The first phase of this monumental project is underway this summer, with more than 450 employees working on the project — from the North Slope to the Northwest Arctic. The amount of data the cable can handle — 30 terabits a second, with the possibility of doubling that capacity — is just amazing and unlike anything we've ever seen on the Slope."

Anchorage-based Quintillion Networks, the Alaska arm of the international Canadian-led Arctic Fibre project, is working on a 10,000-mile intercontinental subsea fiber system that will eventually connect London and Tokyo by way of Alaska and Canada's Arctic.

The first intercontinental cable system, Pierce said, it will rely on terrestrial cable installation along Alaska's northern coastline, including Nome, Kotzebue, Point Hope, Wainwright and Barrow.

The fiber runs from the Kuparuk and Colville units to Pump Station 1 of the Trans-Alaska Pipeline System. The terrestrial sites will lead to an undersea cable from Nome to Prudhoe Bay, expected to be completed in October.

One cable-laying vessel made port in Dutch Harbor while the summit was in session, stopping on its way up the coast. Its sister ship is on its way from France. Two other ships are already in Nome.

Crews will bury more than 1,176 miles of cable and install onshore connections, with operations taking place simultaneously across hundreds of miles on land and sea, Pierce said.

The company began burying a new fiber optic cable from Prudhoe Bay to Fairbanks a year and a half ago along the Dalton and Elliott highways. In Fairbanks, it will connect to existing fiber optic cable systems to the Lower 48, Pierce said, noting that Quintillion can double capacity "just by changing out cards with existing technology."

Per a recent Alaska Dispatch report, Matt Boyer, a senior adviser at Cooper Investment Partners, a New York fund and major investor in the project, told summit attendees, "The original idea was to build a subsea cable from Europe to Asia and stop off in Alaska along the way, almost as an afterthought."

The second phase of Quintillion's project is laying undersea cable from Nome to Japan.

Phase three will be the trans-Canada line to England.

Government incentives critical

Summit discussions included a panel on government's role in Arctic broadband.

"We were fortunate to have representatives from our congressional delegation, the Federal Communication Commission's International Bureau, the National Telecommunications and Information Administration, and National Oceanic and Atmospheric Administration at the summit," Sweeney said. "The delegation's representatives shared a few words about their commitment to reliable communications and increased capacity in the Arctic, and I was encouraged to hear their support on the federal level. We continue to look for their assistance in navigating regulatory hurdles and for setting the standard in how governments can support this technology."

Walker administration representatives "also voiced support for increased Arctic connectivity and its importance to national security, food security, marine safety and situational awareness," she said.

Investment panelists included Guggenheim, NxtVn, Cooper

Members of a private investment panel discussed attracting investors, barriers to investment and key criteria that are prerequisites for investment including natural, political, economic and social, as well as Arctic opportunities and new technological innovations that could increase connectivity.

Panelists included moderator Ronald Eidshaug, vice president of congressional and public affairs, U.S. Chamber of Commerce; Bob McCoy, director of the Geophysical Institute, University of Alaska Fairbanks; Michael Perkinson, chief of staff for the chief investment officer, Guggenheim Partners; Kahled Sedrak, founder and CEO, NxtVn Group, Netherlands/Finland; Krag Johnsen, vice president of business operations, GCI; and the previously mentioned Cooper Investment's Boyer.

Boyer noted that his firm has a "long-dated investment horizon" and can afford to take a different view on things than other companies might.

Maritime investment important component

A fourth panel, Open for Business — Fostering Arctic Economic Growth through Maritime Transportation Infrastructure Development, discussed reliable broadband

see ARCTIC BROADBAND page 12

Young dislikes USCG 'bullsh__ answer'

The U.S. Coast Guard is down to two working icebreakers in Alaska's Arctic waters, the sole heavy icebreaker still on the job scheduled to retire before a replacement can be built, reportedly a 10-year process. A Senate bill already includes $1 billion for a replacement icebreaker, but the country would likely have no heavy icebreaker for three to six years, hampering potential ship traffic in the Far North, Alaska Public Media reported July 12.

Congressman Don Young, R-Alaska, is trying to convince the Coast Guard to lease a privately owned vessel for what he and fellow members of the House's Coast Guard and Maritime Transportation Subcommittee refer to as the "icebreaker gap."

Edison Chouest Offshore has the only privately owned ice-capable ship in Alaska's far north, the Aiviq, having built the new 360-foot ice-class anchor handler for Shell's recent Arctic drilling activity.

But in a July 12 subcommittee hearing, Coast Guard Vice-Commandant Charles Michel testified that the Aiviq was not suitable because all Coast Guard icebreakers have to operate as military vessels — i.e. must be able to enforce the law and assert national sovereignty. It would take a substantial refit, he said, for the Aiviq to be suitable.

"That's what I call, Mr. Chairman (Rep. Duncan Hunter, R-Calif), a bullsh__ answer." Young was reported as saying by Alaska Public Media. "Military service. I'm talking about moving ice."

—KAY CASHMAN

continued from page 11

ARCTIC BROADBAND

connectivity and Arctic maritime transportation infrastructure's importance to the perpetuation of Arctic livelihoods and economies.

This panel explored the importance of situational awareness for maritime vessels, challenges of navigating through the Northwest Passage and Northern Sea Route, the need for pan-Arctic response operation capabilities, and the role of reliable communication infrastructure in maritime safety, and more.

Panelists included moderator Wayne Westlake, president and CEO, NANA Regional Corp.; Gail Schubert, president and CEO, Bering Straits Native Corp.; Arnold Brower Jr, executive director, Alaska Eskimo Whaling Commission; Angel Corona, NOAA National Weather System, Alaska Region, Chief Systems Operation Division; and Linda Leary.

Leary is president of Edison Chouest Alaska subsidiary Fairweather LLC.

Edison Chouest Offshore will take over the oil tanker escort and spill response duties out of Valdez in July 2018, per a recently signed 10-year contract with Alyeska Pipeline Service Co.

The company also has the only privately owned ice-capable ship in Alaska's far north, the MV Aiviq, having brought in the new 360-foot ice-class anchor handler for Shell's recent Arctic drilling activity (see sidebar).

In an interview with Petroleum News, Leary said the event was "very exciting. There were people there from all over the Arctic," which led not only to interesting presentations but stimulating conversations.

Fairweather, she said, received a lot of kudos for its "four com centers," set up this summer, under a private contract with Shell.

Quintillion, however, was "the hero of the whole conference," Leary said.

There were essentially three major sections for the maritime panel, the first of which was tourism.

"You've got to have ports deep enough to accommodate the big cruise ships. Right now only Port Clarence can handle the really large ones."

At other ports, she said, such as Nome, passengers have to be lightered in.

The other two sections dealt with subsistence and communications.

When residents are traveling for subsistence hunting, fishing and gathering, it is "important to know where they are," Leary said.

Iridium, OneWeb, ORION reps spoke

Nearly 40 speakers participated in the conference, coming from as far away as Finland, including Wyler from OneWeb; Ali Abbas Mehboob Hirji, chief of staff of Ontario Research and Innovation Optical Network, or ORION; and, Bryan J. Hartin, executive vice president, sales and marketing of Iridium Communications, who talked about connectivity in the high-high North.

Wyler told Petroleum News in an email that OneWeb "will work closely with its Arctic partners to make broadband access available for every home and business in every community."

He congratulated the sponsors for hosting an "excellent" summit, which "introduced OneWeb to many new potential partners, helped us understand more about the Arctic needs and reinforced the importance of our mission."

Following the summit, ORION's chief of staff said, "As an attendee, I understood that the introduction of broadband to the Arctic is a community effort — beyond the technical expertise and financial investments, a community strategy is required to ensure that the technology is well utilized. In the case of the Arctic, it is a matter of how do we advance these communities into the global ecosystem of economics, trade and exchange. It is a challenge of globalization — how do we take local capacities, global."

A major issue, he said, is the "cost of implementation, access and maintenance."

see **ARCTIC BROADBAND** *page 13*

continued from page 3

DUNLEAVY Q&A

Petroleum News: So what concerns do you have about Marty's departure?

Dunleavy: The timing is kind of weird. People say Marty was retiring. I don't know. Unless I hear something different, guess I've got to accept it for what they say. I mean, Mark Myers, he's gone too. These people came into the administration and were doing other things. They came into the administration, because they probably liked what they heard. Consequently they are gone and you've got to believe they no longer like what they heard and no longer like where things are going. That's just speculation, of course. I can't even keep up with the names.

Keith Meyer alluded to some way to raise capital for the purpose of investing in the project in which we wouldn't have to be the ones who raise it — others will — but we would still own it. I'm very curious to find out what that concept it and what instruments they use. I'm not a Wall Street guy, but you hear something like that you think junk bond rating, where it's a high risk proposition that if it works, there's a high return. How do you give investors high return without impacting your return on a project? You see, these are questions that keep coming up.

Petroleum News: What would give you comfort or more answers with the next quarterly update or the pre-FEED report, whichever comes first?

Dunleavy: The pre-FEED information, that's what we're all waiting for. That's what we funded this project for up to this point. If this group believes that the conditions — economic, financial, market, political — whatever else goes into that consideration. If the conditions are there and this group believes we should move through the gate, I'm looking forward to hearing the results of the study. If they believe they should move forward and why. I'm going to ask a lot of questions. Or if at least one partner or more says no, this is not the time to do it, I'm going to ask why because if they believe this isn't the time to do it, I have to believe there is a response from the administration. I think we all need to be looking forward to this next meeting and the report to find out where we are going from this next stage.

Petroleum News: So what else did Mr. Meyer say to give you pause, concern, or optimism?

Dunleavy: He's new to Alaska, certainly not new to oil and gas. He made the statement that he could never understand why Alaska was never able to bring the concept over the last 30 years to fruition. I thought there were obvious reasons why. It's expensive. The gas is stranded at the top of a subcontinent. It's not like Rhode Island. You can drive across the state of Rhode Island, that's like driving from Wasilla to Anchorage.

We are at the top of a subcontinent with no infrastructure. We've got extreme weather. When he said he couldn't understand why it wasn't brought to market coupled with the oil and gas commission which monitors and manages out Btus that come off the slope, have — and rightly so — viewed gas as a better play for the state use it as a lifter of oil, which is a much more lucrative product.

Even I understand the lack of infrastructure, the climate challenges, the marketing issues, the geographic issues, the purpose for gas right now. Here's the deal, we all can have great, sometimes wildly fantastic ideas on projects. We dream big and we are able to put those dreams into reality. Sometimes they pay off and they move this world forward.

However, when you're dealing with other people's money and you're put in charge to safeguard that money as we are the Legislature, you have to temper your optimism a little bit and interject as much reality as possible. We've dreamed a lot which paid off in the pipeline. Alaska was a dream itself by (William) Seward which I believe paid off for the country.

We've got to be careful. We do have some instances where we dreamed and nothing came of it and we lost money. This could be one of the greatest projects ever built, ever conceived or it could be one of the greatest boondoggles. I don't think there is any middle ground with this concept it's so big. With that idea that big, you've got to be very careful.

Petroleum News: So if one or two of the partners decide it's not economical to advance to FEED, what is it you want to hear?

Dunleavy: I want to know why. I'll do everything I can to get the information in a public meeting. What is it they may know that we may not? Who knows they may just come straight forth and say we don't have the cash for it. We understand the horizon for this thing is 10 to 15 years, but our internal analysis — and we've been in this business for decades — tells us this is not a project we want to invest resources in.

I want to find out what the particulars are and why other partners might want to go forward. Are we dismissing reality? Are we creating our own reality? Is it truly one partner who has cash flow issues, their balance sheets are upside down, their board's priorities were always skeptical to begin with and they were always looking at other projects? I want to find out why. All that information will be great information.

Petroleum News: On to oil taxes and oil tax credits. The last special session, you had a two-hour hearing?

Dunleavy: The administration has a different idea as to what the state should look like from the previous administration. The administration has a different idea as to what the state should look like from a lot of legislators. Again, as I said when we started this conversation, I'm not an oil and gas person. I'm an educator, basically a government person, but I know where revenue comes from. I've been here since 1983. It appears to me that this administration has a different view of oil tax policy. When we first started this conversation six months ago it was oil and gas credits, and it was mostly Cook Inlet for the purpose of internal consumption. Those credits appeared to have worked. At the same time the Legislature has agreed some of these tax credits aren't necessary. Then we move to middle earth. The hope was there would be gas and oil plays so those projects will be allowed to finish out.

Then we looked at the Slope. In the back of our minds as many of us think this through it the technologies have changed dramatically since the majors and others went to the Slope back in the 1960s. The geopolitical landscape has changed dramatically.

The key for myself and others is how do we keep a continual rolling process of exploration, development and production so that the pipeline has as much oil in it as possible. It would appear that this administration is heading toward tax policy.

What does this tell anyone who wants to invest in Alaska. What is the message we are going to send to folks? That we want people here investing or that we don't. Some will say of course we do, Dunleavy, we don't want to give away our resource. I don't want to give away our resource. I think we are dipping into tax policy. More and more companies are going to view Alaska as a host desperate for revenue.

Any other industry — people don't think about this — any other industry who wants to take advantage of our geography being close to Asian markets, they are going to be somewhat skeptical if we are constantly changing our policies, especially if we change them radically. For most people believe looking into the tax credit concept was a worthy and necessary discussion, but getting into a tax policy that was just put into place two years ago, I think is going to potentially cause some issues.

Petroleum News: You had wondered in the hearing what happens when shale oil come back online?

Dunleavy: I asked Mr. Alper (Alaska Tax Director Ken Alper) how does this ensure continual exploration, development and production. There is no doubt that the governor wants a healthy oil industry. There is no doubt we all want that. The question is whether our policy and approach will let it happen. I believe these technologies have changed the landscape. The geology of the North Slope — you've heard the expression we have great rocks — still has huge promise as a producer of large quantities of oil. But the fracking, you can set up and move a rig to get set up for production a lot quicker than you can on the North Slope. If oil starts to creep up and we are still dithering with our policies that has individual companies, groups, etc. saying we're not sure if we want to invest there. They can move a whole lot quicker down south is my understanding. What I'm afraid of is they will be able to take advantage of the demand for oil much quicker that we will. We have to constantly have this activity going on. We can't shut things down and then next week we get word the Saudi king is going to hold back oil and the price is going to go through roof, well let's jump back in there. We can't do that as easy as they do down south. We have to be very careful. ●

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continued from page 12

ARCTIC BROADBAND

When asked what part ORION plays in bringing high-speed broadband to the Arctic, he said. "ORION is the network upon which numerous research projects occur. Various institutions in Ontario are working on issues in the Arctic and we are the backbone network responsible for enabling the transfer of big data and computing."

In an email following the summit, Hartin said, "Iridium plays a major role in providing connectivity options for remote areas in the Arctic, particularly across land mobile, maritime and aviation markets. Iridium's Low Earth Orbit constellation provides superior, truly global coverage in the Arctic compared to other satellite networks, particularly geostationary satellites which do not cover the Arctic."

While the summit "focused on terrestrial options for providing broadband to different areas in Alaska, Iridium plays a complementary role by providing satellite connectivity where the terrestrial broadband deployments cannot reach."

Iridium, Hartin said, is "about to start launching its next-generation constellation, Iridium NEXT, which will replace its current network and provide new services and enhanced capabilities such as faster speeds. Iridium NEXT will be backwards compatible, ensuring the products you use today will work on the new network, further positioning Iridium to address the unique connectivity requirements in the Arctic today and into the future."

Sweeney said attendees were able to see "firsthand the many challenges we experience in the Arctic and the importance of using broadband as a tool to bring opportunities to the north — like educational, health and economic growth benefits. Improved connectivity capacity is a problem all too common in many parts of the Arctic, and I'm pleased that industry leaders are committed to helping us find solutions."

The summit was broadcast live on KBRW Radio and the program was simulcast worldwide on the Internet.

"We had more than 90 people registered," Sweeney said, "and there were certainly more from the North Slope who heard about the summit and stopped by," the result of KBRW's broadcast and livestream on the Internet.

The summit was also co-hosted by the Iñuit Arctic Business Alliance and ASRC. ●

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continued from page 1

FRENCH APPOINTMENT

shore in Cook Inlet, and starting in 1979 was with Shell on the North Slope where he worked his way up to a production operator. French began work for ARCO as a production operator in 1984 and was promoted to lead operator.

The governor's office said French brings 13 years of hands-on oil field experience to his new job at the commission.

French left the oil industry in 1992 to attend law school and received his juris doctor from Cornell Law School in 1995. He returned to Alaska and worked as a prosecutor in the Anchorage District Attorney's Office for six years.

In 2002 French was elected to the Alaska Senate where he served for 12 years and was a member of the Senate Bipartisan Working Group and chair of the Judiciary Committee. The governor's office said that during that time French played an active role in oil and gas development legislation, criminal justice reform and health care reform. His first day at AOGCC is July 25. His appointment to the commission will be subject to legislative confirmation.

The commission is an independent quasi-judicial agency housed in the Alaska Department of Administration. It has three members — a petroleum engineer, a petroleum geologist and a public member, a seat which requires, under Alaska statute, "training or experience that gives the person a fundamental understanding of the oil and gas industry in the state." Members serve six-year terms. French is filling an existing six-year term which began the first of March 2015 and expires at the end of February 2021.

The commission has been without a third member for more than a year since the Legislature failed to confirm Walker's appointment of Mike Gallagher to the public seat.

—KRISTEN NELSON

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UTILITIES

Thibert new CEO at Chugach Electric


LEE THIBERT

Chugach Electric Association said July 18 that Lee Thibert has been named chief executive officer of the association, replacing Brad Evans who retired as CEO in mid-July after serving 8 years in that role.

Thibert has been with Chugach Electric since 1987 and has held a variety of senior management positions, most recently as senior vice president, strategic development and regulatory affairs.

"This is an exciting time in the Railbelt as we look for opportunities to work with other utilities to better serve all Alaskans with low-cost, reliable power," Thibert said. "From power pooling and economic dispatch, to utilizing new technologies and renewable integration, there are a number of important and interesting areas we will continue to focus on moving forward."

Thibert was born in Minnesota and has a Bachelor of Arts in organizational management from Alaska Pacific University.

Chugach Electric Association is a member-owned cooperative with 68,000 members, providing power through retail, wholesale and economy energy sales. It serves some 83,000 locations within its retail service area, including much of Anchorage and surrounding areas from the northern Kenai Peninsula on the south, to Tyonek on the west, to Whittier on the east and to the Glenn Highway on the north.

—PETROLEUM NEWS

GOVERNMENT

Alberta dangles new industry incentives

The Alberta government has done a full about-turn from its original threat to hike oil and gas royalties by introducing two new royalty programs to stimulate spending on early-stage developments and squeeze more revenue out of underutilized existing operations.

Energy Minister Marg McCuaig-Boyd said that based on collaboration with the industry her government is confident that "modernizing" the regime will put more rigs to work and boost the revenue flow into public coffers.

The incentives involve a flat royalty of 5 percent on crude oil, natural gas and natural gas liquids for up to 90 months, after which rates will return to normal levels.

McCuaig-Boyd said there will be no further royalty reviews, although annual assessments will be conducted to ensure the rates are competitive.

"We want to make sure we have positioned Alberta to be globally competitive and we believe this new royalty framework will do that," she said.

Alberta's royalty returns are currently at levels not seen in 40 years, with the 2016-17 budget predicting revenues from non-renewable natural resources at C$1.36 billion, compared with almost C$9 billion in 2014-15.

The revised programs target projects that use enhanced recovery methods and projects in "emerging" new plays by making "difficult investments economically viable," the government said.

The industry is guarded in its view of how successful the adjustments will be, with the Canadian Association of Oilwell Drilling Contractors doubting the changes will return capital that has left Alberta for other jurisdictions.

A spokesman for CAODC said the incentives may not be sufficient to offset hikes in corporate taxes or the province's coming carbon tax.

He said only 65 rigs were active in June, while 606 were idle — a 9.5 percent utilization rate that is the toughest in CAODC's history.

Kevin Neveu, chief executive officer of Precision Drilling, said the government move is a "step in the right direction" to improve costs, but he noted that low oil prices, pipeline bottlenecks and stricter environmental laws are choking off new investment in Alberta.

Mark Salkeld, president of the Petroleum Services Association of Canada, said

see INDUSTRY INCENTIVES page 15

continued from page 6

TOFKAT

The proposed Titania exploration program was to occur between December 2002 and December 2007 on an ice pad on Kuukpik Corp. lands some five miles southeast of the village of Nuiqsut. ConocoPhillips proposed as many as two wells and two sidetracks.

Even after the disappointing results of the Oberon No. 1 well convinced ConocoPhillips to relinquish more than 26,000 acres associated with the prospect in August 2003, the company insisted it would continue with its plans to explore the Titania prospect.

But those plans never materialized. The Titania acreage automatically expired when the state contracted more than 16,000 acres from the Colville River unit in July 2004.

Part 2: Tofkat

The contraction came just as the Alaska Venture Capital Group was gathering momentum for exploration activities after several years of encountering obstacles and delays.

At an October 2004 lease sale called "Independent's Day," because only one major oil company bid, AVCG acquired the block of acreage near Nuiqsut for $478,080. The company later acquired some additional acreage in the area at a different lease sale.

By early 2006, AVCG was looking for funding to explore as many as five prospects across the North Slope, including the Titania prospect. With its proximity to the Colville River unit, the company saw the possibility of a field on par with an Alpine satellite.

"We're more excited than when we first bought the acreage," managing director Ken Thompson told members of the Alaska Industry Support Alliance at the time.

Over the next six months, the AVCG subsidiary Brooks Range Petroleum Corp. formed a joint venture with three independents to explore Titania and other prospects. Like Titania, many of those prospects were in the "billion dollar fairway," which was ARCO Alaska's term for the land nestled between the Kuparuk River unit and the Colville River unit.

By October 2007, BRPC was permitting a Tofkat exploration program, using a new name to avoid confusion with the Titania exploration program abandoned a few years earlier.

In early 2008, BRPC drilled the Tofkat No. 1 well and two sidetracks at the prospect using Nabors rig 27E and also acquired some 200 square miles of 3-D seismic over the prospect. The well collected 10 oil samples from three sandstone reservoirs in the Brookian formation and a fourth sandstone in the deeper Kuparuk formation.

The Tofkat No. 1 well encountered six feet of net pay in the Kuparuk formation. Early on, BRPC estimated that the prospect contained about 40 million barrels of recoverable oil in the Kuparuk C sands and another 20 million in the deeper Jurassic sands.

By early 2009, the joint venture was discussing plans for another Tofkat well by late 2010. But instead AVCG pursued the North Tarn prospect near the southwest corner of the Kuparuk River unit. An exploration program ultimately proved to be successful, leading to the Mustang Development Project at a new Southern Miluveach unit.

As the Tofkat leases approached their expiration date, the joint venture applied to form a unit. The Department of Natural Resources approved an application for the Tofkat unit in 2011. The unit covered some 9,131 acres over 22 state of Alaska and Arctic Slope Regional Corp. leases. An associated plan of exploration required BRPC to drill and complete a well into the Kuparuk formation by the end of May 2013 and, along with its working interest owners, sanction a Tofkat development project by October 2013.

But work at the Mustang project took priority. BRPC missed the May 2013 deadline at Tofkat. The Department of Natural Resource placed the unit into default and required BRPC to complete its original work commitments by May 2014 to cure the default.

While the joint venture relinquished other acreage in its portfolio, it remained protective of the Tofkat prospect. In early 2013, BRPC announced plans to drill the Tofkat No. 2 well and Tofkat No. 2A sidetrack over the coming winter using Nabors rig 106.

But those plans never materialized and BRPC missed its second deadline. In July 2014, the Department of Natural Resources asked the company to propose a solution — the second step in the default process. That August, BRPC asked the state to reconsider the default, blaming its failure to drill in part of permitting delays from local authorities.

The department agreed to reconsider and held a hearing in October 2014. But in late January 2016, after considering the testimony, DNR Division of Oil and Gas Director Corri Feige affirmed the original default. BRPC accepted the ruling rather than appeal to the Superior Court.

Termination

The Tofkat unit expired at the end of March 2016 — all units expire after five years of persistent inactivity, according to state regulations — and was terminated in early April.

While the primary term of the leases expired, state regulations automatically extend the term of any lease in a terminated unit for 90 days — a secondary term of the lease.

And in May 2016, the five working interest owners at Tofkat — Caracol Petroleum LLC, TP North Slope Development LLC and MEP Alaska LLC, AVCG LLC and Nabors Drilling Technologies USA Inc. — asked to transfer the Tofkat leases to ConocoPhillips.

Given the recent inability of BRPC to develop the acreage, and the previous inability of ConocoPhillips to explore or develop it, Feige was skeptical about approving the deal.

Of the 22 leases in the former unit, all but seven would expire as soon as the termination period ended, and the rest were set to expire at the end of June 2017, Feige noted.

Once the leases expire, they would become eligible for a future lease sale. "Anecdotal evidence suggests the acreage which encompasses the Tofkat unit lands is valuable exploration acreage and is likely to attract a wide range of potential bidders and substantial competitive bonus bids for the state," Feige noted in her June 2016 ruling.

The timing of the request also concerned Feige. While regulations provide a secondary term for leases, the goal is to encourage drilling or production. But in this case, Feige wrote, the companies were trying to "circumvent the intent of the extension provision."

And Feige was also concerned about the royalty structure on the leases. Given that the acreage is owned jointly by the state and ASRC, the royalty rate on the 15 leases set to expire at the end of June 2016 is 16.66667 percent — considerably high-

see TOFKAT *page 15*

continued from page 1

ALASKA LNG

the state is now looking at a scenario in which it would take the lead. Moving from a process to a project, requires the most motivated party be in the appropriate role, he aid.

Walker said the state's partners in the project have developed LNG projects elsewhere and said he was glad to have experienced partners.

"I absolutely want the producers involved," Walker said, noting that an earlier proposal, AGIA, the Alaska Gasline Inducement Act, was designed to keep producers out. That process failed, he said, adding that Yukon Pacific had already proved you could get permits but couldn't do a project without the gas.

Illustrating his desire to keep the state's producer partners in the process, Walker related a conversation with a producer.

"I recently had one of the producers ask me," he said, "would I be OK with the producers designing the project?"

"I said absolutely.

"Would I be happy with the producers building the project?

"I said absolutely.

"Would I be happy with the producers operating the project?

"I said absolutely.

"And the response was, I think we ... have an option," Walker said.

So what does the state uniquely bring to the table?

The goal has been to bring down the cost of the project, the governor said, and the cost of construction has been reduced a lot.

"But the next-to-last piece is the tax-exempt status," he said, referring to a concept which the Alaska Gasline Port Authority with which Walker was long involved was formed to pursue in 1999.

It's not a new concept, Walker said, and there already has been one Internal Revenue Service ruling on it.

This is a new opportunity, with the producers but with the state in a different role, with the goal of getting AKLNG up on the marquee, he said: "When we were offered the opportunity to lead, I didn't shy away from it."

But, the governor said, "I believe the market is a huge part of this project; without a market there is no project."

There is no intent, Walker said, to go ahead at all costs.

"We're going to take it to a point where we're going to find out is it financeable, does it make sense," he said. "And then we decide if we go forward or not.

"So it's not a build it and they will come."

The goal, he said, is to "go to the market and say the gas is available, here's what the price is."

He said Alaska LNG will be a price taker, not a price maker, "so we'll take the price that's in the market and we need to make sure that a project works at that price."

Walker said the state's partners acknowledge "the significant financial advantage of being tax exempt. That's a big step in the right direction."

What he wants, the governor said, is to "just find out if it works. Let's find out what the market's going to say on a fully put together project. And that's all we're asking for."

Walker said an Alaska project has never been up on the marquee, in the top tier of potential projects.

"I want to make sure that we ... find out once and for all, is there a project or not. Because, again, we're in a process, we're not in a project. A project is when you actually make the final investment decision and you're ordering pipe. We want to find out if it makes sense to do that."

Walker stressed the importance of Alaska's role as a sovereign in the project, telling the chamber audience that worldwide it's often when the sovereign, the government, gets involved that resources get to market.

He compared AKLNG to infrastructure and said it's not inappropriate for government to be involved in creating infrastructure. Like highways, this infrastructure is needed to make Alaska's economy work, Walker said.

While the state will continue to work with its partners, it's time the state stop following and start leading, he said. ●

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continued from page 1

NIKAITCHUQ WELLS

wells at the Oliktok Point pad using Nabors Rig 245, which has been cold stacked since October 2015.

The company is also studying the feasibility of working over the existing OP19-T1N well to test a new completion technique into the N sand of the Schrader Bluff formation. To date, all development at the unit had occurred from the Schrader Bluff OA sands.

Earlier this year, Eni completed a 203-bed camp at the Nikaitchuq Operating Center to replace an original camp that had been destroyed during a fire in December 2014.

The Nikaitchuq unit produced some 22 million barrels through November 2015 and oil production is currently in the range of 25,000 barrels per day, according to the company.

The global downturn in oil prices came just after Eni completed an initial drilling campaign at Nikaitchuq and was venturing into an expansion and delineation program.

The company completed its initial program of Oliktok Point pad development wells in October 2012 and began a continuous drilling program from the Spy Island drill site in November 2012 using Doyon rig 15. The Spy Island program continued until the company suspended drilling operations in December 2015, due to low oil prices.

Starting in mid-2013, Eni began adding laterals to existing wells. The campaign lasted through May 2014 and added eight laterals to select existing Oliktok Point pad wells. The laterals increased the amount of drainage from the OA sands and included "alternating undulations through the OA1 and OA3 sand layers as compared to the original laterals."

In early 2013, Eni drilled the first multilateral well at Nikaitchuq. The SP22-FN1 from the Spy Island drill site had four laterals with lengths between 1,600 and 2,000 feet.

Starting in the third quarter of 2013, Eni began incorporating a second lateral into all new production wells being drilled from the Spy Island drill site, which yielded five dual lateral wells by the time the company suspended drilling operations at the end of 2015.

In the third quarter of 2014, Eni launched the West Extension Project to target a specific area west of the Spy Island drill site. The company drilled two dual lateral producers and two single lateral injectors before completing the extension project in 2015. The company launched the East Extension Project in the third quarter of 2015, but only completed one dual lateral producer before suspending development activities a few months later.

Now, Eni plans to resume regular development drilling in addition to resuming the East Extension Project from the Spy Island drill site in 2017 with Doyon rig 15. When the company completes the work in its initial development plan for Spy Island in early 2017, it plans to begin a second phase to convert eight existing single wells into multilaterals.

Eni is also considering a Nikaitchuq North project, although the evaluation is currently in the data collection phase and could be far from any decision to sanction development. ●

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continued from page 14

TOFKAT

er than the typical 12.5 percent royalty rate on leases owned exclusively by the state. Additionally, those leases have a 3 percent overriding royalty interest. Altogether, this 20 percent royalty interest would leave only 80 percent for an operator, which Feige worried could shorten the economic life of the field by limiting the amount of capital available for investment.

For those reasons, Feige allowed the Tofkat unit joint venture to transfer the seven leases set to expire in June 2017 to ConocoPhillips. But she denied the request to transfer the 15 leases currently in their secondary term and set to expire this year.

A Tofkat satellite?

The seven leases might be of limited use to ConocoPhillips.

Without the other 15 leases, the seven preserved leases are not entirely contiguous to the Colville River unit. The preserved leases also do not include the Tofkat No. 1 well.

But given that the 15 expired leases will appear at an upcoming lease sale, ConocoPhillips could potentially assemble another Alpine satellite in the near future.

That corner of the North Slope is a growth area for ConocoPhillips.

The company brought the CD-5 satellite of Alpine into production in late 2015 and is currently working to bring the GMT-1 development into production at the Greater Mooses Tooth unit to the west, in the National Petroleum Reserve-Alaska. Earlier this year, ConocoPhillips applied to expand the Colville River unit to make it contiguous with the Greater Mooses Tooth unit and ease the gradual step-out of future development. ●

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continued from page 14

INDUSTRY INCENTIVES

the new royalties could attract interest in deep natural gas reserves in the Canadian Foothills region, where "nobody" is willing to develop known reserves because of the costs involved in building roads, pipelines and compressor stations.

The Canadian Association of Petroleum Producers welcomed the incentives at a time when companies have diverted spending to projects in the United States, noting that capital will go where it can "get the best rate of return."

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continued from page 1

INFO SQUABBLE

that would be marketed through the proposed large Alaska LNG Project, which Gov. Bill Walker is now pushing for the state to take over.

If built, Alaska LNG would export up to 20 million tons of LNG yearly beginning in 2025 under the current schedule.

Prudhoe Bay producers, however, rejected the request for the marketing information in several letters to the state since January citing concerns over antitrust issues and confidentiality of the information.

Prudhoe's previous Plan of Development was to expire June 30 but the division has extended it temporarily and has meanwhile given the producers, BP, ConocoPhillips and ExxonMobil, until Sept. 1 to comply with the information request.

'Long range' plans required

If the demand is not met, Feige explained the procedure for legislators where the state could proceed through a lease default procedure and ultimately to the courts.

She referenced language in state regulations requiring field operators to inform the division on "long range" plans for developing the oil and gas resources.

In a proceeding like that the state would argue the producers are making inadequate efforts to market the gas, although this in unlike any previous action by the state including an earlier controversy over Point Thomson leases.

Hard line from producers

Producers are taking a hard line on the matter, however. "BP and the other PBU working interest owners (mainly ConocoPhillips and ExxonMobil) believe the POD (Plan of Development) submittal is a complete and the POD should be approved," BP said in a statement issued during the hearing.

"The level of information provided is consistent with the previous PODs that DNR has approved each year since 2000. This POD satisfies all of the Prudhoe Bay Unit Agreement's and POD regulations' requirements," the company said in the statement.

BP is the operator of the Prudhoe Bay field and spoke on behalf of the other gas owners, it said.

One producing company, asking not to be identified, said it is willing to discuss its gas marketing with the state, but terms of confidentiality for the meeting could not be agreed on. Other producers are reported to have made similar offers.

Meanwhile, some meetings with the state have been held on how the companies' Prudhoe gas could be sold to the state or a third party for a state-led pipeline, state officials said earlier this spring.

Third party sales info

The request for marketing information, spelled out in the division's June 30 letter to BP, the Prudhoe operator, is specific in not only asking about general marketing information but also on potential sales to a third party such as the state, with a state-led gas project.

The companies and the state are still partners in the Alaska LNG Project at this point, although the partnership may now be strained. The state has a one-fourth interest in Alaska LNG, with ExxonMobil acting as project manager.

Preliminary engineering, or pre-Front End Engineering and Design, is expected to be concluded by the end the year.

To date the LNG project partners, including the state, have spent about $600 million on the pre-FEED, and the producers had earlier invested $150 million in conceptual engineering.

Given record-low LNG prices in Asia, the target market, some of the industry partners have expressed reluctance to spend an estimated $1.5 billion to $2 billion to take the next step to final engineering, at least until there is more clarity as to when LNG prices will improve.

Walker wants to state to assume control of the project and proceed to final engineering, funding the work by bringing in new partners or private equity firms, the governor said July 18 in a speech.

Legislators concerned

State legislators are meanwhile concerned about the possible connection between the state's regulatory action on the Plan of Development and a state-led gas pipeline and LNG project. The regulatory move is being seen as a step toward pressuring the producers to sell gas to the state-led pipeline.

All three producers have offered in writing to sell gas at the wellhead to the state, but at mutually-agreed prices and terms.

"This is an extraordinary requirement (the request for marketing information). It will be very chilling to the state's oil and gas industry," said state Rep. Dan Saddler, R-Eagle River, who attended the Senate committee meeting.

"What's the end game? What's the connection to the governor's plan for a pipeline?" he asked.

Feige defended the request for information, citing language in existing regulations requiring lease owners to provide information on long-range development plans for oil and gas resources. She acknowledged that the interpretation of the regulation is "new policy" and that it was done at the request of the governor.

Responding to questions from Sen. Cathy Giessel, R-Anchorage, the committee chair, Feige also said that the state Department of Law wrote parts of the division's correspondence with the producers dealing with gas marketing even though the letters went over Feige's signature.

Houston attorney state lead

The law department's lead on the issue is Mark Cotham, a Houston-based attorney under contract to the state who specializes in "duty to produce and market" litigation in Texas on behalf of royalty owners, Cotham told the legislators by telephone.

Legislators at the hearing were skeptical of the governor's gas marketing request.

"You want specific information on gas marketing on LNG that will be sold ten years in the future?" Sen. Anna MacKinnon, R-Anchorage, co-chair of the Senate Finance Committee, asked.

Feige said that is correct.

Sen. John Coghill, R-Fairbanks, majority leader of the Republican-controlled Senate, said the request raises, "ethical, legal and antitrust issues. Once this information is given, it could be used in other ways," such as by the state in the competitive marketing of its own royalty gas as LNG.

"I think this is a problem. There's a credibility problem here," Coghill said.

Sen. Mia Costello, R-Anchorage, was equally critical. "Do you think the governor is being forthright with you, or the Alaska public?" she asked.

"The new policy was launched in January with no discussion with the public or the Legislature," she said. Costello chairs the senate's Labor and Commerce Committee.

One legislator at the meeting, Sen. Bill Wielechowski, D-Anchorage, praised the initiative, however. "The division is seeking information on the marketing of state oil and gas resources. I think that is quite reasonable," he said.

Feige said at the hearing that the division has approved parts of BP's 2016 Plan of Development that deal with the ongoing development activities and operations of the field, but that the plan did not comply with the request for gas marketing information.

BP and the other companies said they must wait until a gas pipeline is built before conducting major gas sales but also said the gas has historically been used to produce more oil. ●

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continued from page 1

HENDRIX

insight is much needed and respected."

In remarks at the Anchorage Chamber of Commerce the same day, Walker cited problems with the state's oil and gas tax credit program, calling it flawed. "It was never intended that when we were underwater financially that we'd be borrowing money to pay the tax credits." But, the governor said, the state has an obligation to pay the credits and wants to get them paid, even if it's a bit challenging right now.

Walker said the administration is working with companies on a weekly basis, and said "that is one of the things that John Hendrix is going to be doing."

Hendrix graduated from Homer High School and has a bachelor's degree in civil engineering from the University of Tennessee. He began his oilfield career with Schlumberger Oilfield Services on the North Slope in 1980. He later joined BP and was with that company for 18 years, holding engineering and managerial positions on the North Slope and in Anchorage, as well as in Russia and the United Kingdom.

Hendrix joined Apache Corp. in 2005 as a production engineering manager for the Gulf Coast and prior to moving back to Alaska in 2011, served as general manager of Apache's Qarun Petroleum Co. joint venture in Egypt.

He was appointed general manager of Apache's Alaska operations in 2011. Apache acquired existing leases in Cook Inlet in 2010 and acquired extensive additional acreage in state oil and gas lease sales. The company suspended Alaska operations in early 2016 and said it would allow its leases to expire.

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