



### Borough objects



The Fairbanks North Slope Borough has objected to rates proposed by Fairbanks Natural Gas. See story page 10.

### Federal judge declines to vacate permit for emerging CD-5 project

U.S. District Judge Sharon Gleason has denied a motion to set aside, or vacate, the federal permit for a ConocoPhillips oil development now under construction in the National Petroleum Reserve-Alaska.

A handful of residents from the nearby village of Nuiqsut wanted the permit vacated as part of their lawsuit challenging the wetlands fill permit the U.S. Army Corps of Engineers granted for the project in December 2011.

ConocoPhillips is now well along on construction of the Colville Delta 5 project.

CD-5 is one of a number of satellite fields designed to feed into processing facilities at the large, ConocoPhillips-operated Alpine field.

More significantly, CD-5 is poised to become the first oil

*ConocoPhillips told the judge that pulling the permit now would throw CD-5 into a state of "regulatory confusion," and leave the partially completed project vulnerable to erosion or other problems.*

see **PERMIT RULING** page 16

### Conoco contracts with Doyon for new-build rotary rig for Kuparuk

ConocoPhillips Alaska said July 28 that it has contracted with Doyon Drilling for a new drilling rig, Doyon 142, the first new-build rotary rig the company has added to the Kuparuk River rig fleet since 2000.

The rig is scheduled to begin drilling in early 2016.

Mike Wheatall, ConocoPhillips Alaska manager of drilling and wells, said at a Fairbanks press conference that ConocoPhillips has signed a five-year contract for the rig.

Aaron Schutt, president of Doyon Ltd. said building the rig was an opportunity to both make money for Doyon's shareholders and to employ those shareholders.

It isn't often that Doyon gets to build a large North Slope rig; Doyon's last new rig went into service in 2012, he said. "Long-term contracts for drilling around the world are actually quite rare," Schutt said.

Wheatall said ConocoPhillips has three Doyon rigs under contract. The five-year contract for Doyon 142, he said, is the

*"Without this rig, we would have had to push back the start of the 1H development several years." —Mike Wheatall, ConocoPhillips Alaska*

see **KUPARUK RIG** page 16

### EXPLORATION & PRODUCTION

## Big Nikaitchuq plans

Eni to complete initial development program in November; expansions coming

By ERIC LIDJI

For Petroleum News

As Eni US Operating Co. Inc. completes its initial development program at the Nikaitchuq unit, it is beginning expansion efforts that could define upcoming operations.

The Italian major expects to complete its initial development program at the North Slope field by the end of the year, but will undertake continuous drilling from its Spy Island drill site into 2015 as it pursues several opportunities. Those include a campaign to add dual laterals to existing wells, expansion into the area just west of its existing development and evaluation of two potential

*Eni plans to drill more than 20 wells and laterals at the nearshore unit over the next two years, according to a seventh plan of development filed with state officials in July.*

developments yet to be fully sanctioned.

Eni plans to drill more than 20 wells and laterals at the nearshore unit over the next two years, according to a seventh plan of development filed with state officials in July.

The work scheduled for the remainder of this

see **EXPANSION PLANS** page 15

### ENVIRONMENT & SAFETY

## Spill would spread

WWF study: 50% chance blowout in Canadian Beaufort would reach Alaska

By GARY PARK

For Petroleum News

A new report by the World Wildlife Fund Canada was emphatic on one point: A significant oil spill in the Canadian section of the Beaufort Sea would quickly contaminate ecologically sensitive shorelines in Canada and Alaska.

The conclusion was released July 25 just as Imperial Oil and Chevron Canada are gearing up for reviews of their deepwater exploration plans by the National Energy Board and Inuit-led environmental panels.

In anticipation of applications for drilling approvals, the WWF hired RPS Applied Sciences Associates to model the spread and fate of poten-

*Imperial and Chevron have both objected to the NEB's proposal for same-season relief wells, arguing that would be impossible to achieve and have suggested their own alternatives.*

tial oil spills associated with increased ship traffic and offshore exploration and development.

The consultants concluded that, in the event of a major blowout, currents and winds would contribute to a rapid spread of the crude, which would become trapped in sea ice, making cleanup virtually impossible and would have a high probability of

see **WWF STUDY** page 14

### EXPLORATION & PRODUCTION

## Happy Valley appraisal

Hilcorp plans four-well program, including new C pad to reach gas accumulation

By ERIC LIDJI

For Petroleum News

Hilcorp Alaska LLC is planning a four-well appraisal program to prove up and possibly develop a shallow natural gas accumulation within the boundaries of the Deep Creek unit.

The Cook Inlet producer wants to build a Happy Valley C pad at the onshore Kenai Peninsula unit. The project would involve a 2.6-acre gravel pad and an access road and pipeline corridor connecting to the Happy Valley B pad, some 2,000 feet to the northeast.

The C pad would support a four-well natural gas appraisal program. If the program encountered commercial volumes of gas, Hilcorp would initially develop the pad using the existing facilities at B pad. With sufficient production rates, Hilcorp

would construct separation and compression facilities at C pad and move processed fluids to B pad.

The Alaska Department of Natural Resources is taking comments through Aug. 25.

### Avoids contraction

Hilcorp moved quickly to assess the potential of undeveloped acreage at the Deep Creek unit after it acquired the property, propelled by looming contractions to state acreage.

Union Oil Company of California brought the Deep Creek unit online in 2004 and drilled some 13 wells between 2003 and 2009. But the company soon lost interest in the unit. In a plan of development from December 2010, the company offered no additional exploration plans and said it

see **HILCORP PROGRAM** page 14

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# Alaska - Mackenzie Rig Report

| Rig Owner/Rig Type | Rig No. | Rig Location/Activity | Operator or Status |
|--------------------|---------|-----------------------|--------------------|
|--------------------|---------|-----------------------|--------------------|

## Alaska Rig Status

### North Slope - Onshore

|   |                  |   |                |
|---|------------------|---|----------------|
| <b>Doyon Drilling</b><br>Dreco 1250 UE<br>Dreco 1000 UE<br>Dreco D2000 Uebd<br>AC Mobile<br>OIME 2000   | 14 (SCR/TD)      | Prudhoe Bay DS 04-47, workover  | BP             |
|   | 16 (SCR/TD)      | Prudhoe Bay F-36, workover  | BP             |
|   | 19 (SCR/TD)      | Alpine CD4-96   | ConocoPhillips |
|   | 25               | Prudhoe Bay Y-39  | BP             |
|   | 141 (SCR/TD)     | Kuparuk 2.E-0   | ConocoPhillips |
| <b>Kuukpik</b>  | 5                | Stacked out 100% Pad Deadhorse, Royale Energy Well AK #1, AK #2, Winter 2014-2015 |                |
| <b>Nabors Alaska Drilling</b><br>AC Coil Hybrid<br>Dreco 1000 UE<br>Mid-Continental U36A<br>Oilwell 700 E<br>Dreco 1000 UE<br>Dreco 1000 UE<br>Oilwell 2000 Hercules<br>Oilwell 2000 Hercules<br>Emsco Electro-hoist-2<br>Emsco Electro-hoist Varco<br>TDS3<br>Emsco Electro-hoist Canrig 1050E<br><br>Emsco Electro-hoist<br>Oilwell 2000<br>Academy AC Electric CANRIG<br>OIME 2000<br>Academy AC electric CANRIG<br>Academy AC electric Heli-Rig | CDR-2            | Kuparuk 2F-18   | ConocoPhillips |
|   | 2-ES (SCR-TD)    | Prudhoe Bay   | Available      |
|   | 3-S              | Prudhoe Bay   | Available      |
|   | 4-ES (SCR)       | Prudhoe Bay   | Available      |
|   | 7-ES (SCR/TD)    | Kuparuk   | ConocoPhillips |
|   | 9-ES (SCR/TD)    | Kuparuk   | ConocoPhillips |
|   | 14-E (SCR)       | Prudhoe Bay   | Available      |
|   | 16-E (SCR/TD)    | Prudhoe Bay   | Available      |
|   | 18-E (SCR)       | Prudhoe Bay   | Stacked        |
|   | 22-E (SCR/TD)    | Prudhoe Bay   | Stacked        |
|   | 27-E (SCR-TD)    | Deadhorse, under contract to ExxonMobil for 2015                                  |                |
|   | 28-E (SCR)       | Prudhoe Bay   | Stacked        |
|   | 33-E             | Prudhoe Bay   | Available      |
|   | 99AC (AC-TD)     | Deadhorse   | Available      |
|   | 245-E (SCR-ACTD) | Oliktok Point   | ENI            |
| <b>Nordic Calista Services</b><br>Superior 700 UE   | 105AC (AC-TD)    | Deadhorse   | Available      |
|   | 106-E (AC-TD)    | Deadhorse   | Available      |
|   |                  |   |                |
| Superior 700 UE<br>Ideco 900  | 2 (SCR/CTD)      | Prudhoe Bay Drill Site C, conducting rig maintenance                              | BP             |
|   | 2 (SCR/CTD)      | Prudhoe Bay Well Drill Site H-09  | BP             |
|   | 3 (SCR/TD)       | Kuparuk Well 1Y-10  | ConocoPhillips |
| <b>Parker Drilling Arctic Operating Inc.</b><br>NOV ADS-10SD<br>NOV ADS-10SD  | 272              | Prudhoe Bay DS 18   | BP             |
|   | 273              | Prudhoe Bay DS W-59   | BP             |
|   |                  |   |                |

### North Slope - Offshore

|   |              |                  |                           |
|---|--------------|------------------|---------------------------|
| <b>BP</b><br>Top Drive, supersized              | Liberty rig  | Inactive         | BP                        |
| <b>Doyon Drilling</b><br>Sky top Brewster NE-12 | 15 (SCR/TD)  | Rig Maintenance  | ENI                       |
| <b>Nabors Alaska Drilling</b><br>OIME 1000      | 19AC (AC-TD) | Oooguruk ODSN-02 | Pioneer Natural Resources |

### Cook Inlet Basin – Onshore

|   |               |   |                       |
|---|---------------|---|-----------------------|
| <b>Kenai Land Ventures LLC (All American Oilfield Associates, labor Contract)</b><br>Taylor         | Glacier 1     | Kenai Loop Drilling Pad #1                          | Buccaneer Energy Ltd. |
| <b>All American Oilfield Associates</b><br>IDECO H-37   | AAO 111       | Kenai Yard  | Available             |
| <b>Aurora Well Services</b><br>Franks 300 Srs. Explorer III   | AWS 1         | to mobilize to the west side for Apache P&A         |                       |
| <b>Doyon Drilling</b><br>TSM 7000   | Arctic Fox #1 | Demobilizing from Beluga                            | ConocoPhillips        |
| <b>Nabors Alaska Drilling</b><br>Continental Emsco E3000<br>Franks<br>IDECO 2100 E<br>Rigmaster 850 | 273E          | Kenai   | Available             |
|   | 26            | Kenai   | Stacked               |
|   | 429E (SCR)    | Kenai   | Stacked               |
|   | 129           | Kenai   | Available             |
| <b>Saxon</b><br>TSM-850   | 147           | Ninilchik Unit, Bartolowits pad drilling Frances #1 | Hilcorp Alaska        |
| TSM-850   | 169           | Swanson River                                       | Hilcorp Alaska        |

### Cook Inlet Basin – Offshore

|   |          |   |                       |
|---|----------|---|-----------------------|
| <b>XTO Energy</b><br>National 110                                 | C (TD)   | Idle  | XTO                   |
| <b>Spartan Drilling</b><br>Baker Marine ILC-Skidoff, jack-up      |          | Spartan 151<br>Upper Cook Inlet KLU#1               | Furie                 |
| <b>Cook Inlet Energy</b><br>National 1320                         | 35       | Osprey Platform RU-1, workover                      | Cook Inlet Energy     |
| <b>Hilcorp Alaska LLC (Kuukpik Drilling, management contract)</b> |          | Anna Platform, Demobilized Hilcorp Rig 428 to shore | Hilcorp Alaska LLC    |
|   |          | Steelhead Platform, Well M-34 Grassroots, Drilling  | Hilcorp Alaska LLC    |
|   |          |   |                       |
| <b>Patterson UTI Drilling Co LLC</b>                              | 191      | West McArthur River Unit #8                         | Cook Inlet Energy     |
| <b>Kenai Offshore Ventures</b><br>LeTourneau Class 116-C, jack-up | Endeavor | Port Graham   | Buccaneer Energy Ltd. |

## Mackenzie Rig Status

### Canadian Beaufort Sea

|   |     |                        |           |
|---|-----|------------------------|-----------|
| <b>SDC Drilling Inc.</b><br>SSDC CANMAR Island Rig #2 | SDC | Set down at Roland Bay | Available |
|---|-----|------------------------|-----------|

### Central Mackenzie Valley

|                          |    |                           |           |
|--------------------------|----|---------------------------|-----------|
| <b>Akita</b><br>TSM-7000 | 37 | Racked in Norman Well, NT | Available |
|--------------------------|----|---------------------------|-----------|

The Alaska - Mackenzie Rig Report as of July 31, 2014.  
Active drilling companies only listed.

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

This rig report was prepared by Marti Reeve



### Baker Hughes North America rotary rig counts\*

|        | July 25 | July 18 | Year Ago |
|--------|---------|---------|----------|
| US     | 1,883   | 1, 871  | 1,776    |
| Canada | 395     | 381     | 329      |
| Gulf   | 59      | 57      | 54       |

### Highest/Lowest

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

\*Issued by Baker Hughes since 1944

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## FINANCE & ECONOMY

# Canada's Independents being independent

*Encana, Talisman take different routes in overhauling businesses*

By **GARY PARK**

*For Petroleum News*

**T**wo of Canada's largest independent oil and gas producers have a sharply contrasting view of their destinies.

Encana, after a year under new leadership, is convinced it is beating the clock in its corporate makeover.

But Talisman Energy, guided by a caretaker chief executive officer, could be on the verge of disappearing altogether after years of speculation.

Having pulled Encana off its single-tracked pursuit of natural gas to chase production of oil and natural gas liquids, Chief Executive Officer Doug Suttles told analysts "we generally think we're one or two years ahead on our strategy delivery," which is focused on five main areas — two in Western Canada, three in the United States.

Although Encana's profits slumped to US\$271 million in the second quarter from US\$730 million a year earlier (with cash flow dipping to US\$656 million from US\$665 million), Chief Financial Officer Sherri Brillon said the company is no longer outspending its cash flow and expects to generate US\$500 million in free cash flow this year.

Suttles said "the first thing (Brillon) is trying to find is a bigger closet to put all the money in."

The second quarter aside, Encana is now aiming to reach total cash flow for the year of up to US\$3.6 billion, well ahead of its earlier high-end goal of US\$3 billion, while spending will come close to US\$2.8 billion, partly reflecting its US\$3.1 billion acquisition of Eagle Ford assets.

### Liquids production up

Oil, condensate and gas liquids output is forecast to achieve the range of 86,000-91,000 barrels per day (earlier guidance targeted 68,000-73,000 bpd), compared with a mere 29,000 bpd in 2013.

AltaCorp Capital analyst Dirk Lever said the "transformation is happening really fast" and is far ahead what he would have predicted a year ago.

He said cost cutting and higher production has helped, although with some good fortune in asset sales and purchases.

More deals could be in the works, with industry sources predicting that Encana could soon unload its troublesome Deep Panuke natural gas project offshore Nova Scotia.

They claim Encana is now working with financial advisers in hopes of fetching C\$1 billion-C\$2 billion from a possible sale before the end of 2014, adding to US\$7.3 billion in deals so far this year.

Deep Panuke came on stream last December after three years of delays and contributed more than 30 percent of Encana's operating cash flow of US\$1.1 billion in the first quarter, delivering an average 253 million cubic feet per day, or 9 percent of total company gas volumes.

But Deep Panuke contributes no oil or gas liquids, meaning it "doesn't really fit into our portfolio," Brillon said.

For those Encana investors who were able to secure shares in PrairieSky Royalty when it was spun off in May to develop a chunk of Encana's royalty lands in central and southern Alberta the initial results

were promising. The parent company also has reason to be grateful it retained a 54 percent stake in the assets.

The first month of production to June 30 averaged 15,664 barrels of oil equivalent per day (44 percent crude oil, 10 percent gas liquids and 46 percent natural gas), posting a profit of C\$23.9 million and leaving the company with working capital of C\$57.4 million.

Investors now hope PrairieSky will generate more cash flow by allowing third parties to develop its oil and gas resources with span 5.2 million acres.

The shares have remained comfortably above their initial public offering level of C\$28, topping C\$40 in early July as investors were drawn by the prospect of a stable dividend.

### Talisman shares languish

Talisman is chasing a different destiny as the clock runs down on the promise by Hal Kvisle to end his two years as chief executive officer by late 2014.

Fleetingly, it seemed a breakthrough was at hand on July 23 when the company took the unusual step of confirming it had been approached by Spain's Repsol "with regards to various transactions," while adding "there is no assurance that any transaction will be agreed."

Since it got bogged down in a huge oil venture in war-torn Sudan as part of its drive to round up operations on a global scale, Talisman shares have languished far behind their perceived value and speculation has been rife that a takeover is inevitable.

But word in a Bloomberg report that a Repsol bid was in the works was as close as Talisman has come to a deal, though there was no indication whether that would involve the entire company, which has a market value of about C\$12.2 billion.

### All assets open to bids

Kvisle has put the word out that all assets are open to bids as he tries to right-size the company, while some investors have suggested the logical move is to split operations in the Americas and Southeast Asia to facilitate a sales process.

What Kvisle has made no secret of is his desire to offload Talisman's North Sea assets, which are seen as an obstacle to improved financial and operating performance.

He said the North Sea still has a "very large amount of oil left," but also admitted that "the challenge is controlling the costs of everything that we do," especially given that the North Sea relies on old equipment that has been around for decades.

Other candidates for sale could include holdings in the Eagle Ford, where Talisman has been squeezed by rising costs.

But what Kvisle has indicated he'd like to retain is the company's Western Canadian operations, its U.S. Marcellus shale operations and its interests in Malaysia and Vietnam.

However, his bottom line is clear. "For the right price, we'll do anything," he said. ●

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GOVERNMENT

# Persily: LNG project issues numerous

Federal coordinator talks challenges, potential for Alaska liquefied natural gas; cost a huge issue, location has some advantages

By STEVE QUINN

For Petroleum News

There aren't many people who can speak to the prospects of Alaska getting North Slope gas to market with authority backed by decades of frontlines work.

Larry Persily is among them. He has served as the Obama administration's federal coordinator for a natural gas pipeline since his 2010 appointment. At the time, the state and North Slope producers were working on an over-land line designed to feed Midwest markets. That changed with the rise of shale gas fields altering the markets.

From there, Persily went from someone who would coordinate permits to overseeing team of researchers reporting on global markets, the status of Alaska projects to market gas and what's happening with North America's emerging export efforts.

Persily sat down with Petroleum News to discuss the latest developments with the AKLNG project and what's going on globally.



LARRY PERSILY

JUDY PATRICK

*Petroleum News: Against the backdrop of past delays and setbacks, what do you make of the producers application for an LNG export permit?*

Persily: It's a serious effort by the three North Slope producers to see if they can put together a project that's economically attractive. As part of that, it's also one they want to see if they can get approval to build and operate, then export LNG. You might as well file early to see if you can get that or if you can have a problem with it. It makes sense to get in and find out if you can get export authorization or how long it will take or if there are any problems before you start spending billions on the project as opposed to multimillions.

This isn't like a penny stock on the Toronto stock exchange where some mining company tripped over a gold nugget. Large publicly traded companies have some very strict rules. They don't just conjure up news to entertain shareholders.

Publicly traded companies don't make public statements, don't make regulatory filings and don't do things on a whim. It shows that they are serious and they are willing to tell shareholders, investors and the market they are making a serious run at this project.

So when a publicly traded company makes a statement it needs to be accurate and certainly is going to be judged by shareholders and investors. It doesn't mean they are starting construction today, but it's a key step to getting a construction decision, which is greatly dependent on the market. I wouldn't expect it to drive stock unless the world thought they were crazy.

*Petroleum News: Your office's report noted that the application was for exporting to free trade and non-free trade nations. Could this gas be going someplace other*

**"Alaska got filthy stinking rich off of oil. We are not going to get filthy stinking rich off of natural gas. It just is not as profitable a commodity." —Larry Persily, federal coordinator**

*than Asia or is this just being thorough?*

Persily: Oh, they could. But realistically Alaska is close to Asia. Alaska is far from Europe. People always think of Asia as a wide encompassing area: That could be Japan, Taiwan, South Korea, China, Thailand, India, Indonesia. We need to think of it not just as Japan. Pakistan wants to become an LNG importer. With shipping distances it's pretty hard to conceive of this anyplace on the Atlantic.

*Petroleum News: (Researcher) Bill White cited a provision about the North Slope gas possibly needing to clear an extra hurdle under the 1976 law saying these exports, "will not diminish the total quantity or quality nor increase the total price of energy available to the United States." Wouldn't the state's export history satisfy that or is this different because the history is with Cook Inlet gas?*

Persily: That's all Cook Inlet. That's the presidential determination from the 1976 law applied only to North Slope gas. There was a determination issued in 1988 that's never been rescinded and the companies' position is that it's still valid. At some point the White House is going to have to weigh in with its view of it.

*Petroleum News: Should Alaska be treated almost as a separate market from the Lower 48?*

Persily: Certainly that is the companies' argument. That is the way the Department of Energy has always looked at it before because sending Alaska's gas overseas does not affect supplier price in the Lower 48 because it's not connected to the Lower 48. That's always been how the Department of Energy has looked at the ConocoPhillips applications for exports from the Nikiski plant, and I think that's the expectation of how they will look at the new project from the North Slope, but we'll have to wait to see what they say. It's logical. If you can't deliver this gas to North America, it shouldn't affect price of supply down there, in the Lower 48.

*Petroleum News: With that in mind, who is our competition?*

Persily: It's not like there is only one project that is going to get built. There are probably a dozen new LNG projects that will be built over the next 20 years. I think the competition is economics. Those dozen over the next 20 years are going to be the 12 that are most competitive on price. And certainly that would include Alaska, British Columbia, the U.S Gulf Coast, East Africa, Russia, Tanzania and Mozambique. Those are going to be the big players trying to get theirs picked over the next 20 years. It's not like it's us versus the Gulf or us versus Canada. We are all competing to see who can be the most econom-

ically attractive out there.

*Petroleum News: (Researcher) Jeanette Lee's report recently mentioned East Africa as a region looking to get into the export market.*

Persily: The last several years there have been tremendous offshore reserves in Tanzania and Mozambique that have been discovered, and the countries would like to monetize it. Anadarko, BG Group, ENI and Statoil, they are all there. They are looking at investing in those two countries. No one has gone to final investment decision yet. They are like everybody else. They are on the drawing boards.

*Petroleum News: Last year when we spoke, we weren't discussing those countries the way we are today. Is that an illustration of how unpredictable the market is and in just a short time?*

Persily: Sure. Spot prices are down. Construction costs are up. Who knows what Japan will do with nuclear? Who knows what China will do with its economy? There is always a market uncertainty. Strong projects will persevere. You may have down periods in the market like any other businesses in commodities whether its soy beans, or natural gas or coal or cotton. If your project is a good investment, you'll ride out the bad years and enjoy the good years



*Petroleum News: OK, that's the supply side unpredictability. Are you hearing or seeing anything on the demand side, something like China migrating away from coal for example — or anything along those lines?*

Persily: Well China's energy needs are growing so much that it's not so much reducing the volume of coal as it is needing more energy from gas. They are not going to get rid of coal. It's too cheap. There's too much invested in it. As the demand for energy grows, clearly they are using more and more gas. China certainly realizes there is a public health issue with too much coal. It's killing people. China talks pretty seriously about using more gas but coal provides more than 60 percent of their energy. It's not going away. If gas can command shares of growth in the future, that's a lot of gas.

*Petroleum News: When I asked about competitors, thinking about Alaska's efforts in the past, some believe the state's been its own worst enemy. Is that a factor as well?*

Persily: Alaska often has unrealistic expectations. Alaska got filthy stinking rich off of oil. We are not going to get filthy stinking rich off of natural gas. It just is not as profitable a commodity. It costs too much money to move the same Btus of gas as it does oil; it's just not as profitable a product. But it's still profitable. So if Alaskans expect to replicate the filthy stinking rich as oil, that same wealth, then we would be putting too much of a burden on the project; it just can't afford it. We can still make riches

see PERSILY Q&A page 13

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## • NATURAL GAS

# Cheap gas fuels big dreams

*Using natural gas to power transportation sector has sputtered and backfired, held back by capital costs, still-evolving technology*

By GARY PARK

For Petroleum News

The prospect of using abundant supplies of natural gas as a transportation fuel has attracted a swarm of admirers and eager promoters over several decades. But progress toward their big dreams has been marked by fits and starts.

Companies such as Shell, Chesapeake, Encana and South Africa's Sasol have made a forceful case that the time is right to invest in using gas to power vehicles, exciting market observers such as Citigroup and the International Energy Agency.

The IEA said last year that the alternative fuel is a potential "game-changer," while offering a cautious suggestion that change is only "likely to occur in stages."

Citigroup has predicted that global

demand for natural gas in transportation will increase to 10.2 billion cubic feet per day by 2020 from the current 4.3 bcf per day, and double again by 2030, displacing nearly 3.4 million barrels of oil.

A Canadian government study has projected that one of every 10 new medium- and heavy-duty vehicles sold in Canada over the next decade will be powered by natural gas, reducing carbon emissions by 0.2 percent from present levels.

Alicia Milner, president of the Canadian Natural Gas Vehicle Alliance, said there is growing urgency "to move natural gas into transportation because we need new markets for this resource," especially as Canada's gas exports to the United States go into sharp decline.

## Lack of fueling infrastructure

But J.P. Morgan points to one of the

key barriers to the adoption of long-haul LNG trucks in North America — the lack of fueling infrastructure.

The plodding progress was noted by David Bradley, chief executive officer of the Canadian Trucking Alliance, who estimated that a mere 10 of its 4,500 member companies are experimenting with natural gas vehicles.

"I don't think anybody should feel that natural gas has the potential to displace diesel fuel," he told the Financial Post. "It's just not in the cards at this point."

Natural gas heavyweight Encana was once one of the driving forces behind the use of compressed natural gas by converting 10 percent of its North American fleet of 1,400 vehicles to run on natural gas and by gradually building a network of fueling stations.

But it has also collided with the reality that the cost of converting vehicles to nat-

ural gas is substantial and the volatile history of natural gas prices remains a deterrent.

Randy Eresman, the former Encana chief executive officer, was an enthusiastic champion of the "huge potential" for gas in the transportation industry.

"Our vast North American supply of natural gas truly represents a domestic energy solution and a way to strengthen the economies of both Canada and the United States," he said, shortly before stepping down from his post at Encana.

## Shell suspends development

For all of the strongly held belief that the shale gas revolution could provide the greatest impetus yet to the uptake for natural gas vehicles, those who could play a leading role in bringing about change seem to remain unsure, if not downright skeptical.

That prevailing view will have been reinforced in July when Shell announced it was suspending development of a liquefaction unit at the company's Jumping Pound facility west of Calgary.

A company spokesman told Reuters that the use of LNG in transport is a "considerable opportunity for Shell, but it is an emerging market and we must have a balanced approach to its development."

Shell, as the major owner of the Jumping Pound complex, which has processed 300 million cubic feet per day of gas over more than 60 years, said it will continue working with the Canadian Green Corridor project and the retail program with Shell Flying J in Canada.

But Deutsche Bank said in a note that the pullback is another sign that Shell's new Chief Executive Officer Ben van Beurden "is applying a greater degree of discipline in allocating capital than was previously the case and is actively streamlining the 'options' in the portfolio which are to be pursued."

Shell conceded that high development costs, regardless of the drag shale gas production has had on gas prices, "means making tough choices around the projects we develop in order to redeploy our resources, focus our efforts and our capital to create the greatest value for our business."

## Retrofitting costs high

Adding to the argument against LNG in the transportation sector, ship broker ACM said that "retrofitting a vessel's engine to burn LNG produces a payback period longer than a vessel's asset life," while the availability of LNG and methanol as a bunker fuel "remains scarce and the infrastructure simply isn't in place yet for bulk trades."

All of which points to the need for even greater patience among those who want gas to achieve a substantial shift in transportation, not least President Barack Obama, whose latest speech on climate change was backed by a White House document that pledged to partner with industry "to develop post-2018 fuel economy standards for heavy-duty vehicles to further reduce fuel consumption through the application of advanced cost-effective technologies."

## Handful of undertakings

For a number of years, Sasol has gen-

see **TRANSPORTATION FUEL** page 8

# What's Up? Dock.

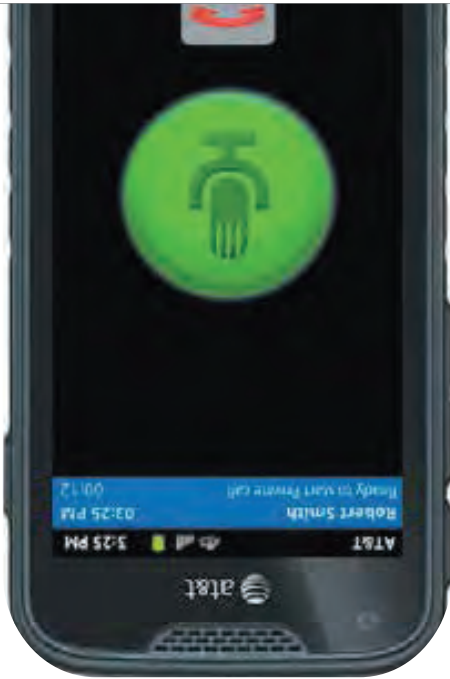
The big news around here – ASRC Energy Services Marine Support is now providing marine services in Cook Inlet. Our newly refurbished Rig Tenders Marine Terminal is fully equipped to deliver a wide range of specialized services to the Kenai Peninsula's oil and gas industry. In Alaska, only one company puts it all together – AES.



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## • NATURAL GAS

# Investors stir up Canada's LNG sector

Jana Partners puts pressure on Apache to quit Kitimat; private equity firm Kern Partners launches new C\$750 million energy fund

By GARY PARK

For Petroleum News

The jostling continues in Canada's LNG field, with two investor groups trying to assert their influence.

Activist hedge fund Jana Partners is putting pressure on Apache to break up the Kitimat LNG partnership, while private equity firm Kern Partners has launched a new C\$750 million energy fund, with an eye on advancing one British Columbia project.

In a letter to investors, Jana, having accumulated a US\$1 billion stake in Apache declared that it wants the Houston-based company to trade its positions in LNG export terminals in Canada and Western Australia for U.S. exploration.

It is the most aggressive move yet to reinforce a lurking fear among Canadian gas producers and the British Columbia government that investors could undo their hopes of a windfall from LNG.

Apache was once the operator of Kitimat until handing over the controls to Chevron, while retaining a 50 percent stake, but the partnership has since been engaged in a protracted search for Asian buyers of an initial 5 million metric tons a year of LNG, forcing a continued delay in mak-

ing a final investment decision.

Apache Chief Executive Officer Steve Farris has frequently expressed Apache's desire to reduce its holding in Kitimat, despite committing C\$2 billion to investment this year to keep the project on track amid signs of capital cost inflation, as Canada faces a challenge from competition for materials and labor.

A Canadian spokesman for Apache said only that the Kitimat team is pressing ahead with its marketing efforts.

He also told the Financial Post that Apache is "focused on continuing to execute our strategic plan to rebalance our portfolio and to focus our strategy on more predictable and profitable production growth in our North American onshore assets" — a clear signal that Kitimat is far from an unbreakable goal for the company.

Jana said in its letter that Apache has lagged behind its peers for a decade and needs to step up its restructuring efforts.

Industry sources have estimated that if Apache is able to sell off its position in Kitimat and the Chevron-operated Wheatstone LNG project it could reap up to US\$4 billion in cash to fund share buybacks and reduce future spending.

## New fund firm's largest

The new Kern fund is the fourth and largest offering by the Calgary-based equity firm and is targeted at investments of up to nine years in diversified energy exploration and development companies that are led by proven management teams, but has not ruled out stakes in infrastructure and technology sectors.

Kern is already a participant in the newly disclosed Steelhead LNG venture which plans a terminal at Sarita Bay at the mouth of the Alberni Inlet on the west coast of Vancouver Island.

Kern partner Jason Montemurro said the hopes of converting British Columbia's massive gas reserves into LNG for export to Asia will not achieve a breakthrough for at least another two years.

However, he expressed confidence that over the next decade the discount on Canadian gas could start to diminish, giving a lift to exploration and production companies that have languished for about five years.

Montemurro said that if LNG plans are conducted in a "respectful manner ... and in long-term partnership with

see **LNG JOSTLING** page 9



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continued from page 6

## TRANSPORTATION FUEL

erated some of the biggest hopes of advancing gas-to-liquids technology in North America as it has grappled with the complexities and challenges of building a US\$21 billion GTL and petrochemical complex on the U.S. Gulf Coast and its slow-moving plans for a C\$9 billion-C\$11 billion GTL plant in British Columbia.

Shell, meanwhile, has spent US\$19 billion on a facility in Qatar — where Sasol has a plant — that is designed to yield 100,000 barrels per day of fuel and a Chevron project in Nigeria using Sasol technology is starting this year.

What this handful of undertakings has demonstrated is how notoriously expensive the ventures are, with Chris Cox, an analyst with Calgary-based AltaCorp Capital noting the "incredibly capital intensive" projects are equivalent to building a full-scale refinery. "I would be hard-pressed to see how that would make a lot of sense," he said.

"Shell is so far ahead technically," said Ed Osterwald, an advisor to companies and governments on GTL and a partner with consultants Competition Economists Group. "It is hard to see how another company is going to replicate that."

Guy de Kort, a Shell vice president, told a London conference in July that his company will "continue our investment into technology development and product development to increase the value of our future GTL projects. We are pursuing other opportunities as well. But the economics have to be convincing enough to put our money there."

Some Shell investors are far from sold on the idea, given that the cost of the Qatar operation soared from an initial US\$5 billion, warning the company against making investments that "depend on a moving price spread."

Osterwald concedes that GTL is a "very expensive business and there are a lot of risks, but handled in the right way it can be very successful." Observers and prospective investors are likely to keep a close eye on how the Qatar project performs before rolling their own dice. ●

Contact Gary Park through  
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## • FINANCE &amp; ECONOMY

# BP reaches settlement for Alaska spills

By WESLEY LOY

For Petroleum News

BP Exploration (Alaska) Inc. has reached a proposed \$450,000 settlement to resolve federal and state pollution violations in the Greater Prudhoe Bay unit.

The settlement covers four oil discharges from BP-operated pipelines from 2007 to 2011.

Federal and state officials outlined the alleged violations in a joint civil suit filed against BP on July 25 in U.S. District Court in Anchorage.

The same day, a “joint stipulation of settlement and judgment” was filed specifying the \$450,000 civil penalty. The stipulation “does not constitute any admission” by any party, the document says.

“The two governments will divide the penalty, with \$269,900 going to the federal government and \$180,100 to the state.

BP will not bear the penalty alone. Rather, it will share the pending judgment with the other owners in the Prudhoe Bay unit. The major partners are ConocoPhillips and ExxonMobil.

The civil suit was brought on behalf of the U.S. Environmental Protection Agency and the Alaska Department of Environmental Conservation.

The suit alleges violations of the Clean Water Act as well as certain state pollution laws.

“We are pleased to resolve these issues with the EPA and the state of Alaska,” BP said in a statement provided to Petroleum News. “Our ownership share of the judgment is approximately \$118,620. BP is focused on moving forward and operating North America’s largest oil field in a safe, reliable and compliant manner to the benefit of Alaska and the United States.”

The civil suit details the four spills covered under the settlement:

- On Oct. 15, 2007, a discharge occurred from the DS-16 flowline in the Greater Prudhoe Bay unit. BP reported an estimated 46 barrels (or 1,932 gallons) of oil mixture spread over nearly an acre of tundra wetlands in the area of Flow Station 2.

- On Nov. 29, 2009, a discharge occurred from a line carrying crude oil, natural gas and produced water near the Lisburne Production Center. BP reported an estimated 321 barrels (or 13,482 gallons) of oil mixture covering 8,400 square feet of tundra wetlands, about a mile from the Lisburne Production Center.

- On Dec. 21, 2009, a discharge occurred from a line carrying oil, gas and water from a wellhead near Drill Site 6. BP reported an estimated 12 barrels (or 504 gallons) of oil mixture covered tundra wetlands.

- On July 18, 2011, a discharge occurred near Lisburne Drill Site L-1. BP reported an estimated 42 barrels (or 1,764 gallons) of oil mixture covered approximately 2,040 square feet of tundra and 4,960 square feet of gravel pad.

The settlement does not take effect immediately. Rather, it stands as a proposal subject to a 30-day public comment period, court papers said.

“Upon expiration of that comment period, the United States will notify the court, in light of any comments received, whether it believes that entry of the proposed settlement is appropriate,” the papers said.

The papers also make reference to a “separate settlement” with the state under which BP agrees to complete site restoration at certain locations. ●

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## LAND & LEASING

### BOEM issues call for 2017 Beaufort sale

The U.S. Bureau of Ocean Energy Management has issued a call for information and nominations for a potential 2017 Beaufort Sea oil and gas lease sale.

The agency said the purpose of the 45-day call is to “gather information about specific areas within the Beaufort Sea Planning Area that have the most promising oil and gas resource potential, while also increasing the agency’s understanding about environmentally sensitive habitats and important social and cultural uses — including vital Alaska Native subsistence activities — that also exist within the area.”

“There is significant oil and gas potential in the Beaufort Sea, but this part of the Arctic Ocean is also a unique and sensitive environment that is critically important to the subsistence needs of Alaska Native communities on the North Slope,” said BOEM Acting Director Walter Cruickshank in a July 25 statement. “Any consideration of future leasing must be done in a way that identifies not only the areas that have resource potential, but also those areas that must be protected for wildlife and traditional uses.”

#### Nominations, comments requested

The call is a request for industry to “identify specific blocks in the Beaufort Sea Program Area that appear promising for oil and gas exploration and development” and asks industry to rank interest in areas from “critical interest” to “no interest.”

BOEM said that for nominations which fall outside areas the agency has determined to have high hydrocarbon potential, “the nominating company will be required to provide detailed information about the basis for its level of interest in the nominated area, including a summary of the relevant geologic, geophysical and economic information.”

The agency is also asking in the call for comments relevant to its analysis of areas for potential leasing “as well as areas that should be considered for exclusion from leasing due to conflicting values, uses or environmental concerns.”

The call for information and nominations is available on the BOEM website at: [www.boem.gov/ak242](http://www.boem.gov/ak242) and is scheduled to appear in the Federal Register July 29, with comments due 45 days after the Federal Register publication.

Additional information about targeted leasing and a map showing the areas of high hydrocarbon potential in the planning area are also available at the link shown.

—PETROLEUM NEWS


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continued from page 8

## LNG JOSTLING

First Nations” there is a chance to generate more value for upstream companies.

Of its first three funds, Kerns has about C\$1.1 billion under management and has placed C\$1.5 billion in its co-investment management program, joining a growing by private equity firms — including Altex Energy, Black Swan Energy, Cequence Energy and Seven Generations Energy — to play a role in financing the energy industry.

Seven Generations is already seen as a candidate for an initial public offering in the gas-liquids rich Montney formation in northwestern Alberta and northeastern British Columbia, which is generating a buzz among smaller players.

Montemurro said Steelhead has its sights set on smaller, independent producers who have yet to negotiate access to pipelines, adding that through a “fair and balanced” partnership investors will be able to finance and build pipelines. ●

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## GOVERNMENT

### Governor names review board members

Alaska Gov. Sean Parnell has named the members of the state's Oil and Gas Competitiveness Review Board.

The board was established in Senate Bill 21 and will report to the Legislature in January 2015 on changes to state regulations and permitting which would encourage increased investment in the state while protecting the state's people and environment; status of the state's oil and gas labor pool; status of oil and gas infrastructure; and "competitiveness of the state's fiscal oil and gas tax regime when compared to other regions of the world."

In January 2021 the board will report to the Legislature on fiscal system changes which would make the state more competitive, alternative means for attracting investment and "effectiveness and future value of any provisions in the state's oil and gas tax laws that are expiring in the next five years."

Members include the commissioners of the departments of Environmental Conservation, Natural Resources and Revenue — or their designees — and the chair of the Alaska Oil and Gas Conservation Commission or the chair's designee.

Two members are to be nominated by the two leading nonprofit trade associations representing the oil and gas industry; three members of the public to be appointed by the governor, including a petroleum engineer, a geologist and a financial analyst; and two members of the public who do not represent the oil and gas industry, also to be appointed by the governor.

Rodney Brown of Fairbanks, business manager for Plumbers and Pipefitters UA Local 375 and president of the Alaska Petroleum Joint Crafts Council, is appointed to a public seat.

Curt Freeman of Fairbanks, president of Avalon Development Corp., is appointed to the geologist seat. Freeman holds a bachelor's degree in geology from the College of Wooster and a master's degree in economic geology from the University of Alaska.

Tom Hendrix of Palmer, vice president of oil and gas for Carlile Transportation Systems, formerly president of the Alaska Support Industry Alliance, is appointed to a seat nominated by The Alliance.

Tom Mahoney of Anchorage, Alaska area manager for CH2MHill, is a certified public accountant, a certified management accountant and holds a bachelor's degree in accounting and finance from California State University Fullerton. Mahoney is appointed to the financial analyst seat.

Joey Merrick II of Eagle River, the business manager/secretary-treasurer for Labors' Local 341 and a board member of the Alaska Workforce Investment Board, is appointed to a public seat.

Kara Moriarty of Anchorage, president and CEO of the Alaska Oil and Gas Association and former president of the Greater Fairbanks Chamber of Commerce, is appointed to a seat nominated by AOGA.

Pete Stokes of Anchorage is a petroleum engineer and business consultant for Petrotechnical Resources of Alaska and chair of the University of Alaska Fairbanks College of Engineering Advisory Development Council. He holds a master's degree in global business from Duke University. He is appointed to the petroleum engineer seat.

—PETROLEUM NEWS

## • UTILITIES

# Borough protests FNG proposed rate hike

*Attorney Robin Brena says Fairbanks North Star Borough wants RCA to investigate rate filing, including split of FNG into segments*

By KRISTEN NELSON

Petroleum News

Fairbanks Natural Gas LLC filed a revenue requirement and cost of service study with the Regulatory Commission of Alaska on June 30, proposing a rate increase of 6.92 percent. This was the first rate case FNG has filed since it began business in 1997, offering natural gas in the Fairbanks area by bringing in liquefied natural gas from Cook Inlet. The company accepted rate regulation in late 2012 as part of a long-running settlement with state officials.

In a July 25 filing attorney Robin Brena, representing the Fairbanks North Star Borough, vigorously protested the rate increase.

In the protest Brena cited RCA's duty to strike a balance between the interest of ratepayers in the lowest possible rates and adequate revenue and return to shareholders for the utility.

Previously, FNG has not been economically regulated, Brena said, and its rates were not based on the costs of providing service. In recent hearings on FNG's application to expand its service area, Brena said RCA Chairman Robert Pickett noted that return on equity would be substantially lower in a regulated than in an unregulated environment.

Brena said cost-based rates are expected to be less than non-cost based rates, but the rates proposed by FNG are not less than previous rates but nearly 7 percent higher, and called on the RCA to "immediately act to investigate FNG's proposed rates."

He argued that FNG's rate increase "should not be permitted to go into effect on a permanent basis." He said the company's existing rates have not been determined to the just and reasonable.

### Assets transferred

One issue which Brena addressed was transfer of some of FNG's assets to subsidiaries.

FNG President Dan Britton, in an affidavit supporting the rate increase, said the

company initially separated its rate-regulated distribution and the unregulated LNG operations, but when the company became exempt from rate regulation in 2003, it combined the operations for convenience.

With the return to a regulated structure, Britton said FNG transferred the LNG production and transportation assets to Titan. He said the purpose was not to avoid RCA regulation of the LNG plant, but to go back to the original structure of the company where the regulated gas distribution company was held separately from the unregulated LNG company.

Brena told the RCA that FNG transferred "significant operating assets to affiliates for no consideration. These transfers were designed to create profit centers outside of the scope of the RCA's review, thereby maximizing profitability for FNG's owners, while disadvantaging FNG's ratepayers." He said FNG is seeking to "have its ratepayers pay a second time for these assets with return and taxes."

Brena asked RCA for an "investigation to determine the propriety of FNG's dealings with its affiliates."

### North Slope LNG costs

Brena said inclusion in FNG's rate of nearly \$5 million invested in the plan — now abandoned — for FNG to liquefy natural gas on the North Slope was a "questionable ratemaking" practice. He said that \$5 million should not be recovered through FNG's rates, but should be borne by FNG and Pentex and/or Polar, the subsidiaries responsible for the expenditure.

Britton said the \$5 million which FNG invested in the North Slope LNG plant is about a quarter of its current rate base, and said "risk of this sort of investment loss is increased due to FNG's reliance on LNG," a risk which a typical gas distribution company would not have.

Brena said FNG had provided no evidence that it had an ownership or controlling stake in the North Slope LNG project "or that FNG ratepayers would have bene-

see FNG RATE HIKE page 11


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ENVIRONMENT & SAFETY

Oral history chronicles 1989 oil spill

The Prince William Sound Regional Citizens' Advisory Council and the University of Alaska Fairbanks have partnered to create an online oral history of the Exxon Valdez oil spill.

"Through the university's Project Jukebox website, visitors can access video, audio and written resources that offer a rich understanding of the 1989 Exxon Valdez oil spill," the council said in a July 23 press release. "The personal stories of 20 people who experienced the spill firsthand are highlighted in the project. Each person talks about the impact the spill had on their life and the environment, the cleanup response, the long-term effects of the spill, and changes in the oil industry since 1989. Twenty-five years after the Exxon Valdez oil spill, Project Jukebox is helping preserve this piece of history. Many of these stories are being told for the first time."

To access the oral history, go to <http://jukebox.uaf.edu/exxonvaldez>.

The council, the Alaska State Library and others provided funding support for the project.

The council is a congressionally mandated nonprofit that monitors the oil tanker terminal at Valdez. The council draws most of its funding through a contract with the terminal operator, Alyeska Pipeline Service Co.

The Exxon Valdez was an oil tanker that struck a reef in Prince William Sound, spilling about 11 million gallons of North Slope crude. No one died in the shipwreck, but the spill had a major impact on wildlife and habitat.

The oral history interviews "will be of particular interest to local residents of Prince William Sound, the Kenai Peninsula and Kodiak Island who were impacted by the spill, but also to people from around the world hoping to prevent similar accidents in their coastal waters," the council said.

The council added: "These poignant oral history recordings are stark reminders of the need to combat complacency regarding oil spill risks."

—WESLEY LOY

LAND & LEASING

BOEM extends OCS comment period

The U.S. Department of the Interior's Bureau of Ocean Energy Management said July 30 that it has extended the public comment period for its 2017-22 outer continental shelf oil and gas leasing program by 15 days, to Aug. 15.

BOEM said the extension was in response to requests from several states.

The current five-year program expires in August 2017.

Following close of comments, BOEM will prepare a draft proposed program.

—PETROLEUM NEWS

continued from page 10

FNG RATE HIKE

fitted from this project," and said the lack of documentation gives the appearance that the \$5 million was "nothing more than giveaways by FNG to its affiliates."

Gas price protested

Brena protested the gas supply price which FNG expects from Titan and said RCA should investigate the reasonableness of FNG's proposed cost of gas. He also objected to inclusion of a management fee to the parent company, rate case expenses and lobbying costs.

Britton said most of the cost increase under the Titan contract is due to factors

such as an increase in the contracted price for natural gas. FNG had a contract with Aurora Gas for \$6 a thousand cubic feet, mcf, which terminated May 31 of this year, Britton said. FNG's new contract, with Hilcorp Alaska, is \$6.86 per mcf this year, increasing to \$7.13 per mcf next year; costs for electricity and third-party trucking have also increased. Britton said Titan is "giving FNG a great deal" for LNG. He said the contract is adjusted monthly, based on Titan's costs to process the gas into LNG, third-party trucking costs and all other costs, with an estimated average price for the rest of the year of \$15.06 per mcf. ●

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FINANCE & ECONOMY

Betting on gas recovery

Two years after making its initial footprint in the Western Canadian Sedimentary basin, junior producer Pine Cliff Energy has joined those who believe natural gas prices are on the verge of a rebound.

It has taken a C\$100 million plunge by acquiring shallow gas holdings in Alberta and Saskatchewan from an unnamed "senior producer," gaining 5,300 barrels of oil equivalent per day and a base that is 100 percent weighted to gas.

The transaction, due to close by Nov. 1, is consistent with Pine Cliff's existing 460,000 gross acres in the southeast corner of Alberta that it describes as strongly leveraged to a gas price recovery.

The company is also producing from multi-zone plays covering 35,260 gross acres in west-central Alberta, where it has a working interest of 56 percent and a 90 percent operating role. That output is weighted 23 percent to oil and natural gas liquids.

It produced 6,272 boe per day in the first quarter compared with 2,536 boe per day a year earlier, and has set a 2014 outlook of 6,100-6,500 boe per day.

Pine Cliff said the acquisition will allow it to build base production to more than 11,000 boe per day, with a combined decline rate of 14 percent from its new proved plus probable reserves of 15.5 million boe.

A number of "potential low risk growth opportunities" have been identified on the properties, including the use of infill drilling, recompletions and well reactivations, it said. The acquisition costs are calculated at C\$18,870 per flowing boe of production and C\$6.45 per boe of proved plus probable reserves.

—GARY PARK

*The transaction, due to close by Nov. 1, is consistent with Pine Cliff's existing 460,000 gross acres in the southeast corner of Alberta that it describes as strongly leveraged to a gas price recovery.*

Court schedules vote of Buccaneer plan

A bankruptcy court is allowing Buccaneer Energy Ltd. to sell its "de minimis" assets.

The recent order from the U.S. Bankruptcy Court for the Southern District of Texas establishes procedures for Buccaneer and its subsidiaries to sell or abandon any assets valued at less than \$3,000. The procedures require Buccaneer to provide at least 10 business days of notice before completing any transaction. The notice must describe the asset being sold, identify the buyer and list the purchase price, among other details.

The total value of all de minimis assets sold this way cannot exceed \$200,000.

*The total value of all de minimis assets sold this way cannot exceed \$200,000.*

Doesn't cover interests in properties

The order only allows Buccaneer to sell assets it owns outright, and doesn't cover the interest Buccaneer may own in properties, such as the Endeavour jack-up drilling rig. If Buccaneer claims that it owns some asset related to the rig, the company must provide the owners of the rig with notice of its intentions and the owners are allowed to object.

The procedures for Buccaneer to sell larger assets in its portfolio continue to play out.

The court recently approved the package of information Buccaneer put forward for holding an auction to sell "substantially all" of its assets. The creditors must vote on the plan before it can be implemented. The creditors must submit their ballots by Aug. 22 and Buccaneer must report on the results of the vote by Aug. 25, according to the court.

The creditors also have until Aug. 27 to object to a disclosure statement attached to a proposed plan for distributing the funds collected through a sale of the assets. The statement is meant to elucidate how the distribution plan would work. Some creditors objected to an earlier version of the statement, saying it was inadequate and premature.

—ERIC LIDJI



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# Oil Patch Bits

## Crowley installs automated system at McGrath airport

Crowley's Alaska fuel sales and distribution group has unveiled McGrath airport's first aviation fuel card lock system, offering pilots the convenience of 24-hour refueling services at one of the region's busiest airfields. The implementation of the new, fully automated system means that aviators can access Crowley fuel pumps with the swipe of a credit card or proprietary card the same way that drivers would at a local gas station. Moreover, the easy-to-use system eliminates extra fees previously associated with after-hours transactions.

McGrath Airport is popular amongst pilots flying across the state because of its central location. Before Crowley installed the card lock system aviators had to complete their fuel purchase during regular business hours or arrange to have a Crowley employee meet them at the airport. Now, automated sales transactions save pilots time and money.

"The 24-hour availability of our top-quality jet fuel and avgas was something that our customers had been asking about for a while now," said Sean Thomas, Crowley vice president. "Not only are pilots able to access Crowley fuel around the clock with the card lock system now in place, they're paying less for that convenience."

Crowley's card lock refueling pumps are located at the McGrath airport on the tarmac east of Runway 25, directly in front of Crowley's office. Call 907-524-3019 for more information.

## CGG's Hampson and Russell awarded with membership

Dan Hampson and Brian Russell of CGG were awarded honorary membership in the Geophysical Society of Houston during its 2014 Annual Honors and Awards Banquet.

Honorary membership in the GSH is conferred in recognition of a distinguished contribution to the geophysical profession. It is the highest award bestowed by the GSH and Hampson and Russell were the only recipients this year.

Hampson and Russell founded Hampson-Russell Software in 1987. When the company was acquired by Veritas DGC in 2002 and then by CGG in 2007, the founders continued their mission to deliver best-in-class seismic reservoir characterization software and services to the world-wide oil and gas industry. Today, Hampson serves as president, Hampson-Russell, which is now part of CGG GeoSoftware, with Russell as vice president for global Hampson-Russell sales, and both continue to guide the strategy and development of geoscience software within the CGG



Dan Hampson, left

COURTESY PHOTO

see OIL PATCH BITS page 13

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

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## PERSILY Q&A

off gas and profit from revenue and affordable energy for Alaskans. We just need to be realistic. The world is not short of natural gas. The world has way more gas and lots of potential suppliers. If we want to sell into that market, what is it going to take so we can be competitive and so we can still prosper from it?

*Petroleum News: Some have said part of being the state's own worst enemy often lies with the political battles and that doesn't allow for advancing legislation. Can that be a factor still?*

Persily: Sure. Politics can get in the way of everything, be it state, municipal or federal level. Of course.

*Petroleum News: You folks noted the high number of applications out there. Well into the 30s. Are those daunting numbers?*

Persily: Yeah, there's a lot. Everyone knows they're not going to build all of them. I'd be shocked if 10 years from now there were half a dozen. Ten years ago, before shale, everyone thought the U.S. was going to import LNG. At one point there were 42 proposed import terminals. Obviously we didn't get 42 import terminals built. Now all the import terminals in the Lower 48 want to become bi-directional and get in the export business. It costs \$50 to file an export license for LNG plus lawyers time. It's when you start doing the environmental and engineering work that shows you're serious.

*Petroleum News: What are some of the other uncertainties in the U.S. export market whether it's regulatory or otherwise?*

Persily: There's always regulatory. You need permits: federal; state; municipal. There are always risks of litigation. But with the markets uncertain, no one is going to spend billions unless they have secure sales contacts and terms that produce a reasonable profit for them. I think a chance to get financing depends on the market and the customers. The biggest uncertainties are what's happening in the market; what are customers willing to sign; how much are they willing to pay; can you make money at that price or do you drop out because you are too expensive.

*Petroleum News: When you are talking about demand, at least for a project like AKLNG, are you talking about buyer or buyers, or even high multiple buyers?*

Persily: Multiple buyers. Nobody takes one. You could easily have a dozen or more customers — more than that. It's complicated. No one company can take that much so it would be more than a dozen customers.

*Petroleum News: As you look at the state's position with SB 138, what are the strengths and what are the weaknesses?*

Persily: Alaska's weaknesses are construction costs. It's very expensive to build anything and that certainly goes against the project. Its strengths are it's closer to Asia than anywhere else in North America. It's closer to Asia than British Columbia and it's closer than the Gulf. Its strengths are that it has 35 trillion cubic feet of proven reserves. There are no exploration risks. With a lot of other projects, once you start drilling you don't always know what you've got. Well on the North Slope, they know what's there. Prudhoe Bay production costs will be pretty low. It's being produced every day. It just isn't being converted into an LNG product. Because of Alaska's cold temperatures, the equipment to run the compressor stations, the gas treatment plant, the liquefaction plant will be much more efficient than say a piece of equipment sitting in the Middle East — maybe as much as 15 percent more

efficient. So, you'll get more LNG for less energy and less money going in. That's a serious advantage. So weather efficiency. Proven reserves. Shorter distance for tanker runs. Prudhoe Bay has a high Btu gas. It's perfectly suited for the Japanese market where they burn higher Btu gas than in the Lower 48. So the question is whether all that can overcome the costs of construction up here and how that compares to all the projects around the world.

*Petroleum News: What about SB 138. Has the state really advanced the state's position in getting a gas line project moving?*

Persily: The companies do seem to like having the state as a partner. They feel it aligns the state and the companies better. Other people would disagree with that; they disagree that's good public policy. Regardless that's what the Legislature approved. The companies like the state as a partner in the project. It reduces the companies' risk. They put up less money because the state is going to put up some. It gives them fiscal certainty with the state as a business partner so from that perspective it's an advantage.

*Petroleum News: Now when you were deputy commissioner of Revenue (in 2002), did the idea of state ownership ever come up?*

Persily: We considered it and rejected it, but keep in mind back in 2002, the state was down to its last couple of billion dollars in the budget reserve. We were running huge deficits. There was no way we could have afforded it even if we wanted to.

*Petroleum News: Lawmakers often like to look for a model when discussing projects and analysts or consultants often have one handy, but as you look at this arrangement with the state, there really isn't one in this case or is there? What could you compare it to?*

Persily: Nothing. There is nothing of this size comparable in the United States. There is just nothing like it in North America where they are looking at 25 percent stake in an oil and gas project. There is nothing to compare it to.

*Petroleum News: So is it a trailblazing thing or is it a case of finding your way around in the dark, or a little of each?*

Persily: If you support it, you would say trailblazing. If you oppose it, you would say probing in the dark, but there is still nothing comparable.

*Petroleum News: You folks did cite other major projects — airports, tunnels, LNG projects — which did not come in on time or on budget. What kind of cautionary tone should that set?*

Persily: It just proves the point that good project management is essential. Cost overruns are pretty painful. Certainly as a partner the state will be responsible for some of the cost overruns. People just need to know that.

*Petroleum News: With AGIA off the*

*table, as you look back, was there any value to it?*

Persily: Who knows on a political value? Much of the work the state paid for under AGIA can be used for this project. It was done for the gas treatment plant on the North Slope, for the pipeline and compressor station as far south to Fairbanks. You will need all that for this project, too. So as far as data gathering it can be used here. Money spent for the section of pipe from Livengood east to the Canadian border, no, that's of no use to us. That doesn't mean it's worthless. It would be of some value to the state Division of Geological and Geophysical Surveys when they went out and looked for earthquake fault lines and found a bunch, they got to use that information. Did the state get the full value? No. You could say the same thing about the Knik Arm Bridge. If that thing does not go ahead, did the state get value? Some maybe, but not the full value. That's the risk you take with big projects.

*Petroleum News: Let's talk about the three steps connected to a project: Pre-FEED; FEED and FID (final investment decision). To a lot of people, these are industry terms. Even Bill (White) said the terms can be different. So let's start with pre-FEED.*

Persily: It's as significant as FEED, but

it's a half billion to start putting together your engineering, design and environmental data to see if you have a viable project. It's not going to give you a black and white answer. It may tell you it's hopeless; then you stop. Then if it looks favorable, then you go into the front end engineering and design. That's \$2 billion plus. When you're done spending with that much money, then you have a pretty good idea how much it's going to cost to build it and how long it will take to build it. It would be ridiculous to go right to full engineering and design for \$2 billion when you can spend a half billion and you can test it first. You go in increments. You say I'll spend a half billion and see if this is plausible. If not I'm only out half a billion. If it's plausible, then I'm still interested and I'll go at it with \$2 billion. Pre-FEED is sort of roughing it out. FEED is the final details.

*Petroleum News: So when you get to FID, what does that tell Alaskans or investors?*

Persily: It tells someone this is what it is. I made a final decision to invest in a project. I'm going to start ordering steel and modules and hiring people. It tells them that their dream has finally come true. ●

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## OIL PATCH BITS

GeoSoftware organization.

Sophie Zurquiyah, senior executive vice president, Geology, Geophysics & Reservoir, CGG, said, "CGG is extremely privileged to have Dan Hampson and Brian Russell as key members of our GeoSoftware management team. They are shining examples to us all of true dedication to the advancement of our industry. They fully deserve the recognition they are regularly shown by our industry societies for their total commitment to innovation and their enthusiasm for sharing their knowledge and expertise for the benefit of the wider geophysical community."

### URS announces hiring of Amy Rosenthal

Amy Rosenthal recently joined URS as a senior environmental planner and project manager with more than 18 years of practical environmental resource management, planning, regulatory and academic experience. She is a technical expert in National Environmental Policy Act analysis and cumulative impact assessment, with a proven ability to manage large-scale, controversial projects for federal and commercial clients, including the U.S. Fish and Wildlife Service, Bureau of Land Management, National Marine Fisheries Service, the Bureau of Ocean Energy Management and the National Park Service.



AMY ROSENTHAL






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## WWF STUDY

reaching Alaska's Arctic National Wildlife Refuge.

Using chemical dispersants to curb the spread would result in toxic concentrations of dissolved crude in the water column along the Beaufort Shelf, which houses species that are critical to the Arctic ecosystem.

### Inuvialuit Game Council involved

WWF Canada worked with the Inuvialuit Game Council, the IGC, of the Northwest Territories on compiling the report and plans to hold a series of meetings with local communities to review the findings.

Modeling was based on up-to-date data on ice, weather and ocean current in the Beaufort, with estimates of spill sizes and the effectiveness of cleanup measures built on information used by the industry.

The consultants considered 22 different oil-spill scenarios, including a fuel or oil spill from a tanker, a pipeline release and blowouts in both shallow and deep water.

RPS found that in all cases there would be up to a 50 percent chance that an oil slick would spread into Alaska and a 10 percent chance of the oil drifting as far as Russian waters in the Chukchi Sea.

Subsurface oil contamination from a blowout would be very likely to spread into Alaskan waters.

Project coordinator Dan Slavik said it is "quite startling how quickly and how widely (spills) can spread," regardless of the spill size or the time of year.

### 2011 report cited weather impact

A 2011 report commissioned by the NEB determined that cleanup efforts in Arctic waters would be impossible at least one day in five because of bad weather or sea ice.

Miller said that even a minor spill could

have a major impact on marine wildlife including beluga whales.

Frank Pokiak, chairman of the IGC, said local residents are now in a better position to understand what spills could do to their environment, adding that the Inuvialuit reliance on seals, whales and fish could experience a devastating setback.

"One spill in the Beaufort would be devastating for the Inuvialuit and the marine species and wildlife that we harvest," he told reporters. "We know there is going to be risk in offshore activity that is happening. So we're dealing with those issues and haven't decided on a position."

WWF President David Miller said that with decisions being made on exploration proposals the "need for this information is very urgent."

He said the study findings demonstrate the enormity of the risk posed by deepwater drilling.

Miller insisted the industry must show it has a credible plan to manage risks and "based on what we've seen to date that's going to be extremely difficult for them to do, particularly deepwater wells."

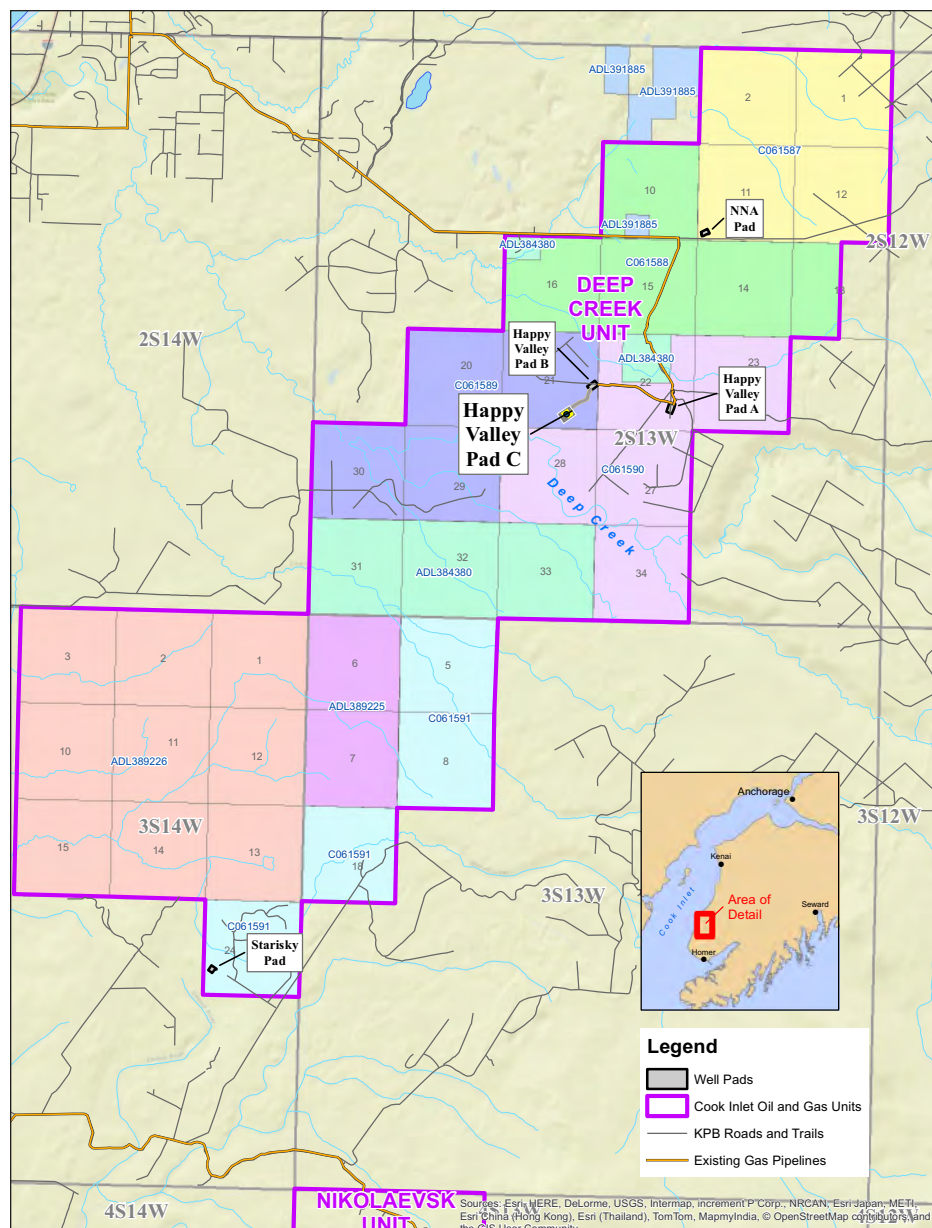
### Objections to same-season relief wells

Imperial and Chevron have both objected to the NEB's proposal for same-season relief wells, arguing that would be impossible to achieve and have suggested their own alternatives.

Imperial said its proposal to use the "best available technology and apply the best safety practices and standards" would be consistent with the NEB's commitment to "goal-based regulation in ensuring the highest levels of protection in offshore Arctic drilling."

It described its primary approach to well control as the "prevention of incidents," while Chevron said it has developed a new technology that will ensure a fail-safe barrier against blowouts rather than same-season relief wells. ●

Contact Gary Park through publisher@petroleumnews.com



continued from page 1

## HILCORP PROGRAM

was looking to farm out acreage in the south of the unit.

The state Division of Oil and Gas believed the unit contained additional accumulations and required any future plans of development to make plans for exploration outside of existing participating areas. "Unocal's interpretation of the data also indicates a potential accumulation south of the Happy Valley reservoir that Unocal refers to as the Middle Happy Valley Prospect," the division wrote in a 2004 decision concerning the unit.

Unocal took steps toward exploring the prospect, but the plans never materialized. By the time Hilcorp acquired the unit, the state was on the verge of contracting the undeveloped acreage. An extension gave Hilcorp some time to produce a plan for exploring the area.

A 2013 seismic survey indicated the presence of a large shallow gas deposit in the southern reaches of the Deep Creek unit, beyond the reach of the existing A and B pad.

### Beyond existing pads

The current program would step just beyond the reach of those existing pads.

The "ideal" location for C pad would have been southeast of the proposed location, but Hilcorp said that it chose an alter-

nate site to avoid nearby wetlands. The proposed site is located on Ninilchik Natives Association Inc. land 14 miles from the Sterling Highway.

The program calls for drilling one appraisal well to delineate known gas reservoirs followed by three development wells. If successful, Hilcorp would convert the four wells into production wells that would be connected to B pad through a 6-inch steel pipeline and from B pad through existing pipelines to A pad and the Kenai Kachemak Pipeline.

The construction program is expected to last one month, with drilling to begin later this year. The current schedule calls for drilling HVC-17 in the fourth quarter, HVC-18 in the first quarter of 2015 and HVC-19 and HVC-20 "in 2015 or later," according to Hilcorp.

The 6,000-foot HVC-17 and the 5,000-foot HVC-18 wells would target the Sterling and Beluga formations outside the Happy Valley participating area and would likely justify the creation of a new participating area, Hilcorp has said in previous filings. All four wells in the appraisal program would be drilled directionally to the south, Hilcorp said.

Previously, Hilcorp mentioned plans to drill the Middle Happy Valley No. 1 well in 2015. The well would target potential accumulations even farther to the south. ●

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## EXPANSION PLANS

year at the field in state waters of the North Slope, north of the Kuparuk River unit, calls for drilling four production wells with laterals, three injection wells and four multilateral sidetracks of existing wells. The work for 2015 calls for drilling three production wells with laterals, four injection wells and four multilateral sidetracks, as well as a new water sourcing well into the Ivishak.

### Program focused offshore

Eni has been developing Nikaitchuq using a combination of onshore and offshore drilling, but the current program is focused offshore, which allows the company to reach accumulations located farther west. The company completed its initial onshore drilling program from the Oliktok Point Pad in August 2012 and said it expects to complete its initial offshore drilling program from the Spy Island drill site this coming November.

With work completed for the time being at the Oliktok Point Pad, Eni plans to cold stack Nabors rig 245 through January 2015, when the rig would be used to drill an injection well and a water sourcing well into the Ivishak formation. Eni is also considering a campaign to use the rig to work-over well it had previously drilled from the onshore pad.

The program at the Spy Island drill site would use Doyon rig 15 and a Baker RAM multilateral system. For the foreseeable future, Eni plans to drill all new production wells as multilaterals. (The company would continue to drill injection wells with single laterals.) Once the planned program is completed, around March 2015, according to the company, Eni plans to convert eight single-bore wells at the pad into multilateral wells.

Eni attributes previous multilateral wells with a large jump in production.

### Schrader Bluff OA focus

The current program is focused exclusively on the Schrader Bluff OA sands, but Eni is in the process of “derisking” the shallower Schrader Bluff N sands, which could contain between 40 million and 100 million barrels of oil, according to company estimates.

The company is also deciding whether or not to commission a second offshore drilling pad farther west, which would allow it to develop a reservoir in the Sag River formation.

And as it pursues those two potential developments, Eni is moving ahead on a westward expansion of the OA sands into a section of the unit previously considered unfeasible.

Some of the work for the year is under way, although Eni is planning a 36-hour facility shutdown in late August to accommodate “critical maintenance items,” the company said.

### Transitional phase

Eni is in a transitional phase at Nikaitchuq.

After acquiring a minority stake in the unit in 2005 and the remaining working interest in 2007, the company sanctioned a \$1.45 billion development program in early 2008.

The initial program called for drilling some 73 production and injection wells by 2011, but the company later modified the plan to include some 51 wells: 11 producers and eight injectors from Oliktok Point, 15 producers and 12 injectors from Spy Island, a disposal well at each pad and three water sourcing wells into the Ivishak formation.

After slowing the pace of its develop-

ment because of weather delays in conjunction with the short Arctic sealift season, Eni brought the Oliktok Point Pad online in late January 2011 and brought the Spy Island drill site online in late November 2011. As the development schematic progressed, Eni contracted two undeveloped leases from the unit.

Through the end of 2014, Eni expects it will have drilled 53 wells at the unit, largely keeping to its earlier plan but shifting some onshore wells to the offshore drilling pad.

### Current peak 25,000 bpd

In June 2014, Eni reach its current peak production of 25,000 barrels per day at Nikaitchuq, a rate the company expects to maintain through the end of the year, according to its most recent plan of development. In announcing the milestone, the company said it expected to reach 30,000 bpd within the next year. The Nikaitchuq production facilities were designed to accommodate 40,000 bpd of crude oil.

With the initial campaign nearing completion, Eni is beginning to apply advanced technologies to the field, specifically a multilateral and waterflood program launched last year. The program helped increase the average rate of oil production per well to 924 bpd, up from 565 bpd, throughout 2013, according to the company.

The multilateral program involves drilling laterals in “counter undulation” to existing production wells. The well and the lateral undulate in a mirroring fashion, so that the lateral curves downward where the well curves upward, which covers more formation.

Through the end of the year, Eni expects to have added dual laterals to 15 existing or recently drilled wells — eight from the Oliktok Point Pad, five from the Spy Island drill site and two from wells drilled as westward extensions of the Spy Island drill site.

### Three expansion opportunities

As Eni advances near-term efforts to expand the use of multilateral technology, the company is also evaluating three geographic or geological expansions at the field.

The company is looking to extend its development of the Schrader Bluff OA sands into the “western area” of the unit. “Originally considered technically beyond drilling reach, this area is now considered a challenging but feasible drilling target,”

the company wrote in its most recent plan of development. The project involves drilling four wells — two producers and two injectors — from the Spy Island drill site into the western flanks of the field starting this summer. According to the company, the Nikaitchuq field has documented “higher productivity” and “better fluid properties” as it moves to the west.

The plan of development fails to identify the precise extent of the “western area” development, although potential plans for a Sag River development would suggest that the “western area” stops far short of the undeveloped northwest corner of the unit.

In a Nikaitchuq plan of development filed last year, Eni proposed a second offshore drilling pad in the northwest corner of the unit to access a Sag River reservoir and said it intended to submit a proposal to its “upper management” within “12 to 18 months.”

In the current plan of development, Eni said it plans to spend the next 12 to 18 months reviewing “geological, petrophysical and seismic information” and monitoring existing and pending wells at the Nikaitchuq unit to “aid in identifying potential exploration and development opportunities, including Sag River and Schrader Bluff N sand.”

The company said it plans to submit a proposal for a Sag River development to upper management within the current 12-18 month timeframe. A development would allow Eni to retain all or part of four undeveloped leases currently included in the unit boundaries.

### Sag River

The Sag River at Nikaitchuq is deeper than the Schrader Bluff. Although thought to contain lighter oil than the shallower formations, the Sag River formation is “plagued with poor quality reservoir rock” and development would be “marginal at best unless there are significant advances in stimulation or enhanced oil recovery

technology,” state officials wrote in a previous decision to modify the royalty structure at Nikaitchuq.

Alongside those studies, Eni is also still evaluating another proposal discussed last year.

While Eni sanctioned Nikaitchuq based on the potential of the Schrader Bluff OA sands, the company has long discussed the possibility of developing the shallower N sand.

Eni claims to have encountered between 40 million and 100 million barrels of “contingent resources” in the N sand in 2012, which prompted the current appraisal program alongside development of the OA sands. The company conducted “sedimentological, petrophysical and reservoir studies,” extended the “toe” of several OA sands development wells and drilled a pilot well last year to test completion strategies.

Eni said that it expects those studies to be finished by the end of the year, at which point the company would decide whether to propose a “conceptual project” to management.

### Infrastructure work

Aside from drilling, Eni has also been expanding its infrastructure.

The company installed the Black Gold Camp at its onshore Nikaitchuq Operations Center in the third quarter of 2013 and installed a snow fence alongside the center in early 2014 to protect against drifts in the winter. Eni started a second train at its production facilities in February 2014 and installed a permanent load bank at the facility in the second quarter.

In May 2014, Eni started a temporary chiller to re-freeze thawed permafrost at its source water well. Now, the company is working to install a permanent chiller system. ●

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## PERMIT RULING

production drill site inside the vast petroleum reserve. As such, the project has become a focal point for resistance to the oil industry's slow expansion into the western North Slope frontier.

### Explanation needed

The Nuiqsut villagers are suing the Army Corps, and not ConocoPhillips directly. The oil company has intervened in the case to help defend the permit it received from the Corps.

In late May, Gleason ruled the Corps had violated NEPA, the National Environmental Policy Act, by failing to explain why it chose not to do a supplemental environmental impact statement for the CD-5 project. The supplement would consider changes to the project since 2004, when the original EIS for Alpine satellites was done.

On July 22, Gleason issued an order sketching out how the case will now proceed.

The order notes that the Corps,

ConocoPhillips and the Nuiqsut plaintiffs all agreed the 2011 permitting decision should be remanded to the Corps to rectify the NEPA violation, which the Corps says it can easily do.

The villagers asked the judge to vacate the permit pending completion of the remand. But Gleason declined to do so.

The judge wrote that "vacatur at this junction is not warranted because, as ConocoPhillips has demonstrated, the disruptive consequences it would have in the midst of the construction project weigh so heavily against it."

Gleason noted that the plaintiffs "for whatever reason" didn't file suit until more than a year after the Corps granted the permit.

Now, she wrote, "the project is already substantially constructed."

### Construction progress

The judge's order summarizes the status of construction.

"ConocoPhillips indicates that the following construction work has already occurred at CD-5: the gravel footprint has been laid, four bridge structures

have been installed, and a multi-season ice pad has been created," the order says. "This summer and fall, ConocoPhillips plans to conduct tie-in work, install decking on two bridges, install the spans on the Nigliq Channel bridge, and 'season' (i.e., compact) the gravel on the CD-5 road and pads. The gravel seasoning can only be done in summer, when temperatures are consistently above freezing."

ConocoPhillips told the judge that pulling the permit now would throw CD-5 into a state of "regulatory confusion," and leave the partially completed project vulnerable to erosion or other problems.

The Corps, on remand, must explain whether a supplemental EIS is needed, taking into account post-2004 climate change information, Gleason ordered.

She gave the Corps a deadline of Aug. 27 to complete the remand and report back. Meantime, gravel seasoning and bridge installation may proceed.

—WESLEY LOY

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## KUPARUK RIG

period of time Doyon "considers sufficient to justify ... the capital investment needed to build the rig." Doyon said North Slope rigs cost more than \$100 million.

### Third recent rig addition

"Doyon 142 will be the third rig we have added to North Slope operations after tax reform," Wheatall said, referring to passage of Senate Bill 21 in 2013. Nabors 7ES was added to ConocoPhillips Alaska drilling operations in May 2013 and Nabors 9ES in January.

He said that while rigs come and go depending on the company's projects, ConocoPhillips expects to be at seven rigs once Doyon 142 is working, up from an average of four rigs between 2008 and 2012.

Ron Wilson, Doyon Drilling's general manager, said Doyon 142 is under construction near Edmonton, Alberta, with engineering 98 percent complete and fabrication 23 percent complete. Wilson said Doyon expects the rig to be fully assembled about this time next year. At that point, it will be broken down and shipped to the North Slope, arriving in the winter of 2015-16, where it will be reassembled. Wilson said the goal is to have Doyon 142 at work approximately the first of April 2016.

### Value of the rig

Wheatall said ConocoPhillips is pursuing development both at Sharks Tooth, drill site 2S, and at West Sak NEWS, drill site 1H.

"Without this rig, we would have had to push back the start of the 1H development several years," he said.

"This rig will have capabilities that no other rig that we have in our fleet ... can perform," Wheatall said, and "will be able to drill wells that we wouldn't be able to drill" with the current rig fleet.

Doyon's Wilson said one of the most unique things about Doyon 142 is that it will be able to get over different well spacings, whether they are 10-foot or 15-foot. Keeping the weight down on the rig down was also important because of roads and river crossings, he said.

Wheatall said one of the most unique things about Doyon 142 "is it will be able to operate both at Kuparuk and Alpine."

"There's no rigs on the North Slope right now that can cross the Colville River in the wintertime and still fit on all of our wells at Alpine," he said. ConocoPhillips as more than 200 wells at Alpine, Wheatall said. "This rig was designed ... very, very carefully so that we can keep the weight down and cross the Colville River, but it can still work on all of the wells at Alpine," something no other North Slope rig can do. Alpine is not connected to North Slope infrastructure by road. Rigs are moved in and out of the field on winter ice roads, partly built offshore.

—KRISTEN NELSON

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