Moving ANS syrup

BP in initial testing phase for extracting Ugnu heavy oil at Milne Point

By ALAN BAILEY
Petroleum News

Fingers are crossed at BP as the company’s heavy oil project at S-Pad in the Milne Point unit on Alaska’s North Slope moves into its first test phase. The company is lowering a pump into a well designed to extract oil with the consistency of chocolate syrup from the Ugnu formation, 4,200 feet below the surface. The test well is located on an S-pad extension that was constructed for the project.

An initial test should take about three weeks, with a phase one testing project continuing into 2009 and involving the drilling of three more wells.

Masters of their destiny

Newfoundland leader hails Hebron advance, oil to yield $28B in royalties, taxes

By GARY PARK
For Petroleum News

Danny Williams, the tough-talking, brawling premier of Newfoundland, has achieved his own version of an Olympic gold medal.

And, more importantly for the petroleum industry, the East Coast offshore will apparently live to fight another day.

In signing a landmark agreement Aug. 20, the Williams government and a Chevron Canada-led consortium, have set the stage for initial production from the Hebron/Ben Nevis oilfield in the 2016-2018 period, peaking at 150,000 barrels per day from reserves of about 700 million barrels.

The government will take a 4.9 percent equity stake in the project for an upfront payment of C$110 million and a contribution to its share of pre-production and construction costs, estimated last year at C$5.8 billion.

That will leave Chevron with 26.63 percent, ExxonMobil Canada with 36.04 percent, Petro-Canada with 22.73 percent and Norway’s StatoilHydro Oil & Gas 9.7 percent.

As a result, Petro-Canada will have a stake in all four of Newfoundland’s producing fields — 20 percent of Hibernia, 34 percent of Terra Nova (where it sees DESTINY page 17)

TAPS owners respond

Say shippers falsely criticized efforts to follow FERC order to lower rates

By ROSE RAGDALL
For Petroleum News

In a spate of filings Aug. 14 and 15 in response to shipper protests, owners of the trans-Alaska oil pipeline defended their proposals for lowering the line’s 2005 and 2006 interstate tariffs and their plans for tallying shipping rates in subsequent years.

The 800 mile pipeline runs from Prudhoe Bay on Alaska’s North Slope south to the Port of Valdez. The five owners, BP Exploration (Alaska) Inc., ConocoPhillips Alaska, ExxonMobil Production Co., Unocal Pipeline Co. (now a subsidiary of Chevron), and Koch Alaska Pipeline Co. L.L.C. also criticized the shippers’ objections, calling them
Canada, U.S. share Arctic expertise

Politicians make promises on Arctic policy

Buffett, Gates cause buzz in Alberta

Stakeholders respond

Say shippers falsely criticized their efforts to follow FERC orders to lower rates

Pacific Energy looking for partners; wants to sell down, farm-out Cook Inlet assets

Anchorage to study geothermal

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By ERIC LIDJI
Petroleum News

As Eni Petroleum works to become the fourth operator to produce oil from Alaska’s North Slope, the Italian super major is turning to a familiar strategy for disposing of the large amounts of industrial waste associated with development drilling.

Like BP, ConocoPhillips and Pioneer Natural Resources before it, Eni plans to pump millions of barrels of drill cuttings, slurry and wastewater around one mile underground beneath the offshore Nikaitchuq unit, located in the Beaufort Sea near Oliktok Point.

These “deep well injections” have become increasingly common on both the North Slope and the Cook Inlet basin over the past five years as a way to avoid the potential hazards of trucking industrial waste to a more traditional disposal site, according to Thor Cutler, with the U.S. Environmental Protection Agency.

“They are a very expensive alternative, but they’re more environmentally sound than to transport over the tundra,” Cutler said.

The EPA plans to issue a permit for Eni to drill four of these Class I injection wells at Nikaitchuq, two from a drill pad being built at Spy Island and another two from a new pad under construction at Oliktok Point. The permit would last for 10 years.

The federal regulatory agency is taking comments about the project through Sept. 15 when it plans to hold a public meeting in Anchorage on the issue.

Eni is currently spending around $1.45 billion to bring Nikaitchuq into production by the end of next year. With construction underway in the shallow waters of the Beaufort Sea as well as on land at Oliktok Point, Nikaitchuq will have the first production facilities in northern Alaska not owned or operated by BP, ConocoPhillips or Exxon.

Wells now used across Alaska

State and federal governments regulate several different kinds of deep injection wells.

In Alaska, the state government is responsible for Class II wells used exclusively by oil and gas companies trying to enhance recovery by injecting salt-brine into the ground.

More than a decade ago, federal regulators fined Doyon Drilling for disposing of hazardous Class I fluids into a Class II well at the BP-operated Endicott field.

Class I wells are used by oil, chemical and pharmaceutical companies, as well as other facilities like municipal wastewater treatment plants, to pump industrial waste below known sources of drinking water. To qualify for the EPA permit, a company must prove that any water in the reservoir is too salty for drinking.

“This deep well injection is into an area that is not a potential source of drinking water in the future,” Cutler said.

As of February 2008, the EPA counted around 550 Class I wells in the United States, mostly in the Gulf Coast and the Great Lakes regions, but also across Alaska, where access to traditional landfill sites is scarcer and traditional aboveground reserves pits are discouraged.

Although expensive, with each well costing around $3 million, the process has become more popular across Alaska over the past five years, although some Class I wells at Prudhoe Bay date back almost twenty years.
Refinery newcomer on the prowl

By GARY PARK

For Petroleum News

Canadian refining novice, Harvest Energy Trust, is ready to gamble C$2 billion on an expansion of its Newfoundland plant, looking for a partner to share the risk.

The trust’s daring move into the high-stakes refining sector two years ago has convinced it there is demand for a 75,000-barrel-per-day addition to its 115,000 bpd North Atlantic refinery, allowing the processing of heavier crudes that yield better products.

The plan involves upgrading the “negative-margin, high-sulfur” fuel it currently produces into higher-margin distillate and gasoline products, Harvest chief executive officer John Zahary said, noting that the objective is to steer the facility toward processing more diesel fuel oil and less gasoline and heavy heating fuels.

“The project is all about more and cheaper feedstock making more and better quality products,” Zahary said.

Must like the refinery business

He said the trust has been approached by potential partners in the two years since it paid C$1.44 billion to acquire the refinery, formerly known as Come By Chance, from Swiss oil trader Vitol.

But, acknowledging the shaky state of global markets as a possible deterrent to investors, Zahary said anyone thinking of becoming a partner “won’t be interested in this sort of refinery investment if you don’t like the refinery business … that’s a non-starter.”

As a result, he agreed the search will be challenging.

To aid the process, Harvest has hired Deutsche Bank, which advised Vitol on the 2006 deal with harvest, to flush out interested parties.

Harvest itself is certain it is on the right track in eyeing an expansion based on preliminary studies covering technical feasibility and plant reconfiguration designs.

In addition, a recently completed analysis by construction engineers SNC-Lavalin has “validated” the trust’s internal work.

Price is 25-30% stake in refinery

Zahary said the upgraded facility would continue buying crude from South America, Russia and the Middle East, but it would add heavier crudes, with the products targeted at the same markets the refinery serves today, with distillate going to Europe and gasoline to New York and Boston.

He indicated Harvest would expect a partner to potentially finance all or most of the upgrade costs in exchange for a 25 to 30 percent stake in the refinery.

He said the estimated return on investment and other financial metrics are “compelling.”

Jason Cramlyn, a Salmon Partners analyst, said that given Harvest’s “fairly levered” balance sheet, a partner would reduce the trust’s exposure in a volatile refining market.

However, he said that if the upgrade can be completed it would be a “fairly significant” refinery in North America and should be able to generate a fairly strong cash flow.

UBS Securities Canada analyst Grant Hofer said in a note to clients that lining up a partner could be “very challenging” because of the project risks.

Partner wanted for Alberta heavy upgrader

On another Canadian refining front, privately-held North West Upgrading has recruited a new top executive to improve its chances of finding a partner for a planned merchant heavy upgrader in Alberta.

The company has appointed Doug Quinn, a former manager with Shell Canada during the design and construction stages of its Athabasca oil sands project and who has since worked with Washington State’s Puget Sound refining, as its new chief executive officer.

He will take over as CEO from Rob Pearce, who will become senior vice-president of corporate development.

For Petroleum News

CIRCULATION

Forrest Crane

CONTRIBUTING WRITER

Judy Patrick Photography

CRON Staff Writer

Gary Park

CONTRIBUTING WRITER

Eni plans new seismic at Nikaitchuq

More recently, BP applied for Class I well permits at Milne Point in 2004, Prudhoe Bay in 2006 and Badami in 2007.

In recent years, ConocoPhillips and Pioneer both used deep injection wells on development at Alpine and Ooogunk respectively, while Forest Oil and Unocal applied for permits on efforts in the Cook Inlet basin.

“Tape is a common practice,” Cutler said.

Eni plans to drill its injection wells into the Canning and HUE Shale formations, a 3,000-foot thick block of shale-rich geology located just below the Shruber Oil formation.

The Canning formation sits about 3,600 to 4,200 feet underground, while the HUE Shale formation is about 3,600 feet below ground. Eni plans to pump its waste into many thin sand intervals in the two formations.

According to the EPA, reservoirs deeper than 4,300 feet below sea level are not underground sources of drinking water.

Nearly 3 million barrels

Of the nearly 3 million barrels of industrial waste expected to be generated over the 30-year life of Nikaitchuq, almost half...
Mackenzie line threat to bird life?
Agency wants restrictions on gas line impact; reports show tensions within government circles over Canada’s investment reputation

By GARY PARK
For Petroleum News

The sole protected wildlife area in Canada’s Mackenzie Delta is threatened by the Mackenzie gas project, claims a study by the federal government’s conservation branch.

But shelving the project could have damaging consequences for Canada’s investment reputation, the Canadian Wildlife Service (CWS) warned. The CWS is urging the physical impact of a Mackenzie Valley pipeline, if it proceeds, should be restricted to 1 percent of the Kendall Island Bird Sanctuary, a 240-square-mile blip near the coast of the Beaufort Sea.

The sanctuary was created in 1961 as a shelter for migratory birds such as snow geese and tundra swans and is home base for grizzly bears, polar bears and wolverines.

CWS regional director Bill Gummer told a federally-appointed environment, economic development and natural resources minister, the 2007 note said Indian and Northern Affairs Canada is worried that “lands with high resource values are not sequestered indefinitely.”

Environment Canada, which oversees the CWS, has suggested a Delta-wide land-management approach, which Indian and Northern Affairs believes could “add to the burden of obtaining regulatory approvals, increase costs and limit exploration and development” — all matters of special concern to the Canadian government of Prime Minister Stephen Harper, the Northwest Territories government and the industry.

The issue has surfaced prior to a scheduled visit by Harper to the Norman Wells in the central Northwest Territories is the service hub of the proposed Mackenzie pipeline, does not expect to deliver its final report until 2009.

A joint new release said: “Why the JRP wasn’t better prepared to manage the vast amount of evidence and produce a report on time is a mystery to us and — we would assume — potential developers.

A succession of regulatory delays has been the major factor in stretching the projected start of gas deliveries from the Mackenzie Delta to 2014 from 2010.

Frustrations boil over
Norman Wells, which stands to be one of the major beneficiaries of a Mackenzie Gas project, is growing edgy over continuing delays in the regulatory process.

The Town of Norman Wells, with a shrinking population of less than 800, and its business community have reacted sharply to word that the Joint Review Panel, charged with evaluating the environmental and socio-economic impact of a Mackenzie pipeline, does not expect to deliver its final report until 2009.

The town, along with the Norman Wells & District Chamber of Commerce, has rejected claims by the panel that the volume of material under review needs more time to sift through than originally anticipated.

A joint new release said: “Why the JRP wasn’t better prepared to manage the vast amount of evidence and produce a report on time is a mystery to us and — we would assume — potential developers.

A succession of regulatory delays has been the major factor in stretching the projected start of gas deliveries from the Mackenzie Delta to 2014 from 2010.

Norman Wells in the central Northwest Territories is the service hub of the pipeline, which was discovered almost a century ago by Imperial Oil, although initial production did not start until the 1940s.

Volumes on the existing Enbridge pipeline out of Norman Wells has been in decline, with hopes for its revival pinned on the Mackenzie project and successful exploration in the Central Mackenzie Valley.

The Mackenzie proposal includes a gas line from the Delta to southern markets and a separate liquids pipeline feeding into the Enbridge system.

A succession of regulatory delays have been exceeded. According to a briefing note by Morell, the CWS can refuse permits for the project, adding the Kendall Island sanctuary “has been identified as a potential show stopper … and is one of the top concerns for the proponents.”

But the note also warns that if the Mackenzie project is halted “the competitiveness of Canada will be put in question, with negative implications for Canada’s investment climate.”

“Canada could also lose an opportunity as a member of circumpolar countries to become a global model for sustainable development in the Arctic.”

Hunting at disagreement within the government, the 2007 note said Indian and Northern Affairs Canada is worried that “lands with high resource values are not sequestered indefinitely.”

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NEWCOMER

Oglander tapped for federal pipeline office
Joseph “Joe” Oglander has been appointed as general counsel for the Office of the Federal Coordinator for Alaska’s Natural Gas Transportation Projects. The coordinator’s office is responsible for expediting the response of federal agencies to the construction of a pipeline for commercializing North Slope natural gas and for ensuring that the agencies comply with the Alaska Natural Gas Pipeline Act of 2004.

Oglander will provide guidance on various legal matters, including legislation that applies to the gasline construction, the development of regulations and the development of coordinator office policies.

“Two are competing pipeline proposals and both proponents are aggressive,” said Federal Coordinator Drue Pearce. “We will face any number of unique legal and policy questions over the coming months. I’m pleased to welcome Joe Oglander to my senior management team to provide advice at critical junctures.”

Prior to this appointment, Oglander served as an attorney at the U.S. Air Force Legal Operations Agency, Civil Litigation/Environmental Law Division. Oglander had previously worked in the U.S. Department of the Interior and in the private sector.

The Mackenzie proposal includes a gas line from the Delta to southern markets and a separate liquids pipeline feeding into the Enbridge system.

The plant is designed to process bitumen into low-sulfur diesel and diluent. The first phase was supposed to have come on stream in spring 2009, handling 70,000 bpd of bitumen, but North West Energy Projects was unable to arrange financing. The startup has since been postponed to 2012. During these delays, the anticipated cost of the upgrader has climbed from C$5.6 billion to C$5.2 billion in 2007, partly because of a lawsuit from a group of unhappy investors.
Gulf of Mexico lease sale draws $487M

Exxon, Chevron, Statoil account for 70 percent of total winning bids, some 68% more than last year's Western Gulf sale generated

By KAY TISON
For Petroleum News

E"stern Gulf of Mexico Lease Sale 207 drew a healthy $487.3 million in apparent high bids, some 68 percent more than what last year’s Western Gulf sale generated, and bringing the total high bids of all federal offshore lease sales from the U.S. Gulf and Alaska this year to $9.5 billion. That performance certainly ranks 2008 among the more successful years in the history of the U.S. leasing program, no doubt greatly helped by the extraordinary run up in world oil prices.

In the middle of the national discussion about energy production, the activity at today’s sale (207) signals that the offshore oil and gas industry is serious about developing our nation’s resources,” said U.S. Interior Secretary Dirk Kempthorne, who attended the Aug. 20 lease sale in New Orleans, La.

Fifty-three companies bid

One thing is certain about the financial outcome of latest Western Gulf sale: the government’s take in high bids would have been far less had high rollers ExxonMobil, Chevron and StatoilHydro decided to sit this one out. The two U.S.-based supermajors and Norway’s Statoil doled out a combined $342 million, representing just more than 70 percent of the total winning bids in the sale. Moreover, the highest 10 single bids submitted, including three by Chevron and two by Statoil, totaled $230 million, or just more than 47 percent of total high bids.

Western Gulf of Mexico Lease Sale 207, the final offshore sale of this year, drew 423 bids on 319 blocks with 53 companies participating. Last year’s Western Gulf Sale 204 received 358 on 282 blocks with 47 companies participating. Though comparable in size, Sale 204 drew just $289.95 million versus the $487.3 million for this year’s Sale 207. In part, the difference might be attributed to the emergence of Chevron and particularly Exxon as major lease sale players in the Western Gulf, at least in terms of the amount of money they spent.

Other top bidders included Shell, Eni, Conoco

Exxon was tops capturing 130 blocks for apparent high bids of $127.33 million, while Chevron collected just 20 blocks for $127.28 million. Statoil, which over the past several years has emerged as a major U.S. Gulf player, came in third with $87.35 million for just five blocks. Other top 10 finishers in Sale 207, in terms of the sum of high bids submitted, were: LLOG Exploration Offshore, $23.17 million for 11 blocks; Shell Gulf of Mexico, $20.19 million for 15 blocks; Anadarko E&P Co., $14.80 million for 19 blocks; Hess Corp., $14.16 million for 22 blocks; ConocoPhillips Co., $10.50 million for two blocks; and Devon Energy Production Co., $6.67 million for 20 blocks.

Ultra-deepwater Alaminos Canyon

Ultra-deepwater Alaminos Canyon, home to the multi-field Perdido Hub Lower Tertiary development, received some of the largest bids in the entire lease sale, including Statoil’s sale-high $61.1 million for Block 380, which also ranks among the five highest single bids ever submitted in a federal offshore lease sale in the Gulf of Mexico, according to U.S. Minerals Management Service (MMS) records.

Statoil also captured Alaminos Canyon Block 424 for $22.3 million, the fourth highest single bid submitted in Sale 207. Shell and Chevron, both Perdido Hub producers, also weighed in on Alaminos Canyon – Chevron’s $20.12 million for Block 775 and Shell’s $11.99 million for Block 771. Blocks 775 and 771 also made the top ten for blocks receiving the highest bids.

Located at Alaminos Canyon 857 in 8,000 feet of water, Perdido is expected to begin processing oil from the Western Gulf in 2010. That’s a trend, as well as are drilled

see GULF SALE page 7

Feds expect ‘interesting’ NPR-A sale

With September NPR-A lease sale now past the date of appeal, Interior Department official expects companies to show up and bid

By ERIC LUDI
Petroleum News

ith a series of lawsuits finally resolved, a new round of environmental studies completed and calls in Washington for increased domestic oil production, an upcoming federal lease sale in the National Petroleum Reserve-Alaska should be worth watching, according to a U.S. Interior Department official speaking in Alaska on Aug. 14.

“I think we’re anticipating that it will be a very interesting sale,” said Stephen Allred, assistant Interior Secretary for land and minerals said during a speech to the Resource Development Council for Alaska.

Speaking to the Reuters news agency after his talk, Allred said the Sept. 24 lease sale covering around 4.8 million acres of the reserve should draw bidding from oil companies.

“I think we’re going to see a lot of interest,” Allred told Reuters. “We know there’s a substantial resource up there. We also know it’s a challenge to develop it.”

Officials with the Bureau of Land Management in Alaska, the branch of the federal agency responsible for the

see NPR-A SALE page 7
NATURAL GAS

Denali gets North Slope fieldwork permit

Denali — The Alaska Gas Pipeline LLC is expanding its fieldwork to the North Slope.

The pipeline company jointly owned by BP and ConocoPhillips received a state permit on Aug. 20 to start hydrology studies along the Dalton Highway and Yukon Pacific Corp. right of way between Galbraith Lake and Prudhoe Bay.

Through the studies, the company will collect information about the streams and rivers that would be crossed by a natural gas pipeline running into Canada.

That pipeline is competing with a similar state-sponsored effort by TransCanada.

Earlier this summer, Denali opened a field office to support work between Tok and the Canadian border, a 200-mile stretch of Alaska that hasn’t been studied as thoroughly as the corridor of the trans-Alaska oil pipeline in the northern part of the state. The trans-Alaska oil pipeline corridor, which includes the Dalton Highway in many places, is often called the most studied piece of land in the state.

— ERIC UDRI

FINANCE & ECONOMY

Prices rebound even as inventories jump

The price of oil bounced back near $115 a barrel on Aug. 20, as traders shrugged off a massive increase in U.S. crude inventories and a stronger dollar and focused on possible supply threats.

It was a volatile day for energy prices, which initially retreated after the U.S. Energy Department said a big gain in imports drove crude inventories up by a hefty 9.4 million barrels in the week ended Aug. 15.

And given that the hurricane season is not even halfway over, traders remain nervous about the possibility of storms striking oil facilities in the Gulf of Mexico.

The delivered price of Alaska North Slope crude oil rose 45 cents to $114.28 a barrel. futures exchange in London rose $1.11 to $114.36 a barrel.

One highlight of the sale involved keen interest in a cluster of blocks on the boundary line between Keathley Canyon and Garden Banks where Chevron submitted two of its three top ten winning bids. That region of the U.S. Gulf also included six of the 44 blocks with two bids and an additional seven nearby blocks attracting single bids.

Century Exploration of New Orleans submitted the apparent high bid of $2.7 million for the sale’s most hotly contested block, topping six other bidders for High Island Block 469, a shallow-water block previously leased by Mariner Energy.

MMS said production had ceased allowing defer leasing any land north and east of the lake for 10 years. The environmental groups involved in the lawsuit accepted that decision.

“For once, we may have a document that we can rely upon as we go forward without additional litigation.” —Allred said.

Contact Eric Ladi at 907-770-3305 or eladi@petroleumnews.com

— GARY PARK

GULF SALE

and key infrastructure allows for subsea tiebacks, explained one MMS official.

Two shallow water blocks in top 10

Chevron also submitted the second and third highest single bids in the sale — $52.1 million for Garden Banks Block 973 and $34.60 million for Garden Banks Block 972.

The highest bids are usually submitted on deepwater and ultra-deepwater blocks, areas with the greatest potential for large reserves. So the presence of two shallow water High Island blocks among the 10 largest single bids, both by LLOG Exploration Offshore for $8 million and $6 million, would have to be considered a sale surprise.

NPR-A SALE

under lease.

Lease sale past appeal date

The upcoming lease sale covers portions of the northeastern and northwestern planning areas of the reserve, some of which federal officials originally intended to offer in 2006. But a coalition of environmental groups challenged that proposal, citing concerns about the impacts oil and gas drilling might have on the wildlife around Teshekpuk Lake.

The matter wound through federal court, eventually leading to a new environmental review of the region and a July decision to defer leasing any land north and east of the lake for 10 years. The environmental groups involved in the lawsuit accepted that decision.

“One for once, we may have a document that we can rely upon as we go forward without additional litigation.” —Allred said.

— GARY PARK

EXPLORATION & PRODUCTION

Offshore Newfoundland production pushes 1 billion barrels per day

Husky Energy said its White Rose oil field offshore Newfoundland has pumped its first 100 million barrels, 27 months after coming on stream, pushing the region’s three producing fields close to the 1 billion barrel mark.

Husky, with Petro-Canada as its partner, said the White Rose field has been a “tremendous success … providing strong reservoir performance and high facility uptime.”

The current reservoir production capacity is 120,000 barrels per day. An infill well is currently being drilled and is due on stream in the current quarter.

Work is also underway at the North Amethyst satellite field, the first of three tiebacks identified at the White Rose satellite development with the first oil projected for early 2010 and major contracts have been awarded.

Of Newfoundland’s other two fields, Hibernia has yielded 59.4 million barrels since its launch in 1997 and Terra Nova has delivered 240 million barrels since January 2002.

—GARY PARK

PIPELINES & DOWNSTREAM

More pipelines in works to handle Alberta’s growing heavy oil load

Another CS$2.4 billion worth of pipelines are in the works to handle growing volumes of heavy oil in Alberta.

Enbridge is applying for environmental approval of two lines — one carrying 250,000 barrels per day of diluted bitumen and the other 70,000 bpd of diluent — to serve the Fort Hills oil sands project, operated by Petro-Canada, with UTS Energy and Teck Cominco as junior partners.

Subject to regulatory clearance, construction will start late in 2009 on the two pipelines, which will follow a common right-of-way, mostly along existing routes.

Separately, Pembina Pipeline Corp., with EnCana and Canadian Natural Resources as founding customers, is starting public consultation on its proposed CS$400 million Nipisi and Mitsu pipeline systems in the Pelican lake area of west-central Alberta.

Nipisi will provide capacity of 100,000 bpd of blended heavy oil service for shipment to the Edmonton area. The Mitsu line will combine new and existing pipelines to carry 22,000 bpd of condensate as a diluent for heavy oil.

The facilities are due to come on stream by mid-2011 and each is expandable by about 50 percent of its current design capacity.

—GARY PARK

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- Another C$2.4 billion worth of pipelines are in the works to handle growing volumes of heavy oil in Alberta.
- Productive drilling can help you position wells in the best place in the reservoir. And evaluate formations in less time. Our real-time imaging technology can detect sand-shale contacts and fluid boundaries while drilling. You can stay in the reservoir, access attic oil, and delay water cut.
- Schlumberger can help your team maximize reservoir contact and production.
- Schlumberger can help your team maximize reservoir contact and production.
Technology not ready for Lofoten drilling?

A Norwegian parliamentarian who represents communities in the Lofoten area says the seismic surveys conducted this summer were necessary to obtain knowledge about oil and gas resources, in accordance with the government’s exploration management plan. Hill-Marta Solberg, who is also chair of the Standing Committee of Parliamentarians of the Arctic Region, told Petroleum News that new technology should make drilling in the important fishery possible in the future, but the technology is not ready today.

Solberg was in Fairbanks in August for the Conference of Arctic Parliamentarians. She is a member of the Labor Party, which is part of a coalition government that includes the Socialist Left Party and the Center Party. Solberg is also optimistic about the Snohvit natural gas project in the Barents Sea, operated by StatoilHydro.

“Solving the problems with the company’s operations is a kind of a pioneer project, so we have to understand that there will be problems in the early stages,” Solberg said.

—SARAH HURST

New company to manage Kola Bay terminal

As part of a major consolidation of assets, Russia’s largest ship owner, state-owned Sovcomflot, has announced the creation of a new ports company called SCF Terminals. In addition to ports in the Baltic and the Far East, SCF Terminals will manage the Belokamenka floating oil terminal in the Kola Bay near Murmansk. But Sovcomflot is also considering replacing the Belokamenka with a double hull floating production storage and offloading vessel, according to Lloyd’s List.

The Belokamenka acts as a collection point for small tankers delivering oil from the ports of Varandey, Arkhangelsk and the Gulf of Ob and reloads oil into 100,000-150,000-metric-ton carriers for export to the United States, Canada and northwest Europe.

—SARAH HURST

Gazprom starts undersea pipeline section

Russia’s state-owned major Gazprom has begun construction of an undersea section of gas pipeline across Baidarata Bay in the southern Kara Sea, the company announced in a release Aug. 12. The 660-mile pipeline will transport gas from the Bovanenkovskoe field on the Yamal Peninsula southwest to the city of Ukhta in the Komi Republic. The section that crosses Baidarata Bay is about 43 miles long and is scheduled to be completed in 2011. The steel pipes for this technically challenging part of the project were developed and manufactured by Russian companies, Gazprom stressed.

Gazprom also said recently that it will increase investment in the Bovanenkovskoe field for 2008 by 10 billion rubles ($406.1 million) to around 105 billion rubles ($4.3 billion). At the same time, the company will cut this year’s spending on the Shtokman project in the Barents Sea from a planned 16.2 billion rubles ($657.9 million) to 14.7 billion rubles ($597 million).

—SARAH HURST

Barents electromagnetic survey data available

Trondheim-based Electromagnetic Geoservices (EMGS) has completed the world’s largest multi-client electromagnetic (EM) survey in the Barents Sea, ahead of Norway’s 20th exploration licensing round, the company announced in a release Aug. 15. The survey area, at more than 9,000 sq. km (3,475 sq. miles) and covering 30 blocks, includes all the Barents Sea acreage in the licensing round.

“The program has been heavily pre-funded and has generated a great deal of interest,” said EMGS CEO Terje Eidesmo. “We are excited by the results, which reveal valuable information related to the prospectivity of the survey areas. The EM data will give potential bidders a competitive advantage during the licensing round, and will help them to target their exploration resources more effectively.”

The data is available in the Clearplay Find format, which is a further development of the company’s 3D scanning service. Clearplay Find offers the display of EM data as maps and 3D volumes and is easily integrated with seismic information and geological models, according to EMGS. Combining EM techniques with conventional methods gives a clearer and more complete understanding of the subsurface, the company adds.

—SARAH HURST
Our priorities

We want people who understand Alaska. That’s why BP believes in hiring and training Alaskans for jobs. It’s good for us, and good for Alaska.
Canada, U.S. share Arctic expertise

By GARY PARK
For Petroleum News

Canada and Denmark have found allies in the United States on a couple of issues as the Arctic sovereignty debate heats up.

Canada and the U.S. have teamed up to conduct a seismic survey of the Beaufort seabed north of the Yukon-Alaska border, a change from the recent tensions over control of the Northwest Passage and jurisdiction over a portion of the Beaufort Sea.

Meanwhile, a Danish admiral has echoed Canada’s campaign for improvements to safety regulations governing Arctic shipping, saying there should be mandatory rules for equipment and preparation before vessels can sail into Arctic waters.

The joint seismic study will involve the U.S. Coast Guard icebreaker Healy in creating a “straight and open path through the ice” for the Canadian Coast Guard ship Louis St. Laurent as its crew undertakes sonar scans on the Beaufort Sea bottom.

A U.S. State Department release said the “collaboration will assist both countries in defining the continental shelf in the Arctic Ocean” — a crucial element in determining sovereignty over the region.

The joint effort will “save millions of dollars for both countries, provide data of greater interest to both countries and increase scientific and diplomatic co-operation,” the State Department said.

Canadian federal geoscientist Jacob Verhoef, who is leading Canada’s seabed mapping project, said the bilateral program stemmed from a sharing of information last year about previous mapping missions, at which time Canada and the United States realized each had specialized equipment and techniques that could be beneficially shared.

He said the United States was “impressed” with Canada’s seismic methods for measuring the thickness of seabed sediments, while Canada was equally impressed with United States success in using a “high-resolution bathymetric system” that profiles the shape of the ocean floor.

The joint work is expected to help prepare submissions to claim jurisdiction over seabed areas beyond the 225-mile coastal economic zones. Canada faces a 2013 deadline to file its submission.

Mandatory codes needed

Rear Admiral Henrik Kudsk of Denmark’s Greenland Command said there is a need for “mandatory codes” applying to Arctic and Antarctic navigation, especially as the number of vessels entering Arctic waters increases.

He predicted 45 cruise ships carrying 55,000 passengers will sail into Greenland waters this summer, up 60 percent from last year.

Dennis Bevington, a member of Canada’s parliament from the Western Arctic, issued a call making it mandatory for all ships sailing into the Canadian Arctic to register with the Coast Guard, saying Canada’s ability to clean up oil spills is limited by the amount of ice in the water.

Kudsk noted that vessel registration is mandatory in Greenland and those that fail to comply are fined.

Canada does not have effective control

Ron Huebert, associate director for the Center of Military and Strategic Studies at the University of Calgary, said in a Globe and Mail article Aug. 16 that melting ice in the Northwest Passage will see more international shipping in the Arctic, meaning “Canada needs to be prepared for when it comes, or else the world will simply ignore Canada.”

He said that strictly speaking all foreign vessels entering what are deemed to be Canadian Arctic waters must follow the Arctic Water Pollution Prevention Act introduced in the early 1970s, but “they do not have to tell Canadian authorities.”

Until now most ships have complied to gain access to Canadian reports on ice conditions, but in 2007 two cruise ships declined to report to the Arctic marine traffic system.

“This is very troubling,” Huebert said. “Why they suddenly decided to do this is unknown. But it reminds the world that Canada does not have effective control.”

Ice-breaking fleet small, aged

Even if Canada were to prohibit the ships from entering its waters it would have to have required vessels to support the ban.

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Politicians make promises on Arctic policy

Renewable energy to be a priority, and international shipping rules must be established, Arctic parliamentarians decide

By SARAH HURST
For Petroleum News

While President George Bush and John McCain were denouncing Russia’s actions in Georgia, parliamentarians from the United States, Russia and several other countries were getting together to seek cooperative solutions to burning issues in the Arctic. Talk of the war on the southern border between Europe and Asia was diplomatically avoided at the Eighth Conference of Arctic Parliamentarians, which took place at the University of Alaska Fairbanks in mid-August.

The conference ended with the adoption of a statement that included numerous action items. On energy, the parliamentarians pledged to “promote and invest in alternative and renewable energy sources suitable for the Arctic region. Special emphasis should be placed on the replacement of fossil fuels by solar, wind, biomass and other alternative energy sources,” the statement said.

150 attendees in Fairbanks

About 150 participants came to Fairbanks at the invitation of U.S. Sen. Lisa Murkowski, who summed up the results of the conference in an Aug. 14 call with journalists. The three main themes of the conference were adaptation to climate change, development of rural energy resources and human health in the Arctic, Murkowski said. Presentations were made on topics ranging from Arctic marine policy to the use of geothermal power in Iceland.

“We can learn so much from one another, and when you recognize that we’ve got so much in common, it’s not just our weather and the geography, being in the high north, we deal with small populations in large geographic areas,” Murkowski said. “We’re faced with changing conditions to our lands that make development of infrastructure more problematic. We’re seeing a great rush to resource wealth, energy resource wealth, and how you manage that,” she added.

Murkowski said she had to constantly remind her colleagues in Congress that the United States is an Arctic nation and needs to act like an Arctic nation.

“So let’s be sharing some of these best practices, learn from some of the mistakes, and try to advance an area of the globe that is really — I hesitate to say we’re being discovered, we know we’ve been here all along, but for many on the planet, the Arctic is just kind of this forgotten, cold place, and now that we’re learning how rich we are in energy resource up here, for instance, all of a sudden everyone’s paying attention. All eyes are upon us as we see the impact of a changing climate, because it’s more readily apparent here in the Arctic,” Murkowski said.

Tourism on the rise

Tourism in the Arctic is another indicator of the world’s increased interest in the region, she said, and the opening up of new shipping routes due to reduced ice cover makes that tourism possible, Murkowski noted. Last year ships brought about 3,000 tourists to Greenland; this year the figure was up to 55,000 — almost the same as the total population of the country.

“Last year for the first time the Northwest Passage was wide open... Think what that means to us in terms of commerce and opportunity. But it’s also very challenging because we don’t have the infrastructure in place,” Murkowski said. “How do you provide for search and rescue in an area where you don’t have ports and harbors? How do you provide for any kind of clean-up if you have an accident in these waters? How do you provide just for things like communication when we really don’t have a level of communication ability up there?”

International Arctic shipping rules needed

After listening to presentations by an admiral from Denmark and an admiral from the U.S. Coast Guard, conference participants agreed that there is a need to establish international guidelines for ships operating in ice-covered waters. An aerial
PACIFIC ENERGY

Pacific Energy now wants to focus on its remaining prospects in California and Alaska. But the company is also looking to further reduce its leverage ratio, or the relationship of debt to assets used as a gauge of financial solvency.

Some reductions will come from new oil production brought online over the past six months, especially from the long shut-in Eureka platform off the coast of California. But the company sees further opportunities in Alaska, according to Gerry Tywoniuk, who took over as chief financial officer for the company on Aug. 15.

“We’ve also begun the process of evaluating the company’s options of selling down our interest in the Alaska properties in some fashion, whether that is to farm-out some of the new drilling, or by selling our working interest in some specific asset,” Tywoniuk said. 

“We’ve been very fortunate to experience a substantial increase in our equity value in a short time period,” Tywoniuk said. One of those wholly owned prospects, the offshore Corsair unit, is the core of Pacific Energy’s exploration efforts, and the company intends “to farm out a large portion of the project to fund the exploration program,” said Darren Katic, president of Pacific Energy.

Corsair and Osprey in 2Q 2009

With a year of “planning and integration” under its belt, Pacific Energy offered a firmer timeline for work in Alaska, now expecting to begin exploration drilling at Corsair and development work from the Osprey platform at the Redoubt unit in mid-2009. Pacific Energy originally hoped to get those projects underway by the end of this year, but “rig-availability and weather-related logistics” cause a six-month delay, Katic said.

While the company is looking at leasing or buying a rig for the Osprey platform, the “availability” problem likely refers to Corsair. Exploration drilling at Corsair requires a jack-up rig, a mobile drilling unit well suited for shallower offshore prospects. Previous failed attempts to get a jack-up to Alaska have forced other companies to delay or abandon drilling projects in the Cook Inlet basin. Earlier this year, Pacific Energy signed a three-year lease on a Blake Offshore jack-up rig, but is now working to get the large piece of machinery to Alaska from its current location in the Gulf of Mexico near Louisiana.

Katie estimates that the voyage around the southern tip of South America would take roughly two months, but first Pacific Energy needs to contract with a shipping company capable of making the trip. The state recently gave Pacific Energy until Sept. 29 to sign a contract with a shipping company or face losing the unit.

If Pacific Energy is successful, though, the company will have several new options for partnership, because a jack-up rig is in high demand in the Cook Inlet. The rig could be used to drill the Escopeta-operated Northern Lights prospects, which both sit along the same geological formation as Corsair.

Katie said Pacific Energy is “in discussions” with other companies.

“Currently, the rig does have enough work, assuming we all drill our wells for the entire 2009 drilling season,” Katie said, referring to the period from spring to fall when the ice covering the Cook Inlet thaws enough to use a jack-up rig.

Economics still in question

Although the timing would be tight, leasing out time on a jack-up rig would improve the economics of Corsair, which Pacific Energy began questioning after the state rejected the company’s request to expand the unit boundaries to include four adjacent leases.

The expansion would have more than doubled the unit. Instead, three of the four leases expired at the end of April, and remaining lease expires at the end of the year. Pacific Energy appealed the decision May, but the state has not responded to the appeal and is under no statutory timeline to do so.

For a time, Pacific Energy suggested Corsair might not be economic without the expansion acreage, but now the company is presenting a more nuanced picture.

“While we believe that the original Corsair Unit has significant stand-alone economic merit, the decision of the State not to include the additional leases could have a negative impact on the overall economics of the project,” company management wrote in an analysis of second quarter operations released Aug. 15.

Offering the first revised estimates in since February, Katie said recoverable reserves at Corsair might prove to be as high as 500 billion cubic feet of gas or 100 million barrels of oil. Under the terms of exploration plans with the state, the company has until June 30, 2009 to start drilling on the prospect or face losing the unit.

Benefits from McArthur River

Before work begins on either Osprey or Corsair, though, Pacific Energy could see the benefits from development work at the McArthur River unit, which the company does not operate.

According to Katie, Chevron plans to start development drilling from the Steelhead platform in the McArthur River field in the first quarter of 2009. Pacific Energy owns just less than a 50 percent working interest in several leases at the Cook Inlet field, and many of those leases hold existing platforms.

“Top side improvements continue on all five platforms in preparation for an extensive redevelopment and exploitation program, which will span the next three years,” Katie said.

—ERIC LIDJI

Contact Eric Lidji at 907-770-3505 or elidji@petroleumnews.com
of the world’s richest people make a sneaky, flying visit to northern Alberta? As guests of the Canadian Association of Petroleum Producers, the multi-billionaires were whisked in August 18 to have a peak at Canadian Natural Resources’ massive Horizon oil sands project.

But given that Buffett and Gates are already stakeholders in ConocoPhillips, which controls its own oil sands projects and is a partner with EnCana in a production/refining joint venture, there really needs to be an undercurrent of disquiet about the two men had “investment in mind.”

Markin and vice-chairman Murray Stringham said. “You get tankers moving up there, you get cruise ships moving up and down the Coaster,” he said. “And where the resource fits into Anchorage has the potential to take its place as number one.”

Begich. “This study will determine if Anchorage has the potential to take its place as number one.”

The study found that ancient seabed sediments are being re-eroded by the Gulf of Alaska, with a visual reminder of how narrow the waters between Alaska and Russia are, according to a federally funded study released Aug. 21.

“Two years later, the resource is still there. There really needs to be an undercurrent of disquiet about the two men had “investment in mind.”

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Owners counter Anadarko’s arguments

In its Aug. 5 protest, Anadarko said it objected to the pipeline owners including in their compliance filing different proposed rates for the various years in question. It maintained that the Feb. 4 order did not authorize the owners to negotiate new rates after the hearing is closed. The owner also said $1.92 per barrel of oil should be the rate adopted for 2005 and $2.02/bbl for 2006. The shipper also accused the pipeline owners of improperly presenting alternative rates “based on new and untested data.”

The owners defended their right to introduce new information in the compliance filing by noting that the FERC has allowed additional data to be introduced in compliance filings in the past, “provided the data is adequately supported.” The owners also said due process is served by allowing the shippers to review and comment on this “new” data before the commission takes any action that relies on its accuracy. The owners called Anadarko’s arguments in support of a uniform rate “mis-guided,” noting that the five of them do not have the same costs, and a uniform rate would cause any owner with above-average costs to “under-recover” its cost of service.

Secondly, they do not transport volumes in proportion to their ownership shares of the pipeline’s capacity, and a uniform rate would necessarily cause an owner with throughput that is less than its ownership share of total system-wide throughput to under-recover its cost of service, the owners said.

Thirdly, an owner with a relatively small ownership share of the pipeline will be precluded by a uniform rate from recovering fixed, base-line costs that are incurred in the owner’s operation of the pipeline. “Because a uniform rate guarantees that certain TAPS (owners) will under-recover their costs of service while other owners will over-recover their costs of service, it produces a rate that is necessarily unjust and unreasonable,” the attorneys argued.

“Anadarko is also incorrect in asserting that these problems can be resolved through pooling. Indeed, Anadarko’s reliance on pooling is tantamount to an admission that a uniform rate cannot—without a subsequent adjustment—produce just and reasonable rates for each TAPS (owner). Moreover, the commission does not have the authority to order the TAPS owners to pool revenues—a fact that Anadarko simply ignores in its Answer,” the attorneys wrote.

The owners further said it is speculative to assert that the problem would be greater for the trans-Alaska oil pipeline than for other oil pipelines that set rates individually.

Criticism lacks merit

The owners also criticized Anadarko’s protest for failing to raise any specific issue regarding the accuracy or suitability of the actual 2006 data other than “alleging that TAPS throughput ‘during the period in Question’ was ‘illogically, not true’.” The owners said Anadarko failed to show that the actual level of petroleum throughput in the pipeline was in any way misleading.

However, Anadarko is wrong in its interpretation of what the FERC meant for prospective rates to take effect, both acknowledged that the commission’s order is subject to different interpretations of how 2007 and 2008 rates should be set. The owners also noted that the use of actual data is consistent with commission precedent.

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In a separate filing the owners argued that Anadarko’s answer to their compliance filing should be rejected by FERC because the 20-page argument does not meet the commission’s prerequisite that such filings be “brief” and “factual.”

They further charged that Anadarko brought up many of the same issues it raised during the regular proceedings. “In sum, Anadarko has not shown good cause for waiving the prohibition on answers to requests for rehearing. Rather, it is largely repeating its earlier arguments, which will not assist the commission in its decision-making process,” the owners’ attorneys wrote.

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In a rare move the Alaska Oil & Gas Association’s board of directors passed a resolution opposing Ballot Measure 4, aimed at changing regulations on water discharged from Alaska’s large-scale metallic mines.

In its Aug. 7 resolution AOGA said the Aug. 26 primary ballot measure would dramatically change portions of Alaska’s water quality laws without the level of review and scrutiny they would receive under the regular legislative and/or rulemaking process — processes that require public hearings, public comment periods, scientific analysis, input from stakeholders and, often times, a detailed economic analysis.

When asked why AOGA is weighing in on a ballot measure targeting mining, AOGA Executive Director Marilyn Crockett told Petroleum News, “It is bad public policy to be deciding scientific and technical issues in a voter referendum. That doesn’t bring with it the appropriate scrutiny that the legislature or an agency with expertise in that area would bring with it. That is not a good way, from our perspective, for issues technical in nature such as the ones being addressed in that ballot measure. That is not the appropriate way for those issues to be addressed and resolved.”

AOGA said the state of Alaska and the federal government each have a rigorous and comprehensive permitting process to ensure that thorough environmental analyses are conducted on all resource development projects before any project is allowed to proceed. The association said state and federal permitting processes include specific requirements that ensure water quality is protected.

AOGA also pointed out that because the initiative language will not receive a thorough examination by most voters, Alaskans may not fully understand the significant ramifications and implications of the proposed changes.

“It doesn’t matter whether the issue is one that addresses restrictions on discharges into water, discharges into air, any of those kinds of issues really need to be run through the rigorous scientific evaluation that the legislature or the agencies would do, and not simply in a confusing voter referendum that don’t meet that sort of rigorous review,” Crockett said.

AOGA board members decided to oppose Ballot Measure 4 because it “could preclude a project from proceeding before it even begins the governmental review process and more importantly, this initiative would set a precedent for scientifically based policy to be determined without the benefit of a full public process.”

Do you believe that one proposal should threaten an entire industry, jobs, and future revenue for Alaska communities?

YES  NO

Do you believe special interests from the Lower 48 should dictate how Alaskans develop our resources?

YES  NO

Do you believe rural Alaska has too many good-paying jobs?

YES  NO

Do you believe an arbitrary and untested proposal should replace Alaska’s thorough, science-based laws that already protect Alaska’s fish, air, human health, and pristine water?

YES  NO

THEN VOTE NO ON 4.

“It is the policy of the State to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest.”

- Constitution of the State of Alaska
Business Spotlight

**Victaulic Piping Systems Solutions**

With 8,000 customers worldwide, Victaulic is known for its Victaflowing piping method which accommodates lightweight, standard and extra-heavy steel, stainless, aluminum, high-density polyethylene, PVC and other plastics. Products for copper tubing (CTS) and ductile iron (AWWA) for water supply, and underground and waste treatment process piping are also available.

Stover Smith joined Victaulic in 2003, transferring to Alaska in 2007. He, his wife Amy and their two daughters — Briede, age 5, and Laurel, 10 months — are on a mission to experience as much of Alaska as possible. They’re enjoying the nice, cool summer but would be happy with somewhat less precipitation.

—PAULA EASLEY

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**Companies involved in Alaska and northern Canada’s oil and gas industry**

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<td>ACS is Alaska’s leading broadband, wireline and wireless services provider to business and mass-market customers. The Anchorage-based company recently purchased Crest Communications and its Northstar fiber optic cable between Alaska and the contiguous 48 states. ACS is also building a geographically diverse undersea fiber optic network — called AKORN, or Alaska Oregon Network — to greatly enhance Alaska’s bandwidth capacity. Steve Gebert, who served a 20-year career as a naval flight officer, was tapped to head the $105-million AKORN construction. During his career he flew combat missions in Bosnia and Iraq, including numerous aircraft carrier deployments in an F-14 Tomcat. Now, settled in Alaska, he and his wife Pamela and their three children are enjoying all the state has to offer, including the world’s best fishing, Steve’s favorite pastime.</td>
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### NATURAL GAS

**State keeps LNG pipeline on the table**

**By ERIC LIDJI**

Petroleum News

Hoping to alleviate the concerns of those who favor an “all-Alaska” option for marketing North Slope oil gas, Gov. Sarah Palin on Aug. 20 signed an ordinance to continue pursuing a liquefied natural gas project.

Although the administrative order outlines a simple framework for the Departments of Natural Resources and Revenue to work with project sponsors, the document is mostly meant to assure those who felt betrayed after the legislature gave TransCanada a license and matching grant to pursue an underwater pipeline from Alaska to Alberta.

An LNG project, such as the one long proposed by the Alaska Gasline Port Authority, would involve a pipeline contained entirely within Alaska’s borders, an option some have long suspected LNG either to markets in East Asia or on the West Coast of the United States.

Testifying before state lawmakers recently, TransCanada promised to allow potential shippers to commit gas to a LNG project, as well as an overland route, during the first open season. With enough customers committing enough gas, TransCanada even promised to build a Y Line, a configuration combining the overland and LNG routes.

The new Administrative Order is “memorializing that same intent, that same attitude for the state,” according to Natural Resources Commissioner Sarah I overlay.

“Everything comes back to the market conditions,” Irwin said. “If you’re a market for LNG only, we agree that will be built. If there’s only a market for the U.S. through Canada, that will be built. If for both, both can get built.”

During legislative hearings, some experts questioned whether an LNG project would get Congressional approval to export domestic natural gas supplies to overseas markets, especially as energy security becomes an increasingly hot topic across the country.

Proponents, especially those at the Alaska Gasline Port Authority, say they already have the export license, and believe it will remain valid if the project moves into development.

Others now believe a Y Line could reduce some pressure by addressing domestic demand, while also giving the state diversity through overseas markets.

Voters in three municipalities created the Alaska Gasline Port Authority by an overwhelming majority nearly a decade ago, and Palin supported the project during her 2006 run for governor, but the agency failed to submit a conforming application to the Alaska Gasline Inducement Act, and spent much of the past year struggling to remain in front of the public.

### NATIONWIDE

**Natural Gas**

Newfoundland and Labrador has arrived in the region under a two-year contract with Husky Energy, StatoilHydro and Petro-Canada to drill a series of exploration and delineation wells in areas where the three companies are active.

StatOilHydro will move the drillship to the Flemish pass basin in about 1,100 meters of water later this year to test the unexplored Mizzen prospect in partnership with Husky, which can acquire an interest of up to 35 percent.

ExxonMobil has contracted for a rig to drill a second exploration well in the deepwater Orphan Basin and ConocoPhillips is gearing up for an exploration program in the gas-prone Laurentian Basin.

In all cases, the companies are aware that the Williams government, under its new energy policy, will insist on a 5 percent stake of commercial oil or natural gas is discovered.

Wade Locke, an economist at Newfoundland’s Memorial University, said that if the Hebron negotiations had failed for a second time the offshore would have lost its fresh momentum.

He said the deal is “extremely important (because) it reconfirms that there is an industry going forward here for the next 30 or 40 years.”

Paul Barnes, Atlantic Canada manager for the Canadian Association of Petroleum Producers, welcomed the two latest pacts — with Hebron and Husky to expand its White Rose development, as a “very positive signal for the industry.”

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by the end of 2008, Eric West, BP’s heavy oil project manager, told a media tour of the Milne Point test facility Aug. 18. If the phase one testing demonstrates the technical feasibility of heavy oil production, the project will move into a second phase of testing, to evaluate whether heavy oil production at Milne Point will prove economically viable, said Max Easley, Alaska Consolidated Team business unit leader.

**20 billion barrels**

And, with an estimated 20 billion barrels of heavy oil in place in the central North Slope, the stakes couldn’t be higher.

“If we only get 10 percent of it, that’s a lot of oil,” West said.

The oil in the Prudhoe Bay region has migrated into various reservoirs at different depths. But bacteria that become particularly active in the temperature conditions at depths of around 4,000 feet eat out the lighter hydrocarbons, West said. That results in a residue of heavy oil in relatively shallow reservoirs far above the conventional light oil reservoirs of the North Slope oil fields.

Methane waste from the bacterial action bubbles towards the surface and becomes trapped around the base of the permafrost as gas hydrate, West said. About three years ago BP decided to embark on a project to try to develop the heavy oil while there is still significant production of light oil from the North Slope. The light oil is needed to thin the heavy oil so that the resultant fluid can flow down the trans-Alaska pipeline, West explained.

“We need the light oil to blend it with, so it’s the perfect time in the North Slope’s life,” Easley said.

Were BP to stick to the conventional concept of waiting for depletion of the North Slope light oil before producing the heavy oil, the company would have to resort to an expensive technique such as hydrogen cracking to create a light enough fluid for export by pipeline, West said.

**Which way?**

But which of the many possible ways of producing that residue of heavy oil is likely to work?

The most widely publicized methods consist of either the surface mining of oil sands or the application of heat to the underground reservoirs, West said. However, in Canada, the epicenter of heavy oil development, techniques for cold heavy oil extraction have also been developed, he said.

BP has a policy of not mining for heavy oil, West said. But the choice between hot and cold in-situ production depends on the nature of the oil reservoir and the characteristics of the oil, he said. On the North Slope much of the Kuparuk unit area heavy oil appears most suitable for hot extraction, while in the Prudhoe Bay and Milne Point unit cold techniques seem more appropriate.

West also said that cold techniques create a smaller carbon footprint than hot techniques.

The particular technique that BP has chosen to try at Milne Point is called cold heavy oil production with sand, or CHOPS.

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**ANS SYRUP**

continued from page 1

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CHOPS, a technique that has seen several commercial developments in Alberta. In this technique, which depends on an unconsolidated sand reservoir, the production well has large perforations and no screen for keeping the sand out of the well. Sand is produced along with the oil and is subsequently separated from the oil at the surface by heating the oil/sand mixture in a tank.

“You’re actually producing a bit of the reservoir into the wellbore,” West said. “That is totally contrary to light oil reservoirs where you always want to keep the sand out.”

**Downhole pump**

A key part of the well technology is the downhole pump, known as a progressive cavity pump, consisting of a long augur-like rotor that spins at high speed inside an enveloping tube. The rotating augur screw will draw material up the well, while being less susceptible to wear than a piston-based pump design.

Because the sand in the well would tend to cause a downhole electric motor to overheat, the pump’s motor drive is placed at the surface and is connected to the pump rotor by means of a long rotating rod that extends through the well inner casing. A huge spool called a mobile gripper unit feeds the drive rod down into the well casing.

The pump should cause a pressure drawdown or drop of around 1,000 pounds per square inch or more at the bottom of the well.

“We’re going to put really significant drawdown against these open perfs,” West said. “And that’s going to induce the pump rotor by means of a long rotating rod that extends through the well inner casing. A huge spool called a mobile gripper unit feeds the drive rod down into the well casing.

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