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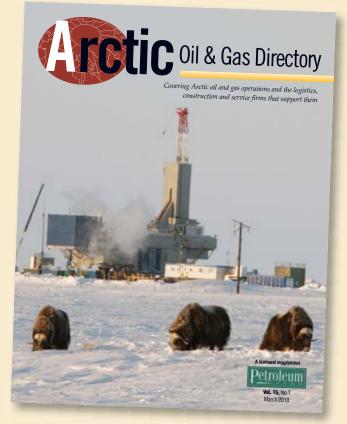
A weekly oil & gas newspaper based in Anchorage, Alaska



page Former Valdez CG commander Mark 12 Swanson named to head PWSRCAC

Week of March 21, 2010 • \$2

Arctic Oil & Gas Directory inside



The Arctic Oil & Gas Directory is produced twice a year by Petroleum News. For more information on the publication, contact Marti Reeve at mreeve@petroleumnews.com.

From deserts of sand to deserts of ice: To Antarctica and back

The differences are obvious, but Abdulla AlMisnad traveled to Antarctica to learn about the similarities between his desert homeland and the southernmost point on Earth.

AlMisnad is the first native of Qatar to take part in 2041's International Antarctic Expedition. He's writing a daily account of his journey in a blog on Greening of Oil's Web site at www.greeningofoil.com/antarctica.aspx.



ABDULLA ALMISNAD

"The picture of Antarctica we had coming here, the picture of polar explorers facing the fiercest winds and barren deserts ... well that's still partly true," AlMisnad wrote on March 12, the

• NATURAL GAS

A change of mind

Stevens opts for in-state gas-line routes from NS to Kenai or Valdez

By ALAN BAILEY Petroleum News

n a major change of heart since leaving office, former U.S. Sen. Ted Stevens now thinks that LNG exports into the Pacific Rim from Alaska present the optimum solution for bringing North Slope gas to market. The state should create an emergency manage- TED STEVENS

ment team to assure the fast-track construction of gas pipelines from the Slope to tidewater liquefied natural gas plants on the Kenai Peninsula and possibly in Valdez, Stevens told a packed meeting of Commonwealth North in Anchorage March 12.

"The team should be given emergency powers



to waive existing restrictions in state law and be assisted by the attorney general to prevent court delays such as we encountered with the (trans-Alaska) oil pipeline," Stevens said. "We must to everything in our power to assure that the private sector, who we want to pursue these projects, will get underway as soon as possible."

Stevens has in the past been a proponent of a pipeline route through Canada

to supply natural gas to the Lower 48, but says that the world natural gas supply and demand situation has changed dramatically in recent years, thus favoring the LNG export route.

"With the recession and the basic changes in

see CHANGE page 17

GOVERNMENT

lberta pays the price

Backtracks on year-old royalties to heal rift with old friends, push competitiveness

By GARY PARK For Petroleum News

he Alberta government of Premier Ed Stelmach has decided the petroleum industry was right after all, rolling back most of the royalty hikes imposed a year ago and opting for job creation over a quick cash grab in a desperate bid to retain power.

In its sixth and final attempt to craft an

acceptable royalty regime, the government has slashed the highest royalty rates for conventional oil and natural gas and unconventional gas and launched a study designed to cut regulatory red tape.

Abandoning the trumpeted objective to deliver a



agenda."

ED STELMACH

create opportunities and jobs in communities large and small across our province and strengthen Alberta's economic recovery."

"fair share" of oil and gas profits to the 3.5 million people of Alberta, Stelmach said

"building competitiveness (against the

other oil and gas jurisdictions of North

America) is at the top of the government's

take effect Jan. 1, 2011, "will help us use

innovation to unlock our energy resources,

He said the latest changes, which will

He said the "realities of the energy sector have changed and Alberta must change, too, or risk losing its competitive edge."

Greening of Oil: Latest from **Mac Ackers**

LOW CARBON DIETS GAIN TRAC-TION ... Davis, Calif., wants to get a jump on the 300 or so other U.S. cities vying to become America's first carbonneutral city. Going up against green havens like Portland, Ore., and Rochester, NY, the university town of 65,000 is pulling out all the stops. The first American city with bike lanes and a yearround farmers' market, Davis also claims the distinction of being the first city in



MAC ACKERS

America to adopt an ordinance requiring energy efficiency tailored to the local climate. The law ultimately led to California enacting Title 24, the first state statute of its kind in the United States.

By teaming up with low-carbon guru David Gershon, author

see MAC ACKERS page 18

ACES: more bad than good

House panel hears mostly nays, a few yeas, on results of ACES production tax

By KRISTEN NELSON

Petroleum News

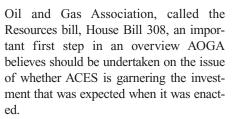
hen House Resources heard comments from industry March 10 on its proposed changes to Alaska's current production tax it heard a litany of woes about what is wrong with ACES, Alaska's Clear and Equitable Share, enacted in 2007

While independents generally spoke in favor of the credits ACES provides, they also told legislators that there is no ready market for the credits, so companies without production and taxes were disadvantaged against producers.

Marilyn Crockett, executive director of the Alaska



MARILYN CROCKETT



HB 308 would reduce the interest rate on underpaid or overpaid taxes, allow interest to be waived when it is due to retroactive regulations, reduce progressivity in ACES

from 0.4 percent to 0.2 percent, offer a tax rebate for resident hire, provide a 30 percent credit for well work and restore the three-year statute of limitations on auditing of tax returns.

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ACES: more bad than good

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12 Alaska oil watchdog group tabs new leader

Former Coast Guard commander in Valdez, to take over helm of Prince William Sound Regional Citizens' Advisory Council

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Chevron (Nabors Alaska Drilling labor contract)

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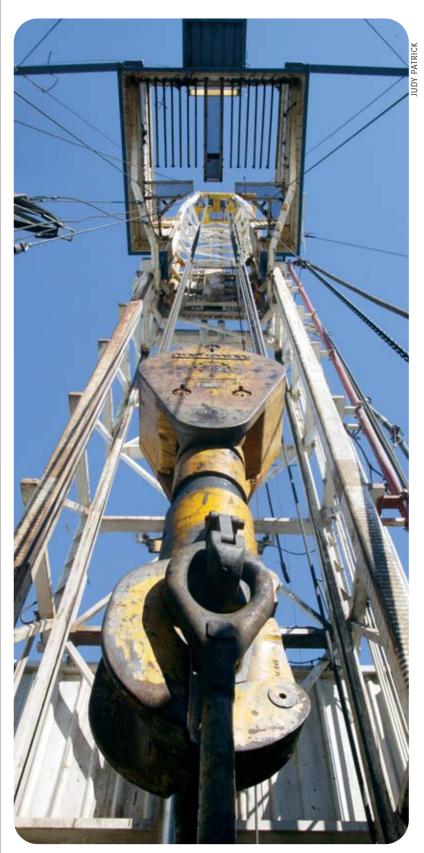
M-17 Steelhead platform Kenai

Alaska - Mackenzie Rig Report

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
	Alaska	a Rig Status	
		Slope - Onshore	
Doyon Drilling			
Dreco 1250 UE	14 (SCR/TD)	Prudhoe Bay P2-22A	BF
Sky Top Brewster NE-12	15 (SCR/TD)	Badami B1-18A	Savant Alaska
Dreco 1000 UE	16 (SCR/TD)	Prudhoe Bay MPS-08PB1	BF
Dreco D2000 UEBD	19 (SCR/TD)	Alpine CD3-121	ConocoPhillips
OIME 2000 TSM 7000	141 (SCR/TD) Arctic Wolf #2	Alpine CD3-301A Stacked at Prudhoe Bay	ConocoPhillips FEX/Available
13101 / 000	AICUC VVOII #2	Stacked at Produce bay	FEA/AValiable
Nabors Alaska Drilling			
Trans-ocean rig	CDR-1 (CT)	Stacked, Prudhoe Bay	Available
AC Coil Hybrid	CDR-2	Kuparuk 1E-12	ConocoPhillips
Dreco 1000 UE	2-ES	Prudhoe Bay, Stacked out	BF
Mid-Continental U36A	3-S	Stacked, Milne Point	BF
Oilwell 700 E	4-ES (SCR)	Milne Point MPF-29	BF
Dreco 1000 UE Dreco 1000 UE	7-ES (SCR/TD) 9-ES (SCR/TD)	Prudhoe Bay DS17-12 Prudhoe Bay DS09-44	BF
Oilwell 2000 Hercules	9-ES (SCR/TD) 14-E (SCR)	Kuparuk 2A-27	ConocoPhillips
Oilwell 2000 Hercules	16-E (SCR/TD)	Northshore #3	Brooks Range Petroleum
Oilwell 2000	17-E (SCR/TD)	Stacked, Point McIntyre	Available
Emsco Electro-hoist -2	18-E (SCR)	Stacked, Deadhorse	Available
Emsco Electro-hoist Varco TDS3	· ,	Stacked, Milne Point	Available
Emsco Electro-hoist	28-E (SCR)	Stacked, Deadhorse	Available
Emsco Electro-hoist Canrig 1050E	27-E (SCR-TD)	Point Thompson PTU-16	ExxonMobi
Academy AC electric Canrig	105-E (SCR/TD)	Stacked at Deadhorse	Available
Academy AC electric Heli-Rig	106-E (SCR/TD)	Stacked at Deadhorse	Available
OIME 2000	245-E	Shut down, plan to recommence	
		drilling at OPP in January	EN
Nordic Calista Services			
Superior 700 UE	1 (SCR/CTD)	Prudhoe Bay Drill Site E-33B	BF
Superior 700 UE	2 (SCR/CTD)	Prudhoe Bay Well Drill Site Z-03	BF
Ideco 900	3 (SCR/TD)	Kuparuk Well 2A16	ConocoPhillips
	North	Slope - Offshore	
Nabors Alaska Drilling			
OIME 1000	19-E (SCR)	J	Pioneer Natural Resources
Oilwell 2000	33-E	Northstar, Stacked out	BF
	Cook Inl	et Basin – Onshore	
Aurora Well Service Franks 300 Srs. Explorer III	AWS 1	Workover at West Mac #6	Cook Inlet Energy
	AWJI		COOK INICE Energy
Doyon Drilling			
TSM 7000	Arctic Fox #1	Stacked at Beluga	Available
Marathon Oil Co. (Inlet Drilling	Alaska labor cont	ractor)	
Taylor	Glacier 1	Paxton #3	Marathon Oi
Nabors Alaska Drilling			
Continental Emsco E3000	273	Stacked, Kenai	Available
Franks	26	Stacked	Available
IDECO 2100 E	429E (SCR)	Stacked, removed from Osprey p	latform Available
Rigmaster 850	129	Kenai SLU 41-33RD	Chevror
Rowan Companies			
AC Electric	68AC (SCR/TD)	Stacked Kenai, Cosmopolitan	Pioneer Natural Resources
	0	at Davis Official	
	Cook Inl	et Basin – Offshore	

The Alaska - Mackenzie Rig Report as of March 18, 2010. Active drilling companies only listed.

This rig report was prepared by Marti Reeve



XTO Energy National 1320	٨	Distform A po drilling or workowers at present	ХТО	Bak	er Hughes No	rth America rot	ary rig counts [*]
National 1320 National 110	A C (TD)	Platform A no drilling or workovers at present Idle	XTO	US	March 12 1,407	March 5 1,396	Year Ago 1,126
Kuukpik	5	Stacked in Kenai	Available	Canada Gulf	479 49	543 42	220 46
	Macke	enzie Rig Status		Highest/Lov	Nost		
	Са	nadian Beaufort Sea		US/Highest US/Lowest Canada/High		4530 488 558	December 1981 April 1999 January 2000
SDC Drilling Inc. SSDC CANMAR Island Rig #2	SDC	Set down at Roland Bay	Available	Canada/Low	est	29 *Issued by B	April 1992 Baker Hughes since 1944
	Cen	tral Mackenzie Valley		T	he Alaska -	Mackenzie F	Rig Report
Akita/SAHTU					is s	ponsored by	
Oilwell 500	51	Racked in Norman Wells, NT	Available			TO ENERGY	

Chevron

PIPELINES & DOWNSTREAM

Polar Tankers to pay for Puget spill

Polar Tankers Inc., a ConocoPhillips subsidiary, has agreed to pay a \$588,000 settlement in connection with an October 2004 crude oil spill in Puget Sound near Tacoma, the Washington State Department of Ecology announced March 15.

The 2004 incident involved the company's oil tanker Polar Texas, which spilled between 1,000 and 7,200 gallons of crude, the Ecology Department said.

"The settlement agreement and the restoration projects being proposed are the final chapter for this tragic spill that damaged Puget Sound and had so many economic, environmental, cultural and emotional ramifications," said Dale Jensen, the department's spills program manager.

Polar Tankers has agreed to make the \$588,000 payment under a consent decree filed in federal court. Parties to the agreement include the tanker company, the U.S. government, the state of Washington, Muckleshoot Indian Tribe and Puyallup Tribe of Indians.

The consent decree makes no finding of guilt or innocence, the Ecology Department said.

ConocoPhillips, in October 2006, paid a \$540,000 fine for the spill, the largest penalty the Ecology Department ever levied for an oil spill from a vessel to Washington marine waters.

Since the 2004 incident, Polar Tankers has "vastly improved" its operations, Jensen said.

Polar Tankers carries Alaska North Slope crude oil to West Coast refineries for ConocoPhillips.

—WESLEY LOY

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NATURAL GAS

Co-op looking to partner in LNG plant

Natural Gas Supply Co., cooperative formed by ANGDA, wants to buy Cook Inlet natural gas, keep LNG plant going for peak gas

> By KRISTEN NELSON Petroleum News

he Alaska Natural Gas Development

Authority is looking at a number of

projects that could require bonding.

ANGDA CEO Harold Heinze told the

Among those are gas purchase, owner-

Senate Resources Committee March 15.

ship of cushion gas in a storage field,

partnering in the Kenai liquefied natural

gas plant and expanding its operational

capabilities, open season commitments in

the big pipe from the North Slope to mar-

ket and in a spur line and development of

a North Slope wholesale propane facility.

44. referred to Senate Resources last

April after it passed the House. He said

two parts of the bill affect ANGDA (the

bill also includes \$100 million in energy

efficiency and conservation program

bonding authority for the Alaska Housing

Finance Corp.): a clarification of the

authority's statutory authority and author-

ization for \$250 million in revenue bonds

"to acquire a gas supply, develop the

Cook Inlet and Fairbanks markets, and

plan, permit, and design gas transmission

systems to mitigate gas shortfalls, the

effect on consumers, and the economy of

high cost energy, and ensure energy effi-

Heinze said the Alaska Attorney

General has found, in reviewing ANGDA

contracts, that as long as there is some

linkage to North Slope gas, even if not

immediate and overpowering, that it is

tive in 2002 and HB44 would amend its

statutory authority by adding "or other

regions of the state" to its authority to

bring natural gas from the North Slope to

market; add "including markets in the

state" and remove Southcentral Alaska in

its authorization to design, construct and

operate facilities necessary for delivering

gas to market; and add "and other regions

of the state, including the Alaska outer

continental shelf," to ANGDA's authority

to acquire natural gas from the North

Heinze said clarification of ANGDA's

ANGDA was created by a voter initia-

ciency for Alaskans."

Statutory clarification

within ANGDA's authority.

Heinze was testifying on House Bill

Natural Gas Supply Co.

Since last year ANGDA has formed the Natural Gas Supply Co., a cooperative of electric utilities formed under the state's general cooperative statute, Heinze said.

The backstopping of any bonds would be consumers through the electric utilities, which have a bankable monthly cash flow coming in from payment of utility bills, he said. This approach helps the electric utilities, which are cash strapped, allowing them to use their credit for other things.

ANGDA's bonding does not have the full faith and credit of the state behind it, Heinze said, but is modeled after a fairly successful financing in which the state was helpful, the Bradley Lake hydroelectric project. The state doesn't pledge its full faith and credit, but instead has what is called a moral obligation. As Heinze described it, the state stood next to the electric utilities and smiled when the bonds were signed.

The combination of a moral obligation on the part of the state and the monthly cash flow from the electric utilities is expected to achieve the lowest interest rate for bonds, he said.

Acquisition of gas

Heinze said acquisition of gas is the highest priority for the electric utilities. The utilities have also expressed "significant concern" over the future of the LNG plant, and are sensitive to the fact that if the LNG export license is not renewed then wells would begin to be shut down in Cook Inlet in the summer of 2011. In the following winter, 2011-12 as wells came back on they would have lost production and deliverability, a situation that would only get worse.

He said the electric utilities believe that working as a co-op with ANGDA as a partner it will be possible to strike a deal with ConocoPhillips and Marathon, providing those companies with a basis for continuing to operate the plant and making the plant more valuable for meeting local needs. The plant would operate as a peak shaver, re-gasifying some LNG to meet local needs.

Heinze said ANGDA and the co-op have written to the plant owners, ConocoPhillips and Marathon, offering to meet and negotiate whatever it takes to get that plant to stay open. So far, he said, there has not been any assurance that the owners will apply for license renewal. Resources Co-Chair Lesil McGuire, R-Anchorage, said U.S. Sen. Lisa Murkowski's office is looking at taking a leadership role in export license renewal. McGuire called it a "public relations challenge" just to apply for renewal because of

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The \$250 million in bonding, he said, was chosen as the largest nontrivial number appropriate for legislature approval at this time and would be indicative of legislative support for doing this kind of bonding.

see CO-OP page 6

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Tossing free trade carries risks

NAFTA protects energy flow from Canada to Lower 48; Deutsche Bank study highlights political, economic advantages of open border

By GARY PARK For Petroleum News

A bipartisan group of U.S. lawmakers is seeking backing for a bill to scrap the North American Free Trade Agreement, and with it guarantees of U.S. access to a share of Canada's oil and natural gas production.

At the same time a major European bank made its case that the U.S. is better off relying on Canada's oil sands crude at a time of rising global tensions.

The anti-NAFTA bill, sponsored by 28 Democratic and Republican members of Congress, is the crest of a wave of protectionist sentiment gathering momentum on Capitol Hill, as the focus of November's midterm elections turns to job losses.

Rep. Gene Taylor, a Mississippi Democrat, said the 10 percent unemployment rate in the U.S. is motivation to end the trade pact with Canada and Mexico.

Taylor opposed NAFTA in 1993 and blames the agreement for a 29 percent drop in U.S. manufacturing over the past 17 years.

"Timing is everything in life and it's the right time to pass this legislation," he said when introducing the bill. "Proponents have had more than enough time to make NAFTA work and they haven't."

Tough fight in DC

Backers of the bill come from a broad political spectrum, representing both parties and both the political left and right.

But they face a tough job swaying a Congress that is immersed in a health care debate and President Barack Obama, whose state of the union address in January championed free trade as the route to economic recovery.

Canada's International Trade Minister Peter Van Loan took a low-key view of the trade threat.

"We are closely following this bill, of course," he said. "Our evaluation is that this is certainly inconsistent with the direction that the Obama administration has chosen."

The bill has been introduced only a month after the U.S. and Canada reached an agreement that Van Loan described as a "demonstration of the Obama administration's commitment to free trade."

Maryscott Greenwood, executive director of the Canadian American Business Council, said there is a lack of awareness in Congress about the important role the U.S. and Canada play in each other's economies and a "fundamental misunderstanding about how integrated our supply chains In a separate study, Deutsche Bank pointed to gathering storm clouds over the Middle East, where tensions between Israel and Iran and a sharp disagreement between Israel and the U.S. underscore the dangers of continued U.S. reliance on crude supplies from the Organization of Petroleum Exporting Countries.

Exporting Countries.

Although the U.S. now buys only 18 percent of its oil from the Middle East, OPEC countries account for a 41 percent share.

Deutsche Bank analysts Paul Sankey, David Clark and Silvio Micheloto concluded that the answer to avoiding these political flashpoints and shoring up U.S. energy security is to promote expansion of the Alberta oil sands.

"We believe oil producers in Canada face a much lower geological and political risk than operators in most other oil-producing zones," they said. "The resource is vast ... the decline rates are effectively zero, there are no Straits of Hormuz or Malacca (vital sea passages for crude tankers in the Persian Gulf and between Malaysia and Indonesia) and Canadian heavy oil continues to outgrow virtually every other major hydrocarbon in the world."

Oil sands growth

The study noted that oil sands growth was running at 10-12 percent a year before the recession-induced slowdown, causing Deutsche Bank to lower its increase to 6-8 percent over the next 10 years, helped by the recent revival of some projects.

The bank estimates oil sands production will rise from 3 percent of non-OPEC oil

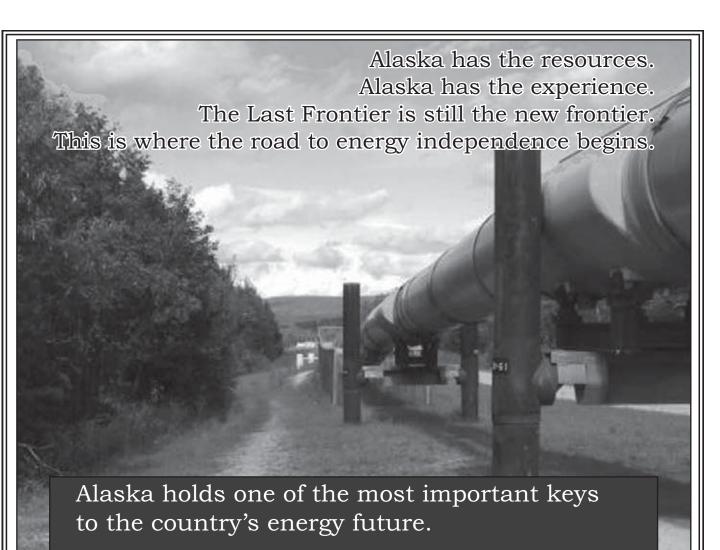
supply in 2009 to 6 percent by 2020, allowing Canada to claim a large slice of the U.S. market, with much of the crude destined for U.S. Gulf Coast refiners, where there is excess capacity because of the downturn in shipments from Mexico and Venezuela.

The study said the marginal, imported barrels that are displaced by Canadian oil sands production come from countries less friendly to the U.S., meaning a shift to Canadian oil "keeps revenue out of the pockets of potentially hostile governments."

In addition, Deutsche Bank noted that the money the U.S. spends on Canadian crude often makes a fast turnaround through Canadian purchases of U.S. goods and services, unlike the petrodollars that head to the Middle East, where they remain. By hiking its imports of Canadian crude,

the U.S. can start to eat into its global trade imbalance, the analysts said.

see RISKS page 6



We want you to be a part of it.

According to the U.S. Department of Energy's Energy Information Administration forecasts, the U.S. will still depend on oil and natural gas for 60-65% of its domestic energy consumption in 2025.

are."

When anti-NAFTA voices have been raised in the past, the Canadian government has responded by pointing out that a NAFTA provision commits Canada to export a proportional share of its production, even in times of supply shortages. Currently that amounts to more than 60 percent of both Canada's oil and gas volumes, which meet more than 16 percent of U.S. demand — bolstering the argument that Canada is the most secure, reliable source of U.S. energy.

International tensions

In a separate study, Deutsche Bank pointed to gathering storm clouds over the Middle East, where tensions between Israel and Iran and a sharp disagreement between Israel and the U.S. underscore the dangers of continued U.S. reliance on crude supplies from the Organization of Petroleum The U.S. is currently importing 56-58% of our oil, much of it from regions of questionable stability and regimes not always friendly to our country.

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NATURAL GAS **Marathon sees some light at Sunrise**

Lone exploration well for the active Cook Inlet company hits 'zone of interest'; previous well found gas shows below 11,000 feet

By ERIC LIDJI For Petroleum News

n a vague but optimistic statement, Marathon Oil said it "encountered a zone of interest" at the lone exploration well the company has drilled in the Cook Inlet basin so far this year.

Marathon recently completed drilling the Sunrise prospect on Cook Inlet Region Inc. leases on the northern Kenai Peninsula inside the Kenai National Wildlife Refuge.

Marathon said it is "continuing to evaluate the results to determine commerciality."

Toward the end of 2009, Marathon permitted two well locations at the prospect, also known as East Swanson because it sits a few miles east of the Swanson River unit.

The wells, Sunrise LK2 and Sunrise LK 2RD, had the same top hole location about one mile west of the Sunrise Lake Unit No. 1 well Forest Oil drilled in early 1970 to a total depth of 14,500, encountering gas shows in the Tyonek formation below 11,000 feet.

In its well logs for Sunrise Lake Unit

No. 1, Forest Oil reported a "small amount of gas" between 11,698 feet and 11,758 feet and some gas between 11,220 feet and 11,260 feet.

The Marathon wells did not have the same proposed bottom hole locations, though.

Marathon proposed to drill Sunrise LK2 relatively straight, CARRI LOCKHART angled slightly toward the

northeast, but proposed Sunrise LK 2RD reaching its final depth a mile farther east. That proposed bottom hole location is just north of the Sunrise Lake Unit No. 1 well site.

Calling the well "tight," Marathon is not offering details about Sunrise. However, speaking to lawmakers recently about a surprising dry hole Marathon drilled at the coastal Ninilchik unit in 2008, Carri Lockhart, production manager for Marathon in Alaska, noted that many producing sands in the Cook Inlet are discontinuous.

"That was a huge surprise, but that's just the nature of the beast in some of these reservoirs. They're very complex and challenging," Lockhart recently said in Anchorage.



Well comes amid declines

Sunrise has been of interest to exploration companies over the past decade. Union Oil Company of California circled the prospect in the early 2000s. Marathon came on as a partner in the middle of the decade, but chose data acquisition over drilling until now.

The prospect is interesting because it is onshore in a basin where significant money goes into offshore drilling prospects, and also because of its proximity to the Swanson River field, the 1957 discovery that launched the modern oil and natural gas industry in Alaska.

The location of the prospect in the Kenai National Wildlife Refuge, though, could make permitting more difficult. A Unocal proposal in 2004 to develop Swanson River satellites led to challenges from environmental groups, the Associated Press reported at the time.

That said, Marathon drilled the Sunrise well this year amid public concerns about whether the aging Cook Inlet basin will continue to be able to

continued from page 5

RISKS

Environmental efforts

Deutsche Bank also gave a positive assessment of efforts within the oil sands sector to tackle the environmental issues that have been used to tar the industry.

It said advances in recycling water will lower consumption from the region's Athabasca River and aquifers and improvements are being made in the use of tailings ponds to handle toxic wastes, but it conceded there is still uncertainty over what steps the Canadian government will take, in concert with the U.S., to reduce greenhouse gas emissions, along with possible steps by U.S. state governments to restrict imports of oil sands-derived crude.

The study said campaigns being waged against the oil sands by environmental groups, such as ForestEthics, represent a major public opinion battle that could affect shipments from the oil sands.

In addition, the analysts noted that Alberta government royalties - 2.5 percent (before capital costs are paid off) and 28 percent (post-payout) based on US\$65 per barrel oil prices - have "meaningfully reduced the expected returns for producers," putting pressure on the province to introduce more forgiving economics.

Less Saudi crude

More fodder for Canada's case has come from Greg Priddy, an analyst with Washington, D.C.-based Eurasia Group, who said the heavy reliance by the U.S. on

crude from Saudi Arabia "just doesn't make sense any more" now that Saudi crude is increasingly being targeted at the fast-growing Asian economies, while U.S. imports from the kingdom dropped 40 percent in 2009, partly because Saudi production was trimmed by 1 million barrels per day as OPEC defended prices.

"It is clearly an opportunity for Canada," he said. "It doesn't make sense geographically for (Canadian exports) to go anywhere else."

The U.S. Energy Information Administration doubts U.S. oil consumption will return to pre-recession levels for many years, while China and India are forecast to experience dramatic growth.

> Contact Gary Park through publisher@petroleumnews.com

"That was a huge surprise, but that's just the nature of the beast in some of these reservoirs. They're very complex and challenging," —Carri Lockhart, production manager for Marathon in Alaska

meet peak winter demand.

Lockhart told the Anchorage Energy Task Force on March 16 that she believes there is further potential in the refuge, but said access remains an obstacle. She also acknowledged that Marathon hasn't shot any seismic outside of the Sunrise prospect.

Sunrise is one of only three wells Marathon plans to drill in the Cook Inlet basin this year and the only exploration well, Lockhart told the task force, convened by Mayor Dan Sullivan.

Marathon sold 87 million cubic feet of gas per day in 2009 on average, Lockhart told members of the House Resources Committee on March 15. The House is considering a bill — HB 229 that would expand drilling incentives for companies in Cook Inlet.

In the mid-2000s, Marathon regularly drilled 10 wells or more in Cook Inlet each year, but the company cut back in 2009 because of the weak economy. In a November 2009 presentation to analysts, Marathon said it drilled six Cook Inlet wells in 2009. (Lockhart told the Energy Task Force that Marathon drilled five Cook Inlet wells last year.)

Those reduced drilling levels will most likely continue until at least 2012.

"Of the current players that are working in the Cook Inlet, Marathon represents, I think, without a doubt, the most active developer and they are in the process of actually pursuing opportunities that we can clearly define as exploration developments," Kevin Banks, director of the state Division of Oil and Gas, told House Resources March 15. •

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the public perception that we're exporting gas when we're short of gas. But, she said, without the ability to export we might be dependent on imported LNG. McGuire suggested that ANGDA might be a voice the public would listen to on the need to extend the license. Heinze said the "really powerful folks" in this case are the electric utilities. They mail out monthly statements, he said, and have the ability to barrage people every month. "They can play a major role in helping people understand why continuance plays a major role," he said. And the electric utilities in the co-op with ANGDA as a member provide "a goodwill factor that has to be important" in going before federal regulators for a license renewal. "I see it as very hard for the federal government to not renew that ... (license) if the electric utilities back it," he said.



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BP, Devon join forces in oil sands

Joint venture targets up to 400,000 bpd of Alberta oil sands production; BP shrugs off bitumen challenge from British legislators

By GARY PARK For Petroleum News

B P is taking a decisive step toward producing crude from the Canadian oil sands by partnering with Devon Energy just as British Members of Parliament joined a campaign to force both BP and Royal Dutch Shell to justify their presence in the controversial northern Alberta resource.

BP, which has been a low-key, late arrival in the oil sands, said it will sell a 50 percent stake in its Kirby in-situ leases to Devon, committing the Oklahoma Citybased company to spend US\$650 million in the heavy oil joint venture.

The deal gives BP an experienced partner with proven steam recovery experience and rated as one of the most successful insitu operators after Cenovus Energy, said Justin Bouchard, an oil sands analyst with Raymond James.

He told the Financial Post that Kirby is a "really nice piece of land," which could yield 300,000-400,000 barrels per day.

Devon will pay BP \$500 million when the deal closes and contribute \$150 million toward capital costs on BP's behalf over the next three years.

The two companies have also agreed to negotiate a long-term heavy crude sales agreement for Devon's share of Kirby production.

Dave Hager, Devon's executive vice president of exploration and production, said that based on his company's "extensive knowledge of the area and our view of the potential of the Kirby lease, it is an asset we have been interested in for some time."

Devon believes the recoverable resources could ultimately reach 1.5 billion barrels.

Part of \$7 billion purchase

The transaction was a minor part of BP's announced \$7 billion purchase of various Devon assets dominated by deepwater assets in the Gulf of Mexico and Brazilian offshore, plus Azerbaijan holdings in the Caspian Sea.

A BP spokesman said the deal, which is expected to close within the next year, is about future growth beyond 2015.

Devon now expects to exceed its previously announced divestiture sales target by 33 percent, achieving total proceeds of \$10.3 billion.

The U.S. independent is already constructing the second phase of its Jackfish oil But the real heat is being turned up on BP by British legislators who have called for the MPs' pension fund to support

resolutions at the BP and Shell annual meetings demanding more information on the financial risks

relating to their projects in Alberta's Athabasca region, the current underpinning of oil sands production.

sands project and has taken steps to initiate a third phase. The initial stage is nearing capacity of 30,000 bpd.

Kirby is adjacent to the Jackfish lease and has so far totaled 250 vertical wells and the gathering of some two-dimensional seismic data.

Devon President John Richels, who gained insight into the oil sands when president of the company's Canadian unit, said Kirby "just adds to our opportunities for incremental production in SAGD (steamassisted gravity drainage)," while the Lloydminster heavy oil play offers additional running room.

The company will use its own natural gas production to generate steam for Jackfish and Kirby and has discussed export options for liquefied natural gas.

Value Creation interest

BP is also taking a controlling interest in an oil sands property owned by privately held Value Creation to develop the 185,000 acre Terra de Grace block that is scheduled for development into a thermal recovery project.

The final price will be determined after drilling by the partners determines the size of the property's reserves.

Value Creation Chairman Columba Yeung said BP will make "significant capital contributions" to the project.

Meanwhile, Value Creation, which has regulatory approval to build a 260,000-barrel-per-day upgrader to convert oil sands bitumen into refinery-ready synthetic crude, has been the rumored target of takeover in recent weeks, with PetroChina and India's Reliance Industries said to be interested in buying the company for C\$2 billion.

Yeung said several offers of interest from multiple parties are under review.

However, the BP entry resolves the company's debt, allowing it to continue with its 100 percent controlled Tristar upstream project as well as the upgrader.

Construction of the upgrader was suspended in late 2007 by the original developer, BA Energy, which ran out of financing options. BA is a wholly owned division of Value Creation.

Value Creation was placed under protection from creditors in 2008, but Yeung said it is possible his company will ask an Alberta court to end that arrangement.

Because of BP's extensive heavy oil conversion capacity in the United States, it's possible the upgrader could be revived at some point, because it remains part of Value Creation's plans, he said.

Fadel Gheit, an analyst with Oppenheimer & Co., said the deal is further evidence that BP is eager to gain knowledge and experience in the oil sands by closing the gap on its peers.

FirstEnergy Capital analyst Michael Dunn said it appears BP has decided that the oil sands can become an important aspect of its growth strategy by taking advantage of low natural gas prices and narrow price differentials between heavy and light oil to exploit steam-generated bitumen recovery technology.

Political heat on BP

But the real heat is being turned up on BP by British legislators who have called for the MPs' pension fund to support resolutions at the BP and Shell annual meetings demanding more information on the financial risks relating to their projects in Alberta's Athabasca region, the current underpinning of oil sands production.

A cross-party coalition is making Alberta a target of alleged environmental and social ills related to oil sands development.

Mike Percy, dean of the University of Alberta's School of Business and a former opposition member in the Alberta legislator, said the MPs' action is the "opening salvo in what we're going to see the energy industry face." He said the oil sands are first in the line of attack, followed by coal-fired power plants.

Simon Hughes, the leading member of the coalition of MPs, said he does not want the pension fund to sell its shares of Shell and BP. The purpose he said is to pressure the two energy giants to think about their international and environmental responsibilities.

The motion before the British House of Commons claims oil produced from bitumen generates triple the volume of greenhouse gases as conventional oil and threatens the lives of aboriginal residents.

"Tar sands are a very risky investment — financially, environmentally and socially," said Hughes, demanding to know from BP and Shell how they are managing the risks.

BP has promised to address investors' concerns at its April 15 annual meeting.

see JOINT VENTURE page 8



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LAND & LEASING

Potential Alaska state and federal oil and gas lease sales

Agency	Sale and Area	Proposed Date	
DNR	Alaska Peninsula Areawide	May 26, 2010	
DNR	Cook Inlet Areawide	May 26, 2010	
BLM	NPR-A	Aug. 11, 2010	
DNR	Beaufort Sea Areawide	October 2010	
DNR	North Slope Areawide	October 2010	
DNR	North Slope Foothills Areawide	October 2010	
MMS	Sale 209 Beaufort Sea	2010*	
MMS	Sale 211 Cook Inlet	2010*	
MMS	Sale 212 Chukchi Sea	2010*	
MMS	Sale 217 Beaufort Sea	2011*	
MMS	Sale 214 North Aleutian basin	2011*	
MMS	Sale 219 Cook Inlet	2011*	
MMS	Sale 221 Chukchi Sea	2012*	

Agency key: BLM, U.S. Department of the Interior's Bureau of Land Management, manages leasing in the National Petroleum Reserve-Alaska; DNR, Alaska Department of Natural Resources, Division of Oil and Gas, manages state oil and gas lease sales onshore and in state waters; MHT, Alaska Mental Health Trust Land Office, manages sales on trust lands; MMS, U.S. Department of the Interior's Minerals Management Service, Alaska region outer continental shelf office, manages sales in federal waters offshore Alaska.

*On April 17, 2009, the U.S. Court of Appeals for the District of Columbia issued an opinion requiring Interior to withdraw and reconsider the MMS 2007-12 oil and gas lease sale program for the outer continental shelf.

This week's lease sale chart sponsored by:

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continued from page 7 JOINT VENTURE

Shell's meeting is set for May 18.

TransCanada's Keystone

In other oil sands developments:

• TransCanada has taken a clear lead in the race to deliver crude from northern Alberta to U.S. Gulf Coast refineries, gaining approval from Canada's National Energy Board to expand its existing Keystone pipeline.

The US\$12 billion system — a 36-inch crude line covering 1,980 miles — is scheduled to make its first Gulf Coast delivery within three years.

The NEB, although attaching 22 conditions to its approval, said the proposed pipeline is "in the public interest" by opening up a "large, long-term and strategic market for Western Canadian crude oil."

TransCanada Chief Executive Officer Hal Kvisle said shippers have committed crude that amounts to 75 percent of the expansion capacity for average terms of 17 years.

The expansion will increase Keystone capacity to 1.1 million bpd from the current 590,000 bpd.

U.S. regulatory approvals are expected in the final quarter of 2010 and construction is scheduled to start in the first quarter of 2011.

The National Energy Board has forecast 3.2 percent growth in Canadian oil output to 2.81 million bpd this year, driven by an 11 percent rise in synthetic crude to 853,369 bpd.

The federal agency predicts conventional crude will continue its long-term decline, dropping by 0.4 percent to 781,000 bpd.

Production of heavy oil and nonupgraded bitumen is forecast to increase by 2.2 percent to 1.03 million bpd.

Taiga evaluation for Osum

• Startup Osum Oil Sands Corp. said an evaluation by GLJ Petroleum Consultants has assigned 320 million barrels of proved plus probable reserves to its commercial application for the 35,000 bpd Taiga project.

Osum Chief Executive Officer Richard Todd said the designation reflects the "derisking of Osum's high-quality Taiga project," which is scheduled to start production by 2014.

He said the company's 2.1 billion barrels of best estimate contingent recoverable resources, together with the engineering evaluation, could support production of more than 200,000 bpd for over 30 years.

Osum has an estimated 10 billion barrels of oil-in-place in its two core project areas — the Cold Lake and Salenski carbonates, a fairway that is gaining recognition for its potential to be a major commercial bitumen development.

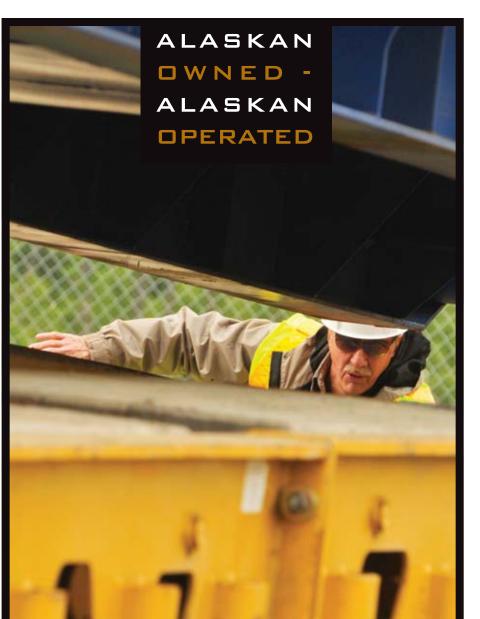
*Executives of Athabasca Oil Sands Corp. are taking the road show for their planned C\$750 million initial public offering to Asia, where they might also encounter officials from OPTI Canada, which is pitching its prospects to Chinese oil and gas companies.

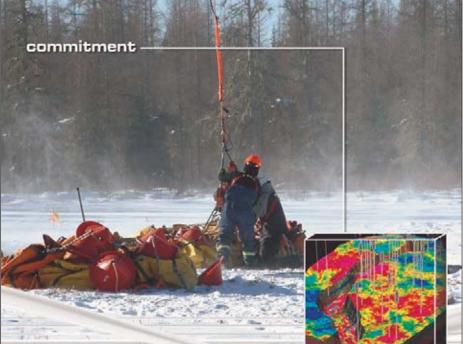
OPTI, which holds a minority stake in the Nexen-operated Long Lake project, is visiting Asia as part of a strategic alternatives review that could result in outright sale of the company.

Athabasca has ready access to potential investors in China, Singapore and other Asian nations following Petro-China's investment of C\$1.9 billion for 60 percent stakes in two of its major leases.

Analysts are betting on Athabasca's

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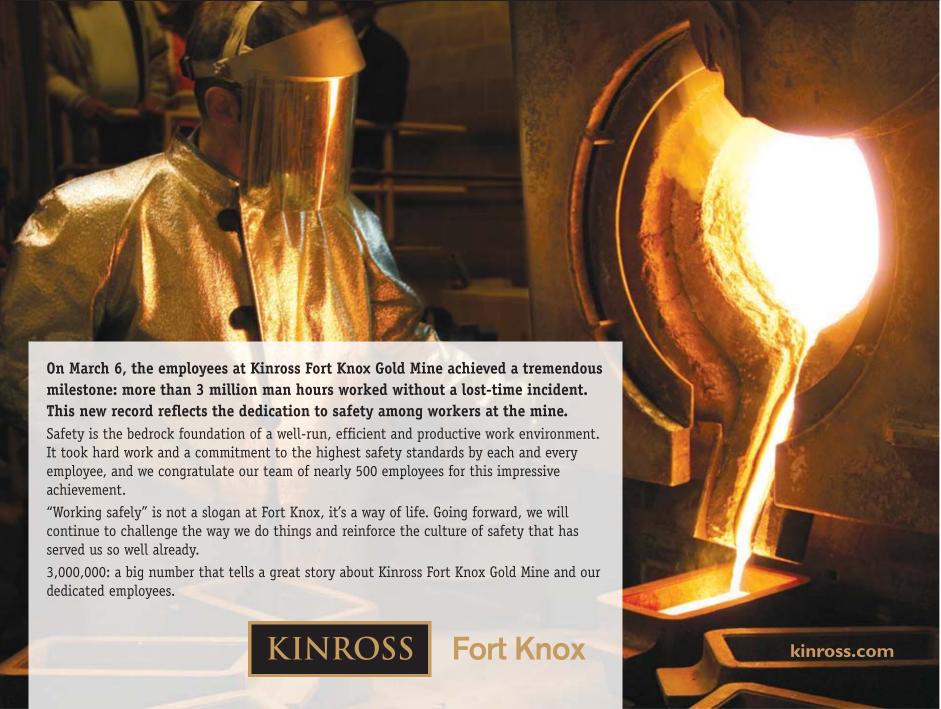




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• ALTERNATIVE ENERGY

A hydrokinetic proposition for Alaska

Florida man wins prize for device that turns currents into electricity, wants to deploy technology on abandoned oil platforms

By ERIC LIDJI

For Petroleum News

S cott Anderson first wondered about generating power from moving water while watching a 14-knot current rip down the river he happened to be fishing in Alaska.

"I was trying to think how I could get the energy out of the water," Anderson, 76, said from Florida, where he lives half the year when he's not on the Kenai Peninsula.

Now, modifying a design invented by the Greek mathematician Archimedes more than 2,000 years ago, Anderson's team at Smart Product Innovations believes they can convert abandoned oil platforms in Cook Inlet into a clean, renewable power source.

Anderson is the latest in a line of energy entrepreneurs

over the past three years interested in pursuing opportunities for generating energy from Alaska waterways without using dams. This technology is broadly known as "in-river hydro" or hydrokinetic energy.



While dozens of different hydrokinetic technologies exist, most share a basic concept: A blade is stuck in a river, and the moving water powers a turbine that generates electricity.

Anderson calls his trademarked variation on the theme the Eco-Auger. As the name implies, it's an auger — the tool used for boring holes — turned on its side and placed in a river. It's essentially a version of the Archimedes Screw used to lift water mechanically.

The power of the current makes the auger spin, which in turn generates electricity. The design was novel enough to win the 2009 ConocoPhillips Energy Prize, awarded annually by ConocoPhillips and Penn State University to innovative energy technologies. The prize comes with \$125,000, which could help Anderson get the Eco-Auger noticed.

Solves two big problems

Anderson believes the Eco-Auger addresses two of the largest concerns about hydrokinetic technologies: one environmental and the other related to engineering.

The environmental concern is often called the "sushi problem." A hydrokinetic turbine may not damage marine ecosystems as much as a fully fledged dam, but sticking a spinning blade into a populated river creates the potential for a lot of chopped-up fish.

Anderson learned this the hard way when his grip slipped on an early prototype. "I caught my finger in it, and boy, the



The Eco-Auger is built from two interconnecting molds

sharp blade spinning just really dinged my finger up. That's when I learned that this is nothing more than a Cuisinart to chop up fish," he said.

It took months of tinkering to figure it out, but the solution is innovative.

The most common solution to the sushi problem involves placing a grill in front of the turbine to keep fish from getting sucked into the blades, but the Eco-Auger allows fish to swim through the auger. In videos of testing Anderson put online, fish approach the auger, disappear inside the spinning mechanism and pop out the other side unharmed.

The engineering challenge is keeping the energy flow steady. One of the biggest obstacles for renewable energy, particularly non-liquid fuels such as wind and solar, is their unpredictability. Some days the sun doesn't shine and the wind doesn't blow. A river always runs, but not always at the same speed, making power generation unpredictable.

The Eco-Auger gets around this by adding a step to the generation process. As the auger turns, it creates pressure inside a pump filled with bio-degradable hydraulic oil that in turn generates power, so that no matter how erratic the flow is coming in, it comes out at a relatively even pace.

Looking at Cook Inlet

Anderson wants to deploy the Eco-Auger in Alaska, but not in the most obvious way.

Hydrokinetic startups see a lot of promise in Alaska. Dozens of rural communities sit along major rivers, like the Yukon and the Kuskokwim. Most of these villages generate all power from diesel fuel shipped in on barges and priced at a premium, sometimes double or triple what urban Alaskans pay. A low cost alternative would be welcomed.

For now, Anderson doesn't know how the Eco-Auger would work in the relatively shallow waterways during the

As the auger turns, it creates pressure inside a pump filled with bio-degradable hydraulic oil that in turn generates power, so that no matter how erratic the flow is coming in, it comes out at a relatively even pace.

long winter season when the rivers are covered in ice.

Anderson envisions something much grander: powering the populous urban areas of the state by strapping Eco-Augers onto abandoned oil platforms in the deeper waters of Cook Inlet. The pressurized oil would run up through the supports of the platform to a generation system up top and the power lines would run to shore through empty pipelines.

Anderson believes the idea could save money, as well as generate power. "If I could lease those platforms for electric generation, they wouldn't have to take them out," he said.

Permitting still a challenge

Anderson has proved he can generate electricity using the Eco-Auger, but he hasn't tested it at full-scale deployment. And it isn't ready for deployment, not by government standards.

One problems facing hydrokinetic technology is its abundance. A recent U.S. Department of Energy report lists more than 100 variations on the basic technology, but notes that few have been tested at full scale, making the environmental impacts difficult to measure.

The DOE report said regulators don't yet fully understand how the technology might impact river currents, sediments and seabed habitats; how coatings on the equipment might prove toxic to marine life; or the cumulative impact of deploying a lot of turbines.

Another potential issue for entrepreneurs is getting to the game late. The Federal Energy Regulatory Commission, which approves hydro projects, grants permits on a somewhat exclusive basis, and many Alaska waterways already have permitted projects under way.

In fact, Alaska is packed with hydrokinetic projects. A government database lists almost 20 projects from at least five different companies, all at different stages of completion.

Anderson is critical of the length of the permitting process, particularly for new technologies. He doesn't believe foreign markets are as demanding as the United States, and said New Zealand and Chile have expressed an interest in the technology.

"Both of those countries want this Eco-Auger now," he said. ${\bullet}$

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SAFETY & ENVIRONMENT **Fishing boats fall short for training**

Alyeska Pipeline reports 'non-readiness' in its spill response fleet, boosts pay; only 169 of 189 vessels available on Jan. 26

By WESLEY LOY For Petroleum News

lyeska Pipeline Service Co., commercial fishermen, state oil industry regulators and an industry watchdog group are trying to patch holes in a program that trains hundreds of fishing vessel crews to respond to oil spills in Alaska's Prince William Sound.

On Feb. 2, Alyeska sent the Alaska Department of Environmental Conservation a "notice of non-readiness" under its mandatory oil spill prevention and cleanup plan. Alyeska said it was sending the notice "due to a deficiency in available fishing vessels to meet the response requirements detailed in the plans."

Alyeska said it is supposed to be able to rally 189 vessels to carry out specific response operations within a certain timeframe, but only 169 vessels were ready in a Jan. 26 availability check.

Alyeska is an oil company consortium that runs the trans-Alaska oil pipeline and tanker terminal at Valdez.

The non-readiness notice revealed simmering tensions over the fishing vessel response program.

Watchdog cites problems

The Valdez-based oil industry watchdog group, Prince William Sound Regional Citizens' Advisory Council, called the situation "a long-developing crisis" in a program that's crucial for effective oil spill response. The group noted that fishing vessels provided most of the equipment and manpower for protecting sensitive areas and cleaning up oil after the disastrous Exxon Valdez oil spill in 1989.

The council said that, by its own calculation, the deficiency in the January availability check actually could have been as many as 33 vessels, not 20 as Alyeska reported.

"The January shortfall is only the latest sign of trouble in the program," the council said in a March 12 press release. "The council has been warning Alveska and its regulators of problems since 2005, when fishing vessel captains at a councilsponsored meeting complained of declining participation in the program and warned that, without changes, it could atrophy to the point of being ineffective for oil-spill response.

"The captains said the biggest probems in the program were inadequate compensation, exclusion from the decision-making process, and lack of respect."



A commercial fishing boat takes part in oil spill response training.

from ports such as Cordova, Valdez and Whittier in Prince William Sound, but also from ports farther away such as Homer.

Vessel crews go through annual training exercises, and boat owners typically are paid \$1,000 to \$2,000 per day of training and drills depending on the size of the boat, said Alyeska spokeswoman Michelle Egan. Alyeska also reimburses fishermen for fuel, and provides insurance during exercises.

The fishing boats are trained to deploy boom, skim oil off the surface of the water and other tasks in the event of a spill.

To partly address the fishermen's con-

cerns, Alyeska has implemented a 10 percent pay increase across the fleet, Egan said.

Alyeska has agreed to work with the citizens' council to further address the issues.

Maintaining a ready fishing fleet is "an ongoing challenge," Egan said. "The players change. Vessels change hands. But I think we're on the way to getting on top of it. The 10 percent across-the-board increase seems to have helped."

One fisherman's view

Homer fisherman John Velsko's 36foot salmon and halibut boat, the Wahoo, is part of Alyeska's Tier II fleet.

The next three-day training session begins April 1, and Velsko said it will be interesting to see how many boats show

The 10 percent pay increase hasn't generated much enthusiasm, he said.

The character of Alyeska's fishing vessel program seems to have changed in recent years, said Velsko, who is on the board of the citizens' council. For example, he said, fishermen haven't had much input when training was taking place.

"Recently, there's been an attitude from Alyeska of take it or leave it," Velsko said.

The most worrisome thing, he said, is that while older fishermen seem willing to stay involved with the program, which involves considerable expense and hassle, younger fishermen don't seem as interested.

It's been suggested that, in the event of a spill, fishermen would come out in droves to help with the cleanup, Velsko said.

"But is that the way you want to run a multimillion-dollar oil spill response plan? I don't think so," he said.

The idea of the Alyeska program is to train vessel crews in advance, and not waste crucial hours on training after a spill occurs, Velsko said.

What's needed now is better communication, and it's positive that Alyeska is going to work with the citizens' council on compensation and morale issues, he said.

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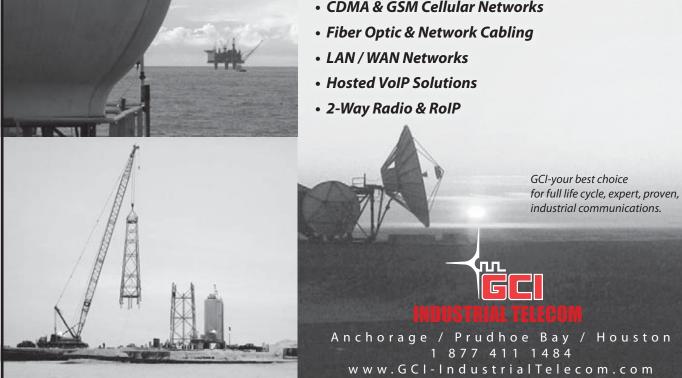
Pay raise

Alyeska contracts with two tiers of fishing vessels for oil spill response.

According to the citizens' council, which has studied Alyeska's complex oil spill contingency plan, a 50-vessel Tier I fleet is supposed to be ready to leave port within six hours, while a 225-vessel Tier II fleet must be ready to depart within 24 hours.

Alyeska is required to have 350 vessel crews trained, but the company fell far short of that level in 2009, the council contends.

The fishing vessels include salmon seiners, gillnetters and other types of boats that normally work in Alaska's huge commercial fishing industry. The boats under Alyeska contract come not only



Alaska oil watchdog group tabs new leader

Former Coast Guard commander in Valdez, to take over helm of Prince William Sound Regional Citizens' Advisory Council

By WESLEY LOY For Petroleum News

SAFETY & ENVIRONMENT

A n Alaska oil industry watchdog group has hired the U.S. Coast Guard's former Valdez commanding officer to lead the organization.

Mark Swanson will take over as executive director of the Prince William Sound Regional Citizens' Advisory

Council effective April 15, the Valdez-based group announced March 15.

Swanson replaces John Devens, who left the position in February 2009. Council staffer Donna Schantz has been serving as acting executive director and contended for the job Swanson ultimately won. She'll return to her former post as director of programs.



Swanson headed the Coast

Guard's Marine Safety Office in Valdez from 2002 until his retirement in 2005 at the rank of commander.

"We're extremely happy to get someone of Mark's caliber to lead our group," said Steve Lewis, president of council's board of directors. "He brings not only long experience in marine safety issues, but also very specific familiarity with the crude-oil facilities and operations we oversee in Prince William Sound."

As Coast Guard's commanding officer in Valdez, one

of Swanson's duties was to serve as a non-voting member of the council board.

"I am familiar with and in passionate agreement with the goals and objectives of the council," Swanson said in a council press release. "Even conscientious politicians, regulators and industry can sometimes need encouragement to make sure they're doing everything required to safeguard the environment and protect the interests of citizens."

Watchdog's origin and work

The council is a congressionally sanctioned nonprofit, formed after the 1989 Exxon Valdez oil spill. It keeps watch over the Alyeska Pipeline Service Co. oil terminal and tanker operations at Valdez and in Prince William Sound.

The council's work has included reviewing oil spill preparedness plans; pushing for policies such as continued tug escorts for tankers and tighter limits on air and water pollution around the terminal; conducting scientific and technical studies; and on rare occasion challenging Alyeska in court.

The oil industry, under a 1990 contract with Alyeska, provides most of the funding for the council, which has an annual budget of more than \$3 million and a staff of 18 in Valdez and Anchorage. The contract is to last as long as oil flows through the trans-Alaska pipeline.

The council has 19 member organizations including

local governments plus commercial fishing, environmental, Native, and recreation and tourism groups from across a region stretching from the Sound to Cook Inlet to Kodiak Island.

By law, the council is subject to periodic Coast Guard recertification.

More about Swanson

A native of the Florida Keys, Swanson graduated from the U.S. Coast Guard Academy in 1984 with a bachelor's degree in naval architecture and marine engineering. He also holds a master's degree in mechanical engineering and naval architecture from the University of Michigan.

Most recently, Swanson worked as an emergency response manager for Shell Trading and Shipping based in Houston, his resume says.

Prior to that, he worked from 2005 to 2008 with Lloyd's Register, an international shipping standards organization, as external training manager delivering technical, environmental protection and maritime safety training to shipping companies and terminal operators throughout the Americas.

Among his numerous postings over a 25-year Coast Guard career, Swanson served three tours with Marine Safety Office Houston-Galveston.

Swanson and his family will live in Valdez.

Contact Wesley Loy at wloy@petroleumnews.com



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• EXPLORATION & PRODUCTION Too much, too little

High snowfall in one area, low in another delays foothills opening

By ALAN BAILEY Petroleum News

Whith Anadarko taking a breather from its drilling program in the Gubik area, no one is on the ground exploring for oil or gas in Alaska's Brooks Range foothills this winter. But that may be just as well, given this year's late opening of tundra travel on state lands in the region.

On March 12 the Alaska Department of Natural Resources announced that the upper foothills area is finally open for "It is hard to say how the Feb. 26 opening for the upper foothills fits in an historical perspective. It is certainly very late and most probably a record." —Gary Schultz, Alaska's Division of Mining, Land and Water

off-road travel, with an estimated opening date of Feb. 26. But DNR said that the lower foothills area remains closed. With a general lack of off-road projects planned for the foothills, the department has not been monitoring conditions in foothills as frequently as normal — hence the estimated date for the upper foothills opening.

"It is hard to say how the Feb. 26 opening for the upper foothills fits in an historical perspective," Gary Schultz of Alaska's Division of Mining, Land and

energy in focus

Creative photography for Alaska's oil and gas industry

JUDY PATRICK

907.258.4704 judypatrickphotography.com Water told Petroleum News March 12. "It is certainly very late and most probably a record."

However, Schultz pointed out that DNR has only been monitoring and separately distinguishing the foothills areas since 2002. And, in fact, there was no general tundra opening on state lands in northern Alaska in the winters of 1976-77 or 1979-80 because of a lack of snow.

This winter's opening dates of Dec. 17 and Dec. 22 for the state's western and eastern coastal areas were a little later than normal, but not exceptionally so, Schultz said.

Strange winter

In what Schultz characterized as a "strange winter," the coastal areas and lower foothills saw very little snow as the winter closed in, with the lack of snow

see FOOTHILLS page 13

• FINANCE & ECONOMY

Gearing up for Canadian action

By GARY PARK For Petroleum News

The Royal Bank of Scotland, majority owned by the British government following a massive bailout, has signaled a further relaxation of financial markets by opening an oil and gas advisory office in Calgary.

The bank's Canadian executive Larry Maloney said the decision mirrors confidence in the Canadian petroleum industry.

Because of changes among other banks that had been in the market, RBS felt there was an opening, he said.

RBS, through its Houston advisory, conducts reserves-based lending, mergers and acquisitions and risk management services for large- and mid-cap companies, but that mandate is being expanded into the junior sector.

Other Calgary bankers agree capital demands are growing in response to an abundance of oil and gas properties on the market as companies such as Suncor Energy and Talisman Energy unload noncore assets.

Pension funds and private equity firms are also making an appearance to build their oil and gas portfolios.

More equity funding expected

Observers expect the latest royalty changes by the Alberta government could spur a fresh round of equity funding to raise growth capital and prepare for anticipated acquisition opportunities.

Brian Lidsky, managing director of Houston-based PLS, said Canada has three of the five largest packages available in North America, including Suncor's plans to divest C\$4 billion worth of assets following its takeover of Petro-Canada, while Talisman and Nexen are seeking buyers for significant production so that they can focus on unconventional shales.

EnCana and Cenovus are also preparing to sell non-core gas reserves and production and oil sands startup OPTI Canada could fetch C\$2.5 billion in an outright sale.

continued from page 12 FOOTHILLS

cover enabling the ground to rapidly freeze to the temperature threshold of minus 5 degrees Celsius at a depth of one foot required for general tundra travel. But then DNR had to wait some time for adequate snowfall, to meet the snowdepth criteria for the tundra travel opening in the coastal areas. On the other hand, there is still insufficient snow in the lower foothills to meet the opening criteria. In contrast, the upper foothills and the southwest lower foothills received a huge amount of snow, with the deep snow cover insulating the ground and delaying the cooling of the tundra to that minus 5 C threshold until late February. The winter of 2008-09 also saw an especially large amount of snow in the upper foothills, but in that winter tundra travel opened on Feb. 2, Schultz said. •

Alan Tambosso, with Sayer Energy Advisors, said that despite the properties on the market, the demand is for unconventional prospects rather than just conventional gas.

He said the "assets out there are very large and they're conventional gas. The big question is who will buy them."

Sayer estimates deals last year fetched an average C\$1.48 per thousand cubic feet, a sharp drop from C\$2.48 in 2008, with production prices averaging C\$37,000 per flowing barrel.

Tambosso said there could be an increase in absolute value this year, but doubts prices will rise in a flooded market. \bullet

Contact Gary Park through publisher@petroleumnews.com

FINANCE & ECONOMY

Canada poised to sell assets

Canada's Finance Minister Jim Flaherty, on the lookout for ways to drag down Canada's projected C\$54 billion deficit for 2010-11, might some answers in offshore Newfoundland and the Northwest Territories.

Various federal administrations have long ducked the opportunity to sell an 8.5 percent stake in the Hibernia oil project, which it acquired for C\$289 million in the early 1990s, compared with the C\$288 million it collected in profits in 2008-09, when oil prices were above US\$100 per barrel.

In the previous year, when oil averaged US\$80 per barrel the dividend was C\$151 million.

But the government has pocketed more than C\$1 billion in the past seven years.

Regardless of Hibernia's limited lifespan, Newfoundland Premier Danny Williams has said his province would pay market value for the federal shares, but federal-provincial squabbling could dissuade the government of Prime Minister Stephen Harper from doing Williams any favors.

Another candidate for sale could be a one-third federal share of Imperial Oil's Norman Wells oil field in the Northwest Territories, which paid a dividend of C\$125 million last year.

Questioned on these and other holdings, Flaherty offered a coy response. "We've done a lot of work on that and more will be said before too long," he said.

Flaherty said there are "substantial opportunities" for federal divestment and, he indicated, they will be realized.

-GARY PARK



Arctic Ice & Snow Roads 2010 Conference: Advancements & Future Needs

Tuesday, March 30, 2010 Anchorage Marriott Downtown Anchorage, Alaska

Arctic transportation networks are critical to resource development on the North Slope. Ice and snow roads are used for all aspects of resource development, including maintaining pipeline infrastructure in current oil fields and exploration in emerging oil and gas fields across the North Slope. This conference has been brought together by a cooperative effort from leading state and federal agencies, industry, and professional societies.

Some of the topics covered will include best management practices, current research projects, safety, techniques to extend ice road operating seasons and other topics of interest to all of those interested in Arctic transportation and resulting resource development efforts. Our conference goal is to bring together industry, professionals, construction firms, regulators, community representatives and NGO's to exchange information, find solutions for common problems and identify future needs. Please Register Early as space will be limited (150 total seating) for those who wish to attend the meeting. We will also have a portion of the meeting available online for those who cannot be in Anchorage.

Contact Alan Bailey at abailey@petroleumnews.com

Conference Highlights

Best Management Practices (BMP's) – What Works? What Doesn't Work? What is Needed for the Future?

Current Winter Transportation Research Projects

Lunch – Round Table Discussion on Future Issues

Ice Road Safety – What Works? What Doesn't Work? What is Needed for the Future?

Ice Road Construction – What Works? What Doesn't Work? What is Needed for the Future?

Ending Panel Session: Facing Future Arctic Transportation Issues

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NATURAL GAS

Senate Finance works decoupling bill

Committee substitute for bill expected to address cost allocation between oil and gas, tighter title, effective date of decoupling

By KRISTEN NELSON Petroleum News

Dividing costs between oil and gas would be a big consideration if the two were decoupled for production tax purposes, Alaska Commissioner of Revenue Pat Galvin told the Alaska Senate's Finance Committee March 12.

Allocation of costs was one of the things Finance Co-Chair Bert Stedman, R-Sitka, told the committee could be in a committee substitute when the bill is next heard, expected to be the week of March 15. Stedman said the title of the bill, already tightened in the committee substitute adopted March 12, would probably be further tightened, and the effective date of decoupling oil and gas might also be addressed.

Senate Bill 305, a bill by Senate Finance, addresses the issue of what happens under the state's production tax system, which taxes oil and gas production jointly, when North Slope gas begins to be sold in large volumes after the construction of a gas pipeline from the North Slope to market. A House bill to separate oil and gas production tax, House Bill 414, was introduced March 10 and is in House Resources. As of March 17 it had not been scheduled for a hearing.

SB305 is being pushed this session because the Alaska Gasline Inducement Act locks in taxes at the beginning of the first open season under AGIA for the first 10 years of gas delivery, and TransCanada plans to begin that open season at the end of April.

When there is a large disparity between the value of oil and the value of gas, the current production tax — Alaska's Clear and Equitable Share or ACES — produces less revenue to the state because gas drops the overall value of the combined resources below the level at which progressivity is triggered. Progressivity is the feature of ACES which increases the state's take at high prices.

Models run for the committee showed



BERT STEDMAN PAT GALVIN

that at some price differentials between oil and gas the state could get less revenue for combined oil and gas sales than it would get for oil sales alone.

The solution proposed by the Finance Committee bill is to remove natural gas from the progressivity calculation.

Progressivity goes both ways

Galvin showed the committee calculations which compared the state's take when there is a large disparity between oil and gas prices (\$120 a barrel for oil and \$8 per million Btu for gas) and when there is less disparity (\$120 oil and \$15 gas), comparing the status quo (a combined tax) with standalone taxes for oil and gas and with the proposal in SB305, which separates the two for the purposes of progressivity.

When there is a large disparity between oil and gas prices the state would receive \$5.5 billion from the status quo system and \$7.5 billion from either standalone tax systems or SB305.

But at the higher gas price the state would receive \$11.6 billion with the status quo, \$11.9 billion with standalone tax systems and \$10.1 billion with the system proposed in SB305.

SB305 results in a lower state share than the status quo when upside profits and gas prices are relatively high because there is no progressivity for gas, Galvin said. (Stedman said the committee has language on progressivity for gas which could be inserted into the bill.)

But SB305 also imposes a higher tax



... a solution would be to make the bill effective with the start of major gas sale deliveries from the North Slope. The substance of the bill could be locked in "for AGIA purposes without triggering prematurely all the disputes and difficulties over allocating costs to gas before production for major North Slope gas sales begins." —Claire Fitzpatrick, senior vice president, BP Exploration (Alaska)

burden than the status quo when gas prices are relatively low, Galvin said.

"And I think that's something that you really need to think about" in terms of balance, he said: The balance of revenue to the state while still providing an attractive environment for investment in the gas line when its economics are challenged.

Cost allocation issues

Galvin told the committee that cost allocation issues are significant when oil and gas taxes are separated because as costs move from the more to the less profitable side it shifts the tax burden, and SB305 provides little guidance on how costs would be spit.

He said the Department of Revenue would "much prefer to have such a significant policy issue be clearly articulated in statute by the Legislature rather than leave it for" the department to develop regulations.

Costs can be allocated on an item-byitem basis or by formula or rule.

When item-by-item cost allocations are used, the producer typically makes the initial cut and the regulator checks it, Galvin said. Historically differences have led to disputes, either producer vs. government or producer vs. producer, because different producers are affected differently so there could be disputes between working interest owners.

A formula or rule method can be based on proportion of production, i.e. barrel of oil equivalent; proportion of sales; proportion of reserves, anticipated rather than current production; a rule of dominant use, either oil or gas; a rule that deems a cost to be oil related unless it is 100 percent gas related; or any combination.

Galvin showed the committee examples of the impact of different allocation methods, a variation of up to a billion dollars between types of allocation.

BP concerns

The committee has yet to take testimony from producers on SB305, but did receive a letter from Claire Fitzpatrick, senior vice president with BP Exploration (Alaska) and the company's chief financial officer, containing comments on the bill.

One concern BP has with the bill, she said, is that while the bill addresses a "potential problem that may arise a decade from now, it would come into effect today and require allocation of costs between oil and gas long before the potential risk it addresses could begin to materialize."

The allocation of costs between oil and gas would affect some gas sold currently, she said. "Allocation threatens to make a mountain out of a molehill because the change in gas taxes due to cost allocation during the coming decade will be tiny relative to the tax when major gas sales begin, but the Department of Revenue will have to apply the allocation rules with strictest rigor lest it create a bad precedent for the major gas sales," Fitzpatrick said.

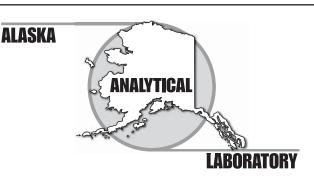
She told the committee a solution would be to make the bill effective with the start of major gas sale deliveries from the North Slope. The substance of the bill could be locked in "for AGIA purposes without triggering prematurely all the disputes and difficulties over allocating costs to gas before production for major North Slope gas sales begins," she said.

Fitzpatrick also said that BP asks that the committee not follow the ACES pattern of leaving "significant matters ... to the determination of the Department of Revenue." SB305 "uses the term 'applicable to' to describe the allocation of lease expenditures between oil and gas. Such a broad term does not provide the industry or the Department of Revenue enough guidance of the legislative intent," she said.

Both Btu equivalent barrels and relative volumes are in use in state law, she said, and urged the committee to make a choice of the allocation method to be used in decoupling, "because that will clarify the obligation that taxpayers are held to, reducing latitude for argument about what compliance requires and making it easier for the Department of Revenue to enforce."

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Chevron to deal with old refinery site

Beach erosion along Alaska's Kenai Peninsula threatens system for recovering polluted groundwater; company proposes stone revetment

By WESLEY LOY For Petroleum News

C hevron is preparing to use a lot of muscle to subdue a nagging environmental problem on Alaska's Kenai Peninsula.

The company is seeking federal and state approval to control beach erosion at the base of a Cook Inlet bluff atop which the Chevron Kenai refinery at Nikiski once stood.

The refinery operated from 1963 to 1991, when Chevron closed it down. The plant later was dismantled and sold.

An unfortunate legacy of the refinery was a hydrocarbon plume that migrated from beneath the plant down toward the adjacent Cook Inlet, a turbulent water body that supports prized salmon fisheries.

The problem became apparent in 1987, when petroleum contamination was discovered on the beach west of the refinery site.

To contain the pollution, a drainage system for collecting free product and groundwater was built at the foot of the bluff in 1994, along with a protective sheet-pile seawall.

FINANCE & ECONOMY

The collection system "has been largely successful in

preventing hydrocarbons from reaching Cook Inlet," according to documents Chevron has filed with the U.S. Army Corps of Engineers. What's more, the volume of recoverable free product at the bluff "has decreased to negligible amounts."

But over the past decade, serious beach erosion has exposed the bottom of the seawall, threatening the integrity of the groundwater collection system.

Proposed fix

Chevron has made a number of efforts over the years to replenish the beach in front of the seawall with cobble, sand and gravel material.

Now the company is proposing a more durable solution. It wants to tear out the 900-foot seawall and the groundwater collection system, and replace them with a rock revet-

ment. A number of alternative techniques would be used to either treat or capture polluted groundwater. These include chemical oxidation and groundwater extraction wells installed at the top of the bluff, says a Chevron project summary. The company is seeking a permit from the Army Corps, plus clearance from state officials, to carry out the work.

Construction is scheduled to run through this year and next.

The revetment will be built across the base of the bluff, and will be higher than the maximum expected run-up of waves. It will feature armor stones up to 4 feet in diameter, sourced from a commercial quarry in Chugiak, Chevron's project description says.

Barges could begin delivering the rocks to the beach in April, but the shipments will be discontinued during salmon season. Some commercial setnet sites are in the vicinity.

A price tag for the project wasn't readily apparent in the documents Chevron filed with the Army Corps and other agencies.

The Corps, in a March 12 public notice, said it already has made a preliminary determination that the project would have no effect on the endangered Cook Inlet beluga whale. \bullet

Contact Wesley Loy at wloy@petroleumnews.com

EIA WTI forecast steady at \$80 a barrel

Energy Information Administration expects crude oil price to rise to \$82 by end of the year, and to reach \$85 by end of next year

PETROLEUM NEWS

A lthough daily price fluctuations continue, the Energy Information Administration's forecast for the price of West Texas Intermediate crude oil has remained relatively stable over the last quarter, the agency said in its March 9 short-term forecast. EIA expects WTI prices to average above \$80 per barrel this spring, rise to about \$82 by the end of this year and to \$85 by the end of 2011.

Projected economic growth for the year is higher in the March forecast, the agency said, with U.S. real gross domestic product growing 2.8 percent and world oil-consumption-weighted real GDP growing 3.4 percent, compared to the February forecast of 2.3 percent and 2.7 percent respectively.

EIA's 2011 forecast for real GDP growth is relatively unchanged at 2.6 percent for the U.S. and 3.5 percent for the world.

Because of projected increases in crude oil prices, EIA is forecasting the annual average price of regular grade gasoline to increase from \$2.35 per gallon in 2009 to \$2.84 in 2010 and \$2.96 in 2011.

"Average U.S. pump prices likely will

EIA said prices may strengthen slightly as local distribution companies begin to rebuild natural gas storage, but "the potential for higher domestic production,

increasing LNG supply and limited consumption growth all reduce the possibility of sustained high prices as inventories are replenished over the next several months."

2011, averaging \$5.65 per million Btu.

Because of colder-than-normal weather in February, the projection for working gas inventories in the first quarter is about 1.55 trillion cubic feet compared to 1.644 tcf in EIA's February projection. In February natural-gas-weighted heating degree days were nearly 11 percent above the 30-year norm.

Crude consumption up

EIA said its more optimistic expectation for 2010 economic growth has driven its 2010 forecast for oil consumption growth up to 1.5 million barrels per day from 1.2 million in February. It is this 2010 growth in oil consumption that "supports a firming of crude oil prices at above \$80 per barrel this summer and accommodates a further drawdown of commercial oil inventories," EIA said. The agency said it has reduced its projections for surplus production capacity in the Organization of the Petroleum Exporting Countries, but "surplus capacity remains ample, dampening the likelihood of a large upward swing in prices."

Most of the increased economic growth this year is expected to be in the Asia-Pacific and Middle East region, EIA said.

Non-OPEC supply increased by 590,000 bpd last year and EIA said this was "the largest annual increase since 2004." The agency said its forecast assumes that OPEC will not change its target production levels at its mid-March meeting.

Gas consumption increasing

U.S. natural gas consumption is expect-

ed to increase by 0.7 percent this year to 62.9 billion cubic feet per day and then decline by 0.4 percent in 2011, with cold weather driving this year's natural gas consumption increases.

EIA said total natural-gas-weighted heating degree days in the first two months of 2010 were 5.5 percent above the 30-year normal level and the highest for the period since 2004. The small decline in natural gas use projected for 2011 reflects an expected return to nearnormal weather.

Total U.S. marketed natural gas production is expected to decline by 2.7 per-

see EIA FORECAST page 17



email: SStewart@arcticcontrols.com

exceed \$3 per gallon at times during the forthcoming spring and summer driving season," the agency said.

EIA said it expects the Henry Hub spot price for natural gas to average \$5.17 per million Btu this year, up \$1.22 from 2009. The price is expected to continue to rise in





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Schuerch named UIC's new in-house counsel

Ukpea vik Iñupiat Corp. said March 16 that is has named Tim Schuerch its in-house counsel. Schuerch will serve as the corporation's in-house attorney on a broad range of legal and regulatory matters. Schuerch earned his Juris Doctor from Southern Methodist University in 1998. He has worked in Alaska for Native corporations and tribal health organizations for more than 12 years, with previous positions as president and CEO of Kikiktagruk Iñupiat Corp. of Kotzebue; policy analyst for the Alaska Native Health Board; and general counsel for the Alaska Native Tribal Health Consortium.



TIM SCHUERCH

UIC is the village corporation for Barrow, Alaska, With more than

1,900 employees, UIC is consistently ranked among the top 10 Alaska-owned businesses by Alaska Business Monthly's annual Top 49ers. UIC provides services to clients in a range of industry sectors worldwide, including energy development, construction and engineering, marine operations, and government contracting.

Anchorage Chamber recognizes women in business

Linda Leary, president of Carlile Transportation, Laurie Fagnani, president and owner of MSI

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Communications, Cindy Curtis, TOTE community relations, Hélène Elizabeth Harding, ConocoPhillips Alaska acting president and vice president of North Slope operations and development, Margaret Nelson, Calista senior vice president of corporate development, and Mary Patricia Quin, president of NANA Management Services LLC are among 14 women chosen by the Anchorage Chamber of Commerce to be inducted into the Anchorage ATHENA Society for 2010.

Oil Patch Bits

The women will be recognized for their professional excellence, commitment to the community, and encouragement of the leadership potential of women during the Anchorage ATHENA Society luncheon, which will be held from noon to 1:30 p.m. on April 5 at the Dena'ina Center.

Reservations are required and available online at www.anchoragechamber.org or by calling 907-272-2401.

ATHENA International is an organization dedicated to encouraging the potential of women as valued members and leaders of the business community. There are more than 200 members in the Anchorage chapter.

Hawk achieves 1 million hours worked safely

Hawk Consultants LLC said March 10 that it hit a milestone achievement of 1 million hours

see OIL PATCH BITS page 17

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

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continued from page 15 EIA FORECAST

cent to 58.7 bcf per day this year and increase by 1.1 percent in 2011, EIA said, with the number of working natural gas rigs increasing in response to higher prices in both the spot and forward markets.

EIA said Smith International reports that natural gas rigs have increased by more than 17 percent, or by nearly 140, since the beginning of 2010, with almost 570 working horizontal rigs, a new record.

The agency said it "still anticipates a decline in 2010 production because of the lag time arising from low drilling rates last year and steep decline rates associated with newly drilled wells."

"However, continued recovery of drilling rig activity, increasing drilling efficiency, and the potential for higher production rates from shale gas wells could lead to higher-than-expected production this year and next."

Gas imports expected to rise

The agency expects U.S. net natural gas

continued from page 1 CHANGE

supply and demand in the south 48, a new vision of our future with regard to gas is required," Stevens said.

And a gas line to the Kenai Peninsula would support the continued operation of the existing LNG plant there, he said.

At odds

Stevens' vision is at odds with current industry plans for the commercialization of North Slope natural gas.

TransCanada and its partner ExxonMobil are planning the construction of a North Slope gas line through Canada under the terms of the state's Alaska Gasline Inducement Act, or AGIA. However, AGIA does require consideration of an option to deliver gas to Valdez for export as LNG. The TransCanada-ExxonMobil Alaska Pipeline Project plans to start its open season in May, soliciting bids for the future transportation of gas — that open season will include an option for the transportation of gas to Valdez.

"The Alaska Pipeline Project open season, which is expected to run from May-July, will provide customers with opportunities to ship their gas to either Valdez for LNG deliveries to the U.S. or international markets or to Alberta on the way to the Lower 48," Tony Palmer, vice president for Alaska development, TransCanada Corp., told Petroleum News March 17. "In both cases, the Alaska Pipeline Project has provided opportunity for instate deliveries off the main pipeline. If parties believe Asia LNG markets provide superior netbacks, I would expect they would nominate gas for deliveries to Valdez this summer."

Denali-The Alaska Gas Pipeline LLC, co-owned by BP and ConocoPhillips and not operating under AGIA, has been moving forward on a competing project for a North Slope gas line through Canada. The company does not plan to offer an LNG option during its open

imports to be slightly higher in 2010 as declines in pipeline imports are offset by lower exports and higher liquefied natural gas imports.

On Feb. 26, working natural gas in storage was 1.737 tcf, 21 billion cubic feet above the previous five-year average and 71 bcf below the level during the corresponding week in 2009.

Inventories have been reduced by cold weather, with an estimated total inventory withdrawal in January and February of 1.406 tcf, compared to an average fiveyear withdrawal rate for those months of 1.159 tcf.

The Henry Hub spot price average of \$5.32 per million Btu in February was 51 cents lower than January.

EIA said prices may strengthen slightly as local distribution companies begin to rebuild natural gas storage, but "the potential for higher domestic production, increasing LNG supply and limited consumption growth all reduce the possibility of sustained high prices as inventories are replenished over the next several months."

continued from page 16 OIL PATCH BITS

worked without injuries or lost-time accidents.

Hawk has worked in the Alaska oil patch since 1985 and has never had a lost-time accident. This achievement is a tribute to the quality and dedication of its employees. Working safely is an individual responsibility that is fostered and supported by the Hawk management team and its clients. The Hawk team strives to help each other get home safely each night.

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NAC renews agreement with Teck for Red Dog Mine

Northern Air Cargo said March 8 that it has renewed its agreement with Teck Alaska Inc. to provide air freight service to the Red Dog Mine. NAC has been providing this service to the mine for many years and will continue to provide vital support to the mine site.

The Red Dog Mine in northwest Alaska's NANA Region is inaccessible by road, so air freight plays a vital role in the mine's operation. "The mine is an important economic and employment engine in the region and we appreciate being able to be part of that," said David Carp, CEO and president of NAC. NAC will operate at least one scheduled flight per week directly from Anchorage to the Red Dog Mine with a Boeing 737-200 all cargo aircraft.

Northern Air Cargo is Alaska's largest all cargo airline offering scheduled and charter services throughout Alaska, the Lower 48 and North America.

Editor's note: All of these news items some in expanded form — will appear in the next Arctic Oil & Gas Directory, a full color magazine that serves as a marketing tool for Petroleum News' contracted advertisers. The next edition will be released in September

"... The (supply) gaps start in all of these places within two to three years, and within five years after that gap starts it will be filled by long-term contracts of 20 to 30 years ... I've never seen such a magnificent opportunity for an incentive to develop our own resources. ... If we don't act soon that window of

opportunity will be closed." -Former U.S. Sen. Ted Stevens

Hard look

Stevens said he has changed his views on the gasline options after spending the past three months taking a hard look at the various gas-line proposals and discussing the gas-line issues with many people including Paul Metz, director of the Mineral Industry Research Laboratory in the University of Alaska Fairbanks, and CEO Robin West and his staff in international consultancy firm PFC Energy.

Thanks in large part to a drive towards the development and production of unconventional natural gas sources such as shale gas, estimates of gas resources in the Lower 48 have almost doubled in recent years, Stevens said. At the same time the U.S. Department of Energy has lowered its forecast of increases in U.S. natural gas demand, he said. And the upshot of these two factors is an expectation that that Lower 48 gas supplies will be able to keep up with gas demand in the coming years.

But DOE also predicts that, if a gas line from the North Slope to the Lower 48 comes to fruition, North Slope gas will not come online until 2022, Stevens said.

"The Lower 48 demand is not rising as fast as it had been predicted. Supply is rising faster than predicted. The supply will likely more than meet demand through

2030," Stevens said. Against that backdrop, Asian demand for LNG, par-

And although countries like Australia are moving rapidly to bring new natural gas to market to meet the future Pacific-Rim gas demand, those countries are experiencing difficulties in developing the necessary industrial infrastructure for LNG exports. For example, one Australian natural gas discovery will require a more than 1,000-mile pipeline to an LNG plant, compared with the length of an 800- to 900-mile Alaska pipeline to bring North Slope gas to a tidewater LNG plant, Stevens said.

"All over the world there are developmental delays which open a window of opportunity for Alaska to enter the LNG market in the Pacific Rim," Stevens said.

And there is sufficient available worldwide shipyard capacity to build new LNG carriers, should additional carriers prove necessary to support an Alaska LNG export trade, he said.

In addition to creating an export market for the approximately 35 trillion cubic feet of natural gas known to exist on the North Slope, plus major quantities of additional undiscovered North Slope gas resources, Stevens sees the in-situ gasification of the vast Alaska coal resources as an additional source of gas for exported LNG. Cook Inlet Region Inc. is currently planning an underground coal gasification facility of this type near Beluga on the west side of the Cook Inlet.

"We have to remember we have half the coal of the United States," Stevens said. "The best use of that coal, in my judgment, is to develop on-site coal to LNG gas."

People can move ahead "only with a concerted effort of a real emergency team (that) will look at those laws and say 'change them. Let's move ahead. We don't need any more open seasons. We don't need any more periods for analysis. We need an emphasis on getting the job done,"

Stevens said.

season, company spokesman Dave MacDowell has told Petroleum News.

"We've been focused on developing a large diameter, high pressure pipeline to bring Alaska gas to the North American market," MacDowell said when asked for a reaction to Stevens' comments. "We're developing a high-quality cost estimate and attractive commercial terms that will enable our customers to decide what they'd like to do. They will make those decisions during the upcoming open season, and we believe it is premature to speculate on the outcome of that process."

And in the debate about the relative merits of exporting gas from Alaska as LNG, versus exporting the gas south through an overland pipeline, some people have questioned whether North Slope gas, with a relatively high carbon dioxide content and lying some 800 miles from an ice-free port, can compete on cost with major gas producers such as Qatar, with its massive gas resources close to tidewater. Some people also believe that North Slope gas can fulfill a useful role as a component in the overall portfolio of future North American gas supplies.

ticularly in Japan, Korea, India and China, is steadily increasing, Stevens said. Stevens presented a graph prepared by PFC Energy showing projected Asian LNG supply and demand, and depicting a shortfall of supply relative to demand starting to open up at around 2012.

"The balance between (global) LNG supply and demand tightens after 2015," Stevens said. "... South Korea buys under long-term contracts and consumes almost exclusively LNG. Its deficit ... commences in 2012."

India's shortfall in LNG supplies is predicted to start in 2014; Japan's in 2012; and China's in 2015, Stevens said.

Price differential

Not only that. Unlike in the United States where natural gas prices have dropped in recent years, Pacific Rim gas prices are indexed to oil prices and have remained relatively high.

"The higher price of LNG, based on oil prices ... makes LNG a high-value proposition for anyone who takes LNG to that (Pacific Rim) area," Stevens said.

Action needed

But, while time is of the essence in moving forward, if Alaska gas is to start filling the pending supply gap in the Pacific Rim LNG market, existing state laws limit people's ability to move quickly with the necessary industrial developments, Stevens said.

People can move ahead "only with a concerted effort of a real emergency team (that) will look at those laws and say 'change them. Let's move ahead. We don't need any more open seasons. We don't need any more periods for analysis. We need an emphasis on getting the job done," Stevens said. "... The (supply) gaps start in all of these places within two to three years, and within five years after that gap starts it will be filled by long-term contracts of 20 to 30 years ... I've never seen such a magnificent opportunity for an incentive to develop our own resources. ... If we don't act soon that window of opportunity will be closed. •

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 1 ANTARCTICA

eighth day of his 15-day voyage down and back. "But it's like our own deserts; on the one hand there's the wind the dust the screeching and the inhospitality. On the other there's the swaying palms, the flowing sands and the warmth. Just like we have our coffee and the smell of wool, Antarctica has its penguins and dancing ice."

A graduate of Stanford University and the London School of Economics, AlMisnad now works for Shell Oil, helping with the company's carbon dioxide management. That feeds into AlMisnad's self-proclaimed interest in sustainability and responsible development.

While traveling to the most remote spot on earth is a challenge, AlMisnad believes the bigger obstacle is bringing useful lessons back. Exploring an extreme landscape can highlight how society needs to key in on "overlooked factors" in the environment.

"What we have been learning over the last few decades is that just because these things are subtle and hard to measure does not mean that they're not important," AlMisnad wrote in the weeks before his trip. "Seeing climate change first hand and exploring this vast protected wilderness is a great way to come to grips with some of these subtleties."

Exploration, but not for oil

AlMisnad is traveling to Antarctica on an expedition led by 2041, the group founded



Gentoo penguins after a swim.

by explorer Robert Swan. Swan was the first man to walk on both poles, and he named his group after the year when the Protocol on Environmental Protection to the Antarctic Treaty could potentially be amended to allow for mining and oil and gas drilling in Antarctica.

The goal is to keep "the last great wilderness on earth" safe from mineral exploitation.

The possible mineral and hydrocarbon wealth under Antarctica is relatively unknown, because exploration of the continent has so far been limited to scientific journeys.

Coal has been found in the Transantarctic Mountains and Prince Charles Mountains in east Antarctica, while the Deep Sea Drilling Project, a scientific venture in the 1970s, accidentally found some natural gas in the Ross Sea, but didn't pursue it. Other scientific drilling expeditions have purposefully avoided areas believed to be gas and oil prone.

While it's impossible to know now whether Antarctica houses a massive untapped oil and gas deposit under its rock and ice, the Australian government doesn't believe the resources buried below Antarctica will be economic except under extreme conditions, like oil prices that stay well above \$200 a barrel or a massive oilguzzling world war.

Penguins, ice and new friends

As a place where the natural environment hugely overshadows the human environment, Antarctica is a place where people go to learn lessons about themselves and the world.

"There are plenty of noises ... but the noises make sense," AlMisnad wrote on March 11, his first day on the continent of Antarctica. "It's like when you go to a movie. Even though there is plenty of noise coming from the film, the two guys making jokes behind you can still break the silence; the noises from the film are not distracting. In this way Antarctica is silent; its speakers are on full blast but there's nothing there to distract you."

AlMisnad has detailed oddities from all corners of life on his blog.

He wrote about leaving for Antarctica on a Russian ship that looked "like a floating low-rise apartment building." Although designed to map the ocean floor, the crew occasionally rented out their ship to exploration teams to generate some cash.

He wrote about the ubiquity of penguins — "Everything's starting to smell like penguin. Wake up in the morning and it's penguin, afternoon penguin. Lunch tastes like penguin, coffee tastes like penguin." — and the strange effects an iceberg graveyard has on light and color, "different shades of white marbled here and there with veins of glowing blue."

The culture clash isn't just between a Qatari and a cold continent either. On March 10, AlMisnad included thoughts from traveling partner Abdul Aziz Al Nuaimi, a real live sheikh, and speaker on sustainability issues in the United Arab Emirates, who calls himself the "Green Sheikh."

"First day I met Robert Swan," Al Nuaimi wrote. "I greeted him on Western and Arabic styles, I hugged him and gave him nose to nose as Emirati way of greeting."

-PETROLEUM NEWS

continued from page 1 MAC ACKERS

of "Low Carbon Diet: A 30-day Program to Lose 5,000 Pounds" and "Social Change 2.0," Davis aims to ratchet up the savings.

"As a city where 75 percent of our greenhouse gas emissions are coming from residential sources, it was a no-brainer," said Mitch Sears, sustainability director of the City of Davis. "When you pair the carbon reduction results Gershon is getting with the innovative Cool Community strategy and tools he offers to scale them up, "Low Carbon Diet" is by far the most costeffective option for our city budget."

LATEST FROM PICKENS ... In his monthly update on the level of foreign oil imports to the United States, T. Boone Pickens said March 15 that based on figures from the U.S. Department of Energy's Energy Information Administration, the United States imported 59 percent of its oil, or 322 million barrels in February, sending approximately \$24.6 billion, or \$609,857 per minute, to foreign countries.

MOVIE MADNESS ... Last week I discussed an ad that appeared in the trade pub Variety, linking the movie Avatar to the Canadian oil sands — i.e. Ava tar online at www.greeningofoil.com/post/Academy-Awards-Antarctica-101-and-a-moment-ofsilence.aspx.

The ad was basically lobbying for both the movie and director Cameron to win Oscars. Quite a few of you responded to me directly. Some were scientific and some more emotionally charged, but either way, I love a person who takes a position! Do you agree with them? Read on... • Avatar was bang on the problem. It is historical and contemporary truth. It is natural for a people who can identify themselves as villains of the movie to shun it. However the defeat of these forces by the primitive tribal is not a truth till today but a hidden aspiration of many in the undeveloped world.

• Ava Tar Sands has damaged Canada's positive image in the world badly. If that could be calculated into economic figures, Cameron would think it over again.

• I would not be surprised if the Chinese who are in the effluents stream for their uncontrolled PV fabrication plants would not think of themselves as the Na'vi also. :-) The film's theme fits many circumstances. It implies there are easy alternatives, which I am not so sure is the case. After all, if it were easy and cheap to move from oil to solar or wind, the oil companies



would do it, make the same or more money, and have less PR headaches.

• The cost to mitigate a ton of CO2 is as high as 40 dollars (\$US) per ton, that I have seen. I know American Forests, a non-profit in the USA, can plant for one dollar per tree. Trees for Tigers is a good example program, after all this is the Year of the Tiger (Chinese)! Trees scrub the sky of CO2 and put it in into the ground through a natural process. This balance must be restored. Solar, Wind and other renewable resources are fine, but biomass recovers the emissions. A billion dollars for CCS R&D or a billion trees for carbon capture and storage? My bet is on the trees.

• Interesting and it is obvious that unobtainium was in the end of the movie degraded to an "unobtainable" mineral. Your clean jeans Gideon may be more valuable than you think. Dare I say once again Bloom Box and Silicon or as they like to call it, Sand? Now if we get the Bloom Box to use either unobtanium or grease residue as well as the clean sand, we may have a good business.

Contact me! I am Greening of Oil's social networker. My weekly column is



posted in both Petroleum News and on Greening of Oil's Buzz and Latest news pages. My e-mail address is mac@greeningofoil.com



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continued from page 1 **PRICE**

Eroding investment levels

Newly installed Energy Minister Ron Liepert said the government could no longer "pretend that oil and gas investment levels haven't eroded or that we don't have a responsibility to current and future generations of Albertans to address that."

Without being a full-fledged apology, that was a tacit admission by Liepert that his government's three year process of reviewing, tweaking and implementing a new royalty framework had failed.

Government officials now acknowledge that they have no time to waste to sharpen Alberta's competitive edge against the neighboring provinces of British Columbia and Saskatchewan and similar jurisdictions in the United States, having been ranked dead last on that scale by experts such as University of Calgary economics professor Jack Mintz.

The most sweeping overhaul of Alberta's royalty regime since it was first introduced was supposed to generate an extra C\$1.4 billion a year in government revenues from a 20 percent average hike.

Instead it collided with commodity prices heading in the opposite direction, then a recession.

The combined result was the loss of billions of dollars in capital spending to other provinces and the U.S. and thousands of jobs.

Job creation projected

The changes announced March 11 are projected to create 8,000 jobs in 2011-12, then 13,000 each year across the economy, but cost the government C\$785 million in previously forecast royalty revenues in the 2012-13 fiscal year.

However, the government expects oil and gas companies will reinvest an additional 2 percent of their cash flow (up from the current 60 percent) or C\$700 million a year, as a result of changes starting in 2012.

The maximum royalty rate on conventional oil will drop to 40 percent from 50 percent and for natural gas to 36 percent from 50 percent. The bottom rate for both will remain at 5 percent.

The government has also indicated it might be open to further concessions for deep new wells using new technology to develop oil and gas pools.

An interim 5 percent rate on the first year of production from new gas wells will be made permanent.

The price curve which will establish royalty rates between the high- and lowend commodity prices will be set by May 31, giving companies time to develop their capital programs for the 2010-11 winter.

Further royalty refinements are possi-

Land bidders bide their time

The run-up to Alberta's royalty revamp was a mixed signal, with a government land sale generating strong returns, but falling far short of the C\$900 million some had anticipated.

The fourth auction of 2010 raised C168 million, close to half this year's total to date of C377 million — edging past the halfway point for the 742 million in successful bids for all of 2009 — from the disposal of leases and licenses covering 628,714 hectares (1.55 million acres) at an average C517 per hectare. The per-hectare average so far this year is C62.

Gary Leach, executive director of the Small Explorers and Producers Association of Canada, said each land sale in 2010 has grown in total dollar returns, pointing to a "healthy trend that shows growing optimism about future investment trends in Alberta."

He said it was possible that uncertainty over the government's royalty announcement the next day might have deterred some bidders.

But Chris Theal, an analyst with Macquarie Capital Markets Canada, who forecast the inclusion of a vast tract of Devonian Duvernay shale gas prospects in the sale could attract successful bids of C\$800 million-C\$900 million, said he was "underwhelmed" by the disposal of the shale rights.

As usual, most of the bidding was done by brokers for clients who have five years to disclose their identities, or allow their rights to lapse.

The largest single bid was C\$21.4 million for a 4,096-hectare parcel by Britt Resources, while the per-hectare high was C\$36,239 by Scott Land and Lease. A large number of other bids exceeded C\$20,000 per hectare.

Dave Russum, vice president of geoscience with AJM Petroleum Consultants, said buyers were probably targeting a wide range of plays from shales to tight sand and the hot prospects such as the Cardium, Montney and Duvernay formations.

Russum said advances in drilling and production technologies are yielding new life in oil fields and rocks that were previously viewed as uneconomic.

Greg Scott, president of Scott Land and Lease, which placed bids worth C\$65 million, said the results reflected activity throughout the province.

The next sale on March 24 also has extensive postings in the shale region of northern Alberta and will be the first real chance to measure industry response to the new royalties.

-GARY PARK

ty. Those calculations exclude the oil sands sector, which is now the largest single source of government revenue, but Liepert said it did not need royalty stimulus because it is attracting strong investment.

End of nasty fight

If the government's objective was also to end its nastiest fight in memory with the industry and start rebuilding trust, the changes appear to have succeeded.

David Collyer, president of the Canadian Association of Petroleum Producers — the industry's most powerful lobbying group — said that although it will "take a little while" to work out final details of the fiscal revisions, the substance and tone of what was announced "are both very positive steps."

But, reflecting the prevailing mood of

the last three years, he noted that the government can't expect to "restore credibility and respect overnight."

He said the divisions have "made it very difficult for Alberta producers" to participate in the rapid growth of unconventional gas resources that has dominated the last three years across North America.

"Investors need to know Alberta is back in the game," Collyer said.

"A strong oil and gas industry means a vibrant economy, which contributes in many ways to our quality of life."

Declaring Alberta "is back," CAPP Chairman Andrew Wiswell, who is also chief executive officer of NAL Oil and Gas Trust, said the changes are a "very important step in re-establishing investor confidence in Alberta" by giving investors the stability and predictability they need to allocate their capital.

Government gets an A

Roger Soucy, president of the Petroleum Services Association of Canada, said reduced royalties "give incentive to the industry to look harder at bringing capital back to Alberta."

John Dielwart, chief executive officer of ARC Resources and one of the government's most outspoken critics, said Alberta is "back to a competitive regime, which we had originally."

Mike Tims, chairman of investment dealer Peters & Co., said, "Nothing anybody does will absolutely please every person, but I think you have to give (the government) a pretty good score this time."

He awarded the government an A for "consultation, tone and spirit (in conducting its competitiveness review). This time, it was based on looking at factors such as the real rates of return and what drives capital spending."

"I think they have found a good balance between the government representing the people who own the resource and the industry that creates value from it," he said.

No apology

Danielle Smith, leader of the Wildrose Alliance party, which has come from nowhere in the last year to within 4 percentage points of the governing Conservatives, gave the government credit for "making some pretty good changes."

But she said the royalty rollback failed to include "the words that I think the industry wanted to hear: 'We were wrong and we're sorry.'"

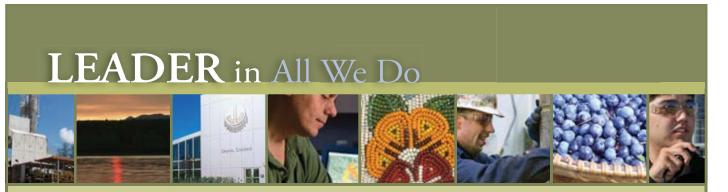
Andre Plourde, an energy economist at the University of Alberta and a member of the government's 2007 royalty review panel, said the Stelmach administration is "basically saying to the (resource) owners, we're willing to take a lower return on your behalf in order to get more activity in the present."

"I remain to be convinced that this is, in fact, the right kind of tradeoff to make for Albertans," he said.

Chris Severson-Baker, policy director at the Alberta-based Pembina Institute, said he was concerned that Alberta's resources are being given away too cheaply in return for drilling and jobs, noting the government had only consulted the industry.

"By only listening to the developers of the resource, you end up with very skewed input." \bullet

Contact Gary Park through publisher@petroleumnews.com



ble as a result of government and industry talks over the next 60 days.

Regulatory barriers targeted

A government task force has been given 90 days to remove regulatory barriers and speed approvals of pilot projects to use new extraction technologies, opening the way for Alberta to join British Columbia in the development of Canada's shale gas.

Stelmach noted that Alberta would have to impose a 16 percent sales tax to replace its oil and gas revenues.

The government estimates that energy development accounts for 30 percent of the province's gross domestic product and is responsible for one in seven direct or indirect jobs.

Over the next 25 years, conventional oil and gas development has the potential to add C\$2.5 trillion in new economic activi**DOYON, LIMITED,** the regional Native corporation for Interior Alaska

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ACES

She addressed three problems AOGA sees with ACES: the tax rate, the "impossible plight" of non-operating companies and the inability of taxpayers to determine with certainty what taxes will be based on the regulations.

On the excessive tax rate issue, Crockett said there has been a lot of discussion of investment, but AOGA thinks the number of new in-field wells drilled is more telling, dropping from 166 in 2007 to 155 in 2008 and 147 last year.

She noted that BP has said that its infield drilling this year will be less than half of what it was in 2007. And while 450 million barrels of oil equivalent of reserves have been added on the North Slope in the last five years, only 35 million have been added since ACES was passed.

On the non-operator issue, Crockett said non-operators receive only monthly billings from the field or unit operator with a description of the cost items, but without timesheets or other documentation and without copies of billings from third parties that the operator has received and paid.

She said there is virtually no way a nonoperator, for example, can know which of 336 cost codes or categories in Revenue's regulations relate to the 20,000-plus cost codes used to allocate costs at Prudhoe Bay.

Small independents

Greg Vigil, senior vice president of Savant Alaska LLC, told the committee that Savant has earned or redeemed \$19 million in ACES tax credits since the inception of the program. The secondary market for these credits it thin at best and he said Savant generally supports the governor's proposed amendments to ACES.

As Commissioner of Revenue Pat Galvin explained the credit aspects of the governor's bill, HB 337, a 30 percent credit would be added for all well-related work; credits could be used in the first year, while the current law requires them to be spread out over two years; and the bill eliminates the existing requirement that to get state reimbursement companies without current production have to make additional investments in the state. The governor's bill also allows interest to be waived when it is the result of retroactive regulation.

Vigil said that in Savant's view the exploration incentives and qualified capital incentives in ACES are meaningful. He said the company has remained silent on progressivity because it didn't have any production, but now that Savant expects to have production from Badami it sees progressivity as a disincentive.

He said ACES' progressivity is an incen-

tive to Savant to be mediocre because it results in a diminishing return per incremental barrel produced as indicated by the company's economic modeling at Badami.

Mark Landt, executive vice president of land and administration for Renaissance Alaska told the committee that there isn't a liquid market for the credits. One producer, he said, would only acquire them at 50 cents on the dollar and others said they weren't acquiring them at all because of lack of certainty around the regulations.

Landt said the state needs to level the playing field between new and existing players. He told Seaton he would be supportive of anything that would expand the market for tax credits and said a proposal to let the Alaska Retirement Management Board purchase the credits at an 8 percent discount would be better terms than what Renaissance has seen for the producers.

But, Landt said, since the state pays 100 percent in the end he doesn't see why non-producers have to go through a secondary market.

Large independent: Anadarko

Mark Hanley, public affairs manager for Anadarko Petroleum in Alaska, said Anadarko, a large independent, has production from Alpine, where it has a 22 percent interest, and is looking for gas on some 4 million acres in the Foothills.

Hanley, a former legislator, told the committee that what he sees as the problem that policy makers should consider is the North Slope's declining production.

To make up for that decline, the state needs to see an Oooguruk or a Nikaitchuq come online every year or every other year.

The real issue, he said, is investment adequate to do that?

People used to say you needed to drill at least 15 exploration wells a year because not all wells are successful, Hanley noted. "Is there enough investment for new discoveries? I don't think there is," Hanley said.

And if there isn't enough investment, he said, "I'd suggest something needs to be done to increase the investment."

Anadarko will go where it can make money, he said. In Alaska the cost of pipeline and tanker transportation add to the cost of projects and the state's royalty if fixed. But one thing the state can control is taxes, he told the committee.

Anadarko testified early on that the company thought the net system was a good one because it takes into account higher costs for some fields and newer production. But just because it's a net system, if the tax is too high it doesn't work, he said.

Credits help, he said, but Alaska is still challenged on net present value from projects because of the short exploration season.

Referring to a Department of Revenue comparison between taxes under ELF, PPT

and ACES, Hanley said there wasn't enough investment under ELF and the state is now taking roughly \$2 billion a year more in taxes.

"If it sounds too good to be true, it probably is," he said, telling the committee that it's hard to argue that taking \$2 billion out of industry improves industry's economics or encourages more investment.

PPT (the predecessor to ACES) improved Anadarko's exploration numbers, he said, but existing fields got hit hard.

And ACES is even worse than PPT, he said.

Hanley said ACES is complicated and he wouldn't go into all of the details, but "overall it's too high; it's not getting the investment" and it's hard for Anadarko's Alaska projects to compete with projects the company can do elsewhere.

The majors: ExxonMobil

Dale Pittman, Alaska production manager for ExxonMobil, told the committee ExxonMobil supports AOGA's presentation and said he would not repeat the technical comments from that testimony.

He said that, consistent with ExxonMobil's testimony during hearings on PPT and ACES, the company "believes Alaska's current production taxes are too high to result in the additional investment needed to maximize the development of Alaska's resources." Pittman said ExxonMobil believes that even the 20 percent tax originally proposed under PPT "would not encourage the full development of Alaska's resources."

He said that while spending on the North Slope has been relatively flat since ACES was enacted, "the majority of that investment has been for maintenance or production enhancement efforts for existing operations, not for new exploration and development opportunities."

It takes about \$1 billion a year just to maintain North Slope production at the current 6 percent decline rate, Pittman said, and without that investment the decline would be closer to 12-15 percent annually.

Pittman brought a very long-term perspective to the discussion, telling the committee that time in the oil industry is measured in decades and generations. "Today's production rates are the product of government policies, technical work and investment decisions that in many cases were made decades ago," he said.

He said legislators need to decide whether Alaska's high production tax is right for Alaska or, "given the current high costs and steadily declining oil production rates we face — if another course is necessary to harness the remaining resource potential."

The majors: ConocoPhillips

Brian Wenzel, ConocoPhillips Alaska's vice president of finance, said ConocoPhillips supports HB308 not because it addresses all of the company's concerns but because it's a step in the right direction toward a more attractive business climate.

Wenzel noted that core fields on the North Slope — Kuparuk, Prudhoe and the Alpine area — provided 90 percent of North Slope production in 2009. He showed a slide illustrating that those core fields also contain the majority of the remaining barrels on the North Slope, dwarfing accumulations at Point Thomson, Nikaitchuq, Liberty and Oooguruk.

With 90 percent of the remaining barrels in core fields, "you should be structuring your fiscal system to encourage investment there," he said.

He also compared the Department of Revenue's 2008 forecast of remaining barrels in the North Slope's core fields (Prudhoe, Kuparuk and Alpine) with the department's 2009 forecast, which showed about a 20 percent reduction due to higher decline rages. Wenzel said ConocoPhillips believes this is related to less investment in those core fields and he noted that industry well completions were down 14 percent from 2007 through 2009.

He also compared the Department of Revenue's oil price, the Baker Hughes U.S. oil rig count and ConocoPhillips figures for the rig count in Alaska's core fields. The U.S. rig count, he said, tracks the oil price while the rig count in Alaska's core fields has been flat or declining beginning in the third quarter of 2007, and fell when the U.S. rig count rose steeply in the second half of 2009.

In addition to rigs, overall spending is a leading indicator that creates concern, Wenzel said, and while the administration has cited increases in spending, when adjusted for inflation spending has been flat from fiscal year 2007 through fiscal year 2010. And while core field investments increased from 2005 through 2008, declining in 2009, most of the increase was for maintenance, replacement and repair, Wenzel said, with development projects and drilling remaining relatively flat.

In recent project activity, he noted that Oooguruk began prior to ACES and has royalty relief; Nikaitchuq has royalty relief; and Liberty is not subject to ACES (the field is on federal outer continental shelf acreage).

More than \$2 billion in projects have been deferred since ACES was passed, he said, including Prudhoe and West Sak work. ●



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Covering Arctic oil and gas operations and the logistics, construction and service firms that support them

A biannual supplement



Vol. 15, No.1 March 2010

Companies involved in serving the Arctic oil and gas industry

A

ACB Solutions Acuren USA **AECOM Environment** Air Liquide Air Logistics of Alaska Alaska Air Cargo Alaska Analytical Laboratory Alaska Anvil Alaska Computer Brokers Alaska Coverall Alaska Dreams Alaska Frontier Constructors Alaska Interstate Construction (AIC) Alaska Marine Lines Alaska Railroad Corp. Alaska Rubber & Supply Alaska Sales & Service Alaska Steel Co. Alaska Telecom Alaska Tent & Tarp **Alaska Textiles** Alaska West Express Alliance, The Alta Air Logistics American Marine **Arctic Controls Arctic Foundations** Arctic Slope Telephone Assoc. Co-op. Arctic Wire Rope & Supply **ASRC Energy Services Avalon Development**

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Badger Productions Baker Hughes Bald Mountain Air Service Brooks Range Supply Builders Choice Inc. Calista Corp. Canadian Mat Systems (Alaska) **Canrig Drilling Technologies Carlile Transportation Services** CCI CGGVeritas U.S. Land CH2M HILL **Chiulista Camp Services** Colville **ConocoPhillips Alaska Construction Machinery Industrial Cosco Fire Protection Crowley Alaska Cruz Construction Delta Leasing Delta P Pump and Equipment** Denali Industrial Dept. of Labor & Workforce Development DNR Division of Oil and Gas

Dowland-Bach Corp. Doyon Drilling Doyon LTD Doyon Universal Services EEIS Consulting Engineers Egli Air Haul Engineered Fire and Safety Equipment Source Inc. Era Alaska ERA Helicopters ExxonMobil Flowline Alaska Fluor Foundex Friends of Pets

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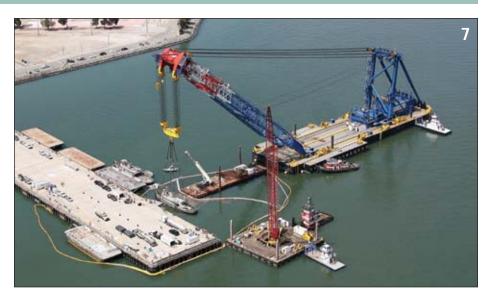
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Cover photo: A group of musk oxen forage for food near a North Slope rig

Photo by Judy Patrick

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With more than 20 years experience, **GESI** gets the job done

GESI uses innovative technology to reduce disposal cost for the oil and gas industry

Q.What do you most want people to know about your company?

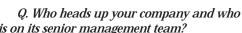
A. Global Environmental Systems, Inc. is committed to a safety work culture across the company as a whole. Our safety culture combined with our high work ethic is for the benefit of the customer.

Q.Where is your company located?

A.We have an office in Kenai, 36370 Bore Tide Ct., as well as a fab shop and equipment yard on the north road.

Q.What year was the company founded, who founded it, and what was its original name?

A. Global Environmental Systems was founded originally in 1987, by myself, and three other partners. In 1995, my son and I reorganized the company which started the successor company, GESI.



is on its senior management team?

A. Our senior management team consists of T.J. Northcott, President; Thom Northcott, Vice-President, Project Management, Consultant and

Injection Engineer; Kathryn Thomas, Sales, Special Projects, Public Relations and Legislative Analyst; Paul Vaas, Mud Engineer, Solids Control, Injection Engineer and Consultant; Barbara Nelson, Human Resources, Administrator and Accounts Payable.

Q. Does your company have any partnership arrangements and when did they become effective?



TJ Northcott, presi-

dent GES Inc., pro-

vided information

for this company

profile.

A. GES, Inc. has completed a

multi-year joint venture with a large contractor in the Kenai Gas fields to close out reserve pits, as well as 3500 cubic yards of Norm scale from a pipe yard. GES has also completed a joint venture with ArcTech, testing reserve pit closures and injection.

Q. What is the company's primary business sector and what services do you offer?

A. Our primary business is oil field support services. We provide safe recycling, waste minimizations, and disposal of industrial, refinery, and oilfield by-products, on and off-site, dramatically reducing transportation disposal costs and their associated liabilities. We provide G & I plants both mobile and stationary, and rental of oil field equipment. Providing services both "Turn Key" and day rate.

Q. Who are the company's main clients?



A. Our main clients are oilfield, construction and engineering companies.

Q. How many employees does your company have?

A. GIS Inc has a core group of managers and engineers, with employee numbers varying according to project size and activities.

Q. What essential equipment do you use and are there any purchases planned?

A. Grinding in section, solid classifying, fluid handling, solid control as well as oilfield equipment. Our equipment is portable or stationary oilfield G & I systems, which allows maximum flexibility to custom-fit equipment to the job and location with a rapid response time.

Q. Is your company expanding any of its operations or locations?

A.We are continuously updating our operations with new equipment and processes to reduce the cost of handling and disposing of solids and fluids.

Q. What is your company's main strength or its edge over the competition?

A.We are a private company, and that gives us the ability to react fast and commit resources to our customers. Our design of the G & I system has become the blueprint of all G & I systems. We were first to use the beneficial reuse recovery of drill cuttings, to remove and close out old reserve pits, to test and evaluate grinding equipment both on the North Slope and the Kenai Peninsula, and to be permitted to use G & I sites in a wildlife refuge. Having over 20 years of experience of safely injecting millions of barrels of Continued on page 6

Communications expert NSTI celebrates its 30th

Meeting challenging projects head-on gives NSTI its edge over the competition

North to Alaska

Straight from the beginning North Slope Telecom Inc. was uniquely suited to perform telecommunications design and installation projects in Alaska, as well as other extreme, remote locations and climates. Established in 1980 by William Laxson, current president and principal engineer, NSTI began as a general contracting firm, specializing in design, construction, and maintenance of telecommunications systems in the remote Arctic and subarctic. Coming to Alaska in 1975, Laxson, who holds a Bachelor of Science in electrical engineering from Oregon State University, an electrical administrator's license, and an FCC general radiotelephone license, has extensive experience in the design and installation of telecommunications systems,

Continued on page 9

continued from page 5

GES INC.

fluids and solids as well as rental equipment, benefits our customers.

Q. Has the company invested in any new technology in the last two years?

A.We are constantly engaged in research and development of new and innovative systems and equipment designed specifically for waste stream management.We continuously analyze problem situations then design, build, test, and operate our process systems to obtain the best possible results for our customers.

Q. What is the most challenging job the company has undertaken?

A.We cleaned the inner legs of a platform to the depth of 123' below sea level to remove the scale rust and we pumped the solids 190' vertically to be treated. We closed out old reserve pits, over 2000 containers, tank bottom sledges from all sources on the peninsula.

Q. What do you see as your company's biggest challenge in the next five years?

A. Our biggest challenge will be securing work in the face of uncertain government taxation and regulations to the oil industry. The government does not understand that incentives and tax breaks will increase development of resources.

Q. What is the most humorous story from your company's years in business in Alaska?

A.Years ago, the many service companies tried and couldn't figure out how to break down emulsion left from the oil base drill mud. One day I washed my hands over the emulsion wash pan, using a common dishwashing soap.The next day the emulsion was broke down providing a technological breakthrough; the emulsion breaker was in soap, we found the emulsifier and developed it.





Q. Does your company have an anniversary or other landmark eve coming up? If so, describe.

A.We have a 25th anniversary of doing business in Alaska coming up in 2012.

Q. What is the average length of time employee's work for the company?

A. Length of our employee time varies with the seasonal workers. On average our permanent management team averages 10plus years with us.

Q. What is your company's safety record?

A.We recently received the: "Alaska Contractor of the Year Safety Award", from Marathon Oil. GES was also nominated for Marathon Oil's, Worldwide, "Living Our Value's Award", and out of 1500 companies we received the award from President and CEO, Clarence P. Cazaloy, at an awards ceremony in Houston, TX.

Q. Does your company or its partners or subsidiaries maintain websites?

A. www.gesi-ak.com



Global Diving & Salvage, creating unique solutions for challenging projects

Innovation and problem solving, Global proves to be a leader in underwater marine contracting

Q.What do you most want people to know about your company?

A. Global Diving & Salvage is the largest diving contractor on the West Coast of the United States, a leading provider of marine construction and infrastructure support services in the United States, and an internationally recognized marine casualty

responder. We are one of the few full-service underwater marine contractors that can provide project management, commercial diving, and a full spectrum of environmental services. We do this through six operating divisions: Re-



gional Diving Services, Marine Construction, Casualty Response, Offshore Support Services, ROV Services, and Environmental Services.

Q.Where is your company located?

A. Our corporate headquarters are located in Seattle, WA. Re-

gional offices are in Rio Vista, CA; Richmond, CA; and Global Offshore Divers, Anchorage, AK. We will also be adding a full time business development position to represent us in the Gulf of Mexico this year.

Q.What year was the company founded? A. Global Diving & Salvage, Inc. was founded by seven divers in 1979 and incorporated in 1980.

Q.Who heads up your company and who is on its senior management team?

A. Our two owners, Tim Beaver and John fio Graham, stepped down last year from active pa

management to sit on the Board of Directors. Devon Grennan, president, runs the senior management, sits on the board of directors, and still oversees daily operations. Our senior manage-



David DeVilbiss, Alaska regional manager, senior management team, provided information for this company profile.

continued from page 7 **GLOBAL DIVING**

ment team comprises of Trinity Ng-Yeung, David DeVilbiss, Mike Langen, Bruce Humberstone and Dan Pierson.

Q.What is the company's primary business sector?

A. The primary business sector of Global's Alaska office is the offshore industry. We offer regional diving and environmental services in Alaska, California, and the Pacific Northwest; marine construction support services, project management and engineering; International marine casualty response services, International offshore and oilfield support services; and International ROV services, and Environmental product sales and services.

Q.Are there important projects the company is currently a part of or has done recently?

A. The Port of Anchorage Pile Repair, where we cleaned damaged steel piling with high-pressure water blasting, installed steel jackets and grouted in place. Deep-water recovery of a fuel-laden tanker truck with a container of assorted oils from the waters of the Robson Bight Ecological Reserve. NYDEP DEL 185 - Saturation dive project to provide nondestructive testing, selective demolition, and construction support in 685 feet of water. M/V Monarch Defueling - Successful fuel recovery from a 166-foot offshore supply vessel submerged at the base of an oil platform in Cook Inlet during January 2009.

Q. How many employees does your company have? A. We have approximately 350 personnel.

Q. Describe the equipment your company might use and whether any new purchases are planned?

A. In the past few years we have acquired multiple large assets including two new saturation dive systems capable of diving to 1000 feet, and several ROVs including a Saab Sea Eye work-class ROV capable of diving to 6000 feet.

Q. Is your company expanding any of its operations or locations?

A. We have recently opened a fully staffed office in Anchorage, AK; and offer our full line of capabilities through that office. In addition, we are opening an office in Richmond, CA; and establishing more of a presence in the Gulf of Mexico Region.

Q. Is the company changing any of its services?

A. Our ROV division provides underwater hydrography services as well as underwater navigation. These technologies are mostly acoustically based and greatly increase the safety and production of diving and ROV work.

Q.What is your company's main strength or its edge over the competition?

A. Our main strength is our commitment to employee safety and customer satisfaction. We work hand in hand with clients to create unique solutions. Where we really stand out is on technically challenging projects, providing strong engineering support in-house and approaching projects with a team concept, where we utilize the abilities of the entire company to complete complex projects that have not been done before.



Q.What new markets, clients or projects did your company attract in the last year?

A. The increased abilities of our ROV division have opened the door for deep-water salvage projects beyond the range of human diving.

Q.What is the most challenging job the company has undertaken?

A. It is difficult to pinpoint the most challenging project we have ever undertaken. By nature of what we do and who we are, nearly half of our jobs are very challenging from a technical level. One of the more complex projects that we underwent recently was the saturation diving project recently completed in New York in nearly 700 feet of water. There was very limited access into the 13-foot-diameter shaft, and special equipment and procedures had to be developed and built in order to complete the job. Loading commercial dive gear in a Cessna 210 and conducting a dive safely off the floats in a very remote part of Alaska can in some ways be just as challenging as the project in New York.

Q. What are the biggest obstacles to completing work the company undertakes?

A.We have a unique niche market that few people understand, so we commit significant energy to educating our clients and potential clients about the diving industry. As a part of that effort, we sit on the Board of Directors for the Association of Diving Contractors and the American Salvage Association.

continued from page 6

NSTI ANNIVERSARY

including two-way radio, microwave, satellite links, and corporate data networks. He has been providing the oil industry with reliable communications systems for the past 30 years.

Making a name for itself

With experienced engineering and technical staff, NSTI continues to provide solutions with time, budget and terrain challenges in mind, meeting them head-on with great success. The team recently designed and fielded a modular electronic equipment support package, the Rapid Deployable Solar System, which includes power generation, storage and distribution, and can be used to support remote stand-

alone applications such as telemetry, video surveillance, and radio communications. The RDSS incorporates over 20 years of experience and is the third-generation system of its design. Sharing the same obstacles as any other company that operates in remote regions, NSTI utilizes an extensive materials handling department to support all efforts and meet challenges head-on. During the installation of a telecommunications infrastructure on Oooguruk Island for Pioneer Natural Resources, the NSTI team was able to remain on budget and ahead of schedule, even



as components of the project struggled with schedule delays and scope change.

The future looks bright for NSTI

Expanding into new markets is on the horizon for NSTI and to meet its goals the company embarked on the construction of a new 7,500-square-foot facility in the summer of 2009. The new building will have office, warehouse and fabrication space. NSTI currently owns a 12,000-square-foot facility in Anchorage with 8,000 square feet of warehouse, shop and fabrication space, 4,000 square feet of office space, additional paved staging and outdoor storage. In addition, NSTI is beginning to work on projects outside of the oil and gas industry, and outside of the North Slope of Alaska, bringing its skills and services to competitive companies in Anchorage and the Mat-Su.

Safety is paramount at NSTI, with its safety

and training unsurpassed, providing its employees with an inhouse safety coordinator, responsible for training staff on all applicable standards, including ASH, OSHA, NEC and NESC, resulting in over 150,000 man-hours worked annually, with zero hours lost due to injury.

North Slope Telecom continues to strive to meet the needs of its clients, stay competitive, and expand projects; all the while remaining a 100 percent Alaska owned company.

NSTI will be celebrating its 30th anniversary this summer.

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GLOBAL DIVING

Q. What do you see as your company's biggest challenge in the next five years?

A.To properly position ourselves to be prepared to meet our client's needs in changing markets and economies.

Q.What do you see as future trends or opportunities for your company from events such as long-term weather fluctua-tions?

A. Our nation's infrastructure is aging and with that comes maintenance that can no longer be delayed on civil works projects. Our nation's oilfields are also aging, so we are ensuring we are properly positioned to expand our commitment to the offshore and oilfield service support industries.

Q. Does your company have an anniversary or other landmark event coming up?

A. We just celebrated our 30th anniversary as a whole and our one-year anniversary with our Alaska Office, regionally known as Global Offshore Divers.

Q.What is the average length of time employee's work for the company?

A. Most of our senior management team and senior divers have been with us for over fifteen years.

Q.What is your company's safety record? What steps does the company take to ensure a safe work environment?

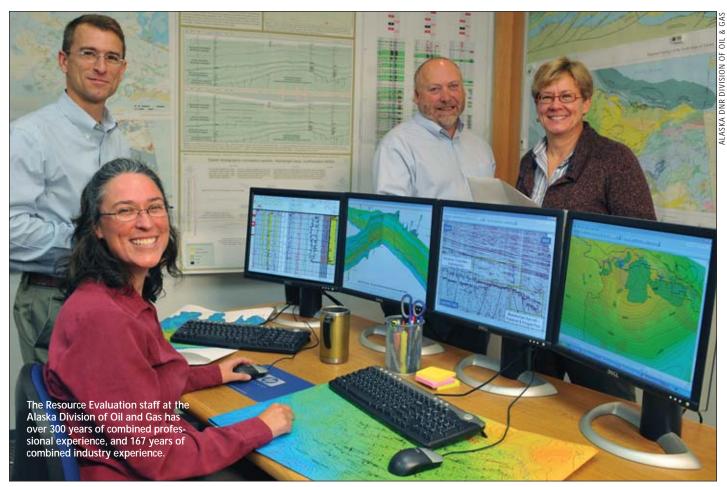
A. We maintain a great safety record by taking pro-active and preventative steps to ensure a safe work environment for our employees and third parties on our job sites. Our employees play an important role in helping develop and roll out our safety program, policies, and procedures. Each project is approached from a safety standpoint.

Q. Has your company received any awards or recognition? A. Global received recognition from Chevron MCA last year for 3 years of Incident Free Operations.

Q. Has your company been involved in any community projects or charities events?

A.We have started hosting a benefit golf tournament each year.The first three tournaments were for the Puget Sound Maritime Historical Society; the 2010 tournament will be for the Seattle Children's Hospital.Average contributed donations from the tournament are around \$28,000 each year. Global supports the Anchorage Zoo and several Anchorage based charitable organizations. Global also supports the Seattle Children's Hospital through participation in Team Seattle at the 24-hour Daytona www.teamseattle.com. Please visit this Web site if you are interested in participating. Global Diving offers a matching policy for employees who wish to contribute to charitable organizations.

Q. Does your company have a Web site? A. We just launched a new Web site: www.gdiving.com.



State of Alaska's oil and gas director says state is open for business

By KEVIN BANKS

Director, State of Alaska Division of Oil and Gas

At the Alaska Department of Natural Resources, Division of Oil and Gas, we take seriously the Alaska Constitution's charge to en-

courage "the development of its resources by making them available for maximum use consistent with the public interest for the maximum benefit of its people" and "provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people."

The Division is responsible for conveying the mineral interest in oil, gas, and geothermal resources for the purpose of exploration, develop-



KEVIN BANKS

ment and production. As the "landlord" over these resources on all state lands, the Division monitors all its leases and ensures that the leaseholders comply with the terms of their negotiated leases, including the responsible development of the resources comprising the surface and subsurface areas of the lease. The Division also makes certain that leaseholders respect each others' rights.

Reimburse up to 40% exploration costs

The State of Alaska takes seriously our responsibilities to our leaseholders. We encourage exploration through innovative new programs, paying as much to 40 percent of exploration costs for qualified applicants, and we share our insight into how state and federal agencies interact to help companies navigate smoothly through exploration and development activities. Alaska is a resource development state. We view the people and companies exploring and developing our natural resources as our partners. In exchange, we expect them to hold up their part of the bargain.

The Division manages the state's oil and gas resources with a staff of 95, highly specialized technical experts with the equivalent of hundreds of years of experience in the industry. Led by the Director's Office, the Division works in asset teams, consisting of diverse groups of professionals using their unique and complementary areas of expertise to managing the wide array of functions assigned to each team.



Alaska's energy resources — a crucial part of the answer to the nation's energy questions

By TOM IRWIN

Commissioner, Alaska Department of Natural Resources

We Alaskans have a very special relationship to our environment. The land is our back yard. We use it for recreation and subsistence. The land has provided our livelihood, for the people and for the state. Alaska is a land of amazing natural beauty, and the resources that underlie that beauty is what sustains our economy.

Responsible development, sustainable yield,



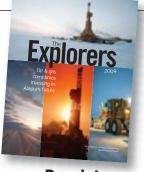
TOM IRWIN

and resource stewardship were written into the Constitution and Statutes when Alaska became a state 50 years ago, and have been part of how we have developed our natural resources ever since. When Alaska Statehood was being de-

bated, a major worry of the US government's was that the new, sparsely populated state would become a financial burden on the federal government. Instead, the new state has

gone on to contribute between 14 and 27 percent of the total national crude oil production annually since the trans-Alaska oil pipeline system was finished in 1977.

Alaska holds tremendous resources. Our state is estimated to hold 18 percent of total U.S. oil reserves. At a production rate of 700,000 barrels per day, Alaska is currently responsible for 14 percent of U.S. oil production.



Reprint

This article is a reprint from Petroleum News' annual Explorers magazine, which was written in October 2009, and has been updated for the Arctic Oil & Gas Directory Developing Alaska's resources is good for the state, for United States and for Canada.Typically, royalty, taxes, and lease payments from oil and gas production provides 90 percent of Alaska's unrestricted state revenue. But oil production from the aging fields on the North Slope, which have provided our country with a steady stream of oil since 1977, is declining.

As a state, we want to provide affordable energy for our people — and we want to continue to provide police protection, good schools, and a solid road system. To do that, we need to develop the natural gas resources of Alaska. Through a gas pipeline, delivering Alaska's natural gas to North America, we will be able to provide Alaska with the revenue the state needs to maintain or improve the level of state services Alaskans need and deserve, provide economic energy for Alaskans, and provide North America with a clean-burning

energy source.

It's a great time to be an Alaskan, and it's a great time to do business in Alaska. We are on the edge of a new era, where, yet again, Alaska holds a crucial part of the answer to the nation's energy questions. At a time when the nation is moving towards environmentally preferred energy sources and greater reliance on American energy, Alaska holds tremendous supplies of the clean-burning natural gas the nation needs.

Even under the most optimistic forecasts, the US will still de-

ARCTIC OIL & GAS DIRECTORY • Vol. 15, No. 1

ASKA DNR DIVISION OF OIL & GAS

The Resource Evaluation section is just one example of the highly qualified staff we're proud to call ours. At last count, our Resource Evaluation staff had 300 years of combined professional experience, and 167 years of combined industry experience. Our team of petroleum geoscientists and engineers has the capacity, experience and integrity to work with potential investors to give technical briefings and share their knowledge and non-confidential public domain data.

Predictability important

The Division of Oil and Gas strives for predictability. That is why we hold annual lease sales for all available tracts in five areas with known petroleum potential – our Areawide Lease Sale Areas. The lease sales are held in May (for the Alaska Peninsula and Cook Inlet) and October (for the Beaufort Sea, North Slope, and North Slope Foothills).

When our lease sales take place, the environmental challenges of potential oil and gas development have already been assessed. For each of these areas, a Best Interest Finding is developed every ten years, and reviewed annually. In the Finding, the Division evaluates the possible cumulative impact of exploration and development and provides measures to mitigate any reasonably expected negative impact.

For exploration outside of these areas, the Division accepts license applications every year during the month of April. When a license application is received, the Division starts its fact-finding process to determine whether awarding the exploration license is in the best interest of the state. A preliminary Best Interest Finding, subject to a public comment period and due consideration of those comments, is followed by a Final Finding of the Director, determining whether the license should be awarded.

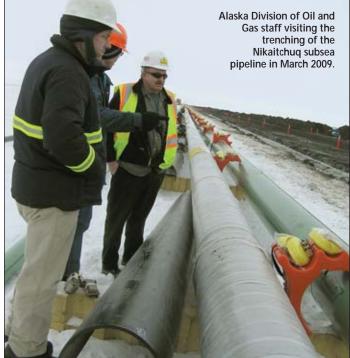
Number of oil companies almost doubled

The State of Alaska successfully encourages investment from companies new to the state. The number of petroleum companies doing business in the state almost doubled between 2006 and 2008.

In 2008, Pioneer Natural Resources became the first company in more than a decade to join with BP and ConocoPhillips as an independent operator on the North Slope producing oil from its offshore Oooguruk unit. The unit, located in the Beaufort Sea northwest of the Kuparuk River, is expected to produce over 100 million barrels during its lifetime.

Italian energy giant ENI owns a 30-percent interest in the field. In addition, ENI has acquired a 100-percent interest in and is the operator of the Nikaitchuq Field, located off-shore of Alaska's North Slope. This project involves the drilling of 73 wells, which will be tied back to the production facility at Oliktok Point. At the time the acquisition was announced, production was anticipated to reach 40,000 barrels of oil per day. Their investment will total nearly \$1.5 billion.

Two years ago Anadarko and its partners, Petro-Canada and BG, conducted exploratory work in the Foothills region of the Brooks Range south of the North Slope. Anadarko is in the process of evaluating natural gas prospects in the Gubik Complex. Because transportation costs often place limits on the ability to develop our resources, Governor Parnell asked for \$8 million in his proposed FY2010 budget for the Department of Transportation in support of the "Road to Resources" effort. This project would fund construction



of a road from the Dalton Highway west to Umiat, crossing a number of additional potential gas fields.

Further south, in Southcentral Alaska, Armstrong Cook Inlet LLC took over as the operator of the North Fork gas unit. The North Fork gas field is anticipated to provide infrastructure extensions into the Southern Kenai Peninsula. Expanding the Southcentral gas market will provide additional investment incentive to successful gas explorers.

Offer 25% credit for net losses

The past two years of lease sales on the North Slope successfully leased a total of 1,267,207 acres. The State's exploration investment credits for qualified applicants include up to 40 percent of exploration costs, credit for capital investments, plus a 25 percent credit for net losses.

More evidence that Alaska's resources are still vast and profitable is found in the fact that some of the world's largest producers are still very much actively involved in new development on our lands. On February 10, 2010, ExxonMobil announced the successful drilling and casing of PTU-15, the first development well for the Point Thomson project. ExxonMobil is also partnering with TC Alaska on the state-supported Alaska Gasline Project, projected to have a gas pipeline from the North Slope to Alberta, Canada, ready for first gas in 2018.

The Division of Oil and Gas mission statement says we manage "oil and gas lands in a manner that assures both responsible oil and gas exploration and development and maximum revenues to the state."

Our goal is to support any responsible company that shares this mission.

We want to see you succeed, because when you're successful, so are we.

Learn more about the Alaska Division of Oil and Gas from our website: http://www.dog.dnr.state.ak.us/oil/

Or contact us at our offices in Anchorage: 550 W. 7th Avenue, Suite 800 & 1100;Anchorage,Alaska 99504. Phone: 907-269-8800

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ALASKA'S RESOURCES

pend on oil and natural gas for almost 65 percent of its domestic energy consumption in 2025. Even under the best circumstances, increased development of domestic oil and gas resources will be required to meet the demand.

The good news is that we are well underway to making that happen. There are good reasons to be excited about, not scared of, our energy future.

Just 8 years away

The Alaska Pipeline Project (APP) is moving forward. We have never been this close to getting the Alaskan natural gas pipeline built, and we have come this far because people with a vision and a clear understanding of the challenges have refused to listen to the nay-sayers and forged ahead, with solid footing in science, technology, and thorough analysis of the financial realities of the project.

The cooperation between the state and federal pipeline coordinators' offices is seamless. We have what I consider the best pipeline company in the world, TransCanada, working together with ExxonMobil, the largest commercial oil and gas company in the world, lending their superior expertise to the project design for the planned North Slope Gas Treatment Facility.

Under the Alaska Gasline Inducement Act, the state of Alaska is investing \$500 million of our own resources, and we are not just following the process to the 2010 open season, but all the way to the FERC certification. In exchange for this investment, we are getting provisions that protect our interests – high netback, low risk, diversity of exploration and development, as well as competition and fairness. The most critical commercial provisions ensure

A tariff structure that provides the lowest reasonable cost to transport Alaska gas to the North American market

Expansion capabilities for the pipeline, to allow for transportation for new gas discoveries

Rolled-in-rates (which is the standard in Canada), ensuring that all shippers share the burden of that expansion.

The commercial terms built into the AGIA process encourage new exploration and development, assuring new players that they will be able to monetize their gas with a reasonable rate of return. Low tariffs also benefit the federal government and the state of Alaska, because our revenues are paid minus transportation costs. Together, low tariffs and encouraged competition in exploration and development serve the interest of consumers by keeping gas prices as low as possible.

The Alaska Pipeline Project filed their open season paperwork with the Federal Energy Regulatory Commission as planned on January 29, 2010, with open season summer of 2010. The open season is an opportunity for shippers to make commitments to take the project to the next stage. As the project continues to advance beyond open season toward the more significant milestone of project sanction – the decision to actually break ground – stakeholders, eventually including the state, will work to resolve those outstanding conditions, and establish commercial alignment.

Before firm commitments are possible, there are uncertainties that must be resolved. The project needs to pass through the regulatory process, which will not be finished prior to 2014, the final design of the pipeline must be finished, financial approaches have to be decided, and final cost estimates reflecting market condiOnce Alaska's massive amounts of natural gas are available to the North American market, a clean-burning, Americancontrolled energy source will be available for the next 100 years. Alaska will be able to provide between 5 and 8 percent of the nation's projected natural gas needs.

tions of 2014 have to be developed.

And while this is going on, complex commercial negotiations, both between North Slope producers and between the producers and the pipeline, must be completed.

AGIA moving forward

The framework of AGIA ensures that progress will continue, regardless of the outcome of the open season. With each step forward, the project's uncertainties diminish. As uncertainties are resolved, the state will become better positioned for any future fiscal discussions. The state can address specific demonstrated project needs, while protecting the long term interests of the state, at the appropriate time. As Gov. Parnell has stated, the road to these discussions goes through AGIA.

Once Alaska's massive amounts of natural gas are available to the North American market, a clean-burning, American-controlled energy source will be available for the next 100 years. Alaska will be able to provide between 5 and 8 percent of the nation's projected natural gas needs.

We also need to develop the vast energy sources of the OCS.

Both the Chukchi and the Beaufort Seas hold tremendous volumes of natural gas. Beyond the more than 100 Tcf of gas potential onshore, the estimated potential of the Alaska OCS is over 130 Tcf of recoverable natural gas. These volumes will be extremely important to the nation over time.

Of more immediate importance is the huge oil potential the OCS holds – an estimated 27 billion barrels. By comparison, total oil production from Alaska's North Slope since construction of the trans-Alaska oil pipeline system in 1977 totals 16 billion barrels. Right now, the declining oil production on the North Slope means trans-Alaska oil pipeline owners recognize the TAPS pipeline will fall below carrying capacity in the next decade. If we let the TAPS pipeline shut down, it will mean the end of oil production from the North Slope. Because of the significant lead time between leasing and production, we need to develop Alaska's OCS without delay, so the large Alaskan oil resource can be accessible to America.

Clean-burning gas, OCS

Alaska has the resources, the experience, and the capability to bridge the move of North America into a future of more preferable energy sources, lower CO2 emissions, and higher degree of energy independence. The nation needs clean energy. And nobody is more concerned about the Alaskan environment than Alaskans. We have decades of experience in safely extracting oil and gas from our resource basins, including those in the Arctic.

We all support developing renewable energy sources (Alaska has a huge resource potential there, too), but in the meantime, clean-burning natural gas has to be the foundation and reliable base load for a comprehensive national energy strategy that will rebuild our economy and create jobs, diminish our reliance on foreign energy, and transition us to environmentally preferred energy sources.

A new Arctic paradigm

Moving farther north in Arctic offshore stimulates drilling safety innovation

By ALAN BAILEY Petroleum News

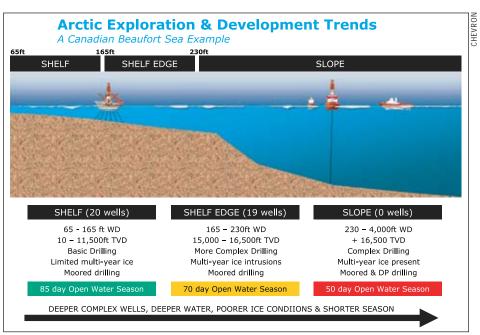
The potentially huge but largely untapped oil and gas resources of the Arctic offshore have become a major focus of attention, as access to new resources in traditional petroleum provinces has become ever more elusive. But, as exploration

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moves north into deep Arctic waters, it will become increasingly difficult to use the drilling of a relief well as the mechanism of last resort for plugging an oil well blowout, Bill Scott, manager of Chevron's Arctic Center in Calgary, Alberta, told the U.S. Minerals Management Service Arctic Technologies Workshop in Anchorage, Alaska, on Oct. 15. A relief well is an emergency well drilled to penetrate and plug a well that is out of control.

Given the potential problems in relief well drilling in deep Arctic waters, Chevron is seeking new ways of proactively preventing a blowout from occurring.

"We want to go one stage further at the front end, to stop any problems happening later," Scott said.



Complex drilling requirements and short drilling seasons on the continental slope of the Canadian Beaufort Sea raise questions over the feasibility of drilling a relief well, should a well blowout occur during future exploration.

Floating rigs

But what are the risks associated with modern offshore exploration?

Most new Arctic offshore exploration drilling is done in water depths that require the use of a floating drilling rig, a drilling approach that has become the technique of choice in the Arctic offshore of Canada and the United States, Scott said. And so far, the safety record in using this technique in the relatively shallow waters of the

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22 percent of undiscovered oil in Arctic

EIA recycles USGS estimate from last year, says vast potential of shale gas could defer development of faraway Arctic gas deposits

By WESLEY LOY For Petroleum News

The region north of the Arctic Circle could hold about 22 percent of the world's undiscovered conventional oil and natural gas, an Oct. 19 report from the U.S. Energy Information Administration says.

This isn't the freshest of news. The EIA report is based on a U.S. Geological Survey assessment released in 2008 that included the 22 percent estimate.

The 18-page EIA report rehashes the

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USGS findings and lays out the challenges of developing whatever oil and gas might be under the globe's frosty cap.

"The Arctic presents a 'good news, bad news' situation for oil and natural gas development," the EIA report concludes. "The good news is that the Arctic holds about 22 percent of the world's undiscovered conventional oil and natural gas resources, based on the USGS mean estimate."

The bad news is that the Arctic re-

sources are believed to be more gas than oil, and that extreme risk, long project lead times, unresolved Arctic sovereignty claims, and costly environmental protections will make production of the resources very difficult, the EIA report says.

Distribution of resources

The EIA report says the area above the Arctic Circle encompasses about 6 percent of the Earth's surface area. Eight countries

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Chukchi and Beaufort Seas has proved exemplary, with five wells in the Chukchi Sea, nine wells in the U.S. Beaufort Sea and 39 wells in the Canadian Beaufort Sea having been drilled to date from drilling vessels, he said.

"They were completed both safely and successfully in periods from 100 percent daylight to 100 percent darkness," Scott said. "We achieved all of our goals without any serious incident."

But, although modern drilling techniques have rendered the possibility of an accidental, uncontrolled oil blowout extremely unlikely, government regulation and prudent safety both require a well operator to maintain the capability of drilling a relief well.

Increasingly challenging

However, as drilling operations take place progressively farther north from the Beaufort Sea coast, moving off the shallow offshore shelf into ever deeper water where the shelf slopes down toward the Arctic Ocean floor, in situations where drilling targets also become deeper and more challenging, the need for longer drilling times combined with the short open water seasons of the extreme north will severely limit the practicality of relief well drilling.

In fact some wells may take more than one sea-Continued on page 16

Drilling mud-line cellars for OCS drilling

A blowout preventer, a tall stack of valves and other devices designed to rapidly shut down a well in the event of an oil blowout, is an essential piece of safety equipment that has to be installed at the surface end of a well whenever a drilling operation is in progress. And when drilling on the outer continental shelf, the blowout preventer would sit on the sea floor.

But in the Arctic offshore, such as on the outer continental shelf of the Beaufort and Chukchi seas, the prevalence of sea ice, much of it in constant motion, gives rise to the possibility of an ice keel hitting a blowout preventer, causing major damage to the device and raising the risk of an oil spill.

To avoid this eventuality, all blowout preventers on the Arctic OCS have to be installed in mud-line cellars, cylindrical holes in the sea floor, typically 40 feet deep, Cody Teff, Shell engineering team lead in Alaska, told the U.S. Minerals Management Service Arctic Technologies Workshop in Anchorage on Oct. 13.

The first step in designing a mud-line cellar is the acquisition of multibeam sonar images of the seabed, a technique that uses acoustic signals to generate detailed profiles of the sea-floor surface. The sonar images enable gouges to be identified and measured, thus setting parameters for the required mud-line cellar depth, ensuring that the top of the blowout preventer will sit well below the deepest scour.

A typical blowout preventer is 20 feet tall and about 16 feet in diameter, weighing about 500,000 pounds, Teff said.

After the gouge depth measurement is complete, a 20-foot diameter, hydraulically powered rotary bit, with teeth in the form of inward-angled plow blades, carves out a cellar, an operation that typically takes anywhere from two to 10 days to complete. The plow blades direct debris from the operation towards the center of the bit, from where compressed air pushes the debris up through the tubular riser that holds the bit in place on the sea floor, Teff said.

-ALAN BAILEY

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EIA REPORT

have some jurisdiction in the Arctic: Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States.

"The allure of the Arctic is great because of the significant oil and natural gas deposits that have already been found and the large areas that have not yet been explored," the EIA report says.

The report says 61 large oil and gas fields — fields exceeding 500 million barrels of oil equivalent — have been discovered within the Arctic Circle. Of these, 43 are in Russia, 11 are in Canada's Northwest Territories, six are in Alaska, and one is in Norway.

The USGS mean estimate of undiscovered, technically recoverable, conventional Arctic resources is 412 billion barrels of oil equivalent, with 78 percent expected to be natural gas and natural gas liquids.

The resources are believed to be concentrated in "just a few sedimentary provinces," the EIA report says.

The Eurasian side of the Arctic is more gas-prone, while the North American side is more oil-prone, the report says.

"The Arctic Alaska region is estimated to hold the largest undiscovered Arctic oil deposits, about 30 billion barrels," the report says. "The second largest oil province in the Arctic is the Amerasia Basin, located just north of Canada, and estimated to have about 9.7 billion barrels of undiscovered oil."

No go for Arctic gas?

As testament to the challenges of developing Arctic oil and gas, the report notes that 15 of the 61 large oil and gas fields already discovered still haven't gone into production. Most of the undeveloped fields were discovered in the 1970s and 1980s.

"The high cost of doing business in the Arctic suggests that only the world's largest oil companies, most likely as partners in joint venture projects, have the financial, technical, and managerial strength to accomplish the costly, long-lead-time projects dictated by Arctic conditions," the EIA report says.

With respect to natural gas, the report notes the long distance of Arctic gas from consumer markets. It adds that the relative importance of Arctic resources "is likely to be affected by the growing realization that shale beds in existing petroleum provinces around the world might be capable of producing 5,000 to 16,000 trillion cubic feet of natural gas.

"This potentially large shale gas resource could significantly defer the future development of Arctic natural gas resources.

"Of course, there could be exceptions."

The EIA report is posted online at www.eia.doe.gov under "What's New."

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son to drill, thus raising question marks over the possibility of drilling a relief well in any feasible time frame.

"It's going to become increasingly challenging to be able to drill a relief well," Scott said."... We're now looking at wells that take two to three seasons to drill, so obviously the ability to continuously drill a relief well in those areas is challenged, if not impossible."

And under Canadian regulations, drilling in the Beaufort Sea has to be completed by or on Oct. 15, thus making a blowout that occurs right at that Oct. 15 date the worst case scenario for the loss of control of an oil well, Scott explained. Subsequent relief well drilling would have to be done at a time of year when daylight is dwindling and the winter sea ice is starting to form.

"So the longer it goes into the winter period, the tougher it is to get things done and tougher it is, certainly, to get them done efficiently," Scott said.

And, although the probability of a well blowout nowadays is as low as perhaps one in 300,000, a contingency plan that includes the possibility of drilling a relief well must assume the possibility of a blowout occurring: Relief well drilling must be feasible, Scott said.

Simulator

Chevron has developed a computer simulator to model the conditions under which a late-season offshore relief well might be drilled. The simulator can test the feasibility of relief well drilling at different distances offshore, north of the Canadian Beaufort Sea coast.

Data from the past 10 years indicates that on the relatively shallow continental shelf 73 to 100 days would be available to drill that worst-case scenario relief well, with the relief well likely taking about 60 days to drill.

"The conclusion obviously is that a relief well could be drilled," Scott said.

But, farther north in the Beaufort Sea, out on the continental slope, only seven to 67 days would be available for relief well drilling, in a situation perhaps requiring 120 days to plug the uncontrolled well.

"Obviously, somewhere between the shelf and the slope we run into a problem which is a combination of well depth, ice conditions and equipment, where it becomes, in all likelihood, impractical to drill a relief well," Scott said.

However, the Canadian drilling regulations allow an alternative contingency arrangement to be substituted for relief well drilling, provided that this alternative arrangement represents an equivalent or lower risk than that associated with a relief well. That "equivalency" clause in the regulations has led Chevron to seek new techniques for handling blowouts, a search that has led to an initiative with a drilling equipment company, Cameron, to develop a new form of blowout preventer.

"We've decided to go for an equivalency to late-season relief wells, and we see the need for that in various Arctic nations. ... We're developing this technology for worldwide use," Scott said.

Key technology

The key technology in the new blowout preventer design is a hydraulic ram that will both shear and seal the well tubing — a conventional blowout preventer has separate rams for the shearing

Watching for the ice in the Chukchi

Modern satellite-based synthetic aperture radar technology is enabling the detection of sea ice in the dark and in cloudy conditions, thus greatly improving ice observation capabilities for ice management during Arctic offshore oil and gas exploration, Peter Noble of ConocoPhillips told the U.S. Minerals Management Service Arctic Technologies Workshop in Anchorage on Oct. 14, 2009.

By reflecting radar signals off the ice, synthetic aperture radar can produce images over a range of scales, and in great detail.

"We can take pictures of a 500-km square all the way down to a 20-km square at any time," Noble said."... We use different scales for different reasons as we develop our plots."

In fact, during the summer of 2009 ConocoPhillips was able to detect a 240-foot survey boat on the water using a Chukchi Sea radar image, he said.

Ice management zones

During a drilling operation, sea-ice management would be based on the delineation of concentric zones around the drillship. The observation of ice entering a specific zone would trigger ice management activities, breaking up the ice and moving it out of the way. If the threat persists drilling operations would be suspended. And depending on circumstances, such as the ice entering a critical zone close to the drillship, the well might have to be secured and the drillship moved from the site.

The timing of any decisions on ceasing drilling would depend on a defined "time to react," a time that varies depending on the status of the drilling operation, but which tends to increase as the drill bit penetrates further into the subsurface.

ConocoPhillips is planning to drill an exploration well in its Chukchi Sea Devil's Paw prospect, in the vicinity of the old Klondike well, in the open water season of 2011, at a time when sea ice is very unlikely to present a problem at the drill site, Noble said.

In fact, the company has been assessing past Chukchi Sea ice conditions, to determine when the drilling would best be carried out, he said. An analysis of past ice cover indicates a slow increase in the open water season length over the years, but the year-to-year variability in the ice-cover timing tends to obscure that trend towards a longer season.

Historical ice-cover data suggests a likely drilling season of up to 100 days at the planned drilling site. There has always been ice cover at the site in June, but the ice starts to retreat in July, with a 90 percent probability of the site being clear of ice by the end of August, Noble said.

-ALAN BAILEY

and sealing operations.

"A single ram will do what two rams did — it will shear and seal simultaneously," Scott said."It will cut and seal on a wide variety of drilling tubulars and production casing."

The stacking of two of the new rams in a single blowout preventer will provide 100 percent redundancy in both the shearing and sealing operations, while additional rams and other technology *Continued on page 17*

Beaufort leasing in state's 'best interest'

Finding supports 10 years of planned sales in nearshore seas extending from Barrow to Canada; Native groups claim slight from state

By WESLEY LOY For Petroleum News

Alaska oil industry regulators have cleared the way for a series of lease sales over the next decade along a vast swath of coastal waters in the Beaufort Sea.

The state's oil and gas director, Kevin Banks, concluded "that the potential benefits of lease sales outweigh the possible negative effects." Natural Resources Commissioner Tom Irwin concurred.

The conclusion is contained in a 437page document known as a "best interest finding." State law requires a review of pertinent information, including public comments, to determine whether oil and gas lease sales on state-owned acreage are in the state's best interest.

The finding issued Nov. 9 confirms a preliminary best interest finding issued on April 2. It supports annual areawide lease sales planned from this year through 2018 across about 2 million acres of nearshore waters and islands stretching from Barrow east to the Canadian border.

The lease sale area is believed to have "moderate to high petroleum potential," based on prior exploration in the area and Petroleum News reprint • Nov. 15, 2009

proximity to discoveries such as Prudhoe Bay, the best interest finding says.

The state's finding drew considerable opposition, especially from some people living along the Beaufort Sea coast.

Leasing legacy

Since the state's first lease sale in December 1964 on land known as the North Slope, which glides down to meet the Beaufort Sea, the state has held 56 oil and gas lease sales involving Slope and Beaufort acreage.

More than 11.5 million acres in 3,065 tracts have been leased. Of these tracts, 407 were drilled and only 292, or just under 10 percent of those leased, have been commercially developed, the best interest finding says.

"About 81 percent of the state-leased acreage was onshore, and about 19 percent was offshore," it says.

The coastal waters generally are shallow, subject to extreme cold and grinding ice. Precipitation along the Beaufort Sea coastline is so low that the region is classified as a desert, the state document says.

The best interest finding reviews the re-

gion's communities, climate, geologic hazards such as ice movement, fish and wildlife and their habitat, local subsistence practices, the region's oil and gas history and potential, oil spill risk and response, and regulatory protections for the environment.

Objections lodged

A number of environmental groups, Native organizations and others raised concerns about the planned leasing.

State officials said they received 35 oral and written public comments. Among the input state officials collected during a public hearing in the village of Nuiqsut, near the Alpine oil field, was a packet of letters to President Obama from some school children.

Issues raised in the public comments pertained to oil spills, climate change, polar bears, the cumulative effects of oil and gas activity, industry disruption to subsistence activity including bowhead whale hunts, the desire to exclude large areas from leasing, and the prospect of using only landbased directional drilling to tap Beaufort

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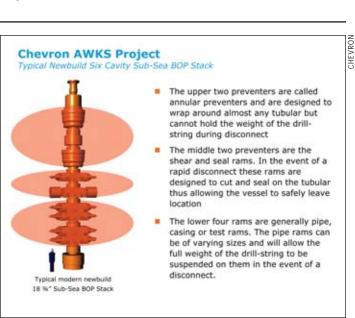
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PARADIGM

in the massive device will further increase the device's overall effectiveness.

Testing of the new blowout preventer design is scheduled for the fourth quarter of 2009, with testing likely to be completed in 2010. And, in addition to being used on wells drilled from floating rigs in the Arctic offshore, presumably with the blowout preventer located in the seafloor, the new design could find application in other situations, such as drilling from offshore platforms and from land rigs. However, given the difficulty of trying to shoehorn a huge new blowout preventer into an existing land rig, for example, Chevron is considering developing a safety package, using the new technology, for retrofitting into existing rig configurations.

But, when it comes to using new technologies such as the new blowout preventers in the Arctic offshore, Chevron is taking great care to discuss its proposals both with government regulators and with the local communities along the Canadian Beaufort Sea coast, making sure that everyone is on board with what Chevron is proposing, Scott said.



A new design of blowout preventer now ready for testing includes duplicate hydraulic rams that would simultaneously shear and seal the well tubing following loss of control of a well.

How much longer for the North Slope?

Revised DOE report indicates oil production from remaining reserves could last 35 years, but much longer after new developments

By ALAN BAILEY Petroleum News

The slowly declining meter readings at the trans-Alaska pipeline pump station 1 on the North Slope, as production from America's most northerly oil fields continues to flow south at a slowly dwindling rate, raise some worrying questions for those whose livelihoods and well being depend on a corresponding flow of oil dollars.

Petroleum News reprint • Feb. 14, 2010

But just how much oil is left in Arctic Alaska? And at what point would the pipeline cease to be viable?

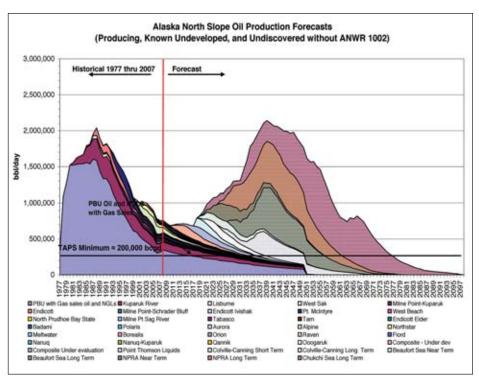
An updated version of a major U.S. Department of Energy report titled "Alaska North Slope Oil and Gas: a Promising Future or an Area in Decline?" attempts to answer these questions through a comprehensive analysis of data about the existing North Slope fields and by piecing together an impressive quantity of available data about potential new oil and gas developments and future exploration.

Earlier version

An earlier version of the report, published in 2007 and based on data available in 2005, contained a massive amount of information about the North Slope oil industry but was substantially out of date by the time that it went to press. Its economic analysis was based on a state oil production tax system that was already defunct at the time of publication, oil production data were nearly three years old, and the report lacked coverage of the most recent exploration programs, oil field developments and development plans.

The new version of the report has updated the data by three years or so.And, given a lack of sufficient data about the operation of Alaska's new ACES oil production tax, the new report does not now attempt an economic analysis of the North Slope oil industry, instead presenting estimates of technically recoverable rather than economically recoverable oil and gas resources.

So what's the bottom line?



Northern Alaska oil production, historically and projected into the future, assuming active oil exploration and development across the region, offshore and onshore. Without new exploration, the lower mechanical limit of 200,000 barrels per day of throughput in the trans-Alaska oil pipeline would be reached at around 2045. The development of new oil in areas such as the National Petroleum Reserve-Alaska, the Beaufort Sea and the Chukchi Sea could extend the life of the pipeline by several decades.

In the absence of any new oilfield development, the existing oil fields could probably produce about another 6.1 billion barrels of oil, the report says. But based on estimated decline rates for oilfield production, flow rates through the trans-Alaska oil pipeline would drop below the 200,000barrel-per-day mechanical limit for the pipeline by 2039, with that date being extended to 2045 if new oil comes online from fields currently being developed or under evaluation, the report says. A shutdown of the pipeline in 2045 "would potentially strand about 1 billion barrels of oil reserves from the fields analyzed," the report says.

Gas pipeline impact

If a North Slope gas pipeline comes to fruition, estimated gas reserves in the Prudhoe Bay and Point Thomson fields would provide about 32 trillion cubic feet of the 57.5 tcf of natural gas required to support the construction of a pipeline with a capacity of 4.5 billion cubic feet per day and a 35year lifespan, the report says.

"The assurance of a gas pipeline to transport the gas to market is needed to encourage exploration and development of sufficient gas resources to support the gas sales project," the report says. "The potential life of the gas sales project could easily exceed a 35-year life for a 4.5-billion-cubic-feetper-day rate by many years if the potential of Alaska North Slope gas resources is realized."

But, although the export of condensate and oil associated with gas from the Point Thomson field would boost North Slope oil production, extending the life of the oil pipeline would require new oilfield development, the report says.

On the other hand, with a low density of oil wells other than in the immediate vicinity of the existing oil fields, the North Slope

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and adjacent areas are "not representative of mature petroleum provinces," from an exploration perspective, the report says. New exploration efforts in the period up to around 2018-20, prior to any possibility of a North Slope gas pipeline coming online and probably targeting the central North Slope, the National Petroleum Reserve-Alaska and the Beaufort Sea (including the outer continental shelf), could add 2.9 billion barrels of recoverable oil to the inventory of known resources. Exploration in these areas and in the Brooks Range foothills could discover 12 tcf of natural gas.

Longer term

In the longer term, assuming adequate oil and gas prices; unrestricted land access; and stable government fiscal policies, exploration and development onshore and in nearshore waters, but excluding ANWR, could add another 9 billion to 10 billion barrels to oil reserves, the report says.

Successful construction of a gas pipeline could eventually enable 65 tcf of natural gas to come online, while also having the secondary effect of encouraging new oil development and pushing the oil reserves to 15 billion to 16 billion barrels. The addition of further exploration and development on the Beaufort Sea outer continental shelf might push the recoverable oil resources to 19 billion to 20 billion barrels, and recoverable natural gas to 85 tcf, while addition of the Chukchi Sea could perhaps boost those fig-

continued from page 17

BEAUFORT LEASING

Sea oil and gas discoveries.

In general, state officials replied that ample mitigation measures and regulations are in place to protect wildlife and the environment, and that some of the concerns raised such as global climate change go beyond the scope of a best interest finding for lease sales.

One major complaint from some commenters was that state officials failed to meet or work with Native interests, and that the Alaska Department of Natural Resources "considers working with Native communities only as a hurdle."

State officials replied: "All stakeholders were given ample opportunity to participate in the Beaufort Sea best interest finding process."

Dozens of local governments, whaling groups, Native corporations, tribal councils and others were invited to submit input, and public hearings were held in May in Barrow, Nuiqsut and Kaktovik. Another hearing via teleconference was offered for Wainwright, and an informational public meeting was held in Anchorage. Though heavily publicized, the meetings were sparsely attended, the best interest finding says.

The North Slope Borough, the local government for nearly 7,000 mostly Inupiat people living across northern Alaska, raised many leasing objections and asked the state for "cooperating agency status" to help prepare the best interest finding.

The borough cited the example of the Aleutians East Borough, which was granted such status as the federal government moves toward an offshore lease sale in the North Aleutian basin, otherwise ures to 29 billion to 30 billion barrels of oil and 135 tcf of gas.

In fact, taking into account new reserves developed in existing fields and assuming that exploration proceeds in more remote areas — in the Chukchi Sea and perhaps in the Arctic National Wildlife Refuge — a total of 35 billion to 36 billion barrels of oil and 137 tcf of natural gas might ultimately be added to reserves by 2050, with those oil reserves additions amounting to more than twice the cumulative North Slope production to date, the report says.

The exploration of the coastal plain area of ANWR would be especially valuable in boosting oil reserves, because the estimated ANWR undiscovered oil resource of 10.3 billion barrels relates to a land area of just 1.9 million acres, the report says. By comparison, NPR-A is thought to hold 10.6 billion barrels of undiscovered oil across a much larger area of 24.2 million acres.

Even the most conservative of these future exploration and development scenarios, with the addition of perhaps 10 billion barrels of new oil reserves, would extend the life of the trans-Alaska oil pipeline to 2060 or beyond, thus also unlocking the 1 billion barrels of oil otherwise stranded in current fields after a 2045 closure, the report says.

However, the report characterizes its estimates of future oil and gas discovery and development as based on "optimistic assumptions" and presents a lengthy list of potential impediments to development. That list includes land access; infrastructure dismantlement and removal requirements; marine mammal protection in the offshore; and gravel availability for onshore infrastructure construction.

known as Bristol Bay.

State officials refused the borough's request, saying designation of cooperating agencies is a federal practice under the National Environmental Policy Act.

"Alaska has its own statutory process for obtaining public input on best interest findings," state officials wrote.

Feds raise ANWR worry

Some of the Beaufort Sea acreage to be offered for lease fronts the Arctic National Wildlife Refuge.

That drew a concern from the U.S. Fish and Wildlife Service, which cited potential land ownership and title issues with many tracts bordering ANWR.

The agency said it was "concerned that tracts the state cannot legally lease may share a boundary with ANWR," and suggested removing or deferring from lease sales all tracts without a clear title.

The boundary between ANWR and Alaska's tide and submerged lands and uplands has been the subject of a long-running legal dispute between the federal and state governments.

In the best interest finding, state officials downplayed the concern.

Because the lease sales will encompass a vast area of about 2 million acres over 573 tracts, and it's unknown which if any of the tracts will receive bids, it's impractical to conduct a title search of the entire zone or even just the tracts bordering ANWR, the officials said.

Instead, the state "will verify title for tracts receiving bids following each lease sale, and prior to issuing leases," the best interest finding says. "Therefore, removing or deferring tracts from the lease sale area is unnecessary."

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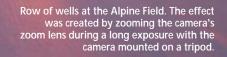
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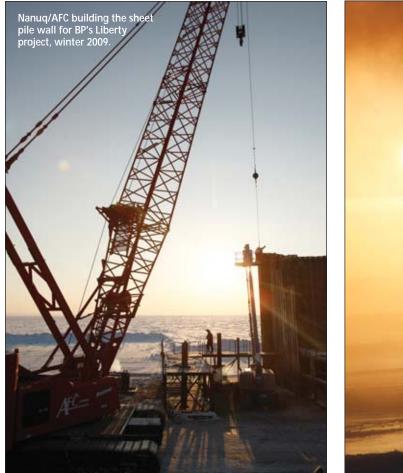
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810 Houston St. Fort Worth, TX 76102 Contact: Vaughn O. Vennerberg, II Phone: (817) 870-2800 Fax: (817) 870-0379 Other Office: 52260 Wik Road Kenai, AK 99611 Contact: Scott Griffith, production superintendent *XTO Energy, established in 1986, is engaged in the acquisition and development of quality, long-lived producing oil and gas properties and exploration for oil and gas.*



North Slope exposure

Images by Judy Patrick





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COMPANY**NEWS** in brief

AADE presents three local charities with checks

The American Association of Drilling Engineers Alaska chapter at its Sept. 16 monthly meeting presented three local charities with checks totaling \$7,500.

The AADE celebrated another successful Fin, Feather, Fur, Food Festival on May 15; the proceeds of the event brought in an astounding \$22,588, monies which are divided to help support local charities, AADE engineering educational initiatives such as the Knowledge Box and AADE's scholarship fund.



ELGIN JONES

The three local charities to each receive a \$2,500 check were the Kid's Kitchen, Down-town Soup Kitchen and Bean's Café. "Thank you for your help and don't forget, no child

should ever go hungry," said Elgin Jones, accepting the check on behalf of the Kid's Kitchen.

The AADE, a nonprofit volunteer organization, was founded in New Orleans in 1978 and comprises an affiliation of nine independent chapters, including Alaska, with more than 5,000 members and governed by an AADE National Board.

ABB acquires Sinai Engineering Corp.

ABB Inc. said Oct. 8 that it has acquired the assets of Sinai Engineering Corp., enhancing its presence and capabilities in Western Canada. "This acquisition is aligned with our strategy to strengthen our footprint in Western Canada, particularly in providing engineering services to oil and gas and utility customers," said Sandy Taylor, president and CEO of ABB Inc. "Sinai Engineering's expertise and customer focus will help our customers boost productivity and energy efficiencies while reducing costs." Sinai Engineering is a consulting firm whose customers include electric utilities, conventional and heavy oil, gas processing, pulp and paper, mining, pipeline operators and independent power producers. ABB is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. For more information visit www.abb.com.

ABB retains DCS market share worldwide for '08

ABB said July 21 that it had retained the leading worldwide market position in the core automation market for the latest version of ARC Advisory Group's "Distributed Control Systems Worldwide Outlook" study. The study says the explosive growth that characterized the distributed control systems market up until 2008 is gone due to the global economic crisis. ARC predicts that the compound annual growth rate for this market through 2013 will be curbed to 3 percent.

Distributed control systems-related services offer the best opportunity for growth in the near future, the report said.

Customer demand for value-added services from automation suppliers has never been higher, ARC said. These include project services such as the main automation contractor concept, where the supplier takes full responsibility for all aspects of an automation project, as well as other after-sales distributed control systems services that help end users optimize plant performance.

"ABB's comprehensive automation system lifecycle approach helps our customers get the maximum value out of their existing control system investment, while providing a secure evolution path forward to help them maintain their competiveness and reach their productivity targets," said Veli-Matti Reinikkala, head of ABB's process automation division. "Our leading-edge technology, dedicated global services team and commitment to our installed base provide an unbeatable combination to transcend today's troubled economy and prepare for tomorrow's new challenges."

ABB wins \$60M order from Saudi Electricity

ABB said Aug. 10 that it has won orders worth \$60 million from Saudi Electricity Co., Saudi Arabia's national power transmission and distribution utility, to improve the power efficiency of 28 distribution substations. ABB is responsible for the design, engineering, supply, installation and commissioning of the projects, which are expected to be completed by 2010. ABB technologies will improve the power factor, which is a measure of how efficiently power is being used. "These solutions will enable the substations to operate more efficiently thereby increasing the availability of electricity and improving power quality," said Peter Leupp, head of ABB's Power System division. ABB is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact.

ACS \$6.8 million gift to the University of Alaska

Alaska Communications Systems said Dec. 8 that it has provided a gift to the University of Alaska worth an estimated \$6.8 million, enabling service continuity of core university functions should a major disruption occur. The gift will provide the university with a backup data center for its most important systems at ACS' facility in Hillsboro, Ore., along with all the necessary connectivity for its core systems, allowing UA to continue online operations that would otherwise be disrupted in the wake of a major disaster or outage. The gift comes at no cost to the university for five years, including maintenance at the Oregon facility. "ACS is proud to give back to the community and support the mission of the university," said Liane Pelletier, president and chief executive officer, ACS. For more information visit www.acsalaska.com.

ACS offers new unlimited voice and data plans

Alaska Communications Systems said Jan. 19 that it was offering new unlimited nationwide, monthly service plans to pair with unlimited text and data plans on Alaska's largest and most dependable 3G network. The company aims to keep pace with voice plan streamlining recently established by the national carrier that competes in the Alaska market, while providing best value for wireless data services. Beginning Jan. 20, customers may sign up for a new Nationwide Unlimited voice plan that allows customers to call anyone in the United States and Canada for \$69.99 per month. Nationwide family plans will also have new unlimited options. ACS has also revamped its wireless data offerings to firmly position itself as a value leader in the rapidly expanding market for wireless data services. For more information visit www.acsalaska.com.

ACS unveils new retail location in Wasilla

Alaska Communications Systems said Nov. 18 that it has opened a new retail store in Wasilla. The store, at 1733 E. Palmer-Wasilla Hwy., directly in front of Fred Meyer, is open 9 a.m. to 8 p.m. Monday through Saturday and 10 a.m. to 6 p.m. on Sunday. "We encourage everyone to stop by the new location in Wasilla. It's a beautiful new building close to all your shopping needs. With more than 4,000 square feet, our new store location will provide our customers with a great experience including convenience to other shopping and ample parking," said Janet Klatt, director, retail sales and service. The new location will have a grand opening celebration, including special promotions, refreshments and more, on Dec. 4.

AECOM wins environmental publication awards

AECOM said Jan. 27 that it has received four Business Achievement Awards from two leading environmental industry publications' annual award competitions. Dale Sands, senior vice president and global practices director in AECOM's Environmental practice and Lucy Labruzzo, U.S. managing director of the Energy practice, will accept the awards at the annual Environmental Summit in Coronado, Calif., on March 3. The Climate Change Business Journal recognized AECOM for its Renewable Energy practice, and Arauco Carbon Footprinting Analysis project. The Environmental Business Journal recognized AECOM for Green and Sustainable Remediation and its Environmental Mobil Application for Pipelines. AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is leader in all of the key markets it serves. For more information visit www.aecom.com.

AIC wins Juneau area construction contracts

Alaska Interstate Construction LLC said Sept. 3 that it recently won two construction contracts in the Juneau area of Southeast Alaska. The company successfully bid for the principal civil and piping contract for the tailings facility at Coeur Alaska's Kensington Mine. Coeur awarded the contract on Aug. 21. AIC also won a \$28.6 million contract to complete runway safety area improvements at Juneau International Airport on Aug. 10. The tailings facility at Lower Slate Lake is the only remaining construction left before the Kensington Mine can begin gold production. Following that, most of the 80-acre lake will be pumped out to an acceptable level of construction and a temporary dam will be erected so work can begin on a permanent dam.AIC contracted with a local tribal corporation to provide AIC project-specific socieconomic and cultural outreach services. AIC's successful bid for the Juneau International Airport contract will extend the airport's runway at both ends, which requires extensive filling and dredging.AIC will also improve taxiways and lighting, realign an adjacent creek and trail, dredge the float plane pond and build float plane ramps. For more information visit www.aicllc.com.



Alaska Railroad 2010 annual print release event

The Alaska Railroad Corp. said Nov. 24 that it will release its 2010 annual print during two public sale-and-singing events in mid-December, each featuring print artist Stefan Wilson who will be on hand to sign the prints and posters. The first event will be held in Fairbanks, Saturday, Dec. 12, at the Fairbanks Depot, 1745 Johansen Expressway. The second event will be in Anchorage, Saturday, Dec. 19, at the Historic Ship Creek Depot, 411 W. 1st Ave. Both will be from 10 a.m. to 2 p.m. The water-based acrylic painting titled "Next Stop, Anchorage," depicting a passenger train moving northwest along scenic Turnagain Arm, was created using a combination of airbrush and paintbrush, and is the first annual print to feature the Goldstar first-class double-decker dome coaches. Prints cost \$55, posters cost \$30 and pins cost \$55. For more information visit www.akrr.com.

Air Liquide finishes project for Shell Hydrogen

Air Liquide said Dec. 16 that it has completed the installation of a fueling system for Shell Hydrogen in Bronx, N.Y., in addition to the fueling equipment, Air Liquide is also supplying the hydrogen gas and liquid nitrogen required for operations. The station will provide fueling capability in support of General Motor's Project Driveway vehicles and serve as another site in the network being developed in New York in anticipation of other auto manufacturers introducing fuel cell vehicles to the area. Air Liquide's technology is also used at a station in Ardsley, N.Y. Using hydrogen as energy for transportation is a promising solution for sustainable mobility. Air Liquide has also provided fueling systems in California, Delaware and many countries around the world. The fueling systems are built in the U.S. with proprietary engineering designs from Air Liquide Advanced Technologies U.S. LLC, and are capable of filling a car at 700 bar pressure in less than five minutes. "Air Liquide's innovative hydrogen technologies are powering vehicles and equipment while protecting the environment. With more than 40 years experience in hydrogen and numerous related patents, Air Liquide is helping to build the hydrogen energy infrastructure, to demonstrate its benefits to society and prepare for future markets," said Michael J. Graff, a member of Air Liquide's executive

committee and president and CEO of American Air Liquide Holdings Inc. For more information visit www.hydrogenplanet.com.

AAL supplies Haiti rescue aid

American Air Liquide, a division of Air Liquide said Jan. 27 that it has been helping coordinate emergency assistance efforts with the United Nations Center for International Disaster to provide much-needed medical

oxygen to the rescue teams in Haiti. Due to Air Liquide's footprint and logistics structure, it was able to establish its first medical filling system in Haiti on Jan. 16 and a second system on Jan. 18, providing medical

oxygen needs for a number of hospitals in the area and all of the temporary medical facilities and tents that are in operation at the U.N. compound. While support services are needed, monetary donations are also critical to recovery efforts. Air Liquide has coordinated with the American Red Cross to develop a microsite for employee donations, which will be matched dollar for dollar by the company until Feb. 28.

Air Liquide to double its production capacity

Air Liquide said Jan. 4 that it has begun building a new production unit in Anchorage to double its liquid oxygen and nitrogen capacity in Alaska. Air Liquide has been a leading provider of industrial gases in the state of Alaska for 41 years, with 75 employees ensuring the production of oxygen, nitrogen and acetylene gases distributed in bulk tankers and cylinders, providing equipment to customers in the petrochemical, refining and mining sectors. Scheduled to start in the fall of 2010, the new unit will allow Air Liquide to provide reliable production and distribution of industrial and medical gases to Alaskans, which is particularly important, due to the state's geography and distribution challenges. For more information visit www.airliquide.com.

Alaska Frontier Constructors receives certificates

Alaska Frontier Constructors Inc. said Dec. 15 that it, along with Nanuq Inc. of Anchorage and Prudhoe Bay have achieved an ISO 14001 Environmental Management System certificate, an AHSAS 18001 Health and Safety Management System certificate and ISO 9001:2008 Quality Management System certificate for its development and implementation of an internationally recognized project management structure for heavy civil construction projects. The certifications were issued by SRI Quality System Registrar, an internationally-accredited, Pittsburg-based firm that evaluates and audits management system standards. The recognition highlights AFC and Nanuq's dedication to good environmental practices, as well as a commitment to customers, established clear policy and planning and good community relations. AFC is an Alaska owned and operated civil engineer construction contractor and its affiliate, Nanuq is owned by Kuukpik Corp. from the village of Nuiqsut. The two firms have over 400 employees working throughout Alaska.

Alaska Railroad schedules open house

The Alaska Railroad said Jan. 19 that it invites the public to an open house 4-6:30 p.m., Tuesday, Jan. 26 at the Alaska Railroad Depot, 1745 Johansen Expressway in Fairbanks. The venue provides an opportunity to review and comment on a proposed



APICC supports engineering through education partnership

The Alaska Process Industry Careers Consortium said Nov. 16 that in conjunction with the University of Alaska statewide system it has reached an agreement to collaborate with the Alaska Department of Education and Early Development and the Alaska Department of Labor and Workforce Development to plan, develop and support access to engineering academies for public high school students in Alaska. This initiative will help build a pipeline of highly qualified Alaskans to enter careers in science, technology, engineering and mathematics — the so-called STEM fields. The University of Alaska is working to double its annual number of students graduating with engineering degrees. APICC has an 11-year history and over a decade of strategic alliances with Alaska industry, business, education, trade associations and labor. For more information visit www.apicc.org.



Program of Projects for 2010. The open house will showcase continuing and proposed capital improvement projects that are in various stages, from conceptual planning, to engineering and construction. Project managers will be on-hand to explain projects that are located all along the railroad system from Seward to Fairbanks. An open house will also be held in Seward from 10a.m.-1:30 p.m., Friday, Feb. 19 at the Breeze Inn, 303 N. Harbor St. Open houses were held in Anchorage Jan. 20 and in Wasilla Jan. 21. For more information visit www.alaskarailroad.com.

STB completes final FEIS for Alaska Railroad

The Alaska Railroad said Sept. 25 that the Federal Surface Transportation Board has completed the Final Environmental Impact Statement for the Alaska Railroad Corp. application to construct and operate a rail line between North Pole and Delta Junction. Known as the Northern Rail Extension, the project would offer safe freight and passenger rail service to communities southeast of North Pole; support agriculture, mining and petrochemical industries; and provide yearround reliable access to military training areas. The FEIS includes a recommended route and mitigation measures to offset impacts from construction. The STB's Record of Decision is expected by the end of October. For more information visit www.akrr.com.

ASG's chairman and CEO, Bob Magee, passes away

American Shipping Group said Dec. 1 that its long-term chairman and CEO, Bob Magee, passed away after a courageous battle with cancer. Magee joined Totem Ocean Trailer Express in May 1986 as vice

president marine operations. He went on to become president and CEO of TOTE, later chairman of Sea Star Line LLC, and then chairman and CEO of American Shipping Group. In 2004, Magee was presented with the United Seamen's Serv-



BOB MAGEE

ice Admiral of the Ocean Sea Award, recognizing his longtime career in the maritime industry, leadership and fine American spirit. He received numerous maritime awards, while giving all the credit to his employees. Magee was also known for giving generously of his time and money, sitting on the advisory boards for USMMA Kings Point and United Way of Peirce County, and for being involved in many other clubs and association.

"Bob will be missed by all of us," said Tim Engle, president of Saltchuk Resouces Inc, "those who work in our family of companies, our customers, labor partners, vendors, public policy representatives, members of our industry and the communities in which we serve. Our



American Marine ends another successful season

American Marine Corp. said Oct. 5 that its vessels, the American Explorer and American Discovery have ended another successful season on the North Slope with no accidents, incidents or injuries. "Thanks to the vessel crews, Deadhorse support staff of American Marine Corp., our clients, vendors, and contractors who assisted in achieving this goal," said Rick Wilson, operations manager for the Alaska region. American Marine Services Group of Companies includes Pacific Environmental Corp. and has offices in Anchorage, Prudhoe Bay, Honolulu, Los Angeles and New Orleans; it operates a significant fleet of vessels including large ocean tugs, barges, research and survey support vessels, supply boats and crew boats throughout the U.S. and beyond. For more information visit www.amarinecorp.com or www.penco.org.

thoughts are with his wife Marie, and the rest of the family."

ASRC acquires major share of Petrochem Insulation

ASRC Energy Services, a subsidiary of Arctic Slope Regional Corp., said Aug. 13 that it was expanding its business services by acquiring a major share of Petrochem, one of the largest providers of insulation and multicraft services in the U.S.

"This new line of business increases our opportunities outside of Alaska, and enhances the services we provide to our customers," said ASRC Energy Services President Mark Nelson. "We are proud of Petrochem's exceptional safety record, and welcome its 1,000 employees to the ASRC family of companies."

Petrochem has been providing multicraft services for 35 years to oil refineries, power and chemical plants, pulp and paper companies, breweries and wineries, food processors, and other industrial markets. Other services provided by Petrochem include scaffolding, asbestos and lead abatement, fireproofing, and industrial painting and coating.

ASRC Energy Services performs an array of oilfield engineering, operations, maintenance, construction, fabrication, regulatory and permitting, and other services for some of the world's largest oil and gas companies.

Port, BP honored for clean 'shore power'

On Oct. 7 Everything Long Beach carried an article about the Southern California regional air pollution authorities presenting the Port of Long Beach with an award for becoming the first seaport in the world to construct an oil shipping terminal that offers clean "shore power" to improve air quality. Port and BP America officials accepted the honor from the South Coast Air Quality Management District at the agency's 21st annual "Clean Air Awards" ceremony in downtown Los Angeles.

The Port of Long Beach outfitted BP's oil tanker terminal on Pier T with the ability to allow tankers to safely "plug in" to the landslide electrical grid for all power needs while docked and unloading crude oil. BP America retrofitted two of its Alaska oil tankers to plug in.

BP sponsors Alaska math, science conference

On Oct. 7 Capital City Weekly carried an article about the 2009 Alaska Math & Science Conference, which is being held in Juneau for the first time Oct. 14-17 and is sponsored by the Alaska Department of Education & Early Development, BP Alaska, Delta Education FOSS, ExxonMobil, the Juneau School District and the University of Alaska Southeast.

The goal of the conference is to help science and math teachers, and in turn their students, understand the connections in the natural world, enhancing science literacy.

There will be participants from all over the state, from as far away as Bethel and Barrow, capitalcityweekly.com reported. The publication also said there will be an industry panel, "In which educators can hear about opportunities for internships for students or externships for teachers in a variety of local industries, including fish processing, mining, and energy."

CH2M Hill program receives 'outstanding' rating

CH2M Hill said Aug. 25 that it recently received an "outstanding" rating for its supplier diversity and small business program, after successfully completing a July 22 audit by the Defense Contract Management Agency and the U.S. Small Business Administration. CH2M Hill, a global full-service engineering, procurement, construction and operations firm, has held its "outstanding" ranking, the highest of the five ratings bestowed on a company, since 1998. For the past five years, CH2M Hill has subcontracted more than \$1.3 billion in support of federal contracts, with 71.8 percent going to small businesses, 18 percent going to firms socially and economically disadvantaged, 1.39 percent to woman-owned small businesses and 8.6 percent to veteran-owned small businesses.



ConocoPhillips Energy Prize winner announced

ConocoPhillips said Oct. 20 that it, along with Penn State, has awarded the 2009 ConocoPhillips Energy Prize to Scott Anderson and team for their innovation, the ECO-Auger, a hydrokinetic machine that converts moving water from river and ocean currents to renewable electric energy. Its hydraulic storage pressure compensation system guarantees constant energy output regardless of tidal current strength. The ConocoPhillips Energy Prize recognizes new ideas and original, actionable solutions that can help improve the way the U.S. develops and uses energy. The prize focuses on innovative ideas and solutions in three areas: developing new energy sources, improving energy efficiency and combating climate change. For more information about the ConocoPhillips Energy Prize and the finalists visit www.conocophillips.com/energyprize.



Crowley adds Sesok to fleet of Alaska river tugs

Crowley Maritime Corp. said Aug. 25 that joining the fleet of Alaska river tugs this month was its newest triple-screw diesel powered tug, the Sesok.

Jointly designed by Crowley and Diversified Marine, the Sesok, which means "beluga whale" in the Native Inupiaq language, boasts 1,362 horsepower and is equipped to safely propel petroleum and freight barges in river systems throughout Alaska.

"Even in the midst of tough economic times, Crowley continues to invest in vessels that not only provide the safest service but also help protect Alaska's natural resources," said Craig Tornga, vice president of Crowley's Alaska marine services. "Both the Sesok and the Nachik complement the company's existing fleet of river tugs and will provide improved service to our customers and communities in Western Alaska."

Crowley restructuring its Alaska operations

Crowley Maritime Corp. said Jan. 28 that it has restructured it petroleum distribution and contract services group, consolidating all Alaska operations under Craig Tornga, vice president. Tornga will remain in Anchorage, will continue reporting to Rocky Smith, senior vice president and general manager, will continue to manage Alaska's petroleum distribution and fuel sales but will now also manage tanker assist and escort services in Valdez and Prince William Sound, Alaska, and energy support services on Alaska's North Slope. "The realignment of our Alaska management team is in line with our statewide business strategies," said Smith. "We are leveraging our management talents across all lines of business in Alaska in order to promote a one Crowley vision and presence in our Alaska markets." For more information visit



www.crowley.com.

CRAIG TORNGA

Crowley ATB is largest to transit Alaska waters

Crowley Maritime Corp. said Dec. 15 that its petroleum transportation group recently made history, as its 155,000-barrel Articulated Tug Barge, Sea Reliance/550-1, became the largest of its kind to have ever have transited Alaska waters. Under the watchful command of Capt. Scott Murdock, the ATB completed a voyage from Martinez, Calif., to Anchorage carrying a full load of jet fuel. The journey, which occurred without incident, was met with several weather concerns because of an early start to the winter storm season. Although other small cargo ATBs have traveled in Alaska, nothing has rivaled the size of the Sea Reliance/550-1, which measures over 600 feet in length. For more information visit www.crowley.com.

Crowley funding dreams for college students

Crowley said Sept. 9 that its scholarship program continues to cross borders helping five new students in their respective Central American countries fund their educations and their dreams. Over the last month, Crowley has awarded scholarships to students in Costa Rica, Guatemala, Panama, Honduras and El Salvador.

The scholarships are part of Crowley's commitment to provide educational opportunities to exemplary students with strong academic records and financial need. In Central America, the scholarships are awarded to one student in each country each year through graduation, bringing the total to 20 scholarship recipients to date. The scholarships are well-received, especially from students who come from very modest means. For more information visit www.crowley.com.

Crowley names Tessier VP of sales, chartering

Crowley Maritime Corp. said Dec. 9 that Dorine Tessier has been named vice president of sales and chartering for its petroleum transportation group. In her new role, she will report to John Douglass, senior vice president and general manager of Crowley's Gulf and Atlantic region and will relocate from Anchorage to Jacksonville. As vice president of sales and chartering, Tessier will be responsible for the planning and direction of the group's sales and chartering initiatives, overseeing development of policies and procedures; coordinating and negotiating customer contracts and developing business relations, specifically in the company's articulated tug barge program." I am very happy to be joining such a highly skilled team and look forward to the opportunities and challenges chartering, sales and marketing represents," said Tessier. Tessier joined Crowley in 2003 when the company acquired Yukon Fuel Company and has served the company in various roles. In 2006, she was promoted to director, supply and distribution for Crowley's petroleum dis-



Lightering operation successful in Haiti

Crowley Maritime Corp. said Jan. 22 that, working under contract with the U.S.

Transportation Command, it successfully discharged 12 20-foot containers of relief supplies across a beach in Portau-Prince, Haiti, in an experimental lightering operation. The success of this operation, which involved lifting the containers from a Crowley container ship anchored in the harbor to a smaller, shallow-draft landing vessel for transport and discharge over the beach, paves the way for container shipments directly into Port-au-Prince later in the month."Today's operation was an important milestone in re-establishing direct container shipments into the heavily damaged port," said John Hourihan, Crowley's senior vice president and general manager of Latin America services. "The port survey conducted Monday by a team from our TITAN Salvage subsidiary was spot-on in terms of identifying a suitable location in the port where we could safely discharge the cargo." For more information visit www.crowley.com.

tribution group. She was later named director of sales and marketing.

Tom Crowley receives prestigious NTA award

Crowley Maritime Corp. said Sept. 30 that Tom Crowley Jr., the corporation's chairman, president and CEO, was presented with the prestigious National Transportation Award from the Na-

tional Defense Transportation Association, at the group's annual logistics forum and exposition in Nashville, Tenn.

"Our relationship with the Department of Defense is as diverse as Crowley and the different services we provide," said Crowley, who said he was pleased to accept the award on behalf of the 4,300 Crowley employees around the world providing services to the DOD and government.

Jacksonville-based Crowley Holdings Inc.,

a holding company of the 117-year-old Crowley Maritime Corp., is a privately held family and employee-owned company that provides diversified transportation and logistics services in domestic and international markets. For more information visit www.crowey.com.





Crowley restructures senior management team

Crowley Maritime Corp. said Jan. 11 that it is restructuring its senior management team with John Douglas taking over as senior vice president and general manager of Crowley's Puerto Rico/Caribbean liner services: Rob Grune will be taking over as senior vice president and gen-



JOHN DOUGLAS

eral manager of Crowley's petroleum transportation group. In addition, Rockwell Smith, Crowley's senior vice president and general manager based in Seattle, will assume responsibility for all of Crowley's marine contract services both domestically and internationally, continuing to oversee the company's Alaska operations and West Coast harbor services. For more information visit www.crowley.com.





Crowley takes delivery of 'Sunshine State' tanker

Crowley Maritime Corp. said Dec. 4, that it has taken delivery of Sunshine State, a 331,000-barrel, double-hull oil and chemical tanker, from General Dynamics NASSCO in San Diego, Calif., for American Petroleum Tankers LLC. The Sunshine State is the first vessel Crowley has taken delivery of since the company was contracted by APT to handle shipyard construction management and overall vessel management, crewing and operation of the company's growing fleet. The Sunshine State measures 600 feet by 106 feet by 39 feet and has the capacity to carry 331,000 barrels of product. It has a single-screw, slow-speed diesel plant propulsion system with speeds of 15 knots. Two other sister vessels, the Empire State and the Evergreen State, which will both be charted to the Military Sealift Command, are scheduled to be delivered to Crowley in 2010. For more information visit www.crowley.com.

Crowley's Busch elected president of the ISU

Crowley Maritime Corp. said Sept. 28 that Todd Busch, the company's senior vice president and general manager of technical services, which includes Crowley subsidiary Titan Salvage, has been elected president of the International Salvage Union. Busch also serves as a director, representing Crowley and Titan on the board of the Marine Response Alliance LLC, and holds two licenses: Master, 100 Gross Tons Inspected Vessel; and Mate, 200 Gross Tons Inspected Vessels.



TODD BUSCH

Elected during the ISU's 55th general meeting in Boston this week, Busch succeeds Arnold Witte, who will continue to be a member of the ISU's executive committee. "It is an honor to serve this fine organization in the capacity of president," said Busch. "Titan has been a proud member for many years and is looking forward to our continued relationship." For more information visit www.crowley.com.

Michel, Weist awarded Crowley's highest honor

Crowley said Aug. 27 that Suz Michel, director of people development and learning for Crowley in Seattle, and Bob Weist, vice president of sales and marketing for the logistics group, were awarded 2008 Thomas Crowley trophies, the company's highest honor. Created in 1985,





SUZ MICHEL

BOB WEIST

only 50 of the company's 4,300-plus employees have been recognized with the limited edition, bronze sculpture depicting young Thomas Crowley as he ferried goods to and from ships on San Francisco Bay in the early 1890s. The trophy serves not only as a tribute to the founder of the company, but also to those honorees who have aligned themselves closely with the company's values and displayed outstanding performance along with dedication, leadership, initiative and productivity. For more information visit www.crowley.com.

Nalen named general manager in Valdez

Crowley Maritime Corp. said Oct. 7 that it has named Charlie Nalen general manager of the company's Valdez operations. In his new position Nalen will be responsible for the entirety of Crowley's marine operations in Valdez including ship assist and escort services for Alyeska Pipeline Service Co.'s ship escort and response vessel system. He will report to Bruce Harland, vice president of contract services. Alaska, and will relocate from Jacksonville, Fla., to Valdez.



CHARLIE NALEN

"Charlie has helped to position Crowley as an industry leader in safety and environmental protection," said Harland."He has taken the corporation to new heights and has earned a tremendous amount of respect from both Crowley customers and industry officials. We are very much looking forward to him

bringing that know-how and focus to the Valdez operation where safety is paramount."

Nelly Yunta named GM of Customized Brokers

Crowley' logistics group said Sept. 8, that Nelly Yunta has been named general manager of Customized Brokers, Crowley's customs brokerage company in Miami. In her new position, Yunta will be responsible for the coordination of operations activities for Customized Brokers, development of policies and procedures, operating results, profit and loss, coordination and negotiation of service provider agreements and business relations development. She will remain domiciled in



NELLY YUNTA

Miami, but will move to the Customized Brokers office and will report to Pat Compres, vice president.

Yunta joined Crowley in 1988 as a senior coordinator in the Miami traffic department. She has a degree in Business Administration from the University of Buenos Aires in Argentina. In 2003, Yunta was awarded the Thomas Crowley Trophy, Crowley Maritime Corp.'s most prestigious award. For more information visit www.crowley.com.

Duoline gives 'rules of thumb' with new literature

Duoline Technologies said Oct. 23 that it has released its new literature "Connection Options," giving customers general rules of thumb for choosing the best connection option, depending on the application. Duoline, an industry leader in solving oilfield corrosion problems through innovative products and services, said that the literature provides detailed information on five connection options it has available. Details on each connection include typical applications. liner dimensions. drift dimensions. pipe sizes and other unique features. Duoline is a unique insert liner process that secures a corrosion resistant material such as glass-reinforced epoxy or PVC inside the



steel pipe, thereby protecting steel tubular, isolating corrosive oilfield fluids and gasses. Since 1964, more than 80 million feet of Duoline have been successfully installed worldwide. For more information visit www.duoline.com.

EFS advised on halon spare parts

Engineered Fire & Safety said Sept. 8 that it has been advised by Kidde-Fenwal Inc., a UTC fire and security company, that halon spare parts will no longer be available for sale or shipment after Dec. 31. In accordance with the Montreal Protocol Treaty, the U.S. ceased the production of halon agent in 1993. Consequently, KFI ceased to provide factory-filled halon systems; it continued to provide empty halon systems and spares. In 2002, KFI discontinued providing empty halon systems, but has maintained an inventory of spare halon components. KFI has serviced the halon-installed base for the last 16 years, but with the decline of sales and spare components, has decided to discontinue support of the halon product line. For more infor-



ExxonMobil, Harris Foundation visit San Diego

ExxonMobil said Jan. 29 that former U.S. astronaut Bernard Harris gave students and teachers in San Diego a first-hand experience with the wonders of science, technology, engineering and mathematics when "The Dream Tour, presented by ExxonMobil" made its first stop of 2010 at Abraham Lincoln High School, speaking to 650 students from Millennial Middle School, Innovation Middle School and Memorial Preparatory School. The tour is designed to encourage today's middle school students to realize their potentials and strive to acquire strong math and science skills. The program included an interactive and inspirational program by Harris, a demonstration on space and engaging dialogue about achieving goals."It is critical that American students are prepared with the problem-solving skills and tools to tackle challenges they may face in the future. Providing them with a strong foundation in math and science education is imperative, and with The Dream Tour, I hope to inspire students to pursue studies and careers in these fields," said Dr. Harris. This year the dream tour will visit Anchorage, Baton Rouge, Billings, Cleveland, Denver, Nashville, Philadelphia, Phoenix, San Diego and San Francisco as Harris continues to motivate and inspire students to pursue math and science. For more information visit www.daring2dream.org.

mation contact EFS at 907-274-7973.

ExxonMobil contributes \$1.8 million to schools

ExxonMobil said Dec. 30 that through its Educational Alliance Program it has awarded \$1.8 million in grants this year to 2,400 schools to enhance math and science programs across the United States. It is the 10th consecutive year for the program, which has provided grants to K-12 educational institutions in 42 states and the District of Columbia. Local schools are eligible to apply for Educational Alliance grants by partnering with their nearby Exxon or Mobil branded retailer, the vast majority of which are independently owned and operated. Since 2000, the program has contributed more than \$18 million to local schools through Exxon and Mobil retailers. ExxonMobil is a long-standing supporter of math and science education, which includes a \$125 million commitment to the National Math and Science Initiative in the United States. Other initiatives include partnerships with former astronauts Bernard Harris and Sally Ride to encourage students to study math and science, and the Mickelson ExxonMobil Teachers Academy, a partnership with PGA golfer Phil Mickelson and his wife, Amy, which has equipped more than 2,000 teacher with innovative tools to inspire students in math and science. For more information visit www.exxonmobil.com/community.

ExxonMobil grants \$500K to Teach for America

ExxonMobil said Jan. 6 that its \$500,000 grant to Teach for America will be used to recruit more than 1,500 top college graduates from across the United States to teach middle-school math and science. The funds will also support Teach for America's rigorous program of pre-service training, ongoing professional development and mentoring for these teachers. "Improving the quality of math and science education in America's classrooms is a primary focus for ExxonMobil because we believe that education is the key to progress, development and economic growth," said Gerald McElvy, president of ExxonMobil Foundation. ExxonMobil has supported Teach for America for 16 years, and in 2009 invested more than \$90 million in education initiatives worldwide. For more information visit www.exxonmobil.com/community.

ExxonMobil receives EPA STAR award

ExxonMobil said Nov. 16 that it has received the 2009 Continuing Excellence award from the U.S. Environmental Protection Agency, under its Natural Gas STAR Program. The program recognizes companies that apply cost-effective technologies and management practices to improve operational efficiency and reduce methane emissions. The Continuing Excellence Award is presented to companies that annually self report to the EPA; continually demonstrate a high level of performance in reducing emissions; implement a variety of technologies and practices; and support the program's activities, initiatives and outreach. ExxonMobil is one of the largest oil and gas producers and reserves holders in the U.S., with a diverse resource and asset portfolio.

HoTH's air carrier group gets new name, logo

HoTH said Nov. 30 that its air carrier operations will have a new name and logo, "Era Alaska," to represent the airline brand for consumers of in-state travel, with individual carriers operating under their own certificates doing business as Era Alaska. "Seamless branding will allow a single shopping path for passenger and cargo services statewide, with connections to and from hub communities throughout bush Alaska. All services provided by the individual Frontier Alaska carriers will be consolidated into one-stop shop for in-state customers," said Bob Hajdukovich, company CEO. The new name and logo will be applied to all signage, company apparel, Web site, reservations systems, freight network, and equipment on or about Jan. 10, 2010. HoTH Inc., an Alaska corporation, is owned by John Hajdukovich, Mike Hageland, and James Tweto, and the parent holding company of Frontier Flying Service, Hageland Aviation Services, Arctic Circle Air Service and Era Aviation Inc.

HoTH announces acquisition of Arctic Circle Air

HoTH Inc., an Alaska corporation owned by John Hajdukovich, Mike Hageland and James Tweto, the parent holding



Hawk awards \$60,000 grant to support ANSEP

Hawk Consultants LLC said Oct. 28 that it has awarded a \$60,000 grant to support the Alaska Native Science and Engineering Program at the University of Alaska Anchorage. The goal of ANSEP is to help change hiring patterns of Indigenous Americans in the fields of science, technology, engineering and mathematics by increasing the number of individuals on a career path to leadership in these fields. Hawk is a long-time supporter of ANSEP and seeks to develop Native Alaskan expertise in the fields of science, engineering and project management. The grant will help ensure that Alaska Natives are ready to build the state's future. Hawk Consultants LLC is an Alaskan-owned firm specializing in project management services supporting client organizations with people and resources to deliver project success.

company of Frontier Flying Service, Hageland Aviation Services and Era Aviation Inc., said Oct. 14 that it has an agreement to acquire 100 percent of the common stock of Arctic Circle Air Service Inc.

Arctic Circle's cargo operation will join the in-state air group doing business as Frontier Alaska effective Dec. 1.

"This acquisition strengthens Frontier Alaska's position in the cargo business in the state of Alaska," said company CEO Bob Hajdukovich. "Both charter services, as well as scheduled services, will benefit from the added capacity and flexibility the acquisition will afford. Arctic Circle Air's two Shorts 330 all-cargo aircraft will complement the existing Frontier Alaska operations and improve the ability to move greater volume and oversized cargo within the state of Alaska."

Lynden Air Cargo assisting with the Haiti relief

Lynden Air Cargo said Jan. 15 that it is using the oversized capacity of its L 100-30 Hercules aircraft to fly rescue vehicles, portable kitchens and other relief supplies to Port-au-Prince, Haiti, after a Jan. 12 earthquake devastated the capital city. Within hours, Lynden Air Cargo pilots were flying relief missions out of Washington, D.C., and they continue to pick up more supplies from U.S. points to deliver in support of humanitarian rescue efforts. "With an urgent need for relief supplies, aid flights are critical to prevent more human suffering. We are coordinating flights as quickly as possible in cooperation with government authorities," said Judy McKenzie, Lynden Air Cargo president. Lynden operates a fleet of six Hercules around the world; the unique features of the aircraft make it ideal for flying aid into isolated disaster areas. For more information visit www.lynden.com.

M-I Swaco touts MD-3 shale shaker

M-I Swaco said Sept. 10 that when space is at a premium but high-performance solids control is required, the new MD-3 shale shaker provides operators with the ability to meet their solids control challenges, offshore or on.

The small footprint of the MD-3 shale shaker, along with its effective solids control options and the ability to adapt quickly to changing drilling conditions, are hallmarks of the compact, high-performance unit. The shaker's footprint matches the popular M-I Swaco BEM-650 shaker to simplify retrofitting into existing shaker houses.



The unique shaker has three decks of automated, effective solids control, translating to lower waste volume as a result of drier cuttings, and comes standard with many features typically considered special-order, including the fume-extraction hood that reduces operator exposure to vapors associated with drilling fluids and prevents fluids from splashing outside the shaker boundaries. For more information visit www.miswaco.com.

NAC awards Fowler memorial scholarship

Northern Air Cargo said Oct. 1 that Clyde Hoffman, a junior at the Atheneum School of Anchorage, was the recipient of the second annual William Dix Fowler Memorial scholarship.

The scholarship consists of annual awards of \$1,000 each to worthy recipients, chosen by the school. Hoffman, this year's recipient, was chosen for his leadership and dedication to learning. "I've met Clyde, and I don't think they could have made a better choice for this award. We are grateful to be able to do something like this in Bill's name," said Margot Wiegele, NAC's director of marketing and communications. Fowler was the president of Northern Air Cargo from 2001 until March of 2008, and was also actively involved in supporting the Atheneum School.

NAC lands in Haiti in support of relief efforts

Northern Air Cargo said Jan. 18 that one of its Boeing 737 aircraft landed in Port-au-Prince, Haiti, in support of earthquake relief efforts in the region. The company anticipates flying many more flights in the coming weeks. NAC has had one of its aircraft based in Texas flying domestic and international charters since December, so it was available to respond quickly. "We are well aware of the gravity of the situation in Haiti, and we are glad we had an aircraft available to help," said company spokeswoman Margot Wiegele. "We have the capacity to stay in the region for the next several weeks if the need exists." For more information visit www.northernaircargo.com



NAC opens freight service center

Northern Air Cargo said Aug. 4 that it is proud to announce the opening of the NAC Shack on its Anchorage ramp facility.

As part of a continuing effort to make shipping easier for customers, NAC has created the new customer service center for receiving oversized freight, and can now process large flatbed trucks with oversized loads with one-step outdoor shipping, avoiding the need to go inside for paperwork.

For extra quick processing, drivers can call ahead to 771-1616, or pull up to the back gate. Customers can expect to spend less time standing in line and more time getting back to business. NAC expects this addition will also result in shorter wait times for its customers with small shipments.

NAC division to provide ground handling for UA

Northern Air Cargo said Feb. 8 that its Northern Air Services division has signed an agreement with United Airlines to provide ground handling services at Ted Stevens Anchorage International Airport beginning in May. NAAS will provide above- and below-wing services to United including passenger check-in, baggage handling, ramp control and related operational services. The company plans to hire up to 90 seasonal workers beginning in April. "We are looking forward to expanding our services at the airport through supporting United's return to the market," said company spokeswoman Margot Wiegele. "We're looking for good people who are experienced in airport operations and want to join a great team."

Peak expands Cook Inlet division operations

On Oct. 23 Cook Inlet Region Inc.'s Web site carried an article reporting on Peak Oilfield Service Co.'s Cook Inlet division expanding its operations in CIRI's home region. With improved infrastructure and equipment, Peak, a subsidiary of CIRI and Nabors, has positioned itself to capitalize on increasing oil and gas exploration in the Cook Inlet region through 2010."There are two main reasons for our success," said Ben Cleveland, Peak's vice president who oversees the Cook Inlet division. "Our safety record is really good, and our equipment fleet is reliable and



fairly new, thanks to the investments of our owners."The Cook Inlet division provides construction and maintenance services to the Kenai petrochemical industry. The division's Cook Inlet oilfield support includes operations, construction, drilling and maintenance assistance to Chevron, ConocoPhillips, Tesoro, Marathon and Kenai Pipeline Co. at 11 offshore platforms and five onshore facilities. Recent projects completed by the Cook Inlet division include replacing an old Anchorage power plant for Municipal Light & Power. Peak was awarded the \$25 million contract in January 2006, and completed the work in 2007. Peak is also providing logistics and drilling support for ConocoPhillips' drilling at the Beluga Gas Field.

Rain for Rent introduces HD6 pipeline pump

Rain for rent said Oct. 30 that its latest product to join the fleet is the Premier Pump HD6 pipeline pump, complete with exclusive features designed specifically for the rugged cross-country pipeline market. The HD6 pipeline pump is an all-purpose 6-inch pump, producing flows exceeding 2,700 gallons per



minute, heads to 165 feet and able to pass 3-inch solids. The pump has a smaller carbon footprint than other pumps in the market, a galvanized fuel tank, and a protection cage protects the pump at remote locations. It will never rust and has the capacity to run 24 hours before refueling. For more information visit www.rainforrent.com.

Rain for Rent's latest, innovative pipe wraps

Rain for Rent said Oct. 7 that its latest innovation in liquidhandling solutions, Freeze Sentry pipe and manifold wraps, prevent water from freezing and maintain a constant temperature to protect equipment and expensive materials.

The Freeze Sentry pipe and manifold wraps are made with a highly durable, lightweight composite vinyl. Consistent heat is transmitted throughout the length of the wrap to facilitate a constant flow of liquid through the pipes, even in extreme subzero temperatures. The design provides a trouble-free, depend-



Rain for Rent offers new online portal

Rain for Rent said Feb. 3 that it has launched a newly enhanced online customer portal. The new customer portal allows customers to access their accounts through the Rain for Rent Web site, www.rainforrent.com. Now customers can view account data, rental status, download invoices or equipment reports on demand, and set up report subscriptions in a variety of formats. For more than 75 years and now through 60 locations, Rain for Rent, a rental market leader, provides liquid-handling solutions to industrial, municipal, environmental, construction, and petrochemical customers nationwide.

able, and cost-saving way to control equipment temperatures with fast, consistent heat. For more information visit www.rainforrent.com.

Rain for Rent's PWQMS designed to be versatile

Rain for Rent said Dec. 30 that its Portable Water Quality Monitoring System is designed to help keep remote watch over discharge flow, and to ensure that the flow meets discharge requirements.

The compact turnkey system within the PWQMS is capable of handling flow up to 1,000 GPM while simultaneously monitoring, data logging, and injecting chemicals or polymer as needed to adjust conditions in the flow. The PWQMS is



designed with versatility in mind; the most common parameters monitored are pH and turbidity, but the system can be designed to monitor many constituents, like DO and ORP, by changing the input sensors. All information is recorded and can be sent to your PDA or computer for remote notification, allowing you to verify flow is meeting discharge requirements at all times. For more information visit www.rainforrent.com.

Rain for Rent's Freeze Sentry product line

Rain for Rent said Sept. 2 that its latest innovation in liquidhandling solutions, the Freeze Sentry heater product line, prevents water and expensive liquids from freezing and maintains a constant temperature to protect equipment. The Freeze Sentry line is available in various configurations to cover pipe, manifolds, wellheads, pump volutes, barrels, boxes, frac tanks, upright tanks, water-truck valves and more, all while maintaining clear access to critical valves. For more information visit www.rainforrent.com.

BC expands senior global leadership team

Schlumberger said Dec. 3 that its management consultancy arm, SBC, appointed five vice president-level staff to help meet its continually growing business and coincide with the launch of four new offices in New York, Delhi, Rio de Janeiro, Beijing and Abu Dhabi. "Since its launch five years ago, SBC has been about transforming the world's energy business for the 21st Century. The brainpower we've just brought on board is only helping us to do so quicker and the senior management team we now have in place represents the finest in management consultancy," said Antoine Rostand, president of SBC. Launched in 2004, SBC has rapidly grown to become one of the world's largest energy sector management consultancy firms. It works with global energy leaders and many of the world's IOCs, NOCs and independents.

Schlumberger introduces MaxCO Acid system

Schlumberger said Dec. 7 that it has released its new MaxCO Acid degradable diversion acid system. This new polymer-free, non-damaging acidizing system can be used for both matrix and fracture stimulation in carbonate reservoirs with permeability contrasts or natural fractures. The MaxCO Acid system is designed to be used in oil or gas well in both open-hole and casedhole intervals, regardless of deviation. Treatment design, execution and evaluation are optimized using Schlumberger proprietary software applications. Applications of MaxCO Acid yielded a 500 percent production increase from an acid fracturing treatment in the Bluell formation in North Dakota. Elsewhere around the world, productivity increases in excess of 100 percent are frequently achieved, with significant improvements being made to efficiency operations. For more information visit www.slb.com.

SLB and NOV form IntelliServ joint venture

Schlumberger said Sept. 28 that it, along with National Oilwell Varco, has created a joint venture to provide high-speed drill string telemetry systems to improve the efficiency and safety of oil and gas operations.

The IntelliServ joint venture is expected to accelerate development and delivery of intelligent drilling solutions through the expanded use of the IntelliServ Broadband Network, a patented technology that provides high resolution data in real time to and from the bottom of oil and gas wells as they are being drilled. IntelliServ also will provide along-string evaluation services that will enable real-time monitoring of drill string conditions, and an unlimited ability to actuate downhole tolls on-demand.The current speed of 57,600 bits per second is up to 20,000 times faster than the transmission speed that is available using conventional mud pulse technology. For more information visit www.slb.com.

Schlumberger, Technip announce joint pact

Schlumberger said Nov. 19 that it has signed a global cooperation agreement with Technip to jointly develop subsea integrity and surveillance solutions for flexible pipes used in deep offshore oil and gas production. The new agreement extends the collaboration between the companies that began in 1998, and is initially focused on surveillance systems activities for new and challenging flexible pipe applications such as those required in the deepwater pre-salt environment in Brazil. Several key Schlumberger technologies used in the subsurface applications have been indentified for integration into Technip's new Ultra Deepwater flexible pipe designs. One of the initial integrity solutions that the partners expect to develop and qualify is focused on the use of optical fibers to monitor a variety of parameters characterizing pipe behavior. For more information visit www.slb.com.

Schlumberger, Chevron announce Intersect

Schlumberger said Oct. 5 that it, in conjunction with Chevron Energy Technology Co., has released Intersect, a nextgeneration software to enable simulation of large complex reservoirs and highly heterogeneous systems. The technology is the result of extensive research collaboration and joint development effort between the two companies beginning in 2000.

Going beyond capabilities offered by the current generation of simulators, Intersect runs large and heterogeneous models, simulating tens of millions of cells, fast. It also accurately models complex geology and wells, honoring detailed reservoir characterizations with minimal or no upscaling. Supporting sophisticated field management, it handles thousands of wells in mature fields, as well as simulating all fluid types and recovery processes in a single simulator. Advanced controls enable flexible operational field management."Intersect was possible only through close cooperation between Chevron and Schlumberger. Both companies have been developing and using simulators for several decades and have accumulated significant knowledge as a result," said Jeff Spath, president, Reservoir Management group, Schlumberger."This jointly developed product has leveraged the collective expertise of our engineers in managing global oil and gas reservoirs, as well as our leadership and experience in simulator development." For more information visit www.slb.com.

Schlumberger appoints chief operating officer

Schlumberger said Feb. 8 that its board of directors has appointed Paal Kibsgaard chief operating officer of Schlumberger Ltd. effective immediately. Reporting to Andrew Gould, chairman and chief executive officer, Kibsgaard will be responsible for the day-to-day management of all worldwide operation in addition to the Schlumberger technology organization, including engineering, manufacturing and product development. Previously, Kibsgaard was president of the Reservoir



PAAL KIBSGAARD

Characterization Product Group, responsible for the management of the WesternGeco, Wireline, Drilling & Measurements and Testing Services product lines. Schlumberger is the world's leading supplier of technology, integrated project management and information solutions to customers working in the oil and gas industry worldwide. For more information visit www.slb.com.

Schlumberger touts temperature sensing service

Schlumberger said Dec. 8 that it has released its OPTICall thermal profile and investigation service. This new distributed temperature sensing service tracks fluid movements in real time along the wellbore, helping to detect leaks, monitor gas lift and evaluate fractures to improve field productivity. The OPTICall service is enabled by OpticLine fiber-optic line, which provides a thermal profile along the entire length of the line continuously in realtime, providing immediate answers on site. This fiber-optic line, which is deployed in a single run using slicklinetype intervention, monitors dynamic temperature events with minimal interference. OpticLine can also run conventional production logging tools in memory mode while monitoring, for single-trip efficiency. For more information visit www.slb.com/OPTICall.

Schlumberger reservoir center in Saudi Arabia

Schlumberger said Oct. 6 that it has opened a new reservoir completions manufacturing center in Dammam, Kingdom of Saudi Arabia. The new center represents an investment of approximately \$25 million in state-of-the-art manufacturing equipment, facility, lease and inventory and houses a team of design and manufacturing engineers specialized in the production of customized downhole reservoir completions equipment. More particularly, the center provides a collaborative environment in which joint oil company and Schlumberger teams can develop and manufacture completions solutions for applications across the range of reservoir types found in the Kingdom of Saudi Arabia and the Middle East.

Schlumberger is the world's leading supplier of technology, integrated project management and information solutions to customers working in the oil and gas industry worldwide. For more information visit www.slb.com.

Schlumberger's new cased hole services tractor

Schlumberger announced the release of its new TuffTRAC cased hole services tractor Sept. 8 at the 2009 SPE Offshore European Oil and Gas Conference. This new tractor is the industry's shortest, and is the only tractor with full reverse active traction control capabilities. The new tractor runs on multiconductor wireline cables. A maximum string of six drive sections can be deployed in tandem for a tough-duty true 1,800 pounds of pushing power. The active traction control provides the ability to monitor and change the pres-



sure on each drive wheel to optimize traction in either direction. The system's robust power pack can operate to 350 degrees Fahrenheit and 20,000 pounds per square inch, without



Schlumberger releases SenTurian in-riser system

Schlumberger said Sept. 9 that it has released its Sen-Turian subsea landing string electrohydraulic operating system. Technological advances have resulted in an innovative, shorter modular system, which allows safe, reliable and efficient completion installation, well cleanup and well testing from a dynamically positioned vessel in water depths to 15,000 feet.

SenTurian is the world's first and only in-riser system designed and certified in accordance with the International Electrotechnical Commission's IEC 61508 SIL 2 reliability specifications for safety-related systems. IED is the international standards and conformity assessment body for all fields of technology. In addition, the design enables compliance with ISO 13628-7 standards by providing electronic redundancy and pressure readout for each subsea function. For more information visit www.slb.com/senturian.

requiring cool-down periods. The tractor includes a built-in tension sub, electrical release hub, casing collar locator, addressable tractor perforating safety switch and shock absorber. For more information visit www.slb.com/tufftrac.

Solstice Advertising receives MarCom Awards

Solstice Advertising LLC said Oct. 30 that it has been awarded nine international MarCom Awards, four of which are at the platinum level. The agency also received four gold awards and one honorable mention. The MarCom Awards is an international competition for marketing and communication professionals, and is the largest and most well-known competition of its kind in the marketing, communications and design industries. Entries come from corporate marketing and communication departments, advertising agencies, public relations firms, design shops, production companies and freelancers. Solstice Advertising LLC is a full-service communications firm that specializes in innovative branding solutions, believing that effective marketing stems from respect for client individuality, as well as the ability to leverage their unique assets to enhance growth. For more information visit www.solsticeadvertising.com.

Stoel Rives expands corporate services in Alaska

Stoel Rives LLP said Dec. 14 that corporate attorneys William H. Timme and John D. Kauffman have joined the firm's Anchorage office. Timme has spent more than 35 years counseling mostly Alaska Native corporation clients. Over the years, Timme has helped his clients address a broad gamut of issues, from initially implementing ANCSA, to negotiating oil and gas and mineral exploration programs, handling net operating loss sales, advising clients

regarding EVOS Trustee Council acquisitions and handling general corporate and transactional matters. Kauffman makes the move from the Stoel Rives Seattle office, where he has represented corporate management, investors and entrepreneurs on a variety of business and strategic issues over the last 10 years. Established in October 2008, the Stoel Rives Anchorage office provides local solutions for Alaska-based clients with interests in



WILLIAM H. TIMME



JOHN D. KAUFFMAN

Alaska on corporate, energy, environmental, labor and employment, commercial litigation, intellectual property and white collar criminal defense matters. For more information visit www.stoel.com.



TA Structures manufactures NMS guard shacks

TA Structures said Jan. 19 that it has created six units to be used as guard shacks for NANA Management Services on Alaska's North Slope. A division of Twin Anchors Houseboat Manufacturers, TA Structures has helped the company stay afloat during tough economic times by broadening its manufacturing opportunities. "The units are 20 feet long and 10 feet wide. They have a work area, a dry kitchen including microwave, small fridge and counter space, a bathroom with an incinerator toilet, lockers, and fold down bed," said Buddy Rich, sales manager for TA Structures. "There isn't any like this on the North Slope," said Joe Liska, representative from Nana Management Services. TA Structures provides clients throughout North and South America with the finest quality modular worksite accommodations; these modular building units are built with superior materials and superb craftsmanship. For more information visit www.tastructures.com.

John Parrott named new TOTE president

Totem Ocean Trailer Express Inc. said Dec. 16 that John Parrott has been promoted to company president, replacing TOTE's former president, Bill Deaver, who had been with the company since 2002. Parrott joined TOTE in 1992 as first officer of the S.S. Northern Lights, later serving as the general manager for Sea Star Stevedoring, which manages the loading, discharge and terminal operations for TOTE. In 1996 he joined Sea-Land as a marine superintendent; in June 2002 he became the



JOHN PARROTT

general manager of TOTE's Alaska Division; was promoted to vice president and general manager in 2004; and has served as vice president, commercial, since July 2006. "I have always considered being a TOTE employee a privilege, and I am truly honored to be able to lead the company forward into the next decade," said Parrott.

Unique Machine receives accreditations

Unique Machine LLC said Dec. 11 that the American Petroleum Institute, after completing a full review of Unique Machine's quality programs, has granted API Monogram License No. 5CT-1163 and API Monogram License No. 7-1-0758 to Unique Machine's products stated in API Spec 5CT and API Spec 7-1. In addition, Unique Machine's facility quality management system was found to be in conformance of requirements for the APIQR program. This program includes ISO 9001:2008, Q1-0456 for API SPEC Q1 and TS-0268 for ISO/TX 29001. "These accreditations reflect our on-going commitment to improve our quality management system and our desire to better serve our customers throughout the state," said Pat Hanley, general manager of Unique Machine.

URS awarded 3-year IDIQ contract

URS Corp. said Nov. 20 that it has been awarded a three-year indefinite delivery-indefinite quantity contract for aircraft maintenance and modification. The contract was ordered by the U.S. Army CERDEC Flight Activity, Fort Monmouth, N.J., and was awarded through the EG&G's Division General Services Administration Logistics Worldwide Schedule. Under the contract, URS will provide an array of services including, aircraft maintenance and modification; engineering and technical support; customer assistance and technical support; logistics and operations management; and aviation ground support and tool reset. URS Corp. is a leading provider of engineering, construction and technical services for public agencies and private sector companies around the world.

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