



page 4 Sims takes Enstar helm; Green new AltaGas Canadian Utilities president

This week's Mining News

NEWS NUGGETS
Compiled by Shane Bailey

Constantine expands high-grade discovery, drill program at Palmer
Constantine Mineral Resources Ltd. Aug. 17 reported additional long, high-grade intercepts from exploration drilling at the Natakuk AG zone, a volcanogenic massive sulfide discovery located about 3,000 meters south of the South West Hill discovery at the Palmer project in Southeast Alaska. The discovery hole at Natakuk AG, reported in July, cut 92 meters of massive barite-sulfide averaging 31.2 grams per metric ton silver and 0.9 g/t gold. CMB17-02, drilled about 140 meters south of the discovery hole, cut 17.8 meters grading 11.7 percent zinc, 0.2 percent copper, 0.3 g/t silver and 0.2 g/t gold, and a 7-meter grading 5.7 percent zinc, 2.2 percent lead, 0.1 g/t silver, 0.2 g/t gold, CMB17-04, drilled 50 meters from hole 92, cut 24.4 meters grading 29.6 g/t silver, 0.3 g/t gold, 0.5 g/t copper, 1.4 percent zinc and 0.5 percent lead, including a 10.3-meter section averaging 44.1 g/t (14.2 gpt) silver, 0.9 g/t gold, 2 percent zinc and 0.7 percent lead. The fourth hole, drilled at Natakuk AG, CMB17-06, cut 20.4 meters grading 0.9 percent zinc, 0.2 percent copper, 1.4 g/t silver and 0.1 g/t gold. No barite was mineralized at Natakuk. CMB17-01, 100 by 50-meter area and to a depth of about 200 meters. Garfield MacVegh, President, states "The initial four holes endorsed for the AG Zone discovery have defined a significant new zone of mineralization that is wide open to expansion." "While it is very early days in our exploration of the AG Zone, the length, grade and intensity of hydrothermal alteration indicate excellent potential for a sizeable deposit. The discovery is a major new development for the Palmer project and we look forward to the results of ongoing exploration drilling." Given the success at Natakuk, AG, Constantine and Palmer President, Dena Menikoff & Mining, has expanded the 2017 drill program at Palmer to 10,000 meters.

Drilling, sampling expand gold zone, find new targets at Unga
Redstar Gold Corp. Aug. 23 reported that the initial phase of drilling at its Unga project on the Alaska Peninsula has extended the Shumagin gold zone. "Preliminary drilling has extended the known strike length of Shumagin to 1,600 meters by intersecting the Shumagin structure at 11 out of 12 holes," said Redstar President and CEO Peter Bell. "The summer drill program was designed to understand and to test a previously un-drilled area extending about 500 meters southeast of Shumagin zone. Two drill holes - 1753013 and 1753014 - targeting a 100-meter gap in the Shumagin zone. Hole 13 cut 0.7 meters averaging 5.7 grams per metric ton gold by a g/t.

Expanding Pyramid copper
Drills target higher grade expansion zones at Alaska Peninsula project
By SHANE BAILEY
Hilcorp
CopperBank Resources Corp. sees the need for "renewable energy sources and believes its Pyramid copper-gold-silver project on the Alaska Peninsula ideally suited to help fill that demand." CopperBank was founded by self-proclaimed "renewable energy entrepreneur" Gianni Kovacevic, who drove a Tesla Model S across North America last year to raise awareness about the symbiotic relationship between the mining and green energy sectors. Kovacevic considers copper and energy metal, given its importance to electric vehicles, renewable energy sources and electricity transmission. "The greener and cleaner we create and utilize energy, the more that is demanded of electricity... and of course, copper plays a very important role in that relationship," said before setting off on his Tesla Tour. CopperBank's Pyramid property boasts roughly 1.1 billion pounds of copper in 122.5 million metric tons of inferred resources averaging 0.41 percent copper, 0.1 grams per metric ton gold and 0.021 percent molybdenum, according to resource calculated in 2015. CopperBank is now looking to upgrade and grow this resource with a drilling currently underway, the first program carried out since it acquired Pyramid from Full Metal Minerals in 2014. "This long anticipated drilling program will give our technical team the direction for next steps in the development of the project, and specifically a better view of the higher grade sections of the deposit," said CopperBank Executive Chairman and CEO Gianni Kovacevic. "This long anticipated drilling program will give our technical team the direction for next steps in the development of the project, and specifically a better view of the higher grade sections of the deposit." —CopperBank CEO Gianni Kovacevic. Two zones - Main and North - that demonstrate the potential to increase the grade and size of the Pyramid deposit. To expedite its 2017 program, CopperBank added a second drill in July. "Having two drill rigs on site will enable our team to have a dedicated machine to each of the Main and North zones, said Kovacevic. "Our plan is to finance enough drilling to ensure the important holes in each zone are completed, then our team can assess results to determine where future meters should be focused." One of the most intriguing areas being targeted is situated in 199316, a hole drilled by Full Metal Minerals in 2011. This hole cut 153 meters of 0.71 percent copper, 0.18 g/t gold and 0.018 percent molybdenum, which is significantly higher than the average resource grade. It is an intercept at the bottom of this hole, however, that is most intriguing. The first 14 meters of hole 16, which was drilled to a depth of 209 meters, averaged 0.44 percent copper and was still cutting mineralization, indicating that this higher grade copper continues. CopperBank is drilling at least three holes near hole 16. Two holes already completed west of hole 16 were drilled to 380 and 400 meters. Another hole is being drilled to the east. With the known 14 meters of hole 16 cut included in the resource, the 2017 drill holes being drilled in this area have the potential to both

EXPLORATION & PRODUCTION

Hilcorp's plan proposed

Preferred option in Liberty EIS involves a gravel island and subsea pipeline

By ALAN BAILEY
Petroleum News

Hilcorp Alaska's plan for developing the Liberty oil field in the Beaufort Sea is spelled out in the draft environmental impact statement that the Bureau of Ocean Energy Management issued on Aug. 17. The Liberty field is on the federal outer continental shelf, in Foggy Island Bay, about 15 miles east of Prudhoe Bay. The development plan proposed in the EIS involves the construction of an artificial gravel production island about five miles offshore and the laying of a buried subsea pipe-in-pipe pipeline to carry crude oil to shore. The pipeline would connect with the existing Badami pipeline for transporting the Liberty

The proposed option would place the 9.3-acre Liberty drilling and production island in about 19 feet of water, about five miles north of the Kadleroshilik River and 7.3 miles southeast of the Endicott satellite drilling island.

oil to the trans-Alaska pipeline.

The draft EIS, which contains a detailed evaluation of the potential environmental impacts of the development, is now entering a public comment period. BOEM requires comments on the document by Nov. 18 — public meetings have been

see LIBERTY EIS page 16

UTILITIES

Steady progress

Railbelt utilities tell RCA about status of transmission grid unification

By ALAN BAILEY
Petroleum News

The Alaska Railbelt electric utilities are moving steadily towards the formation of a transmission company, or transco, to operate the region's power transmission grid, utility executives told the Regulatory Commission of Alaska on Aug. 23. T.W. Patch, spokesman for the utilities, told the commissioners that in the first quarter of this year all of the utilities committed to negotiate and finalize a transco business plan and proposal. The expectation now is to complete a proposal for the consideration and approval of utility boards by the end of the year. That should lead to an application to the RCA at some time in the first half of 2018 for a certificate of conven-

The transmission grid, which runs from the southern Kenai Peninsula north through the Anchorage region to Fairbanks in the Interior, supports six independent utilities operating in the region.

ience and necessity for the transco, together with proposed tariffs for transmission grid use. The expectation would then be to have a ruling by the RCA on the transco proposal by the end of 2018.

American Transmission Co., a Wisconsin transco, has been assisting the six Railbelt utilities to investi-

see GRID UNIFICATION page 14

EXPLORATION & PRODUCTION

Off-road exploration

Accumulate moving west from Franklin Bluffs for 2 wells planned for this winter

By KRISTEN NELSON
Petroleum News

Accumulate Energy Alaska Inc., the local operating company for Australia-based 88 Energy, has begun permitting for two winter exploration wells — Bravo 1 and Charlie 1. The company has drilled two Icewine wells from the Franklin Bluffs gravel pad south of Deadhorse and adjacent to the Dalton Highway, and is testing Icewine 2. Because the existing gravel pad is accessible year-round, that work did not require ice roads or ice pads.

The new wells will be 22 to 25 miles west of the Franklin Bluff gravel pad, Accumulate said in an application to the Alaska Department of Environmental Conservation for an update its oil

The tundra winter ice road will be constructed starting from mile post 386.5 of the Dalton Highway to the proposed Bravo ice pad and then an access road will be constructed from the Bravo pad to the proposed Charlie pad

discharge prevention and contingency plan.

Accumulate said in its application that Icewine 1, an exploration core hole drilled at the Franklin Bluffs pad "found oil bearing formations that cannot flow to surface on an unassisted basis."

The Icewine 2 exploration flow test well, drilled at Franklin Bluffs earlier this year, was designed to

see ACCUMULATE WELLS page 13

CopperBank Resources Corp. believes its Pyramid project on the Alaska Peninsula is suited to help fill copper demand. See page 7.

Hilcorp plans four stratigraphic test wells south of Anchor Point

Hilcorp Alaska LLC is planning an exploration program near Anchor Point.

The Alaska Oil and Gas Conservation Commission recently issued permits for the local subsidiary of the Texas-based independent to drill as many as four wells at the Seaview prospect. The Seaview No. 1, Seaview No. 2, Seaview No. 4 and Seaview No. 5 wells are described in AOGCC documents as vertical "stratigraphic test" wells. The wells would be drilled on private land, except for Seaview No. 2, which is partly on ADL 392667.

ADL 392667 sits along the coast of the southern Kenai Peninsula immediately south of Anchor Point and the BlueCrest-operated Cosmopolitan unit, in a cluster of Hilcorp
see TEST WELLS page 13

RCA accepts TAPS filings, rejects objections to rate refund amounts

The Regulatory Commission of Alaska has issued an order accepting pipeline rate refund calculations filed by four trans-Alaska pipeline owners in response to a February 2016 decision by the RCA over a major pipeline system upgrade known as strategic reconfiguration. In accepting the refund filings, the RCA has rejected objections by Anadarko Petroleum, Tesoro Alaska Co. and the state of Alaska to the manner in which the refunds were calculated. The objectors to the calculations are all shippers of oil on the pipeline system — they have questioned the recovery by the owners through the pipeline rates of costs associated with the strategic reconfiguration rate case.

Strategic reconfiguration involved the replacement of the original turbine-powered pumps that drove oil through the pipeline

see TAPS FILINGS page 15

● PIPELINES & DOWNSTREAM

Minnesota releases Enbridge line review

By **STEVE KARNOWSKI**

Associated Press

Minnesota regulators on Aug. 17 released the final environmental review of Enbridge Energy's proposal to replace its aging Line 3 oil pipeline, which carries Canadian tar sands crude across northern Minnesota to Wisconsin.

The state Commerce Department has updated and expanded the massive document since it released the draft for public comment in May. Changes include additional discussion of the socioeconomic impact of the project, the potential impact on tribal resources and the potential impact of oil spills, as well as the inclusion of public comments, the department said. In the process, the main document grew to just over 2,000 pages, plus around 12,000 pages of appendices.

The review will inform the state Public Utilities Commission as it decides whether the project is needed and what route it should take. The commission is scheduled to decide by Dec. 11 whether the final review meets the legal requirements, and to decide on April 30 whether to give its ultimate approval to the pipeline and its route. Administrative law judges will hold hearings and take more public testimony along the way.

Replacement line

Calgary, Alberta-based Enbridge proposed the \$7.5 billion project because the old pipeline is now restricted to 390,000 barrels per day and its maintenance needs are growing. The replacement would restore the original capacity of 760,000 barrels per day. The company says Line 3 is a vital

link in its network, and the replacement would help it continue to meet the demand for Canadian oil from refineries in Minnesota, Wisconsin and elsewhere.

Tribal and environmental groups are fighting the project. Like the draft, the final review says any of the routes "would have a disproportionate and adverse effect on tribal resources and tribal members."

Enbridge built Line 3 in the 1960s to carry Canadian crude from Hardisty, Alberta, to its terminal in Superior, Wisconsin. The route clips a corner of North Dakota before it crosses into Minnesota. The company wants the replacement to follow the existing path as far as its terminal in Clearbrook, Minnesota, then take a more southerly new route to Superior.

Opposition to route

Enbridge's preferred route has drawn opposition because it would cut through the Mississippi River headwaters region and the pristine lake country of northern Minnesota, where Ojibwe bands harvest wild rice and hold treaty rights. However, it would avoid two reservations crossed by the existing Line 3 — Leech Lake and Fond du Lac — where approval by the tribal governments would be unlikely. The review also studied four alternative routes without recommending one over the other, as well as continued use of the existing pipeline, which Enbridge wants to shut down permanently but leave in place.

The Commerce Department held public meetings at 22 sites this summer to take comments on the draft. Those meetings drew Native American activists and environmentalists who say the pipeline poses unacceptable risks of oil spills in sensitive areas and would contribute to climate

change by fostering more production of Canadian tar sands crude, which takes more energy to produce than conventional crude.

Those meetings also attracted labor and business groups that say the project will bring more than 1,500 construction and related jobs to the state and provide ongoing tax benefits to local governments along the route.

Mass protests threatened

Native American groups including Honor the Earth, which is led by Winona LaDuke, have threatened mass protests that would echo the fight over the Dakota Access pipeline near the Standing Rock Reservation in the Dakotas, which stalled work for months. Enbridge owns a minority stake in that pipeline, which began carrying oil from North Dakota to Illinois in June. The Minnesota Chippewa Tribe and the National Congress of American Indians are among the Native groups that have passed formal resolutions against the project.

A Commerce Department tribal liaison, Danielle Oxendine Molliver, resigned in July. She said she didn't think the state was dealing with the tribes in good faith and that she was pushed to the side during the public comment meetings because Enbridge considered her biased.

Despite the document's enormous size, the Sierra Club said it's still "half-baked" and incomplete. The environmental organization's state director, Margaret Levin, said in a statement that it's clear the department didn't have time to review all the public and technical comments that were submitted. She added that the review still doesn't properly address concerns about the risks of the project or adequately assess alternatives. ●

contents

Petroleum News

North America's source for oil and gas news

ON THE COVER

Hilcorp's plan proposed

Preferred option in Liberty EIS involves gravel island, subsea pipeline

SIDEBAR, Page 16: Hilcorp applies for WOTUS permits for Liberty

Steady progress

Utilities tell RCA about status of transmission grid unification

Off-road exploration

Accumulate moving west from Franklin Bluffs; 2 wells planned

Hilcorp plans four stratigraphic test wells south of Anchor Point

RCA accepts TAPS filings, rejects objections to rate refund amounts

EXPLORATION & PRODUCTION

11 DOG releasing more exploration data

GOVERNMENT

5 Walker, Mallott file for re-election

11 EPA, Corps extend WOTUS comment period

INTERNATIONAL

6 Total expands with purchase of Maersk Oil

LAND & LEASING

4 Ramshorn transfers interests to Nabors

PIPELINES & DOWNSTREAM

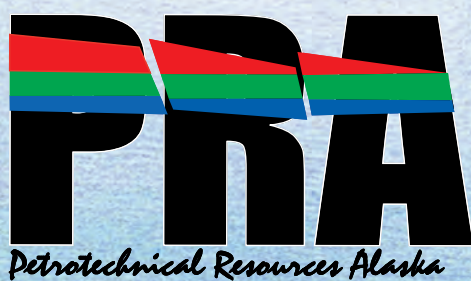
2 Minnesota releases Enbridge line review

4 Sims named as president of Enstar

6 Energy Transfer Partners sues Greenpeace

Petroleum
news

To advertise: Contact Susan Crane
at 907.770.5592



Petrotechnical Resources Alaska

Alaska's
Oil and Gas
Consultants

Geoscience
Engineering
Project Management
Seismic and Well Data



3601 C Street, Suite 1424
Anchorage, AK 99503
(907) 272-1232
(907) 272-1344
www.petroak.com
info@petroak.com

Congratulations

Hats off to ConocoPhillips!

Congratulations on your recent good news:

- DNR approval of expansion of the North Slope Colville River unit to include Tofkat leases.
- Completion of facilities at the 1H NEWS development in the Kuparuk unit.
- Completion of key infrastructure components at GMT-1 in Greater Mooses Tooth.



Joe Marushack,
President of ConocoPhillips Alaska

- | | | |
|--|-----------------------------------|--|
| ABR | Chugach Alaska Energy Services | Lynden Transport |
| AECOM Environment | CIVEO | Mapmakers of Alaska |
| aeSolutions | Colville Inc. | MAPPA Testlab |
| Afognak Leasing LLC | Computing Alternatives | Maritime Helicopters |
| Air Liquide | CONAM Construction | Michael Baker International |
| Alaska Dreams | Construction Machinery Industrial | Nabors Alaska Drilling |
| Alaska Earth Sciences | Crowley Solutions | NANA WorleyParsons |
| Alaska Frontier Constructors (AFC) | Cruz Construction | NEI Fluid Technology |
| Alaska Gasline Development Corporation | Denali Universal Services (DUS) | Nordic Calista |
| Alaska Marine Lines | Dowland-Bach Corp. | North Slope Telecom |
| Alaska Railroad | Doyon Anvil | Northern Air Cargo |
| Alaska Rubber & Rigging Supply | Doyon Associated | Northern Solutions |
| Alaska Steel Co. | Doyon Drilling | NRC Alaska |
| Alaska Textiles | Doyon, Limited | Olgoonik Corp. |
| Alaska West Express | Equipment Source Inc. (ESI) | PENCO |
| Alpha Seismic Compressors | exp Energy Services | Petroleum Equipment & Services |
| American Marine | EXPRO Group | Petro Star Lubricants |
| Arctic Catering & Support Services | Fairweather | PND Engineers Inc. |
| Arctic Controls | Flowline Alaska | PRA (Petrotechnical Resources of Alaska) |
| Arctic Foundations | Fluor | Price Gregory International |
| Arctic Fox Environmental | Foss Maritime | Resource Development Council |
| Arctic Slope Regional Corporation | Fountainhead Hotels | SAExploration |
| Arctic Slope Telephone Assoc. | Fugro | SafeVision, LLC |
| Co-op (ASTAC) | GCI | STEELFAB |
| Arctic Wire Rope & Supply | Global Diving & Salvage | Sourdough Express |
| Armstrong Energy, LLC | GMW Fire Protection | Summit ESP |
| AT&T | Greer Tank & Welding | Tanks-A-Lot |
| Automated Laundry Systems & Supply | Guess & Rudd, PC | The Local Pages |
| Avalon Development | Inspirations | Udelhoven Oilfield System Services Inc. |
| Aviator Hotel | Judy Patrick Photography | Unique Machine |
| BELL & Associates | Kuukpik Arctic Services | Usibelli |
| Bombay Deluxe | Last Frontier Air Ventures | Volant Products |
| BP | Little Red Services, Inc. (LRS) | Waste Management |
| Brenntag Pacific | Lounsbury & Associates | |
| Brooks Range Supply | Lynden Air Cargo | |
| Calista Corp. | Lynden Air Freight | |
| Carlile Transportation | Lynden Inc. | |
| Certek Heating Solutions | Lynden International | |
| CH2M | Lynden Logistics | |



A Complete Solutions Provider for Alaska's Remediation Industry

WM Energy Services

Waste Management Energy Services offers a variety of oilfield related services and solutions including on-site and off-site water and solids management, materials tracking and reporting along with permitting and compliance assistance.

ALASKA CONTACTS:

Mike Holzschuh

Senior Territory Manager
North America
206-423-4955

Keith Gehring

Business Development Manager
Pacific Northwest & Alaska
206-492-0974

1519 Ship Avenue
Anchorage, AK 99501

Anchorage: 907-274-0477
Prudhoe Bay: 907-659-9848
Toll-free: 866-402-1671

www.thinkgreen.com

- Bulk Soil Remediation
- U.S. and Canadian Manifesting
- Hazardous and Non-Hazardous Waste Disposal
- Waste Reuse and Recycling
- Web-Based Waste Compliance Tracking
- Embedded Materials Management Support
- Turnkey Remedial Services
- ISO Certification Consulting
- ISO Certification Consulting & Training
- Rail & Marine Transportation
- Anchorage 10-Day Waste Transfer Facility
- Vacuum Truck Services



THINK GREEN®

PIPELINES & DOWNSTREAM

Sims named as president of Enstar

Enstar Natural Gas Co. has announced the appointment of John Sims as its new president. Sims replaces Jared Green, who is moving to Calgary, Alberta, to take up a new role as president of AltaGas Canadian Utilities. Enstar is a subsidiary of Canadian company AltaGas Ltd.

Sims joined the business development and public affairs department of Enstar in 2005, subsequently becoming director and vice president in the business development, customer service and human resources departments. Sims hails from Alaska and graduated from Chugiak High School in 1996. After graduating from Hillsdale College in Michigan in 2001, Sims received his MBA from the University of Alaska Anchorage in 2009.



JOHN SIMS

"As a lifelong Alaskan, I am honored to serve as the president of a company so deeply rooted in Alaska history," Sims said in response to his new appointment. "I look forward to preserving the integrity and value of the service Enstar provides, furthering our dedication to Enstar customers and the communities we serve, and pursuing the growth of our system in the years to come."

Enstar is the main gas utility serving Southcentral Alaska. The company purchases natural gas from various Cook Inlet gas producers and ships the gas to its residential, commercial and industrial customers through an extensive network of gas transmission and distribution pipelines. The utility also provides gas transportation services around Southcentral. Cook Inlet Natural Gas Storage Inc., an affiliate company also owned by AltaGas, provides gas storage services on the Kenai Peninsula.

Enstar was established in 1959 under the name Alaska Gas Co. at around the time that gas production started from Cook Inlet. According to an Enstar press release the utility started delivery in 1961 with a single customer, the Rice Bowl on 5th Avenue in Anchorage. The utility now serves about 143,000 customers, the press release says.

—ALAN BAILEY

LAND & LEASING

Ramshorn transfers interests to Nabors

The Alaska Department of Natural Resources has approved a request from Ramshorn Investments Inc. to transfer small working and royalty interests in 37 leases across its entire North Slope and Beaufort Sea position to Nabors Drilling Technologies USA Inc.

The transfers include a range of working interests between 3.75 percent and 6.0786 percent and a range of royalty interests between 2.93751 percent and 4.96666 percent.

The deal includes six leases at the Brooks Range Petroleum Corp.-operated Beechey Point unit, five leases at the Brooks Range Petroleum Corp.-operated Southern Miluveach unit, two leases at the Savant Alaska LLC-operated Badami unit and 24 additional un-unitized leases on the North Slope and in the Beaufort Sea leasing regions.

The state approved the transfers on July 13, retroactive to July 1.

Ramshorn Investments is a subsidiary of Nabors. The company was an early partner in a wide range of exploration activities operated by Brooks Range Petroleum Corp. and continues to hold an interest in some properties operated by the Brooks Range Petroleum.

Also in July, the state received 72 assignments from six parties that are transferring overriding royalty interests at six leases — ADL 389927, ADL 389928, ADL 389929, ADL 38993, ADL 390374 and ADL 390381. The six parties are James S. Watt, Proak LLC, William Allen Huckabay, Stellar Oil & Gas LLC, Vijjinder K. Bangia and Mark R. Landt. Each of the 72 transfers of overriding royalty interests is less than 1 percent.

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

—ERIC LIDJI

Petroleum

www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CEO & GENERAL MANAGER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Shane Lasley	NORTH OF 60 MINING PUBLISHER
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Alan Bailey	SENIOR STAFF WRITER
Tim Bradner	CONTRIBUTING WRITER
Eric Lidji	CONTRIBUTING WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Steve Quinn	CONTRIBUTING WRITER
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Renee Garbutt	CIRCULATION MANAGER

ADDRESS

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

NEWS

907.522.9469
publisher@petroleumnews.com

CIRCULATION

907.522.9469
circulation@petroleumnews.com

ADVERTISING

Susan Crane • 907.770.5592
scrane@petroleumnews.com

FAX FOR ALL DEPARTMENTS

907.522.9583

Petroleum News and its supplement, Petroleum Directory, are owned by Petroleum Newspapers of Alaska LLC. The newspaper is published weekly. Several of the individuals listed above work for independent companies that contract services to Petroleum Newspapers of Alaska LLC or are freelance writers.



OWNER: Petroleum Newspapers of Alaska LLC (PNA)

Petroleum News (ISSN 1544-3612) • Vol. 22, No. 35 • Week of August 27, 2017

Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518

(Please mail ALL correspondence to:

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

Subscription prices in U.S. — \$118.00 1 year, \$216.00 2 years

Canada — \$206.00 1 year, \$375.00 2 years

Overseas (sent air mail) — \$240.00 1 year, \$436.00 2 years

"Periodicals postage paid at Anchorage, AK 99502-9986."

POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

AIR LIQUIDE™

WELDING SUPPLIES

Lincoln
Stoody
Mathey

Miller
Tweco
ESAB
& Victor Gas Equipment

Milwaukee
Thermal
Norton

CYLINDER GASES
Industrial, Blueshield Productivity Mixes, Medical and Specialty
Cylinders for rent, lease, and purchase

BULK LIQUID GASES
Oxygen, Nitrogen, Argon, Carbon Dioxide, and Dry Ice

Toll Free 800 478.1520

Anchorage - 6415 Arctic Blvd. • 907 562.2080
Fairbanks - 2089 Van Horn Rd. • 907 452.4781
Homer - 1104 Ocean Dr. #3 • 907 235.0693
Kenai - Mi. 15.1 Spur Hwy. • 907 283.7141
Wasilla - 301 Centaur Ave. • 907 376.6000

GOVERNMENT

Walker, Mallott file for re-election

By **BECKY BOHRER**
Associated Press

Alaska Gov. Bill Walker announced plans Aug. 21 to seek re-election as an independent, saying he's focused on a vision for the state and not on partisanship.

He and Lt. Gov. Byron Mallott filed candidate paperwork with the state Division of Elections. They also filed separate letters of intent with the Alaska Public Offices Commission.

Walker told reporters they plan make an independent run and to collect signatures necessary to qualify for next year's ballot.

He said they announced their plans now because Alaskans should know what they're going to do. He said he expects a lively race.

Walker changed his party affiliation from Republican to undeclared in joining forces with Mallott in 2014 to upset then-Gov. Sean Parnell, a Republican.

Walker changed his party affiliation from Republican to undeclared in joining forces with Mallott in 2014 to upset then-Gov. Sean Parnell, a Republican.

Mallott, a Democrat, that year abandoned his own run for governor to be Walker's running mate, and the 2014 Walker-Mallott ticket won the support of state Democratic party leaders.

Mallott plans to remain a registered Democrat. Walker plans to remain politically unaffiliated.

Suit over primaries

The state Democratic party currently is suing the state, seeking the ability to have politically unaffiliated candidates run in the party's primaries. The party push for letting nonaffiliated candidates in its primaries predates the 2016 U.S. Senate race.

When asked if they would consider running in the Democratic party if allowed, Walker said things sometimes change in an election process and "we typically don't say never to anything, quite honestly." But he said the path they announced Aug. 21 is the one they plan to pursue.

The administration has been an inde-



BILL WALKER



BYRON MALLOTT

pendent one and that will continue to be the focus, Mallott said.

Jay Parmley, executive director of the state Democratic party, said the party has been supportive of the Walker administration and continues to be supportive.

But he also said he's confident that Democratic candidates will run for governor and lieutenant governor and that it's still early.

The announcement that Walker and Mallott intend to run again was "a marker that needed to be sort of crossed off" and provides some clarity for potential Democratic challengers, Parmley said.

"It may deter, it might spur candidates. But at least it starts setting things into motion," he said.

Republican response

Many potential Republican candidates have expressed interest in the race, state GOP chairman Tuckerman Babcock said. So far, the highest-profile Republican to declare intentions to seek the GOP nomination is state Sen. Mike Dunleavy.

One of the major issues for Walker has been addressing a multibillion-dollar state budget deficit that's persisted amid low oil prices. Oil prices began a freefall in 2014 and have stayed low.

He has yet to secure passage of some pieces he sees as key to a fiscal plan, including use of earnings from Alaska's oil-wealth fund to help cover government costs and taxes — issues that have been hotly debated by legislators.

The House is controlled by a majority coalition composed largely of Democrats. The Senate has a Republican-led majority. Rating agencies have downgraded the state's credit rating in the absence of a fiscal plan.

The Republican Governors Association came out against Walker Aug. 21, citing the state's budget deficit and credit downgrades on his watch as reasons. ●



Only pay for the speed you need...
Dynamic Routing!SM

On time and on budget.

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden you only pay for the speed you need!



lynden.com | 1-888-596-3361



Young minds are the key to Alaska's future.

At Alaska Resource Education, our mission is to educate students and teachers about Alaska's natural resources and how our mineral, timber and oil and gas resources are used everyday. By supporting resource education you are ensuring Alaska's resource industry continues to be a healthy part of our economy and help provide for the next generation. With your help, we can inspire young minds and ignite an interest in Alaska and its resources.

The learning process never ends.
Donate now. Visit our website today!



alaskaresource™
EDUCATION

907 276 5487 www.akresource.org



American Marine Services Group
6000 A Street, Anchorage, AK 99518
907-562-5420
Deadhorse, AK
907-659-9010
www.amarinecorp.com • www.penco.org
alaska@amarinecorp.com



- Commercial Diving
- Marine Construction Services
- Platform Installation, Maintenance and Repair
- Pipeline Installation, Maintenance and Repair
- Underwater Certified Welding
- NDT Services
- Salvage Operations
- Vessel Support and Operations



- Environmental Services
- Oil-Spill Response, Containment and Clean-Up
- Hazardous Wastes and Contaminated Site Clean-Up and Remediation
- Petroleum Vessel Services, e.g. Fuel Transfer
- Bulk Fuel Oil Facility and Storage Tank Maintenance, Management, and Operations

Anchorage
Honolulu
Los Angeles

INTERNATIONAL

Total expands with purchase of Maersk Oil

By PAN PYLAS

Associated Press

French oil company Total agreed Aug. 21 to buy the oil and gas division of Danish conglomerate AP Moller-Maersk for \$7.45 billion, in a deal that will see it become the No. 2 operator in the North Sea.

Total said its purchase of Maersk Oil will shore up its position in the offshore and challenging waters of northwest Europe, which is the seventh-largest oil and gas producing region in the world. Industry consultants Wood Mackenzie said it's the biggest North Sea-weighted deal since 2006.

Under the terms of the deal, Total said it will uphold Maersk Oil's development schedules and investments in a series of projects, and that Denmark will become the regional hub for all its operations in Denmark, Norway and the Netherlands.

"This transaction is immediately accretive to both cash flow and earnings

Maersk has been the main operator in the Danish sector of the North Sea for half a century, helping the country to be self-sufficient in oil and gas.

per share and delivers further growth over coming years," said Total chairman and CEO Patrick Pouyanne. "It is in line with our announced strategy to take advantage of the current market conditions and of our stronger balance sheet to add new resources at attractive conditions."

As part of the deal, Maersk will get \$4.95 billion worth of Total shares, which is equivalent to around 3.8 percent of Total's share capital. The French company, which will also assume some \$2.5 billion worth of Maersk Oil debt, said the deal underpins its dividend profile.

Welcomed in markets

The deal was welcomed in the mar-

kets, with both companies enjoying support on a day when European markets were noticeably lower. Shares in AP Moller-Maersk closed up 2.9 percent at 13,170 Danish kroner on the Copenhagen Stock Exchange, while Total's share price in Paris ended 0.3 percent higher at 42.78 euros.

Valentina Kretzschmar, a director at industry consultants Wood Mackenzie, said that for Total the deal is "first and foremost about consolidation in the North Sea" and that it improves its near-term growth outlook, providing the company with an immediate 6 percent production increase.

"Total is acquiring a deep specialist in unlocking complex reservoirs and boosting recovery factors through enhanced oil recovery techniques," Kretzschmar said.

For Maersk, the considerations are different. The sale of Maersk Oil is part of the company's restructuring strategy, which will see it focus on its core transport and logistics arms. Lower oil prices

over the past few years, which have heaped pressure on energy companies' earnings, also played a role in the plan to divest its oil arm.

Oil at about \$50

Although oil prices have recovered of late to trade around \$50 a barrel, they are still around half the level they were just three years ago. The fall has cut into oil companies' margins by reducing the returns on what were once considered financially viable drilling propositions. That's particularly true for relatively expensive areas such as the North Sea, where deepwater drilling is required.

That's been particularly difficult for smaller and less diversified companies, such as Maersk Oil, a development that contributed to Maersk's decision to refocus its business activities. Maersk has been the main operator in the Danish sector of the North Sea for half a century, helping the country to be self-sufficient in oil and gas.

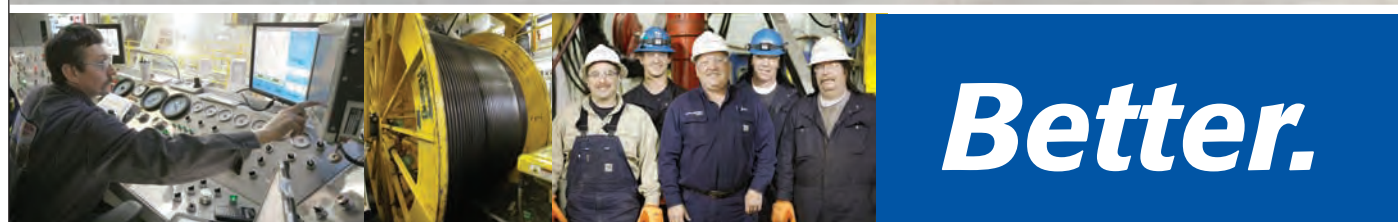
"In determining the best future ownership structure for Maersk Oil, it has been imperative for us that the capabilities and assets created in Maersk Oil continue to be developed, and that long-term investments are upheld, especially in the Danish part of the North Sea," said Soren Skou, AP Moller-Maersk's CEO.

The deal, which is subject to relevant regulatory approvals, is expected to be completed during the first quarter of 2018. ●



nabors.com

Safer. Smarter.



Better.

Our CDR2-AC rig reflects the latest innovations in Arctic drilling to provide our customers with incident free performance and operational and technical excellence.

CDR2-AC is the first Arctic rig designed and built by Nabors specifically for Coil Tubing Drilling operations. The rig was built to optimize CTD managed pressure drilling to provide precise control of wellbore pressures for improved safety, decreased costs, and increased wellbore lengths.

Combining safety and environmental excellence with greater efficiency means CDR2-AC can deliver the high value results customers have come to expect from Alaska's premier drilling contractor.

Learn more about Nabors' new drilling technologies at Nabors.com.

 **NABORS – MISSION TO ZERO**
Safer, Smarter - Incident Free

PIPELINES & DOWNSTREAM

Energy Transfer Partners sues Greenpeace

The company that built the disputed Dakota Access oil pipeline is suing Greenpeace and other groups, alleging they disseminated false information about the project and interfered with construction.

Texas-based Energy Transfer Partners alleges the groups' actions interfered with the company's business, facilitated crimes and acts of terrorism, and violated racketeering and defamation laws.

Texas-based Energy Transfer Partners alleges the groups' actions interfered with the company's business, facilitated crimes and acts of terrorism, and violated racketeering and defamation laws.

The lawsuit filed Aug. 22 in federal court in North Dakota seeks unspecified damages. A Greenpeace spokesman says the group hasn't seen the lawsuit and declined to comment.

The 1,200-mile pipeline began moving North Dakota oil through South Dakota and Iowa to a distribution point in Illinois June 1, after months of delays caused by legal wrangling and on-the-ground protests by tribes and groups that feared environmental harm. Police made 761 arrests in North Dakota between August and February.

—ASSOCIATED PRESS



NEWS NUGGETS

Compiled by Shane Lasley



Constantine Metal Vice President of Exploration Darwin Green and CEO Garfield McVeigh survey the Palmer property from a vantage above Nunatak AG.

Constantine expands high-grade discovery, drill program at Palmer

Constantine Metal Resources Ltd. Aug. 17 reported additional long, high-grade intercepts from exploration drilling at the Nunatak AG zone, a volcanogenic massive sulfide discovery located about 3,000 meters south of the South Wall-RW deposit at the Palmer project in Southeast Alaska. The discovery hole at Nunatak AG, reported in July, cut 9.2 meters of massive barite-sulfide averaging 312 grams per metric ton silver and 0.9 g/t gold. CMR17-92, drilled about 140 meters south of the discovery hole, cut 17.8 meters grading 11.7 percent zinc, 0.2 percent copper, 6.3 g/t silver and 0.2 g/t gold; and 6.7 meters grading 5.7 percent zinc, 2.2 percent lead, 30 g/t silver, 0.2 g/t gold. CMR17-94, drilled 50 meters from hole 92, cut 24.6 meters grading 260 g/t (8.3 ounces per ton) silver, 0.5 g/t gold, 1.4 percent zinc and 0.5 percent lead; including a 10.3-meter section averaging 461 g/t (14.7 opt) silver, 0.9 g/t gold, 2 percent zinc and 0.7 percent lead. The fourth hole drilled at Nunatak AG, CMR17-96, cut 20.4 meters grading 9.9 percent zinc, 0.2 percent copper, 14.4 g/t silver and 0.1 g/t gold. So far, drilling has traced mineralization at Nunatak over a 180- by 50-meter area and to a depth of about 200 meters. Garfield MacVeigh, President, states "The initial four holes released for the AG Zone discovery have defined a significant new zone of mineralization that is wide open to expansion," said Constantine President and CEO Garfield MacVeigh. "While it is very early days in our exploration of the AG Zone, the length, grade and broad area of the drill intersections in combination with the scale and intensity of hydrothermal alteration indicate excellent potential for a sizeable deposit. The discovery is a major new development for the Palmer project and we look forward to the results of ongoing exploration drilling." Given the success at Nunatak AG, Constantine and its Palmer partner, Dow Metals & Mining, has expanded the 2017 drill program at Palmer to 10,000 meters.

Drilling, sampling expand Shumagin gold zone, find new targets at Unga

Redstar Gold Corp. Aug. 23 reported that the initial phase of drilling at its Unga project on the Alaska Peninsula has extended the Shumagin gold zone. "Preliminary drilling has extended the known strike length of Shumagin to 1,600 meters by intersecting the Shumagin structure in 10 out of 12 holes," said Redstar President and CEO Peter Ball. The summer drill program was designed to understand and to test a previously undrilled area extending about 500 meters southwest of Shumagin zone. Two infill holes – 17SH033 and 17SH034 – targeting a 100-meter gap in the Shumagin zone. Hole 33 cut 0.7 meters averaging 5.7 grams per metric ton gold and 30 g/t

see NEWS NUGGETS page 10

COPPERBANK RESOURCES CORP.



CopperBank is taking a closer look at San Diego Bay, a large porphyry copper prospect about 4.5 miles east of the Pyramid deposit on the Alaska Peninsula.

EXPLORATION

Expanding Pyramid copper

Drills target higher grade expansion zones at Alaska Peninsula project

By SHANE LASLEY
Mining News

CopperBank Resources Corp. sees the need for copper rising sharply as the world shifts to renewable energy sources and believes its Pyramid porphyry copper-gold-molybdenum project on the Alaska Peninsula ideally suited to help fill that demand.

CopperBank was founded by self-proclaimed "realistic environmentalist" Gianni Kovacevic, who drove a Tesla Model S sedan across North America last year to raise awareness about the symbiotic relationship between the mining and green energy sectors.

Kovacevic considers copper an energy metal, given its importance to electric vehicles, renewable energy sources and electricity transmission.

"The greener and cleaner we create and utilize energy, the more that is demanded of electricity ... and, of course, copper plays a very important role in that relationship," the CopperBank chairman and CEO said before setting off on his 2016 Tesla Tour.

CopperBank's Pyramid property hosts roughly 1.1 billion pounds of copper in 122.5 million metric tons of inferred resource averaging 0.41 percent copper, 0.1 grams per metric ton gold and 0.021 percent molybdenum, according to resource calculated in 2013.

CopperBank is now looking to upgrade and grow this resource with a drilling currently underway, the first program carried out since it acquired Pyramid from Full Metal Minerals in 2014.

"This long anticipated drilling program will give our technical team the direction for next steps in the development of the project, and specifically a better view of the higher grade sections of the deposit," said CopperBank Executive Chairman and CEO Gianni Kovacevic.

Upgrading Pyramid

The 2017 drill program is primarily targeting

"This long anticipated drilling program will give our technical team the direction for next steps in the development of the project, and specifically a better view of the higher grade sections of the deposit."
—CopperBank CEO Gianni Kovacevic

two zones – Main and North – that demonstrate the potential to increase the grade and size of the Pyramid deposit.

To expedite its 2017 program, CopperBank added a second drill in July.

"Having two drill rigs on site will enable our team to have a dedicated machine to each of the Main and North zones, said Kovacevic. "Our plan is to finance enough drilling to ensure the important holes in each zone are completed, then our team can assess results to determine where future meters should be focused."

One of the most intriguing areas being targeted is around 11PY016, a hole drilled by Full Metal Minerals in 2011.

This hole cut 155 meters of 0.71 percent copper, 0.18 g/t gold and 0.018 percent molybdenum, which is significantly higher than the average resource grade. It is an intercept at the bottom of this hole, however, that is most intriguing.

The final 34 meters of hole 16, which was drilled to a depth of 249 meters, averaged 0.844 percent copper and was still cutting mineralization, indicating that this higher grade copper continues.

CopperBank is drilling at least three holes near hole 16. Two holes already completed west of hole 12 were drilled to 386 and 400 meters. Another hole is being drilled to the east.

With the bottom 34 meters of hole 16 not included in the resource, the 2017 infill holes being drilled in this area have the potential to both

see PYRAMID page 8

NORTHERN NEIGHBORS

Compiled by Shane Lasley



Victoria breaks ground On Eagle Gold Mine

Victoria Gold Corp. Aug. 21 announced the start of a C\$40 million phase-1 construction program at the Eagle Gold Mine project at the company's Dublin Gulch property in the Yukon. This work is primarily focused on road upgrades, camp expansion and detailed engineering in preparation for more extensive development next year.

"This is an exciting milestone in the ongoing development of the Eagle Gold project," said Victoria Gold President and CEO John McConnell. "The phase-1 construction program will set us up for an efficient, low-risk construction program in 2018." The company will also begin Critical path earthworks such as

excavation at the toe of the valley heap leach facility and work on the crusher foundation this year. A number of contracts have been awarded which include significant participation by the First Nation of Nacho Nyak Dun Development Corp. Yukon First Nations, business and political leaders joined Victoria Gold for an official "Ground Turning" event at Eagle Gold on Aug. 18. The open-pit, heap-leach operation being developed at Eagle Gold is expected to produce 190,000 ounces of gold annually over a 10-year mine life, based on 116 million metric tons of reserves averaging 0.67 grams per metric ton (2.66 million oz) gold.

Accelerated drilling for Klondike Gold

Klondike Gold Corp. Aug. 22 reported the start of a third phase of drilling at its Klondike district gold project in the Yukon. The company also said it has added a second rig with the goal of drilling 40 holes in 30 days during an accelerated program at this 527-square-kilometer Klondike property just southeast of Dawson City. This program will start with 40 holes along the Lone Star target/Bonanza Fault trend to test along a 4,000-metre-long soil anomaly identified there. If the weather holds out, the company plans to test two other gold-bearing structural zones – Nugget and Eldorado fault trends – that run parallel to the Bonanza fault-Lone Star target. Gold Run target, about 50 kilometers (31 miles) southeast of the current drilling, is also being considered for drilling if the weather permits. "What we've learned so far at Lone Star-Bonanza has implications for several other key, historically gold-rich target areas within the district, and we're eager to begin systematically testing these zones as they also exhibit strong discovery potential," said Klondike Gold President and CEO Peter Tallman. So far, Klondike Gold has completed 37 holes at the Bonanza fault-Lone Star during the first two phases of 2017 drilling at its namesake project, results from 11 holes have been reported and assays are pending for the remaining 26. Highlights from

see **NORTHERN NEIGHBORS** page 10



From left to right: Victoria Gold CFO Marty Rendall, Victoria CEO John McConnell, Nacho Nyak Dun Chief Simon Mervyn, Yukon Premier Sandy Silver, and Victoria Executive Vice President Mark Ayranto shovel first dirt at Eagle Gold during a "Ground Turning" event at the developing gold mine.

VICTORIA GOLD CORP.

continued from page 7

PYRAMID

confirm the resource in this area and add pound of copper to it be extending it to depth.

Drilling at the North zone is looking to add breadth to higher grade portions of Pyramid by testing extensions of known mineralization.

One hole drilled at North zone in 2011 cut 104 meters averaging 0.56 percent copper and 0.13 g/t gold from a depth of six meters.

10PY005, drilled at North zone in 2010, cut 194.8 meters averaging 0.63 percent copper, 0.14 g/t gold and 0.17 percent molybdenum from a depth of 6.4 meters. Like hole 16, this hole bottomed out in mineralization.

CopperBank is drilling this area more extensively with deeper holes drilled at roughly 100-meter step-outs from hole 5 with the goal of adding tons and increasing the grade of mineralization at North zone.

Drilling is also being considered east of West zone. Success in this area could link West to the other two zones and increase the overall footprint of continuous copper mineralization at Pyramid.

"We want to see if that trend that exists at the North zone extends to the West zone," said Kovacevic.

Results from the 2017 program are expected this fall and, if successful, will inform an updated mineral resource estimate for Pyramid.

San Diego Bay

While drills are seeking to expand and upgrade Pyramid, geological crews are taking a closer look at San Diego Bay, a prospect about 4.5 miles to the east.

A 15-square-mile red-stained anomaly from the pervasive alteration there indicates the potential of another large porphyry system near or even connecting to Pyramid.

"The vast color anomaly over the area is impressive and has never been tested at depth," said Kovacevic.

Limited exploration completed in the past has turned up some interesting results, including rock samples with grades as high as 4.3 and 16 percent copper and more than 1 g/t gold.

This year, CopperBank plans to carry out a reconnaissance program at San Diego Bay that will further investigate the areas of promising copper and gold values with prospecting and soil sampling.

"The proposed program will help orient future exploration work," said Kovacevic. "Subject to results, we aim to have a more robust program at San Diego Bay for the 2018 season."

CopperBank is beginning to treat San Diego Bay as a unique project that makes up roughly 40 percent of the overall land package that blankets roughly 46 miles of Aleut Native Corporation land on the Alaska Peninsula, and has indicated that it would consider bringing on a partner to further investigate this budding prospect.

CopperBank is beginning to treat San Diego Bay as a unique project that makes up roughly 40 percent of the overall land package that blankets roughly 46 miles of Aleut Native Corporation land on the Alaska Peninsula, and has indicated that it would consider bringing on a partner to further investigate this budding prospect.

"Only two weeks of work has ever happened here, so we feel that ... this makes for a very interesting and geologically prospective joint venture work program," said Kovacevic.

Understanding infrastructure

Both Pyramid and San Diego Bay enjoy the advantage of lying next to ice-free, deep tidewater on the Pacific Rim, a great location for shipping copper to Asia or the Americas.

This should contribute to lessened costs of both development and shipping copper concentrates produced from any future mine there, compared to mine projects further inland.

"I would suggest to you that this is one of the best situated copper porphyries in the world because of its proximity to deep tidewater," said Kovacevic.

To get a better idea of the advantages of this locale, CopperBank hired DOWL, an Alaska-based engineering firm, to provide initial infrastructure planning for Pyramid.

This early stage planning will assist in developing initial concepts for key infrastructure components such as potential port locations, on-site power generating options, and a supporting road network.

"It is never too early in the life of a project to begin to understand how critical components – namely power and port facilities – would look like and potentially be situated," the CopperBank CEO said.

With this preliminary understanding of infrastructure, along with expanding and upgrading Pyramid, CopperBank is taking strides towards helping to supply the growing demand for copper that Kovacevic foresees being needed to generate and deliver a greener source of energy to power the growing array of modern products powered by electricity. ●

Petroleum
NEWS

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

Shane Lasley	PUBLISHER & NEWS EDITOR
Rose Ragsdale	CONTRIBUTING EDITOR
Mary Mack	CEO & GENERAL MANAGER
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Curt Freeman	COLUMNIST
J.P. Tangen	COLUMNIST
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Renee Garbutt	CIRCULATION MANAGER
Mapmakers Alaska	CARTOGRAPHY

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

NEWS • 907.229.6289
publisher@miningnewsnorth.com

CIRCULATION • 907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

Several of the individuals listed above are independent contractors

NORTH OF 60 MINING NEWS is a weekly supplement of Petroleum News, a weekly newspaper. To subscribe to North of 60 Mining News, call (907) 522-9469 or sign-up online at www.miningnewsnorth.com.

ORICA ALASKA

BULK PRODUCTS & DELIVERY EQUIPMENT
Packaged & Initiation System Products

For more information contact one of our local branches:

Fairbanks	Anchorage	Ketchikan
907-488-0427	907-349-1424	907-225-9388

NORTH OF 60 MINING | Mining Directory

Mining Companies

Kinross Fort Knox/Fairbanks Gold Mining Inc.

Fairbanks, AK 99712
 Contact: Anna Atchison – External Affairs Manager
 Phone: (907) 490-2218 • Fax: (907) 490-2250
 E-mail: anna.atchison@kinross.com
 Website: www.kinross.com

Located 25 miles northeast of Fairbanks, Fort Knox is the largest gold producing mine in Alaska. During 2016, Fort Knox celebrated two milestone events, the seven-millionth-ounce of gold produced and the 20-year anniversary of commercial operations.

Usibelli Coal Mine

100 Cushman St., Suite 210
 Fairbanks, AK 99701
 Contact: Lisa Herbert, Vice President Public Relations
 Phone: (907) 452-2625 • Fax: (907) 451-6543
 Email: info@usibelli.com
 Website: www.usibelli.com

Usibelli Coal Mine is headquartered in Healy, Alaska and has 700 million tons of coal reserves. UCM produces an average of 2 million tons of sub-bituminous coal each year.

Service, Supply & Equipment

Alaska Earth Sciences

Anchorage, AK 99515
 Contact: Bill Ellis, Rob Retherford, owners
 Phone: (907) 522-4664 • Fax: (907) 349-3557
 E-mail: rretherford@alaskaearthsciences.com
A full service exploration group that applies earth sciences for the mining and industrial minerals industries providing prospect generation, evaluation and valuation, exploration concepts, project management, geographic information systems and data management. We also provide camp support and logistics, geologic, geochemical and geophysical surveys.

Alaska Rubber & Rigging Supply

5811 Old Seward Hwy.
 Anchorage, AK 99518
 Contact: Mike Mortensen, General Manager
 Phone: (907) 562-2200 • Fax: (907) 561-7600
 E-mail: info@alaskarubber.com
 Website: www.alaskarubber.com
Alaska's largest supplier of hydraulic and industrial hose sold in bulk or assembled to spec. We also stock a large selection of wire rope, crane rope, lifting and transportation chain, sold in bulk or assembled to spec. We fabricate synthetic lifting slings, and supply shackles & rigging hardware. We sell and perform field installs of conveyor belting. We are Arctic Grade product specialists. We sell and service a wide variety of hydraulic, lubrication, fueling and pressure washing equipment. We sell high pressure stainless instrumentation fittings and tube, sheet rubber, v-belts, pumps, Enerpac equipment, Kamlocks, plumbing fittings, and much more. We perform hydro testing up to thirty thousand psi, & pull testing up to 350 thousand pounds. All testing comes standard with certification & RFID certification tracking capabilities.

Alaska Steel Co.

6180 Electron Drive, Anchorage, AK 99518
 Contact: Joe Pavlas, outside sales manager
 Phone: (907) 561-1188
 Toll free: (800) 770-0969 (AK only) • Fax: (907) 561-2935
 E-mail: j.pavlas@alaskasteel.com
Full-line steel and aluminum distributor. Complete processing capabilities, statewide service. Specializing in low temperature steel and wear plate.

Arctic Wire Rope & Supply

6407 Arctic Spur Rd., Anchorage, AK 99518
 Contact: Mark Lamoureux
 Phone: (907) 562-0707 • Fax: (907) 562-2426
 Email: mark@arcticwirerope.com
 Website: www.arcticwirerope.com
Arctic Wire Rope & Supply is Alaska largest and most complete rigging supply source. Our fabrication facility is located in Anchorage. We specialize in custom fabrication of slings in wire rope, synthetic webbing/yarn, chain and rope. In addition, we offer on-site inspection services. We carry a large inventory of tire chains for trucks and heavy equipment, chain hoists and rope.

Austin Powder Company

P.O. Box 8236
 Ketchikan, AK 99901
 Contact: Tony Barajas, Alaska manager
 Phone: (907) 225-8236 • Fax: (907) 225-8237
 E-mail: tony.barajas@austinpowder.com
 Web site: www.austinpowder.com
In business since 1833, Austin Powder provides statewide prepackaged and onsite manufactured explosives and drilling supplies with a commitment to safety and unmatched customer service.

Calista Corporation

5015 Business Park Blvd., Suite 3000, Anchorage, AK 99503
 Phone: (907) 275-2800 • Fax: (907) 275-2919
 Website: www.calistacorp.com
Calista is the parent company of more than 30 subsidiaries. In terms of land area and Shareholder base, Calista is the second largest of the Regional Alaska Native corporations established under ANCSA in 1971. Like us on Facebook (<http://www.facebook.com/calistacorporation>) and follow us on Twitter (<http://twitter.com/calistacorp>).

CONAM Construction Co.

301 W. Northern Lights Blvd., Ste 300
 Anchorage, AK 99503

Contact: Dale Kisse, President
 Phone: (907) 278-6600 • Fax: (907) 278-4401
 Email: dkisse@conamco.com
 Website: www.conamco.com
Leading provider of specialized contracting and EPC services delivering heavy industrial infrastructure solutions to the oil and gas, mining and power industries throughout the State of Alaska. CONAM Construction Co. is an operating unit of Quanta Services (NYSE:PWR).

Construction Machinery Industrial, LLC

5400 Homer Dr., Anchorage, AK 99518
 Phone: (907) 563-3822 • Fax: (907) 563-1381
 Website: www.cmiak.com
 Fairbanks office
 Phone: 907-455-9600
 Juneau office
 Phone: 907-780-4030
 Ketchikan office
 Phone: 907-247-2228
Sales and service for heavy equipment for construction, logging, aggregate, mining, oilfield and agricultural industries throughout Alaska. CMI represents more than 40 vendors, including Volvo, Hitachi, Atlas Copco, and Ingersoll-Rand.

Cruz Construction, Inc.

7000 E. Palmer-Wasilla Hwy., Palmer, Alaska 99645
 Contact: Dave Cruz, President,
 or Jeff Miller, Vice President of Operations
 Phone: (907) 746-3144 Palmer
 or (907) 279-3144 Anchorage • Fax: (907) 746-5557
 E-mail: info@cruzconstruct.com
Our flexibility and dedication have enabled us to become a top provider for the heavy civil construction and resource development industries.

Dyno Nobel Inc.

4730 Business Park Blvd., Anchorage, AK 99503
 Contact: Matt Budin, Sr. Account Manger
 Phone: (907) 644-3966 • Fax: (801) 321-6773
 Email: matt.budin@am.dynonobel.com
 Website: www.dynonobel.com

Equipment Source, Inc.

1919 Van Horn
 Fairbanks, AK 99701
 Contact: Nick Ferree, General Manager
 Phone: (907) 458-9049 • Fax: (907) 458-7180
 E-mail: nickf@equipsrc.com
 Website: www.equipmentsourceinc.com
ESI designs, develops, and builds quality, innovative worksite products for the oil, mining, construction, and agriculture industries. We also specialize in Kubota Tractors.

Fountainhead Hotels

1501 Queens Way, Fairbanks, AK 99701
 Contact: Becky Kunkle, Reservations Manager
 Phone: (800)528-4916 • Fax: (907) 451-6376
 Email: beckyk@fountainheadhotels.com
 Other Office: Wedgewood Resort – Sophie Station Suites – Bridgewater Hotel – Bear Lodge – Fountainhead Antique Auto Museum – Wedgewood Wildlife Sanctuary - all hotels in Fairbanks
 Website: www.fountainheadhotels.com
Fairbanks' premier hotel group is locally owned and offers visitors four distinct hotels, a wildlife sanctuary and an antique auto & fashion museum!

GCI Industrial Telecom

Anchorage:
 11260 Old Seward Highway Ste. 105, Anchorage, AK 99515
 Phone: (907) 868-0400 • Fax: (907) 868-9528
 Toll free: (877) 411-1484
 Web site: : www.gci.com/industrialtelecom
 Rick Hansen, Sr. Director
 Richard.Hansen@gci.com
 Mark Johnson, Sr. Business Development Manager
 Mark.Johnson@gci.com
Deadhorse:
 DAC Offices
 Deadhorse, Alaska 99734
 Phone: (907) 771-1090
Houston, Texas:
 8588 Katy Freeway, Suite 226
 Houston, Texas 77024
 Phone: (713) 365-3154
GCI Industrial Telecom provides innovative solutions to the most complex communication issues facing industrial clientele. We deliver competitive fully managed voice, video and data services, reputable expertise and safely operate under the most severe working conditions. We understand remote project management and work as an integrated part of the project team to ensure success. GCI — your best choice for full life cycle, expert, proven, industrial communications.

Greer Tank and Welding Inc.

3140 Lakeview Drive, PO Box 71193
 Fairbanks, AK 99707
 Contact: Mark Greer, General Manager
 Phone: (907) 452-1711 • Fax: (907) 456-5808
 Email: mgreer@greerak.com
 Other offices: Anchorage, AK;
 Lakewood, WA
 Website: www.greertank.com
Greer Tank & Welding are the premier tank and welding specialists of Alaska and Washington. In business for over 57 years, they have a long history of providing an array of products and services for all contracting and custom fabrication needs – all from their highly trained and experienced staff.

Judy Patrick Photography

511 W. 41st Ave, Suite 101, Anchorage, AK 99503
 Contact: Judy Patrick
 Phone: (907) 258-4704 • Fax: (907) 258-4706
 E-mail: judy@judypatrickphotography.com
 Website: www.judypatrickphotography.com

Creative photography for the resource development industry.

Last Frontier Air Ventures

1415 N Local 302 Rd., Ste C
 Palmer, AK 99645
 Contact: Dave King, owner
 Phone: (907) 745-5701 • Fax: (907) 745-5711
 Email: helicopter@LFAV.com
 Website: www.LFAV.com
Helicopter support statewide for mineral exploration, survey research and development, slung cargo, videofilm projects, telecom support, tours, crew transport, heli skiing. Short and long term contracts.

Lynden

Alaska Marine Lines
 Alaska West Express
 Bering Marine Corporation
 Lynden Air Cargo
 Lynden International
 Lynden Logistics
 Lynden Transport
 Anchorage, AK 99502
 Contact: Jeanine St. John
 Phone: (907) 245-1544 • Fax: (907) 245-1744
 Toll Free: 1-888-596-3361
 E-mail: information@lynden.com
Lynden is a family of transportation companies with the combined capabilities of truckload and less-than-truckload transportation, scheduled and charter barges, rail barges, inter-modal bulk chemical hauls, scheduled and chartered air freighters, domestic and international air forwarding, international ocean forwarding, customs brokerage, sanitary bulk commodities hauling, and multi-modal logistics.

Mappa Inc.

1956 Richardson Hwy.
 North Pole, AK 99706
 Contact: Stefan Mack, Engineer
 Phone: (907) 488-1266 • Fax: (907) 488-0772
 E-mail: Stefan.mappa@gmail.com
 Website: www.mappatestlab.com
Contractor Quality Control, asphalt, soil, concrete & masonry testing and special inspection.

NRC Alaska (formerly Emerald Alaska)

425 Outer Springer Loop Rd., Palmer, AK 99645
 Contacts: Shaun Tucker, business development manager
 W. Paul Nielsen III, director of sales & marketing
 Phone: (907)258-1558 • Fax: (907) 569-5353
 Email: Stucker@nrcc.com; PNielsen@nrcc.com
 Other Offices: 619 East Ship Creek Ave, Ste. 309, Anchorage, AK 99501
 Website: www.nrcc.com
NRC Alaska is unrivaled in the management of Hazardous Wastes, automotive fluids and recovered spilled products. NRC is located in Anchorage, Fairbanks, Palmer, Deadhorse, and Kenai.

Pacific Rim Geological Consulting, Inc.

P.O. Box 81906
 Fairbanks, AK 99708
 Contact: Thomas Bundtzen, president
 Phone: (907) 458-8951 • Fax: (907) 458-8511
 Email: bundtzen@mosquitonet.com
Geologic mapping, metallic minerals exploration and industrial minerals analysis or assessment.

Sourdough Express Inc.

600 Driveway St.
 Fairbanks, AK 99701
 Contact: Brian Skinner, VP
 Phone: (907) 243-2545
 Other Office: (800) 488-2654
 Website: www.sourdoughexpress.com
Sourdough's services include trucking of all types. Our equipment fleet consists of Lowboys, Pneumatic Bulkers, Vans, and Flatbeds. We also Lease/Sell Connex Containers.

STEELFAB

2132 Railroad Ave.
 Anchorage, AK 99501
 Contact: Ron Doshier – Business Development Manager
 Phone: (907) 264-2813 • Fax: (907) 276-3448
 E-mail: RDoshier@SteelfabAK.com
STEELFAB is the largest Alaskan-owned Steel Service Center, Fabricator and Coating Facility in the state. It provides Stock Steel Products, Special Design Items Fabricated, Coating (paint & metalizing) and Recoating.

TTT Environmental LLC

4201 "B" St.
 Anchorage, AK 99503
 Contact: Tom Tompkins, General Manager
 Phone: 907-770-9041 • Fax: 907-770-9046
 Email: info@tttenviro.com
 Website: www.tttenviro.com
The preferred source for instrument rentals, sales, service and supplies. We supply equipment for air monitoring, water sampling, field screening, PPE and more.

Taiga Ventures

351 East 92nd
 Fairbanks, AK 99515
 Contact: Mike Tolbert, president
 Phone: 907-452-6631 • Fax: 907-451-8632
 Other offices:
 Airport Business Park
 2000 W. International Airport Rd., #D-2
 Anchorage, AK 99502
 Phone: 907-245-3123
 Email: contracting@taigaventures.com
 Website: www.taigaventures.com
Remote site logistics firm specializing in turnkey portable shelter camps – all seasons.

continued from page 8

NORTHERN NEIGHBORS

assays received so far include 41.1 meters of 2.1 grams per metric ton gold from surface in hole LS17-81; 40.9 meters averaging 2.4 g/t gold from a depth of 10 meters in LS17-82; and 30.7 meters of 1.6 g/t gold in LS17-91. Drilling so far has traced Lone Star for about 1,950 meters along the Bonanza Fault. The company hopes that by widening its step-outs the phase-3

drilling will double the strike of this zone.

Conrad's faults play a role in Carlin-type gold

ATAC Resources Ltd. Aug. 17 reported long sections of significant gold from the first 2017 holes drilled at Conrad, one of the zones of Carlin-type mineralization identified at its Osiris project at the Rackla Gold property, Yukon. The company said these first four holes target new areas of mineralization and cross-

cutting faults believed to be associated with high-grade gold mineralization in the vicinity of the 350 Faults on the western side of the Conrad zone. All holes that intersected gold mineralization returned grades consistent with previous Conrad drilling. Highlights from this drilling include 12.19 meters of 5.97 grams per metric ton gold in hole OS-17-232; and 67.06 meters of 3.35 g/t gold in hole OS-17-233, including 15.14 meters of 7.25 g/t gold within and adjacent to the 350 Fault zone. "The identification of a new area of high-grade gold mineralization and the confirmation that the 350 faults play an important role in the localization of high-grade Carlin-type gold mineralization at Conrad are key developments for future drill targeting," said ATAC President and CEO Graham Downs. Carlin-type gold mineralization at Conrad has been traced for approximately 800 meters along strike and to a depth of about 800 meters. More than 6,800 meters of drilling has been completed this year at Osiris. Two drills continue to test the Conrad, Osiris and Sunrise zones.

Meanwhile, Barrick Gold Corp. is exploring the Orion project, a 780-square-kilometer (301 square miles) section of the Rackla Gold property immediately west of Osiris that hosts the Orion, Anubis, and eight other early stage Carlin-type gold prospects; and Atac is testing Rau, at the western end of the Rackla property. "With five drills turning across the entire Rackla Gold property, we anticipate significant new information and a steady flow of news over the coming months that will further shape what we believe is one of the most exciting gold exploration projects in North America," said Downs.

percent lead. The middle zone yielded 20.5 meters (19.6 meters true thickness) grading 107.1 g/t silver, 3.52 percent zinc and 1.3 percent lead. DV17-047 cut 13.45 meters (13.38 meters true thickness) averaging 284.9 g/t silver, 0.96 percent zinc and 0.29 percent lead. Dolly Varden is considering expanding the 2017 drill program from 5,000 to about 12,000 meters.

Peregrine seeks deeper Chidliak CH-6 diamonds

Peregrine Diamonds Ltd. Aug. 23 said a three-hole, 1,474-meter drill program confirms the expansion potential of the CH-6 kimberlite at its Chidliak diamond project in Nunavut. DD36, a 378-meter vertical hole, intersected kimberlite from 4.5 to 295.8 meters below surface, which is consistent with the current resource model for the CH-6 kimberlite. DD38 cut 190.2 meters of typical olivine-rich CH-6 kimberlite from 277 to 442 meters below the surface, confirming previous results that added depth to the high-grade CH-6 kimberlite. Drilled nearly vertically, DD39 ended in kimberlite at 532 meters below surface, confirming the kimberlite extends beyond 500 meters. A preliminary economic assessment completed on Chidliak last summer envisions an open-pit diamond mine with a life of roughly 10 years. Production would start at CH-6, which contains 4.64 million metric tons of inferred resource averaging 2.45 carats per metric ton (11.39 million carats) diamond to a depth of 260 meters, followed by CH-7, a kimberlite with 5.99 million metric tons of inferred resource averaging 0.85 c/t (4.23 million carats) diamonds to a depth of 240 meters. An internal study indicates the potential to substantially enhance the economics of Chidliak by incorporating an underground mining operation below 260 meters at CH-6. The company continues to test the potential depth extension of CH-6. "This additional kimberlite material could provide a significant uplift to contained carats as we look to recalculate the resource later this year. In addition, hole DD39 confirms the high grade CH-6 pipe continues at depths below 500 meters and provides future resource expansion opportunities. Drilling continues and with these results we are confident that we will meet our objective this year of expanding the CH-6 resource below the 260 meters below surface base of the current inferred resource," said Peregrine President and CEO Tom Peregoodoff. ●

continued from page 7

NEWS NUGGETS

silver; and hole 34 cut 2.2 meters averaging 9.9 g/t gold and 29.3 g/t silver. Hole 17SH032, drilled some 250 meters southwest of the previously drill defined Shumagin zone, cut one meter averaging 2.1 g/t gold 27 g/t silver. Redstar said the visible gold-bearing stockwork encountered in hole 32 is identical to what has been encountered in holes previously drilled in Shumagin. Redstar said this indicates the potential for high-grade mineralization below the area drilled so far in the Southwest Extension zone.

Additionally, Redstar reported that a soil sampling carried out this summer has defined multiple target areas that exhibit similar geochemical signatures to the Shumagin Gold zone. Soil sampling completed in 2014 covered roughly 750 meters of this zone. This year, Redstar expanded that coverage to the

entire Shumagin zone; north to the Shumagin scarp; and southwest to grid soil sampling completed at Red Mountain in 2016. With this program, continuous gridded soil sample data is available along 4,500 meters of the Shumagin Gold trend, from Orange Mountain to Shumagin zone. Redstar said this sampling has identified some very high anomalous gold and silver zones that the company plans to follow up with prospecting work this fall. "This has provided the key information on where to focus our next drill program and efforts at Shumagin and elsewhere within the Unga gold project," said Ball. "Geological mapping and sampling towards the southwest from Shumagin indicates a very strong expansion potential along strike for an additional approximate 3 kilometers towards the Orange Mountain Zone, the interpreted hydrothermal center along the Shumagin Trend." The second phase of 2017 drilling is slated to begin in September. ●

BUILDING ALASKA'S RESOURCE INDUSTRIES

Our innovative solutions and experience in Alaska construction and maintenance are second to none. From the Kenai Peninsula to the farthest reaches of the North Slope, CONAM has been there and built that.

CONAM CONSTRUCTION COMPANY

A QUANTA SERVICES COMPANY

Commitment to Safety & Quality

OIL & GAS CONSTRUCTION | MINING CONSTRUCTION | POWERPLANT CONSTRUCTION | PIPELINE CONSTRUCTION | REMOTE VILLAGE INFRASTRUCTURE | TELECOMMUNICATIONS | DESIGN BUILD & EPC | GENERAL CONTRACTING | PROFESSIONAL PLACEMENT

Anchorage | Kenai | Deadhorse | www.conamco.com | 907-278-6600

Drills tap high-grade silver at Dolly Varden

Dolly Varden Silver Corp. Aug. 21 reported additional high-grade silver intercepts from from the 2017 drill program at the Dolly Varden Silver project in northwestern British Columbia. The batch of five holes reported were drilled from the north side of the Dolly Varden deposit area, one of four deposits and more than 50 exploration targets on the property. The best of these holes, DV17-048, cut three mineralized structures. The first structure corresponds to the silver-rich Dolly Varden vein, and the lower two intercepts tapped zones richer in base metals. The upper zone returned 13.22 meters (12.26 meters true thickness) averaging 701.8 grams per metric tons silver, 1.05 percent zinc and 0.36

Reserve your space today!

The Mining Explorers

Don't miss your opportunity to be included in North of 60 Mining News' 2017 Mining Explorers.

This beautiful annual magazine provides the most comprehensive coverage of the exploration companies seeking to unlock the vast mineral resources of Alaska and Canada's Far North.

The advertising placement deadline is fast approaching - September 22.

To advertise in the 2017 Mining Explorers publication, please contact:

Susan Crane, advertising director
Phone: 907-770-5592
Email: scrane@petroleumnews.com

An annual publication from North of 60 Mining News

NORTH OF 60
MINING
news

EXPLORATION & PRODUCTION

DOG releasing more exploration data

On Aug. 16 Alaska's Division of Oil and Gas announced that within 30 days it would release to the public more seismic and well data that is being made available in conjunction with the state's oil and gas tax credit program. The tax credit statutes require a company to submit data from exploration seismic surveying or drilling to the division if the company used a tax credit in support of the activity. The division has to hold seismic data confidentially for 10 years and well data for two years, after which time the data become public.

The data now being released include data from two 3-D seismic surveys conducted in the northern part of the National Petroleum Reserve-Alaska: the Northeast NPRA survey, and the Puviq South survey. Central North Slope surveys consist of the Storms 3-D survey, the Toolik 2-D survey, the Harrison Bay 3-D survey and the White Hills 2-D survey. The division is also releasing the Cosmopolitan offshore 3-D seismic survey from the Cook Inlet, and data from the Cosmopolitan State No. 1 well.

The work involved in uploading, collating, quality controlling and making available for release the massive volume of data from tax-credit-related seismic surveys has become a major operation for the division. The Alaska Department of Revenue has also been engaged in a major exercise of auditing and verifying the tax credit status of the data.

—ALAN BAILEY

GOVERNMENT

EPA, Corps extend WOTUS comment period

The Environmental Protection Agency and the U.S. Army Corps of Engineers have extended the deadline from Aug. 28 to Sept. 27 for public comments on a proposed rollback of the definition of the waters of the United States. The agencies say they are responding to stakeholder requests for an extension to the public comment period.

In July the agencies announced a proposal to roll back the WOTUS definition to a version predating the definition introduced by the Obama administration in 2015.

The WOTUS definition is controversial because it determines the scope of water bodies and wetlands that are subject to federal permitting requirements. The scope of the definition, therefore, determines the extent to which federal jurisdiction can impinge on state jurisdiction over water impacting activities.

The definition introduced in 2015 caused considerable controversy because of

see **WOTUS COMMENT** page 13

NEI FLUID TECHNOLOGY

Phone:
907.561.4820
Fax:
907.562.2316
Email:
sales@neifluid.com

Suppliers of:

- Petrochemical refueling & testing equipment
- Meters and valve systems for oil & gas industry
- Portable measurement for petroleum, chemicals and bulk liquids
- Refrigerant recovery/recycling equipment

SUBSCRIBE to Petroleum News

Don't miss another issue, call: **907 522.9469**



IN CONNECTION WITH



A quicker, easier, smarter way of connecting local business with local customers.

THE LOCAL PAGES
OF ALASKA
THE BEST PHONE BOOK IN TOWN™



MOBILE | ONLINE | PRINT

WANT TO LIST YOUR BUSINESS?

907-903-4526

VISIT US ONLINE AT
WWW.THELOCALPAGES.COM

find local businesses online at
WWW.GONFIND.COM

Sound solutions for responsible development

With more than 30 years of experience serving Alaska, ASRC Energy Services has the expertise to handle every phase of a project regardless of scale and location.

From pre-planning and development to operations and maintenance and everything in between, we consistently deliver the very best in full-service consulting and contracting services.

ASRC ENERGY SERVICES
a subsidiary of Arctic Slope Regional Corporation

Lynden voted No. 1 in 2017 Quest for Quality awards

Lynden Transport was awarded its fifth consecutive No. 1 ranking and its 21st overall Quest for Quality award in the 2017 awards issued by Logistics Management magazine. Lynden Transport received the highest scores among less-than-truckload western regional carriers in the on-time performance, value, and equipment and operations categories and topped the overall weighted scores.

"We are extremely proud of our No. 1 ranking again this year," said Lynden Transport President Paul Grimaldi. "We strive to help customers utilize the full range of Lynden's capabilities and 'only pay for the speed they need'. Our top marks in the on-time performance and value categories confirm that our efforts are making a difference to customers."

Logistics Management's Annual Quest for Quality awards is the culmination of a six-

month research project conducted by Peerless Research Group. For more than three decades, Quest for Quality has been regarded in the transportation and logistics industry as the most important measure of customer satisfaction and performance excellence. This year 5,437 logistics and supply chain decision makers cast their votes.

BP announces new consumer text messaging program

BP said it is excited to announce that a new text messaging program was rolled out to consumers in all BP marketing regions on Aug. 1. Consumers can join BP offers by texting the key word MOBILE to 38831*. Once consumers opt in, they will begin receiving person-

see **OIL PATCH BITS** page 13

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

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
A					
ABR		Chugach Alaska Energy Services		Lynden Logistics	5
AECOM Environment		Colville Inc.		Lynden Transport	5
aeSolutions		Computing Alternatives		Mapmakers of Alaska	
Afognak Leasing LLC		CONAM Construction	10	MAPPA Testlab	
Air Liquide	4	Construction Machinery Industrial		Maritime Helicopters	
Alaska Dreams		Crowley Solutions		N-P	
Alaska Earth Sciences		Cruz Construction		Nabors Alaska Drilling	6
Alaska Frontier Constructors (AFC)		Dowland-Bach Corp.		NANA WorleyParsons	
Alaska Marine Lines	5	Doyon Anvil		Nature Conservancy, The	
Alaska Railroad		Doyon Associated		NEI Fluid Technology	11
Alaska Rubber & Rigging Supply		Doyon Drilling		Nordic Calista	
Alaska Steel Co.		Doyon, Limited		North Slope Telecom	13
Alaska Textiles		Equipment Source Inc. (ESI)		Northern Air Cargo	
Alaska West Express	5	exp Energy Services		Northern Solutions	
Alpha Seismic Compressors		EXPRO Group		NRC Alaska	
American Marine	5	Fairweather		Olgoonik Corp.	
Arctic Catering & Support Services		Flowline Alaska		PENCO	5
Arctic Controls		Fluor		Petroleum Equipment & Services	
Arctic Fox Environmental		Foss Maritime		Petro Star Lubricants	
Arctic Wire Rope & Supply		Fountainhead Hotels		PND Engineers Inc.	
Armstrong		Fugro		PRA (Petrotechnical Resources of Alaska)	2
ASRC Energy Services	11	G-M			
AT&T		GCI Industrial Telecom		Price Gregory International	
Automated Laundry Systems & Supply		Global Diving & Salvage	16	Q-Z	
Avalon Development		GMW Fire Protection		Resource Development Council	
Aviator Hotel		Greer Tank & Welding	14	SAExploration	
B-F					
BELL & Associates		Guess & Rudd, PC		SafeVision, LLC	
Bombay Deluxe		Inspirations	14	STEELFAB	
BP		Judy Patrick Photography		Sourdough Express	12
Brenntag Pacific		Kuukpik Arctic Services		Tanks-A-Lot	
Brooks Range Supply		Last Frontier Air Ventures		The Local Pages	11
Calista Corp.	13	Little Red Services, Inc. (LRS)	15	Unique Machine	
Carlile Transportation		Lounsbury & Associates		Usibelli	
Certek Heating Solutions		Lynden Air Cargo	5	Volant Products	
		Lynden Air Freight	5	Waste Management	4
		Lynden Inc.	5	<i>All of the companies listed above advertise on a regular basis with Petroleum News</i>	
		Lynden International	5		

SOURDOUGH
moving freight since 1898
EXPRESS

Dependable Service Since 1898
Visit www.SourdoughExpress.com

continued from page 1

ACCUMULATE WELLS

help “determine the size and extent of the oil bearing formations and the best means for producing from them,” the company said.

Bravo 1 and Charlie 1, planned for winter 2018, will be drilled from ice pads accessed via a tundra winter ice road, and will be drilled “to further evaluate the opportunity to explore for additional oil deposits within the Accumulate lease block,” the company said.

Plans for 2018 drilling

Accumulate said in its project overview that Bravo 1 and Charlie 1 are targeting conventional oil deposits in the company’s western play fairway some 39 miles south of existing North Slope development.

The company said it will construct and operate infrastructure to drill the two exploration wells, including construction, operation and maintenance of ice roads and pads.

Field studies are planned for late June through mid-September, with installation of thermistors from July 1 through mid-

September. Staking and pre-packing of ice roads and pads will begin in mid-November and run through the first of the year; construction of ice roads and pads will begin in mid-December and run through Jan. 21.

Mobilizing the drill rig, camp and support operations will begin Jan. 21 and run through the end of January.

Drilling and testing the Bravo 1 well is planned for Feb. 1 through April 14; drilling and testing the Charlie 1 well is scheduled for March 1 through April 14, with demobilizing the drill rig, test, camp and support operations scheduled for April 14 through April 24, with summer stick picking and tundra remediation from July 1 through Sept. 15.

Construction

The tundra winter ice road will be constructed starting from mile post 386.5 of the Dalton Highway to the proposed Bravo ice pad and then an access road will be constructed from the Bravo pad to the proposed Charlie pad. Accumulate said the proposed wells are some 22 to 25 miles west of the Franklin Bluffs pad. A map included in the DEC application

see **ACCUMULATE WELLS** page 15

continued from page 1

TEST WELLS

leases that also includes ADL 392496, ADL 392497, ADL 392665 and ADL 392666.

Previous exploration activity in the area around Seaview includes the Griner well drilled by the Union Oil Company of California, the Endeavour No. 1 well drilled by Aurora Gas and the Anchor Point No. 1 well drilled by the Standard Oil Company of California.

Since arriving in Alaska in 2012, Hilcorp has primarily focused on development activities, with exploration used

in a targeted way to expand existing production. But at the annual conference of the Alaska Oil and Gas Association in late May 2017, Hilcorp Alaska Senior Vice President David Wilkins said, “We will also be drilling exploration wells on the Kenai Peninsula in search for large gas fields that we are confident exist.”

Hilcorp did not respond to a request for additional information.

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

—ERIC LIDJI

Contact Eric Lidji at ericlidji@mac.com

continued from page 11

WOTUS COMMENT

its broad scope. This definition included, not just navigable waterways that could support interstate commerce subject to federal oversight, but also tributaries of those waterways and other features such as adjacent wetlands. The argument in favor of this broad view revolves around the potential for contamination in any of these various water-bearing entities to reach the more navigable water bodies.

The rollback comes as the first step towards complying with an order by President Donald Trump to develop a less broad version of the WOTUS rule and forms part of the president’s policy to cut back on federal regulation of business and industry. The issue is particularly sensitive in Alaska because of the state’s myriad rivers, streams, lakes and wetlands.

—ALAN BAILEY

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 12

OIL PATCH BITS

alized messages, interactive games, discount codes for BP gasoline and other offers from BP. This program gives consumers an easy and fast way to get rewards on BP gasoline.

BP will promote the program at participating BP branded retail locations, online at

www.mypbstation.com, through BP social media websites and email distributions to the existing BP loyalty database.

Editor’s note: Some of these items 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 October.



THE SAFEST, MOST RELIABLE HEATER ON THE NORTH SLOPE.



- 780,000 or 2.2 million BTU versions
- Air recirculation for increased cost savings
- Remote thermostat
- 3,000 hour service intervals
- Extended run fuel tan

FAIRBANKS
907.457.1132

PRUDHOE
907.659.2330

KENAI
907.941.2512

NORTH SLOPE TELECOM, INC.
Alaska’s Premier Motorola Dealer
Providing Alaskans with two way radio and wireless communications.

MOTOTRBO™ PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM.
The future of two-way radio.

907.751.8200 | www.nstia.com



A proud subsidiary of
CALISTA CORPORATION
www.calistacorp.com

WWW.BRICEEQUIPMENT.COM

continued from page 1

GRID UNIFICATION

gate the transco concept since 2014, Patch said. ATC was formed under similar circumstances to those facing the Railbelt grid and has been providing insights based on its experience.

Fragmented system

The transmission grid, which runs from the southern Kenai Peninsula north through the Anchorage region to Fairbanks in the Interior, supports six independent utilities operating in the region. Currently ownership and operation of the grid, a consequence of the manner in which the electrical power system has evolved, is divided between the utilities. The state of Alaska owns a section of the transmission intertie between the Anchorage and Fairbanks regions.

This fragmentation of the operation and management of the transmission system has caused issues such as the fragmentation of the rates that the various utilities charge for using their sections of the system: The fragmentation leads to the “pancaking” or stacking of usage fees for the transmission of power across multiple sections of the grid. And the focus of investment by each utility on upgrades to its own grid sector distorts the economics of making grid upgrade decisions that can benefit multiple utilities — the grid infrastructure contains single points

of failure and aging sections that raise concerns about future reliability.

Following an Alaska Legislature mandated investigation into the management of the grid, in June 2015 the RCA reported that there would be significant advantage in grid unification through the formation of a transco. The commission’s findings also addressed other issues, including the need to establish an acceptable governance structure for the transmission system and the need to establish the operation of what is referred to as economic dispatch across the Railbelt. Economic dispatch involves the pooling of power generation capacity, to enable the continuous use of the cheapest generation available, regardless of where that power generation is located.

Another key issue that the RCA has required the utilities to address is the question of establishing a single set of mandated reliability standards for the Railbelt grid. Currently the grid has two sets of standards, neither of which are enforced.

A transco would own or lease sections of the transmission grid, would operate and manage the grid operations, and would act as a vehicle for investment in grid upgrades. The company would generate revenues from the rates that it charges utilities for shipping power across the grid. The governance entity, variously referred to as a unified system operator or independent system operator, would set strategy for the transco and also oversee the operation of economic dispatch.

Voluntary approach

The RCA encouraged a voluntary approach to meeting its recommendations but set requirements for regular reporting on progress. The Aug. 23 meeting was designed to review progress towards the establishment of a transco. The RCA has also scheduled two further meetings — one in September to review the power pooling situation, and another in October to review what is happening with regard to reliability standards.

Although the utilities have in the past been accused of being unwilling to work cooperatively towards common solutions, several executives attending the Aug. 23 meeting commented on the manner in which the utilities are cooperating to address the RCA’s concerns. Cory Borgeson, president and CEO of Golden Valley Electric Association, said that for some time the utilities have regularly pooled their power, seeking the cheapest power available. And various entities, including the RCA, have been pushing the utilities towards more cohesive action, he said.

“We are certainly committed to going forward with ... the transco ... economic dispatch and some type of independent operator,” Borgeson said, also commenting that this work is setting a legacy for the future and needs to be done correctly. Other executives picked up on this legacy theme, emphasizing that it is essential to take the

time necessary to develop effective solutions rather than rush into an inappropriate plan.

The process of merging operational and commercial arrangements independently developed over many years by independent operators is non-trivial. Complications include the method of allocating transmission costs, the balancing of the transco benefits and downsides among the utilities, and the need to consider each individual utility’s financing agreements, Patch said. He told the commissioners that the various utility executives are fully committed to “work meaningfully to benefit their ratepayers.”

Issues being addressed for the transco include the potential impact on transmission costs and the cost of energy; the design of an appropriate governance structure; and the design of an appropriate ownership and capital structure for the grid.

“Everyone is trying to get it done, but to get it done right,” Patch said. “It does no one any benefit to pat ourselves on the back and get it wrong.”


System operator

Lee Thibert, CEO of Chugach Electric Association, said that the primary focus needs to be the independent or unified system operator for the transmission system, to have an entity that looks at issues regionally. And Borgeson commented that the system operator concept needs to be progressed in parallel with the transco. Thibert said that, while the governing board of the transco would primarily come from the utilities, the owners of the system, the system operator would need to be more stakeholder driven. One of the biggest challenges is figuring out who those stakeholders are, Thibert said.

Tony Izzo, CEO and general manager of Matanuska Electric Association, emphasized the importance of assessing any transco plan in the context of the economics of what is to be achieved. And Anna Henderson, regulatory affairs manager for Municipal Light & Power, said that ML&P is advocating a phased approach to transco implementation, to smooth out the resulting changes in electricity rates — with only a small transmission system coupled with a heavy demand load, ML&P is particularly sensitive to the transmission cost allocation method, she said.

Brad Janorschke, general manager of Homer Electric Association, commented on the difficulty of bolstering the interties between the main electric load centers in the Kenai Peninsula, the Anchorage region and Fairbanks without either state financial assistance or the financial capability of a transco. With everyone being particularly price sensitive at the moment, it is important to balance transmission upgrade costs

see **GRID UNIFICATION** page 15



GREER

Tank & Welding, INC

IF YOU HAVE

FUEL OR WATER STORAGE PROBLEMS WE HAVE SOLUTIONS.


As well as residential septic & water tanks.

1 (800) 770-TANK

FAIRBANKS-AK
907.452.1711

ANCHORAGE-AK
1(800)770.8265

LAKEWOOD-WA
1(800)725.8108



WWW.GREERTANK.COM



INSPIRATIONS

Hair & Nail Salon

We offer personalized service, catering to the busy professional.

- 11am — 7pm (Late night appointments by pre-arrangement only)
- Each stylist has a separate, enclosed work area for your privacy and comfort

700 W Northern Lights Blvd., Anchorage, Alaska 99503

• Call for appointments • 229-6000

Mention
this ad and
receive a 10%
discount on
hair services!

continued from page 1

TAPS FILINGS

with electrically powered pumps, together with the implementation of a more automated pipeline control system.

The 2016 decision by the RCA said that the pipeline owners had overcharged the pipeline shippers for strategic reconfiguration costs — hence the need for rate refunds.

A complex case

The length and complexity of the strategic reconfiguration case, which has continued for several years, reflects the complexity of the arrangements for the management, use and government regulation of TAPS, and the complexities of the strategic reconfiguration project. The case revolved around the extent to which the pipeline owners could recover the costs of the highly expensive project through the rates charged for the shipment of oil through the pipeline.

The pipeline owners want to recover as much cost as possible through pipeline rates, while oil shippers without pipeline ownership interests want the rates to be as low as possible. The state also has an inter-

est in low pipeline rates, to maximize the value of the oil on the North Slope and hence to maximize state oil revenues.

Because TAPS carries both interstate oil, destined for locations outside Alaska, and intrastate oil for use inside the state, the Federal Energy Regulatory Commission and the RCA both separately regulate the pipeline system: FERC regulates interstate transportation while the RCA regulates the intrastate component. Both agencies were involved in the challenge to the recovery through rates of the strategic reconfiguration costs.

In November 2015 FERC issued an order disallowing the recovery of much of the strategic reconfiguration costs through the pipeline rates. And in February 2016 the RCA issued an order largely following the findings of the FERC decision.

Imprudent project

Both agencies said that the project had been imprudent, given inadequate up-front engineering; major cost and schedule overruns; questions over the extent to which the project was actually necessary; and a failure to demonstrate that claimed benefits from the project have actually been achieved.

The commercial arrangements for TAPS

act as if the pipeline consists of several distinct lines, each operated by an individual pipeline owner. Each owner charges its own rates for the shipment of its customers' oil through the owner's portion of the line. During the period of pipeline operation under challenge in the strategic reconfiguration case, four pipeline owners were transporting intrastate oil on behalf of in-state customers. These four owners were ConocoPhillips Transportation Alaska Inc., Koch Alaska Pipeline Co., ExxonMobil Pipeline Co. and Unocal Pipeline Co. BP was also a pipeline owner but did not carry any intrastate oil during the period in question.

Recovery of rate case costs

In conjunction with its concurrence with the FERC strategic reconfiguration decision, the RCA did allow ConocoPhillips, Koch, ExxonMobil and Unocal to recover from pipeline rates their costs incurred in the FERC and RCA strategic reconfiguration case. Anadarko, Tesoro and the state of Alaska objected to this arrangement, saying that the pipeline owners were being allowed to recover costs associated with a project that had been deemed imprudent. Moreover, Anadarko and Tesoro claimed

that, since FERC was also allowing the recovery of a portion of rate-related expenses from pipeline rates, the owners would end up recovering more than the total rate case related costs.

In a previous ruling, dating from June 2016, the RCA upheld the recovery by the pipeline owners of their rate case costs — essentially, the commission said that the rate case itself had been prudent and properly conducted. And, because the recovery of those costs was split between interstate and intrastate rates in proportion to the amount of interstate and intrastate oil carried, there would be no over-recovery of the costs, the RCA said in its new ruling.

Commissioner Stephen McAlpine had dissented from the June 2016 order and continued his dissent in the new order in the strategic reconfiguration case. Alaska statutes, unlike federal statutes, prohibit the recovery from pipeline rates of indirect costs, including costs such as attorney fees, associated with imprudent expenditures, McAlpine argued.

—ALAN BAILEY

Contact Alan Bailey
at abailey@petroleumnews.com

continued from page 13

ACCUMULATE WELLS

shows the ice road running southwest from the Dalton Highway to the Bravo pad and then northwest to the Charlie pad.

The cross country ice road is estimated at 23.2 miles, with 14 lakes and two gravel pits to be accessed for water and ice chips. The 500-by-500 foot Bravo pad will be at the southern terminus of the ice road; a 4.7-mile long access ice road will extend west then north from the Bravo pad to the Charlie pad, which will also be a 500-by-500-foot pad.

Accumulate said the ice roads will be built to accommodate drill rig moves, with pre-packing requested prior to official tundra opening to drive frost down and preserve early snow.

The company also said that where ice roads cross established subsistence trails they will be constructed to provide a smooth transition to ensure subsistence trail users have safe passage.

Drilling

Accumulate said both wells will be drilled to a depth of some 11,000 feet to test conventional objectives within the Seabee formation.

A mobile land drilling rig similar to the Arctic Fox will be used, with the same rig drilling both wells.

The plan is to test and hydraulically fracture both wells, and Accumulate said the wells may include laterals, sidetracks or additional penetrations from the same

exploration pad. Each well involves a vertical hole to about 10,000 feet, with measure while drilling, log while drilling and wire-line conducted in the open hold, along with rotary sidewall coring and repeat formation tester fluid sampling, the company said.

Phase II of the programs would include hydraulic stimulation and flow-back testing of prospective intervals to evaluate reservoir production.

The Bravo wells will be a tract operation in Alaska Division of Lands leases 393048, 393049, 393058 and 393059. The Charlie well will be in ADL leases 393043, 393044, 393052 and 393054.

All of the tracts are owned 77.5 percent by Accumulate and 22.5 percent by Burgundy Xploration, per a November 2014 agreement between the companies whereby 88 Energy acquired an 87.5 percent working interest, reduced to 77.5 percent on spud of the first well.

Icewine wells

Icewine 1, drilled in late 2015, was an 11,600-foot vertical well designed to test potential of the HRZ shale and conventional targets. The company had planned to return and drill a lateral from Icewine 1 and do multistage fracturing, but results of 2-D seismic, acquired in 2016, convinced the company to drill the Icewine 2, which reached its target depth of 10,450 feet on May 15, according to a May 17 announce-

ment from 88 Energy.

In an Aug. 24 update 88 Energy said flow testing on Icewine 2 would recommence beginning Aug. 28, following a six week shut-in. The company said there was a one week delay due to fine-tuning of the testing procedure.

Icewine 2 was shut-in July 10 to allow for pressure build up. ●

Contact Kristen Nelson
at knelson@petroleumnews.com

NALCO Champion

An Ecolab Company

Talk to one of our on-site experts today.

Anchorage, 907-563-9866

Fairbanks, 907-378-5900

Kenai, 907-252-0060

Essential Expertise for Alaska

Nalco is the world leader in delivering programs that maximize production, protect assets and reduce TCO for Mining, Oilfield production, Refining, Industrial producers and Utilities. Our differentiated technologies and services

- Save water
- Increase energy
- Deliver cleaner air and water

LITTLE RED SERVICES IS
ALASKA'S PREMIER HOT
OIL AND WELL TESTING
COMPANY





(907) 349-2931 | littleredservices.com

- Fracturing Pressure Control
- Pressure Pumping
- Freeze Protection
- Chemical Slipstreaming
- Production Rate Metering

- Fluid Hauling and Management
- Hot Water Generation
- Production and Exploration Flowback Services
- Production Fluid Separation
- Production Solids Control

continued from page 14

GRID UNIFICATION

against the resulting benefits, he said.

Janorschke also addressed a criticism that has been leveled at the utilities: that, working independently, the utilities have overbuilt their generation capacity. While Homer Electric's new capacity comes close to matching the utility's load, the older generation systems provide backup power, Janorschke said. In the event of a volcanic eruption, for example, the utility would switch to the use of the old facilities to avoid damage to the newer equipment. The utility also learned from a couple of recent blackouts that the old facilities are invaluable as a means of restarting the power system, Janorschke said. ●

continued from page 1

LIBERTY EIS

scheduled for early October in Utqiagvik, Nuiqsut, Kaktovik, Fairbanks and Anchorage.

Field operator Hilcorp welcomed the publication of the draft EIS. The company said that the field holds an estimated 80 million to 150 million barrels of recoverable oil.

“Not only have similar proposals of the Liberty project been vetted and approved before, but gravel-based energy facilities have a proven record of safe operations, with some in production for over a decade in the Beaufort Sea,” said David Wilkins, Hilcorp senior vice president for Alaska. “We are eager to work with the communities across the North Slope and our partners throughout the state to develop a project that will greatly benefit Alaska and bring greater domestic energy security to the country.”

Discovered in 1980s

Shell Oil Co. discovered oil in the area of the Liberty field between 1982 and 1987, through the drilling of four wells into the Kekiktuk formation from two artificial gravel islands. The Kekiktuk is the reservoir rock for the Endicott oil field to the northwest. In 1997 BP confirmed the existence of the field through the drilling of the Liberty No. 1 exploration well.

In 1998 BP proposed developing the field from an artificial gravel island. However, in 2001 the company re-evaluated that plan and, in 2005, came up instead with a plan to develop the field using ultra-extended reach drilling from the satellite drilling island at the Endicott field. The company moved ahead with that plan, expanded the Endicott satellite island and installed a purpose-built drilling rig for the project. However, following technical problems and some issues relating to the Deepwater Horizon disaster, the company cancelled the project in 2012.

In 2014 BP sold 50 percent ownership of the field to Hilcorp. Hilcorp became field operator and has since moved ahead with planning the development of the field. And the plan encapsulated in the proposed action in the draft EIS is very similar to BP's original 1998 concept.

Alternative options

The EIS does consider other options, including a couple of alternative possible locations for the production island, and the possibility installing field processing facilities on the Endicott satellite drilling island, rather than on the Liberty island. The EIS dismisses as technically infeasible

Hilcorp applies for WOTUS permits for Liberty

Hilcorp Alaska has applied to the U.S. Army Corps of Engineers for permits for work in the waters of the United States in association with the company's proposed development of the Liberty oil field in the Beaufort Sea, according to a notice issued by the Corps on Aug. 21.

Some activities involved in the project will require permitting under section 404 of the Clean Water Act, the Corps said. Those activities include development of an onshore gravel mine; the subsea trenching of the more nearshore section of the oil transportation pipeline from the field; the landfall trenching of the pipeline; the construction of vertical support members for much of the onshore pipeline section; and the construction of a pad for the onshore tie in between the Liberty pipeline and the Badami pipeline.

The construction of an offshore gravel island for the field's drilling and production facilities, and the trenching of the more offshore section of the oil pipeline, will require permitting under section 10 of the Rivers and Harbors Act, the Corps said.

To minimize the gravel requirements for the offshore island, and to minimize the island's seabed footprint, Hilcorp plans to install an armor protection system extending from the island surface to the seafloor, with a three-to-one horizontal to vertical profile and a sheetpile wall, the Corp said. Gravel placement for the island and pipeline construction will take place during the winter, when under-ice water currents are minimal.

The Corps also said Hilcorp anticipates minimizing its needs for operational staffing on the Liberty island, thus minimizing the environmental impacts from logistical support for the island personnel.

The Corps said it will evaluate whether any mitigation for the loss of aquatic resources is needed as a consequence of the project — the wetlands impact of the project appears very small and there are currently no approved mitigation banks appropriate to the impacted watersheds.

—ALAN BAILEY

Shell Oil Co. discovered oil in the area of the Liberty field between 1982 and 1987, through the drilling of four wells into the Kekiktuk formation from two artificial gravel islands. The Kekiktuk is the reservoir rock for the Endicott oil field to the northwest.

ble the ultra-extended reach drilling option that BP had proposed in 2005. A “no action” alternative would eliminate the economic benefit to be gained from developing the field, the draft EIS says.

The Boulder Patch, a seabed feature of considerable environmental significance, played a role in assessing the potential environmental impacts of some options. Although the proposed plan places the artificial island outside the Boulder Patch, alternative island locations could move the island farther from the environmentally sensitive area. But these options would raise other issues. One option would place the subsea oil export pipeline in an area susceptible to seafloor scouring associated with the nearby Kadleroshilik River delta. Another option would require substantially longer well bores and, hence, a larger drilling rig and longer drilling times.

The draft EIS indicates that while the proposed action would likely have little impact on subsistence seal, waterfowl, goose and caribou hunting, noise from the Liberty development could have significant impacts on subsistence whaling in the nearby Cross Island area.

Development plan

The proposed option would place the 9.3-acre Liberty drilling and production island in about 19 feet of water, about five miles north of the Kadleroshilik River and 7.3 miles southeast of the Endicott satellite drilling island.

The island would have slots for five to eight production wells, four to six injection wells and up to two disposal wells. Infrastructure and facilities on the island would support oil production rates of some 60,000 to 70,000 barrels per day. Gas produced from the field would be used as fuel, for artificial lift from the production wells or for re-injection into the reservoir. Seawater, at some point commingled with produced water, would be injected into the reservoir for pressure maintenance. The buried subsea oil export pipeline would consist of a 12-inch oil line inside a 16-inch outer pipe. The subsea section of the line would be about 5.6 miles in length, while the onshore section to the tie-in with the Badami pipeline would extend for about 1.5 miles, the

draft EIS says.

A mine site west of the Kadleroshilik River would act as source of gravel for the project.

Although Hilcorp is not yet in a position to determine when the Liberty development would start, or when to sanction the project, the draft EIS includes a potential schedule. The schedule indicates that first oil could start to flow toward the end of the third year or in the first few months of the fourth year of the development. The field has an expected life of about 20 years from first production, the draft EIS says.

Major construction of the island and its facilities, and the laying of the export pipeline, would take place in years two and three of the project, with development drilling potentially starting in year two and continuing through year four.

Four ice roads would potentially be needed to support the construction operation: one direct from Endicott to the Liberty Island, one from Endicott to the offshore pipeline route, one along the pipeline route, and an onshore ice road from the Endicott road to the pipeline tie-in on the Badami pipeline. Three ice pads would potentially support island, facility and pipeline construction.

Oil and gas potential

“The federal submerged lands of the Beaufort Sea are known to have great oil and gas potential,” said BOEM Acting Director Walter Cruikshank when announcing the publication of the draft EIS. “They also contain sensitive marine and coastal resources that Alaska Native communities depend on for subsistence. During this comment period we look forward to discussing this draft EIS with the Beaufort Sea coastal communities and getting meaningful feedback on ways it can be refined and enhanced.”

BP and Arctic Slope Regional Corp. are partnering with Hilcorp on the project.

“BP believes the Liberty project is important to Alaska's economic future, and we support it moving forward in a manner that is respectful of the environment and of the local communities and their subsistence way of life,” said Janet Weiss, president of BP Exploration Alaska Inc.

“The Liberty Project represents the kind of development that Arctic Slope Regional Corp. has determined is important to our region and through local participation we can ensure that the needs and issues of our communities and shareholders are addressed,” said Richard Glenn, ASRC executive vice president of lands and natural resources. ●

Contact Alan Bailey
at abailey@petroleumnews.com

YOUR GO-TO MARINE SERVICES PROVIDER



DIVING AND SUPPORT SERVICES
FOR ALL OF YOUR OFFSHORE NEEDS.

- Concrete placement and repair
- Inspections
- Intake construction & maintenance
- Pipeline placement
- Underwater video
- Welding & burning
- Customized tasks and solutions

CONTACT US TODAY!

Visit gdiving.com to learn more or call (+1) 907-563-9060.