

Shipping Season

By Marcus Munro



Port site Teck employees Dennis Hunnicutt (far left), Camille Adams (second from right) and Peter Lambert (far right) presenting M/V Sakizaya Hero ship's captain with commemorative pan.

Great news! As of September 13, we passed a major milestone! We have safely shipped out over 1,000,000 wet metric tons (WMTs) of concentrate into our 18th vessel of the year. A lot of hard work and effort from our team (Teck employees and shipping contractors) has gone into achieving this milestone in spite of the challenging weather conditions we have experienced this year.

There have been a number of weather delays where we have not been able to load out concentrate. A more accurate statement would be that we have been down because of sea conditions. Many times this season the sky has been clear and the sun shining but we haven't been able to load any vessels. Many conditions must be met to safely load vessels. Wind speed and its direction create sea swells. A large swell is one of the main reasons we shut down shipping. Why is that, you ask?

It all comes down to how we load vessels anchored over three nautical miles offshore. To load the vessels we use lightering barges and tugs that transfer the concentrate out to the awaiting vessel. Each barge holds 5,443 WMTs of concentrate along with two 988 loaders to feed the barge's reclaim hopper and discharge conveyor system. Once the barge is tied off to the vessel the barge's discharge slewing conveyor swings out over the top of the vessel to load the designated hold. When the vessel is empty,

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Message from the General Manager

By Henri Letient



Three quarters of the way through the year, there are many things we can be proud of. Despite a slight setback in having to postpone the Zero Tonnage Event to ensure we have all the concentrate to ship that we promised, we are well on our way to have record production again this year. When shipping season is done in a couple of weeks, we'll have completed our second best shipping season in Red Dog's history despite a record number of weather delays! Well done, Team.

As usual, summer season was full of construction activities. We completed our new Lime Slaker building in time for discharge season. Construction activities associated with raising the Main Dam and completing the core of the Back Dam were completed well within the planned schedule. Drilling in the pit and in the regional prospects went well also, with very promising results. Many other projects were carried out successfully. Many thanks to our numerous contractors who helped us with all that work.

I am always proud of the level of effort and good team work we put in to ensure everything we do is protective of the environment and in respect of our surrounding communities. Discharge season concluded September 24th within compliance. That is a great achievement which requires much effort by many of you. There was excellent coordination with the Subsistence Committee and with Kivalina to communicate any change in activities on time and address any concerns in a timely manner.

As you are aware, Red Dog Operations has been seeking to work cooperatively with the Northwest Arctic Borough to negotiate a new payment agreement between the mine and the Borough. We recognize the unique challenges facing the people and communities of the Northwest Arctic. We want to achieve a new agreement that provides additional resources for the region while also maintaining the viability of Red Dog and the jobs and economic activity it generates. Discussions are ongoing with the Borough and we are hopeful that we can achieve a fair and reasonable agreement for all stakeholders in the region.

All in all, we are on a good path to complete the year successfully. Let's keep that momentum going and keep our focus on safety with everyone going home safe and healthy every day!

New Equipment Monitor Air Quality

By Darren Jones



This summer, Red Dog Environmental Technicians received training on four new SHARP installations in order to better monitor air quality. Old TEOM monitors are shown in the photo above, while new SHARP monitors are shown to the left.

Since 2004, the Environmental Department has monitored air quality for Total Suspended Particulate (TSP) in four locations at Red Dog Mine and Red Dog Port Site. Tapered Element Oscillating Microbalance (TEOM) air monitors that had been used to measure TSP are no longer supported by the manufacturer, and are being replaced by Thermo Scientific - Synchronized Hybrid Ambient Real-time Particulate (SHARP) monitors.

In the summer of 2016, our Environmental Technicians, Dennis Sheldon, Nicole Shellabarger, Marissa Atoruk, and Carla Nelson built platforms in three locations at Red Dog Mine and Red Dog Port Site. This was done in preparation for the four new SHARP installations at the PAC, Tailings Dam, Port CSB, and Port Lagoon. These technicians worked with Micheal Perkes, Thermo Scientific's field technician, who spent a week at Red Dog helping to install and calibrate the SHARP units for relative humidity, temperature, barometric pressure and flow, as well as ensuring that field installation was done correctly.

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Lightering barge (on right) and discharge slew conveyor off-loading concentrate into vessel hold.

it sits very high in the water and when the barge is full, it sits very low in the water. This means that there is only about 10 feet of clearance between the top of the vessel hold and the bottom of the barge's slewing conveyor. If they come into contact are damaged, the barge could be out of commission for the remainder of the shipping season.

If we were to load in marginal seas with a 3-4 foot swell, the vessel and barge would rise and drop a total of 6-8 feet from the top of the swell to the bottom. When the timing between the vessel and the barge gets out of sync with one another you can imagine what the end result could be! That's right... contact between the two! Because of this potential hazard and the huge impact it would have on our ability to load concentrate, we err on the side of caution.

Maritime Tradition

It is a long standing maritime tradition that when a new vessel on its maiden voyage arrives at its first port of call, the Port Manager (or designee) presents the ship's captain with a gift commemorating the occasion. We have had the opportunity to present numerous Maiden Voyage commemorative pans on behalf of Red Dog Operations. It is an honor to be a part of this great maritime tradition. It is very well received and appreciated by the ship's captain and officers. Port operations and maintenance personnel are given the opportunity to be a part of this well-regarded maritime tradition.

Shungnak Dreams

By D'Anne Hamilton



Left to Right: Student, Jeremy Woods; Teacher, Andie Zink; Students, Brennan Sun, Edward Douglas, Justin Custer, Daniel Custer, Jack Horner, and Principal, Roger Franklin.

A recent trip to the Red Dog Mine has awakened dreams for a group of Shungnak students in Northwest Alaska.

After three days of tours and a myriad of presentations, a group of six high school students saw opportunities that lay before them, igniting passions they didn't realize existed before. A mine tour, complete with a VIP view of a blast detonation, solidified that interest. "I wanted to be a carpenter," said Brennan Sun, with a gigantic smile lighting up his eyes. "Now I want to become a heavy equipment operator," he said. Brennan plans to go to training to prepare him for a job at Red Dog Mine after he graduates from high school.

Every year, the Red Dog Mine brings in students from surrounding communities to encourage them to consider jobs at Red Dog and to promote university or vocational/technical education. The students are also introduced to the concept of on-site apprenticeships that

guide selectees through to journeyman status in the Powerhouse, Electrical and Instrumentation, Mill Maintenance and Heavy Equipment Shop. Students are also given presentations by geologists, engineers and other professionals who reiterate the importance of math and science to many careers at Red Dog. Edward Douglas wants to work in the Powerhouse. Jeremy Woods would like to work in the Mill. Justin "Joe Joe" Custer sees himself in the administration of Red Dog one day. "... I thought I didn't want to go to college, but thanks to you wonderful people, I got motivated to continue my education after high school."

One of the chaperones, Shungnak Principal, Roger Franklin, has been working with this group since they were in middle school, reinforcing student aspirations and pushing home the idea of school as a workplace, talking consistently about accountability and teamwork. "Our motto is, 'It's aWe,'" Franklin said, and many community members support the dreams of these young people.

Brennan Sun realizes where the potential leads. "There's a lot of open doors for not only me, but many other people. And I have to take advantage of it and make it happen."

Grant available for a female business owner to attend 3-day business education program



E-Series (April 19-21, 2017)

is a transformative program for women entrepreneurs by providing classroom style sessions on topics such as sales, marketing, branding and HR. For continued support after the program, all participants are paired with a mentor for 12 months of continuous 1:1 support to ensure they have the insight and feedback they need.

“ Taikuulapiaq, thank you very much! Without this program, I wouldn't have as much confidence as I do now to continue forward with my business. It means a lot to me that you offered this grant and provided me with this opportunity. ”

— M. Jacqui Lambert (EsquiMedia)
Red Dog Mine 2016 E-Series Teck Recipient



One (1) grant is available for a woman from the Red Dog Mine region to cover roundtrip travel to Vancouver, tuition and mentorship. Applications open until January 30, 2017. *Applicant must have a valid US passport for April 2017 travel.

THANK YOU TO OUR SPONSOR + GRANT DONOR:



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CONNECT

Please contact Verna Westlake, Community Relations at 907-754-5189 or email verna.westlake@teck.com for details about how to apply for the Teck grant.



Or, for specific program enquiries, please contact Michelle Cheong, FWE Program Manager, at michelle@fwe.caor by phone at 604-682-8115.

Crop Dusting at Red Dog?

By Joe Diehl



Winter dust mitigation from the tailings beach is a high priority at Red Dog. In past years, several dust suppressant chemicals have been tested with less than stellar results. This year, a new product, T.O.P. Pine Pitch Emulsion, is being tested. We hope it will stand up to the long winter and keep tailings dust suppressed. The product is made from pine trees and is biodegradable, non-toxic, non-water soluble, non-leaching, and non-corrosive.

Applying dust suppressant to the entire tailings beach has become increasingly difficult as the beach continues to grow in order to aide in dam stability. Enter Glenn Air Inc., a crop dusting company out of Palmer, AK owned and operated by Doug Glenn. Doug flies a Turbine Ayres Thrush aircraft for his crop dusting operations. He and his aircraft arrived at Red Dog on September 7. Since the Pine Pitch Emulsion cannot be applied in the rain, weather delays were frequent. Doug finished covering the beach on September 16. Early reports state that the beach was covered thoroughly and the Pine Pitch set up well. Time will tell if this product meets our expectations, but indications are very promising.

MERT in Action!



On Friday evening around 5PM on the first of July, the Red Dog Medical Emergency Response Team (MERT) was paged and called in to respond to a vehicular incident at the fish weir. A driver had recklessly driven off the road and was injured. The driver complained of neck and back pain, and reported he could not feel his legs. A three person MERT team responded to the call with the ambulance and performed a soft extraction of the injured worker from the truck he was driving. They safely delivered the injured man to the onsite medical clinic for further evaluation and treatment. Fortunately, the event was only a planned training exercise, and it was a good one, too! The MERT is comprised of 18 team members with various levels of EMT and First Responder experience, led by our onsite PAs Jim Duchanin and Clay Langland. The MERT meets every Friday from 5-7PM and conducts regular training drills and exercises, as well as classroom and clinical training to practice and sharpen their skills. The MERT volunteers are committed to the health and safety of us all here at Red Dog Operations.

Suvisi (Sü-vĩ-see) in the Iñupiaq language means:

“What are the many people doing?”

Getting-r-Done-Safely



Wayne Johnson, an operator in the new Lime Slaker building, here shows us the beginning of the process where lime is first introduced into the water treatment circuit. As one end of the connex is being elevated, lime slowly gravitates to an opening at the lower end and dumps into a hopper. The inside portion of the connex is lined with plastic to protect the contents from moisture and also provides a smooth surface for lime to flow.



Heavy equipment mechanics John Barlow (pictured above) and Adam Turner are conducting major overhaul work on service truck 8256, which included repairing and replacing electrical components, suspension springs, transfer case linkages, brakes, rotors and the A/C unit.

Courageous Safety Leadership!



May 2016. While preparing to conduct work in Float Cell A2 in Module 2025, Mill Maintenance Crew 238 had to make a tough decision. A confined space assessment had not yet been completed of the space. The supervisor used his experience and good judgment, along with exercising courageous safety leadership, going above and beyond to ensure the safety of his crew. Although production pressure may have been a factor, the supervisor made the hard call to shut down the cell, and classified the work area as a permit confined space. The crew took the needed time to complete the permitting process so they could work in the area safely. Thank you Crew 238 for your commitment to safety and your dedication to our safety culture here at Red Dog.

Crew 238

Quyaana

Thank you to all who contributed to our newsletter.

To submit topic ideas or an article about your work, a coworker spotlight, a special project or life at Red Dog, contact Managing Editor, Verna Westlake at verna.westlake@teck.com or communityrelationsRDOG@teck.com

Red Dog Confined Space Committee



During second quarter, the Red Dog Fire Department participated in excellent Aircraft Rescue and Fire Fighting (ARFF) training. Team members participated in classes offsite at the Beacon Training facility in Kenai. Refresher classes were held for experienced firefighters. One day of live-fire training included extinguishing an aircraft interior passenger compartment fire, a wheel fire, a cargo compartment fire and an APU fire. This training was conducted on a certified Boeing 737 mock-up provided to the state by the FAA, and is required to keep Red Dog Airport operating. The second day of training included a refresher

of Confined Space Rescue so the team could practice and stay competent for any contingencies that might arise at the operation.

New team members participated in an intense, 40-hour initial Aircraft Rescue and Fire Fighting class to learn about the layout, painted markings and airport signage as well as extinguishing fires with both "pumping and rolling" trucks and hand lines. All attending members of the Fire Team were certified, and are now trained to deal with any aircraft emergencies and to perform airport standby on charter flights.

Strengthening Our Communities

Red Dog Community Investment receives and reviews donation request applications quarterly. Successful awards will be made in the last month of each quarter.

Quarter

Q1

Q2

Q3

Q4

Deadline

February 29

May 31

August 31

November 30

For all donation and sponsorship requests, please apply online at: <https://communityinvestment.teck.com>

Red Dog Newsletter

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For Current Job Vacancies (or opportunities)

Please go to www.teck.com and/or www.nana.com and apply on-line. (Paper applications or letters of interest are no longer accepted.)

Caribou Crossing



On September 30, 2016, a line of loaded, south-bound concentrate trucks stopped on the port road between mile markers 9 and 10 waiting for a herd of over 2,000 caribou to finish crossing the road to the south. Per Red Dog policy for caribou crossing, any and all vehicle/equipment traffic must stop and wait for the migration over the road to be completed. The first truck stopped at about 9:20 a.m. and the crossing did not end till about 1:00 p.m. By the time the crossing was over and the road reopened, a total of 13 vehicles (8 loaded concentrate trucks and 5 other vehicles) made up the line of waiting traffic.

Red Dog's annual village visits in the third quarter included Kiana on July 1, Noatak on August 12 and Ambler on August 18.



Helen Jones cutting sheefish in Ambler



Kiana residents interact with Red Dog employees



Eli Mitchell, Surface Crew, showing off gill net salmon catch.



Verna Westlake with sheefish catch of the day



Eli Mitchell, Noatak



Eugene Monroe, Noatak



Frankie Jones, Jr. from Ambler and Inventory Control Lead at Red Dog, sharing about his work with family and friends



Red Dog Team: Dolly Gallahorn, Mill Ops; Nikki Pidgeon, Geotech; Tinu Shantanu, Geologist; Verna Westlake, Community Relations; Michael Rogers, Information Systems; Robert Nelson, NANA; Fritz Westlake, Community Relations; Eli Mitchell, Surface Crew; Aaron Towarak, Mill Ops



Everyone loves one-year old Gunner from Ambler, especially his Mom's colleague, Sarah.