

Red Dog Mine Celebrates 25 Years

By Marissa Atoruk



This November will mark the 25 years in operation milestone for Red Dog Mine. On July 14th, a number of special guests flew to the mine to help our employees celebrate the past, present and future of Red Dog. Many of the guests were a part of making the mine a reality, including: former Governor Bill Sheffield, former NANA President Willie Hensley, and former NANA Chairman Christina Westlake. Teck President and CEO Don Lindsay, NANA President Marie Greene, and NANA Chairman Don Sheldon were also some of the many special guests in attendance.

The partnership between NANA, the owner of the land, and Teck, the operator of the mine,



was praised as the key to the success of Red Dog. It was such a great opportunity to hear the history behind it all and listen to those who had a huge role in getting the mine started.

After months of planning, the only factor that was uncertain was the weather. With rain and fog on the forecast, somehow we were fortunate enough to have blue skies and an overall very nice day. A huge thank you to all who were involved with making the celebration a success!

Message from the General Manager

By Henri Letient



There is much to be proud of and to recognize! We have put a lot of effort in the past two years to improve our performance and ensure we create a safe working environment. Each

one of you was called upon to do your part and the results clearly demonstrate that you answered the call. Thanks you! Safety is a core value at Red Dog and as such, always needs our attentive dedication. Keep bringing up those safety ideas and doing safety observations. By always being on the lookout, we keep all of us safe so that we can all go home safe and healthy every day.

Production is ahead of plan! With the economic tightening the mining industry is currently going through, we knew going into 2014 that we needed to focus on cost control and generate the best economic results we could, for both Teck and NANA. We're doing just that and so far, thanks to the efforts of each and every one of you, we're exceeding our targets on many fronts. The mill has broken many records in terms of volume of ore processed and metal produced.

The shipping season went very well, with an early start and a long stretch of good shipping conditions. We've had a couple of long periods of poor weather but that provided some well needed rest to the crew. Overall, we were on target to get all our production out before the end of the season.

We continue to be committed to ensuring our surrounding communities, our partner NANA and other stakeholders are well informed about our activities. We've had multiple visits already this year by elders, the subsistence committee, various NANA staff as well as regulators and even some politicians! The Big Event this year of course was the 25th Anniversary Celebration on site in July. That was quite an event which took a lot of planning and preparation. The weather cooperated and we had a fantastic day! Thanks to all who were involved in making it a success!

As is tradition, we are recognizing employees who reached a significant milestone in years of service with Teck and Red Dog Operations. Thank you for your support and dedication.

Community Safety

By Nolan Schaeffer

"Am I really at work right now?", I thought with a smile on my face as I cast a fishing line into the water standing on the edge of the Kobuk River, the village of Ambler. I had that same thought casting from a boat on Selawik Lake. My experiences participating with Community Relations during the village tours is something I won't soon forget. Meeting new people and seeing old friends was great, and participating in community activities like rod & reel fishing, WOW! What else can you say about that? Another event I had a great time doing is something I'm very passionate about. Talking about what Safety means to me, my job and Red Dog. Safety isn't just something we do stepping off the plane when arriving at work; it's a part of our lives. It's a value we bring from here to home.

I grew up in the region and enjoyed the activities a subsistence lifestyle provides. I often think of hunting and fishing trips with family and friends. I also remember all the times I didn't wear a personal floatation device when boating, or lack of hearing

protection when firing a gun. As we continue to build our Safety Culture at Red Dog you can't help but think back to those days. Needless to say it's quite easy for me to promote use of these items. We chatted about decibel levels and exposure times while performing activities that most don't even consider loud. I brought a display of items such as personal protective equipment (PPE) that we use here at Red Dog: full face and half face respirators, all the different cartridges, eye wear and a Teck hard hat. I also brought hundreds of pairs of safety glasses and ear plugs that we handed out to promote use of PPE at home.

At each community visit, locals are encouraged to ask questions about Red Dog and gain insight into jobs the various department representatives do. I had numerous discussions about lead exposure and the prevention measures we have in place (respirators at my station sparked interest). Industrial Hygiene was another popular subject matter along with behavioral based safety training, specific task training, and airport security. I talked about Courageous Leadership and our goal of

"Everyone Going Home Safe and Healthy Everyday". It was entertaining watching children try on the full face respirator and showing it off to their buddies. As we finished up the engagement and began prepping dinner an older gentleman admired the white hardhat with a black Teck logo, I offered him the hat. Concluding the day's events some of us stood outside the school saying good bye, the old man wearing his shiny Teck hardhat walked past and I told him "looking good" he shook my hand and said thanks. I believe that promoting Safety throughout the communities is an important step to fulfill our commitment of instilling safety as a core value. Safety & Health will continue to support Community Relations by participation and besides I still haven't caught a fish.

Nolan Schaeffer
Safety & Training Officer
Red Dog Operations



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

"What are the many
people doing?"

Why do you have to fill out a Caribou Card?

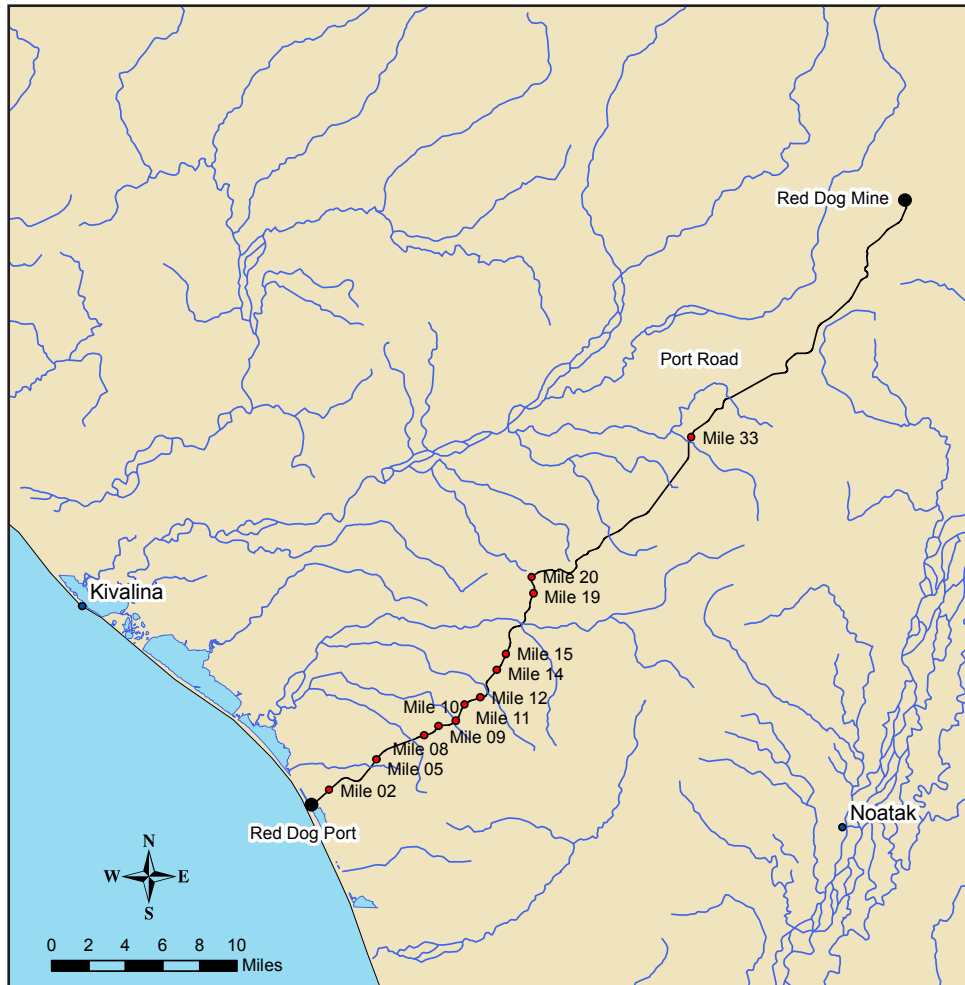
By Chris Eckert

In the early 1980s when NANA and Teck (Cominco at the time) were making the plans for the development of the Mine and the Port, the importance of not disturbing the migration path of the caribou was recognized and control measures were developed and written into the construction and operational plans. One of those operational controls was for all vehicles traveling the Port Road to stop when migrating caribou are crossing the road and for that section of the road to stay closed until migrating herd had completed the road crossing. Knowing that the Port Road could be closed for caribou migration or weather for periods lasting from a few hours to multiple days, the Mine and Port sites were designed to be able to function normally with sporadic unscheduled road closures. For the first 20 years of the operation, the closure of the road for caribou migration became a routine activity and considered part of the normal operation of the site.

During the permitting for the Aqqaluk Pit, agencies involved in the process asked how often and how long the road was closed each year for caribou migration. When we tried to answer the question we found the road closures for caribou were not routinely tracked. The closures

were just considered part of the normal operation of the road and not well documented. As the Northwest Arctic Borough was developing the revised "Master Plan" permit for the operation, they asked us to track the time the road was closed for caribou migration and include the information in the annual report to the borough. To meet this requirement the "Port Road Caribou Card" was developed and now the first vehicle that stops for caribou fill out the card and turns it in to the Environmental Department. The cards collect information on when, where, and how many caribou were crossing the road and if vehicle or hunting activity had disturbed their path of travel.

The information has been collected since 2010 and data shows that road closures are highly variable and sporadic. In 2010 there were no closures for migrating caribou. In 2011 the road was closed 22 times for a total period of 27 hours. In 2012 the road was closed 14 times for a total period of 37 hours. In 2013 the road was closed 25 times for a total period of 22 hours.



2013 Port Road Closure Locations for Caribou Migration

Port Road Caribou Card	
<ul style="list-style-type: none"> ➤ This card is to be filled out whenever vehicles are stopped for more than 15 minutes on the Port Road due to caribou crossing the road. ➤ The first vehicle that stops for the caribou crossing fills out the card. 	
Name: _____	Date: _____
Vehicle #: _____	Location (mile marker): _____
Time closure started: _____	<input type="checkbox"/> AM <input type="checkbox"/> PM
Time road reopened: _____	<input type="checkbox"/> AM <input type="checkbox"/> PM
Number of vehicles stopped	
# Concentrate Trucks: _____	
# Other: _____	
Estimated Number of caribou (check one):	
<input type="checkbox"/> 1-50 <input type="checkbox"/> 50-200 <input type="checkbox"/> 200-500 <input type="checkbox"/> 500-1,000 <input type="checkbox"/> 1,000-2,000 <input type="checkbox"/> More Than 2,000	
Caribou's Direction of Travel:	
<input type="checkbox"/> Toward the Noatak side of road <input type="checkbox"/> Toward the Kivalina side of road	
Did road traffic impact or change herd movement?	
<input type="checkbox"/> Yes <input type="checkbox"/> No If yes: How was herd movement affected? _____ _____	
Were there hunters near the herd? <input type="checkbox"/> Yes <input type="checkbox"/> No Were there hunters on the Road? <input type="checkbox"/> Yes <input type="checkbox"/> No Did the hunters impact or change herd movement? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes: How was herd movement affected? _____ _____	
Ver.1- 8/21/2010	

Cross Training in the Powerhouse

By Travis Clark - Millwright Apprentice Level 3

For two weeks of cross training, I spent time in the powerhouse learning basic operating and maintenance procedures. The training started out with daily rounds and readings for the generators and systems, alarm identification and clearing, troubleshooting, preventative maintenance procedures and a little bit of overhaul. I have previous experience working in the powerhouse and helping out when they were short handed. This training was more in-depth and geared toward normal maintenance and operations.

During the training, I became more familiar with the daily (or in this case, nightly) operating standards. More time spent there will help me fully comprehend the precise and technical maintenance of such equipment. The journeymen of the powerhouse do an outstanding job of teaching while keeping terminology and instructions simple. Like mill maintenance, the powerhouse crew is very diverse in their backgrounds and all are very knowledgeable in power generation.

I learned the two ways generators run, which are droop mode or isoc mode. In droop, the generators run individually and are set at about 63 hertz, and as the load increases on the system the hertz gets closer to 60 hertz which would be running at a 100% power draw. In isoc, they are in communication with each other and try to split the load draw evenly between the generators so one is not overworked. This allows them to operate longer, require less maintenance breakdowns, and allows the generators and engines longer life expectancy.

Preventive maintenance (PM) was my most enjoyable time, which let me see the inner workings of the diesel fuel purifiers and the other PM was on number three and number five generators. Cleaning the purifiers and seeing the inner workings, the design and engineering of the machine was pretty amazing. Working the PM's on the generators gave me a better outlook on record keeping for history on the machine and how they make planned shutdowns easier to schedule.



Working on generator eight turbo chargers was interesting. For physically being a small part of the system, it plays a huge roll in the efficiency and output of the engine.

One lesson I will take from this training is that regardless of how well I know, or think I know a piece of equipment in my work area, reading the manuals will always have something new to teach me. We keep them on file for a reason and are readily accessible.

Have You Been Shaken Lately?

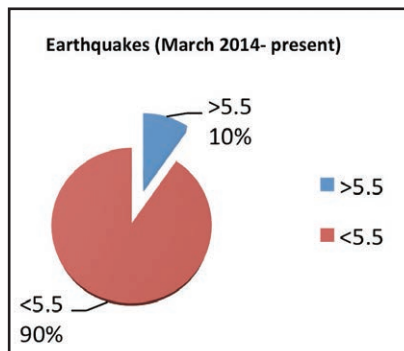
By Tinu Tiwari

The answer would be yes, if you live in NANA region. Lately, Red Dog Mine and surrounding NANA communities have seen an increase in seismic activity in the NW Alaskan wilderness. Earthquakes are not uncommon in Alaska; however, NW Alaska has historically not been as active seismically as Southern or Aleutian parts of the state (With exception of 1984 and 2013 magnitude 5+ earthquakes). Most of the earthquakes this year have been of magnitude 4 or lower, and these are not felt by general population due to lower energy release levels or due to higher distance from focal point (Focal point is the center of an earthquake). Only a set of two earthquakes, one in April 2014 and one in June 2014 have been of magnitude 5 or higher than 5.

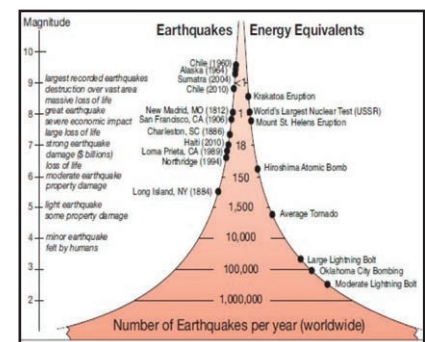
Seismic activity is caused by tectonic plate movement and stress release associated with it. The Alaska Earthquake Information System has installed two new seismographs at Noatak and Kotzebue to pinpoint focal points of

these earthquakes. In preliminary analysis, the focal point of these earthquakes appears to be approximately 10 miles NNE of Noatak. Geotechnical and project engineers at the Red Dog mine are closely monitoring these earthquakes and a post-earthquake tailings storage facility (TSF) and pit wall inspection were conducted. So far, visual inspection and sub-surface monitoring instruments have not

shown any sign of abnormalities. Red Dog Mine has also acquired an accelerograph which will give peak ground acceleration (Peak ground acceleration or PGA in short is the force an object feels) in case of an earthquake. This PGA value will be then compared to TSF dam design parameters to make sure everything is alright.



90% of the Earthquakes have less than 5.5 magnitude



Earthquake magnitudes and energy released by them

Happy Retirement

By Marlene McNeal

Willard Commack retired from the Maintenance Department after 24 years of service with Teck Alaska. Willard was hired on November 13, 1989 as a Mill Mechanic and retired on August 27, 2014. Congratulations Willard on your retirement and thank you for 24 years of service to Teck.



Michael Schierman retired from the Surface Crew after 24 years of Service with Teck Alaska. Mike was hired on August 23, 1989 as a Surface Operator. Mike became a surface supervisor on December 11, 1990 until his retirement on April 16, 2014. Congratulations Mike on your retirement and thank you for 24 years of service to Teck.



Christian Graupe retired from the Powerhouse Department after 19 total years of service. Chris started as a temporary employee in 1994 as a Mill Mechanic and on May 14, 1996 Chris became a regular employee when he transferred to the powerhouse, and ended as the Powerhouse Supervisor when he retired on July 31, 2014. Congratulations Chris on your retirement and thank you for 19 years of service to Teck.



Guy Ambrosio Retires

By Brandon McMillan

After 10 years with Teck Alaska and 44 years with Cominco/Teck in the electrical and instrumentation field, Guy Ambrosio has retired. Gus' positive attitude and great sense of humor will be missed. We may no longer have the beloved game of bocce grace Red Dog soil again. For most, there

will be tears shed. We may never have the Mario lookalike contest again – in which there was no competition. The Italian Stallion will no longer be called out on the radio. Guy, your work ethic and commitment for development of the shop is irreplaceable. You will be missed greatly, but like they say, "The cowboy rides away".



Celebrating 25 Years



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Work Ethic And Enthusiasm Pays Off

By D'Anne Hamilton

Although Barbara Newlin spent considerable time *observing* seasoned journeymen during a two-week long training event at the Red Dog Mine this summer, the Alaska Technical Center Millwright Maintenance graduate was eager to try her own hand at new tools and show her skills at familiar ones in the Heavy Equipment Shop and Mill Maintenance.

Barbara had the opportunity to do just that. She was one of five students selected for the Teck/ATC Practicum at Red Dog May 28th – June 11th: Anthony Ashby, Ernest Barger Jr., Franklin Carter, Thomas Nay and Barbara received site-specific training; toured Maintenance Department work sites; and observed and assisted crews in everything from cleaning 777's to welding.

Supervisors also stressed the importance of building good work habits, such as showing up on time for work. Many of the students caught the eye of potential employers with their attitudes, work ethic and enthusiasm. Barbara's enthusiasm paid off. She is currently employed at Red Dog as a Casual Laborer.

Maintenance Superintendent Bob Chesham was just as eager for this latest effort to build on the relationship with ATC. "We are working



with the Technical Center to prepare their students as much as we can for potential employment at Red Dog, even if we can't guarantee jobs. Our goal this year is to have a new group of students come up during their ATC training instead of at the end of it, so students get more familiar with the experience, much earlier."

This year, students will also get a one-day visit early in their training, to orient them to Red Dog; tour the Mill, Mine and Maintenance Departments; and meet the Maintenance Department supervisors. For more information, contact Personnel Officer D'Anne Hamilton at 754-5861.

Summer Intern

By Brianna Kirk

First of all, I would like to thank everyone for a great summer here at Red Dog. My experience as the Community and Public Relations Intern was something I will never forget and it helped provide important tools and experience I need to achieve my goals. I was exposed to different aspects as a communications major that will benefit me in my studies and I will be able to integrate what I have learned into future classes. I did not only learn about what it is like to have a career in Community and Public Relations, but I also learned things about myself. I can say that I have developed certain skills and built on others which will benefit me for future jobs and careers. There were challenges and I am more thankful than ever for the opportunity provided and there were no better people than in this department to have taught me what I learned.

I was involved in a variety of projects and activities the department manages, and that is what substantially impacted my summer. I got to participate in the annual village meetings in five communities, of which one I have never been to. As you recall, on July 14th was the 25th Anniversary Celebration of the mine. This was a huge milestone,

and I was fortunate enough to be a part of it. Guests attended from various places in Alaska who each had a special role during the life of the mine and it was an honor to meet many of them. Marissa and I greeted everyone at the airport that day and also got to be "tour guides" for everyone on the 15 minute ride to the PAC, it was a really fun opportunity. Watching the celebration fall right into place after months of planning was very exciting, the team worked really hard and it seems everyone enjoyed it.

Safety, now more than ever, has been very important to me in these last few months and all thanks goes to Teck and the messages delivered. I have been able to take home what I have learned and always question whether something is safe or not. With that being said, I hope everyone has a safe and great rest of the year and thank you all again.

Community Relations summer intern, Brianna Kirk, greets former Governor Sheffield upon arrival at site.



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 verna.westlake@teck.com or communityrelationsRDOG@teck.com

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.)

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