

# Quarterly Review

## INSIDE THIS ISSUE:

Sales Spin	2
ORC Logistics	2
Keeping You in the Know	3
ORC Mission & Values	3
Evacuation: What to do	4

## Welcome to the ORC Lab

It has been a challenging and exciting journey creating a laboratory for ORC. Many people were of great importance in helping form the laboratory into what it is today. From carpenters, to plumbers, ORC Lab employees, & management, to outside consultants; all in less than 1 year we have a lab. ORC spared no expense to ensure state of the art technologies including; 180K towards the XRF instrument, 120K towards fusion machines and associated Lab equipment.

The purpose of the lab is to provide accurate data so we can optimize and manage our processes and deliver products desired by our customers. Currently, we are also assisting in providing information about possible process or equipment changes required to bring the plant to the maximum capacity.

The lab analyzes approximately 117 XRF samples and 28 heavy mineral drop tests daily. This translates to 3500 XRF samples and 840 heavy mineral drops per month. In addition, the lab is always available for the special sample requests from internal and external customers. A dedicated group of well trained team members work around the clock to make this happen.

One question that is often asked is, "What is a good sum?" The "sum" or sum of concentration is a number that is the added total of all concentration of oxides from a sample analyzed by X-ray Fluorescence Spectrometry (XRF). To begin, precision is



defined as the ability to recreate the same event many times over, e.g. in shooting a small pattern of shots. Accuracy is the ability to shoot a bulls-eye or in the lab, to match a value of a certified material.

For example, SARM-9 a South African chromite standard has a known value of 46.40% Cr<sub>2</sub>O<sub>3</sub>, [Chromium (III) Oxide], accuracy would be a result that is between 46.3% - 46.4%. Precision may be 46.10%, 46.00%, and 46.05%. If all the elements in a sample are accounted for, the sum should hypothetically be 100%. Generally in practice, sums between 98% to 102% are always attainable. The sum does not mean the results are correct, this is accuracy, and is determined by the difference in the result from a certified material.

If the calibration is accurate, a good sum should be somewhere between 98%-102%. Outside of 98%-102% there is cause for concern. A sum can be changed

by improper sample dissolution, e.g. ZrO<sub>2</sub> (Zircon), is difficult to dissolve. You cannot see if it has all dissolved in a bead by the naked eye or changing sample ratio. We weigh 7.5 g of flux, 0.4 g of sample, and appropriate oxidizer and wetting agents. The dilution is 0.4/7.5 or 18.8:1. The calibration standards are made using this ratio. If a sample includes 0.5 g of sample and 7.5 g of flux, the dilution is 15:1, the XRF machine will see more signals of elements, thus raising the sum above 100%.

In essence, it is the job of the lab team to provide precise and accurate results throughout all steps of the process from the mine pit to the finished product and beyond. In future newsletters we'll talk about things such as heavy mineral drop, slimes calculation, and clay content. Stop by the lab; we are always willing to give tours and share knowledge.

## Heading into a Sales Spin

*"November will bring more than 1 million dollars in revenue."*

Oregon chromite has unique properties not found elsewhere in the world which allow it to be used as a zircon replacement. HA-International, ORC's domestic distributor, has worked with foundries to test SpheriChrome as a replacement for their zircon. SpheriChrome is 1/3 or less of the price of Zircon to the end user. A foundry that uses only 400 short tons of SpheriChrome sent an analysis showing that they could cut their raw minerals cost by around \$600,000 per year by switching from zircon to SpheriChrome.

ORC has sent SpheriChrome out for testing in Thailand, Australia, China, Japan, Taiwan, Korea and several countries in Europe including Russia. Feedback from SpheriChrome testing is positive. This testing is for various applications including the steel market where prices and demand will remain robust due to health and infrastructure.

The first chromite bulk shipment is expected to occur in the next few months with the inventory starting to be set up at Roseburg Forest Products. This product is directed towards Europe for Possehl Erzkontor, ORC's exclusive distributor in that region.

In the last two months the zircon concentrate was brought online. ORC zircon is called a concentrate in the market because the percent of the element ZrO<sub>2</sub> is about 10% lower than typical (65% ZrO<sub>2</sub>). This new product is currently sold out to capacity with all of production going immediately to orders. The current market value of this zircon concentrate is around 2.5x that of an equal bag of chromite. ORC's zircon sales in November (over 1,000 metric tons) will bring in more than 1 million dollars in revenue.

High iron ilmenite continues to be used in a Vein Seal application by IGC Technologies, now a part of Prince Minerals. The testing feedback is positive for this foundry application and IGC expects the demand to increase in the first quarter of 2012.

Marketing continues to review testing information at end user foundries and support distributors with transferring this information to sales. With the encouraging testing responses and forecasts, we expect strong demand for our mineral products in 2012.

## ORC Logistics: "Making Ships Happen"

ORC Logistics team had our first international container shipment in July and has shipped a total of 61 containers to various ports in Asia, South America, Australia, and Europe.

We have shipped via hopper rail cars and trucks to our domestic customers as close as California and as far as Delaware with many stops in between. Soon we will have our first international shipment by truck

to Canada and we are expecting to truck to Mexico as well.

We currently have three offsite storage warehouses that we use for our various shipments. Junction City Reload in Junction City, Oregon is used to store and load high iron ilmenite into hopper rail cars for domestic companies. Jacobson Companies in Portland,

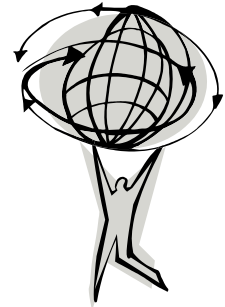
Oregon is used to store and load product in containers for international shipments. Our newest offsite warehouse is Roseburg Forest Product (RFP) in North Bend, Oregon where we are storing product for future break bulk shipments that will depart from RFP's dock.

Want to know more? Stop by anytime for updates on "Making Ships Happen."



## Keeping you in the Know – by ORC HR

- AFLAC  
A rep will be on site the third Tuesday of every month from 11:30am to 1:30pm for new & existing policyholders to ask questions, enroll, or get needed paperwork. The next visit is scheduled for December 20<sup>th</sup>. If you cannot make it in during this time, please let D'Ann McDaniel know what you need prior to the date and she will assist in getting what you need.
- Mine Tour  
Mine Tours are scheduled for 11/11 & 12/9. New sign-up sheets are posted on the employee bulletin boards. Sign-up today!
- Overtime  
If you are working approved overtime in a department other than your own, please clock out and clock back in before working in that department. This will allow us to charge those hours to the correct departments cost center. A new "Overtime Allocation" form has been developed and available for you with your supervisor.
- ORC in the News  
Tune into 94.9 or 95.7 FM on Nov. 15<sup>th</sup>, 17<sup>th</sup>, 22<sup>nd</sup>, 24<sup>th</sup>, or 26<sup>th</sup> to hear us on the radio. Also look for our tabloid in The World Newspaper on Nov. 26<sup>th</sup>!



### Mission Statement

*Develop a strategic mineral sands resource and be the first chromite producer in the U.S.*

*Build a strong organization of skilled and technical personnel.  
Practice responsible development of natural resources.*

*Demonstrate excellence in safety, health, and environmental performance.*

*Partner with the local community to develop economic growth and social infrastructure.*

*To provide quality products and services to our customers, treat our coworkers and customers in a kind and friendly manner, and be a positive influence in the community.*

### Culture & Values Statement

Accountability  
Respectful  
Team Oriented  
Training Mandate  
Safety Focused  
Stewardship  
Empowered  
Excellence

**“ARTTSSEE”**

*“The first chromite producer in the U.S.”*

**Oregon Resources Corporation**  
63776 Mullen Rd.  
PO Box 1350  
Coos Bay, OR 97420

**Phone:** (541) 266-0875  
**Fax:** (541) 266-0858  
**E-mail:**  
info@oregonresources.net



OREGON RESOURCES CORPORATION

*"Your Neighbors at Work."*

## We're on the Web!

[www.oregon-resources.com](http://www.oregon-resources.com)

[www.imcl.com.au](http://www.imcl.com.au)

[oregonresources.blogspot.com](http://oregonresources.blogspot.com)



INDUSTRIAL MINERALS CORPORATION LTD.

# EVACUATION!! What do you do...?

## Emergency Evacuation Drill

Do you know what to do in an emergency evacuation? Do you know where the emergency evacuation meeting point is? The safety department will be conducting an Emergency Evacuation Drill soon and here are a few things you'll need to know.

- Channel 1 on our Motorola Radios runs off of the Repeater and is our emergency channel. When an emergency occurs, you can turn the dial to Channel 1, hold the call button down for at least 4 or 5 seconds before you begin to speak, and then announce your emergency. (It takes a few seconds for the radio to contact the Repeater and relay the voice.) All of the other 9 channels will be able to hear your call and respond accordingly.
- The Emergency Evacuation Meeting point is *in front of the Safety Trailer* by the guard shack. Please do not assemble in the roadway. The safety department will be putting up the Evacuation Signs soon, to lead everyone to the meeting point. Use the perimeter road to get to the meeting point unless it is unsafe to do so.
- Once the emergency or drill has been announced on Channel 1, **GO BACK TO YOUR DEPARTMENTS ASSIGNED CHANNEL TO ACCOUNT FOR ALL EMPLOYEES AND VISITORS.** Do not tie up Channel 1 unless it is something everyone needs to know.

## Evacuating and Accounting for Everyone

**All Department Supervisors/Coordinators** are responsible to account for:

- All of their crew
- All vendors or contractors working with their department

Additional accountability for **Shift Supervisors:** Loader Operators and Haul Truck Drivers.

- Loader Operator can be contacted on the ORC Radio or the Wet Control Room CB
- Truck Drivers can be contacted on the Wet Control Room CB
- Outotec personnel have radios with our channels programmed in and will be part of any evacuation. Shift Supervisors need to follow through on checking with them via radio or face to face to insure they are evacuated also.

Additional Accountability for **Warehouse Coordinator:** Van Truck Drivers.

**Admin Office Receptionist or HR** is responsible to account for: All Admin Staff; and any vendors or contractors on sign-up sheet. Accounting for the vendors or contractors can be done at the Emergency Evacuation meeting point, and via radio to the departments the outside guest are visiting. Both Admin radios are continuously on and are set to Channel 1, in the event of an emergency. Bring the radio to the Emergency Evacuation Meeting place when you leave the building.

**Safety Department** will oversee Evacuation Drill and provide feed-back on what we did well and what needs improvement. Conducting the drill will help us be prepared in the event of a true emergency evacuation. It is important that everyone on site, both employees and visitors, are accounted for – even in a drill!

*Refer to your Employee Safety Manual for more information or speak with Pete/Pat.*