

The dust is highly corrosive, melting aluminum and destroying most electrical systems.



KAWASAKI CHEM PACKAGE TACKLES POTASH

Potash (potassium chloride) is a fertilizer in high demand right now — especially with the push to turn corn and other plant products into ethanol for energy. Although the U.S. imports much of its potash, Intrepid Mining, LLC, headquartered in Denver, is busy making the most out of their mines in Utah and New Mexico. The largest U.S. producer of potash, Intrepid initially grew its company from its oil & gas parent company by taking over mines other potash companies gave up on. By injecting them with creative new ways to extract the mineral, encouraging employee input, and offering excellent pay and benefits, Intrepid is bringing new energy to a domestic industry many thought was dying.

CARLSBAD DIVISION

Intrepid's three facilities in Carlsbad, New Mexico, offer fascinating lessons in both mining and chemicals' extraction. Between the North, East, and West facilities run 25 miles of underground conveyors that handle six different grades of ore: three of potash (also known as sylvite) and three of langbeinite (lang, for short) — a potassium magnesium sulfate mineral excellent for fertilizing citrus crops, vegetables, and tobacco.

If it sounds complex, you're right. It takes a lot of equipment to mine and process the ore — both above and below ground.



Potash is mined underground and brought to the surface for processing.

CHEMICAL APPLICATION PACKAGE

Kawasaki's Chemical Application Package offers special protection for the electrical systems, cooling systems, and hydraulic systems to increase durability and reliability in corrosive environments.

Basic Package Features:

- Silicone Sealed Wire Connectors **1**
- Stainless Steel Axle Brake Lines

Additional Options:

- Autolube System, Stainless Steel Plumbing
- Cab Air Pressurizer/Filter
- Cooling System Cores, Anti-Corrosive Coating
- Epoxy Primer and Paint
- Hydraulic Cylinder Rods, Triple Chrome Plated
- Seal Saver™ Boots, Bucket Cylinder Seal Protectors
- Seal Saver™ Boots, Lift Cylinder Seal Protectors **2**
- Seal Saver™ Boots, Steering Cylinder Seal Protectors
- Stainless Steel Bolts



And given the abrasive quality of potash and especially of lang, equipment reliability and bullet-proof design are two high-priority topics, especially as it relates to their electrical system. If a piece of equipment doesn't have highly dependable electronics and systems to minimize dust contamination, it simply doesn't last long. The wheel loaders of choice are Kawasaki.

"Primarily we are using them in two applications," explains Randy Foote, General Manager, Intrepid Potash-New Mexico. "Their main use is in the load-out process in our large warehouses where we hold up to 160,000 tons of product. And we use them to feed off-spec product back into the plants.

"I know those applications don't sound that tough, but we'll use a wheel loader 8-12 hours a day. During heavy shipping seasons, they're used 24 hours a day. One crew comes off and another comes on, so if that loader is not working, the whole process breaks down. It is very important that we have high availability."

SPEC'ING KAWASAKI

Intrepid has tried a number of wheel loader brands in their dusty and abrasive environment. But over the last 18 months, they've only spec'ed Kawasaki.

"We rely on our end-users, in this case, our maintenance people, to spec out our equipment," explains Rudy Dominguez, Corporate Director of Materials. "They let us know what their preference is. We'll try

to present them with other options, then we'll jointly make the final call. At our East and North facilities, they prefer Kawasaki."

"We've had better availability with Kawasaki than the other brands," continues Foote. "We track our equipment. We know how much time and money we're spending on it. We had another brand of loader in here and noticed, through our maintenance program, that there was an unusually high number of problems. Our first two Kawasakis were rentals, with no chemical package. And there were no major complaints."

DEPENDABILITY IS PARAMOUNT

"We have to have dependability," says John Switzer, Equipment Planner, as he enters a cavernous product storage building filled with different grades of potash. "If the wheel loaders were to go down, we'd be in trouble. They push the materials over the grates to feed our conveyor systems down below for load-out. We ship out by train and by truck. The Kawasakis also have to keep things cleaned up in our storage buildings. Talk about a dusty environment!"

When Intrepid decided to get two more units, they chose to equip the 80ZV-2s with the special Chemical Application Package. The package offers special protection for the electrical systems, cooling systems, and hydraulic systems to increase durability and reliability in corrosive environments. Use of this package has helped improve availability even more, and Intrepid is consulting with their local Kawasaki dealer for additional maintenance ideas and training to further reduce issues caused by the harsh environment.

"We use our Kawasakis to do a variety of things," concludes Switzer. "Beyond the plant environment, it is critical that we keep our retention ponds in top shape on a weekly basis. When one of the Kawasaki loaders has free time, we use it to maintain the dikes as well as other parts of the pond efforts, especially when our dozer might be down. Dependability is everything."

Intrepid Potash-New Mexico, LLC is serviced by Nueces Power & Equipment (NPE), El Paso, Texas.

“**Dependability is everything.**”

– *John Switzer, Equipment Planning Manager,
Intrepid Mining, LLC*



John Switzer, Equipment Planning Manager



Randy Foote, General Manager



Onsite maintenance operations track each cost. Kawasaki and their local dealer NPE provide training and parts support.