

INSIDE



No more pizza parties

Bill Sims Jr. has a different take on the common practice of rewarding employees for clean safety records. He says that incentives like parties for no reported accidents causes workers to engage in injury-hiding nine out of 10 times.

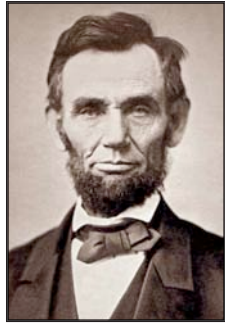
page F5

Mining Lists

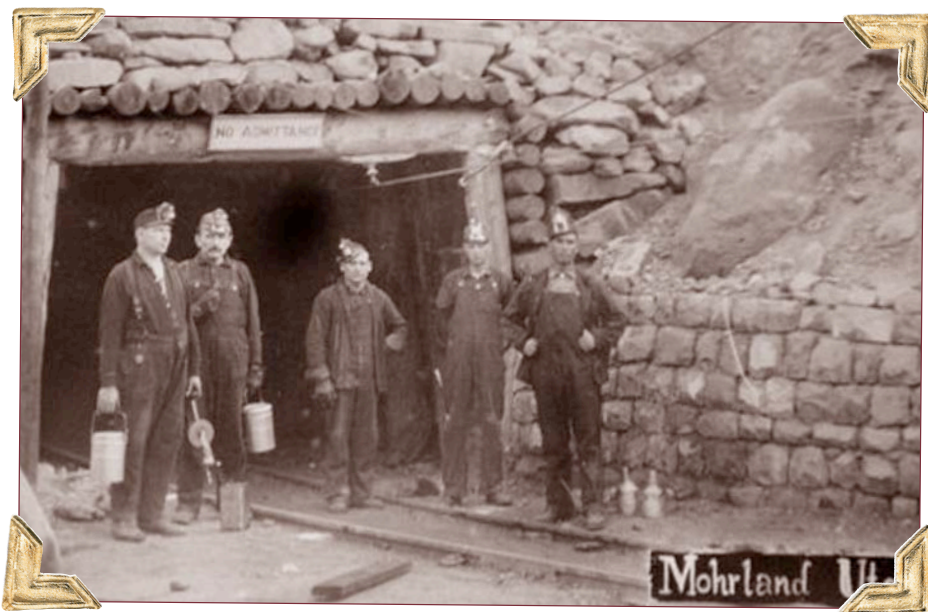
Utah Mineral Mines
page F10

Utah Coal Mines
page F14

Issue Sponsor:



'The treasure house of the nation'



True to Abe Lincoln's vision, Utah owes a great deal of its wealth to its variety of producing mines

It was the spring of 1862 — just over a year into his presidency and nearly 35 years before Utah would join the Union — when Pres. Abraham Lincoln



MARK COMPTON

made a bold statement about a land he had never seen. "Utah will yet become the treasure house of the nation." Now, more than a century and a half later, Lincoln's vision has become a proven reality.

Since the earliest days of the territory, mining has been a vital component of the economy of Utah. Utah is blessed with a rich mineral endowment. Mineral deposits are broadly distributed across Utah, and there are mining districts in 24 of the state's 29 counties. Only about one-tenth of 1 percent of the state's 54,393,600 acres has been touched by mining activities, yet Utah's mines have produced an impressive variety of minerals.

There are at least 75 minerals that have economic value found in Utah and several have helped make the state a major mineral producer on the national and world scale. Copper, coal, gold, silver, uranium, iron, lead, zinc, molybdenum, phosphate, salt, potash, beryllium and Gilsonite head the list. With economic viability these resources will add to the strength and wealth of the state for many years to come.

As early as 1847, pioneer settlers began harvesting salt from the Great

Blue Bench Substation

Duchesne, UT



Substation — Salt Lake City, UT



Seven In-house Divisions to Meet All of Your Specialty Contracting Needs

Electrical Construction ✎ **Infrastructure and Traffic** ✎ **Transmission and Distribution**

Design-Build Engineering: *Arc Flash Hazard Studies, Power Factor Correction*

Energy Services: *Solar, Wind, Geothermal, CNG, and Energy Efficiency Audits*

I.T.S.: *Fiber Optic, Data Communication, AV, Security and DAS (Distributed Antenna Systems)*

Routine and Emergency Electrical Services



Utah's **Full-service Electrical Contractor** of Choice

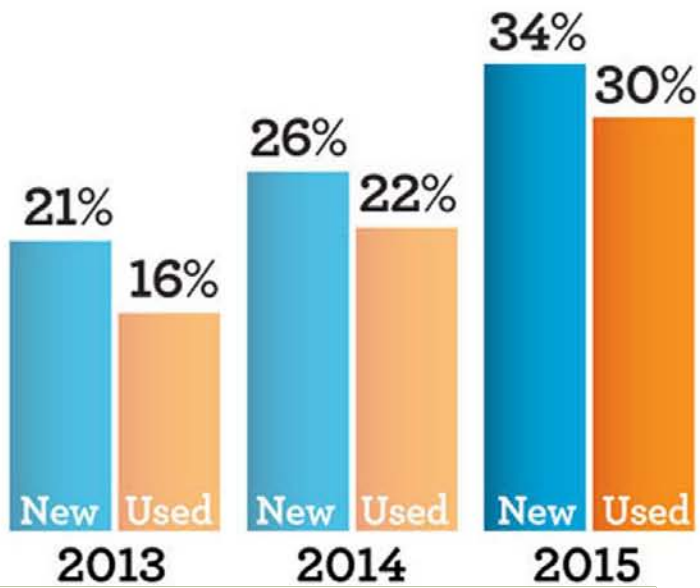
serving Commercial, Industrial, Mining, Data Center, Healthcare, Institutional, Mixed-use, Tenant Improvement, and Hospitality clients.

Quality • Integrity • Performance • Versatility

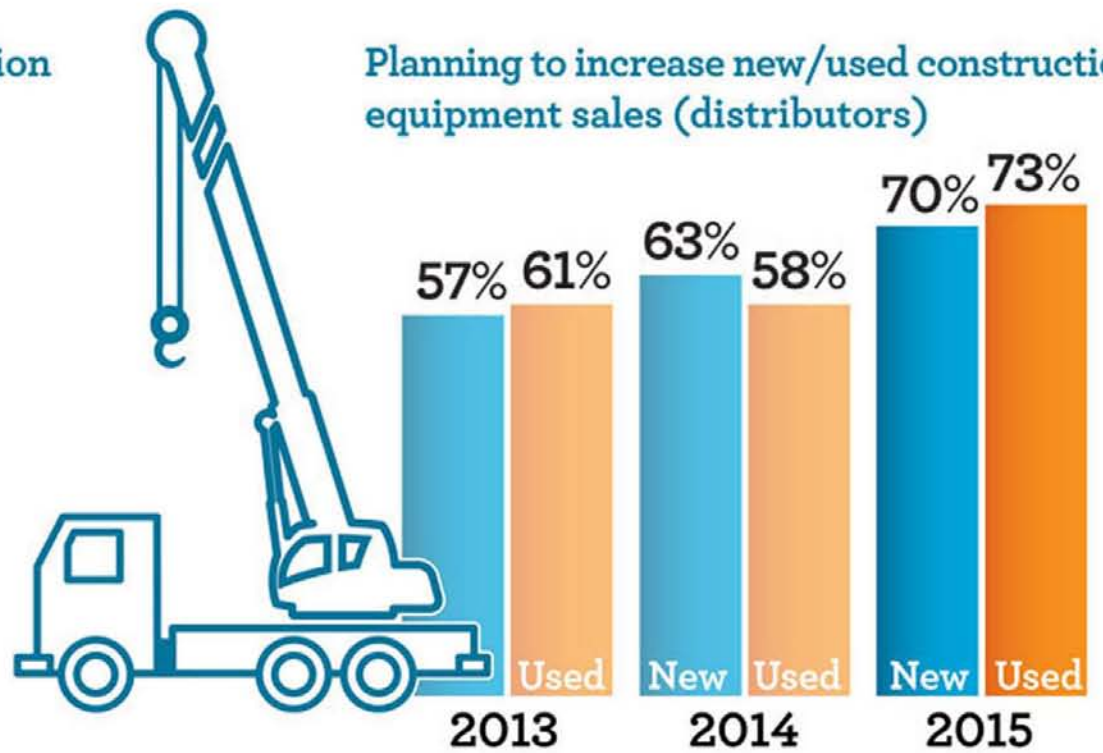
1863 West Alexander Street • Salt Lake City, UT 84119 • 801-975-8844 • HuntElectric.com

Construction equipment purchases are expected to increase in 2015

Planning to increase new/used construction equipment purchases (contractors)



Planning to increase new/used construction equipment sales (distributors)



© 2015 Wells Fargo Bank, N.A.

Financing mining equipment – to buy or to lease?

Steve Pratt
Wells Fargo Bank

If you're considering an equipment acquisition for your mining business — or any business, for that matter — it makes sense to compare the respective benefits of buying or leasing to determine which option is right for your company. Before you buy or lease, give careful consideration to choosing equipment that will fit your project pipeline, foster productivity and position your business for long-term growth.

Evaluate the equipment your organization currently uses. Take time to consider where updating, supplementing or replacing your fleet of equipment could benefit your business. Also, determine if there are additional items of new or used equipment that will help your business operate more profitably or expand its capabilities. New mining equipment is often more efficient and may cost less in near term repairs and maintenance. Used equipment may require a lower initial investment. Whether the equipment is new or used, a loan or lease provides the

ability to use the equipment's revenue-generating capacity over time to help pay for it. Rather than tying up cash in a large purchase, loans and leases may help you preserve liquidity for other business needs.

When it's time to acquire equipment, determine whether buying or leasing is going to serve your long-term interests most effectively. Here are just three considerations:

1. Down payment. Depending on the type of equipment, you may need to provide a cash down payment as part of a loan structure. Recently, how-

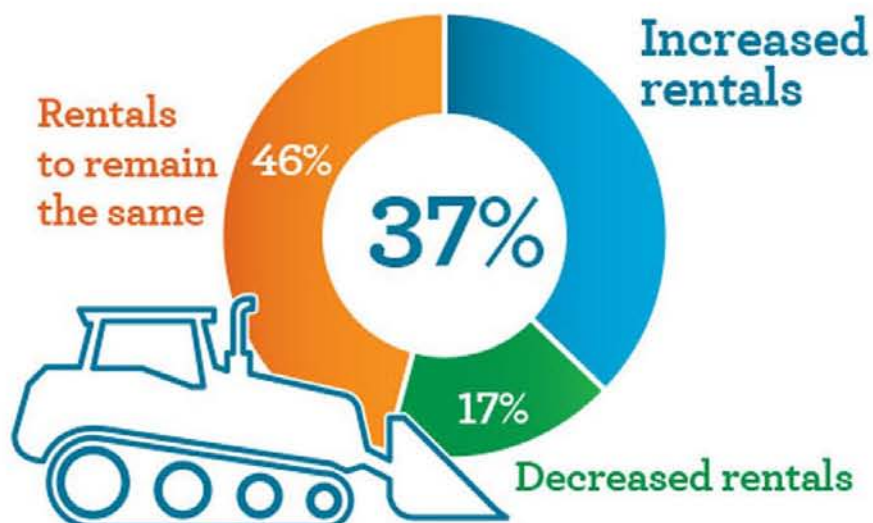
ever, some types of long-lived assets may be financed at 100 percent of the purchase price. Leases are structured to provide periodic payments based on an agreed-upon or estimated equipment value at the beginning and end of a lease term.

2. Risk of obsolescence. If you purchase equipment you bear the risk that it could decrease in value as a result of technological advances or changes in the needs of your business. If you lease the equipment, the

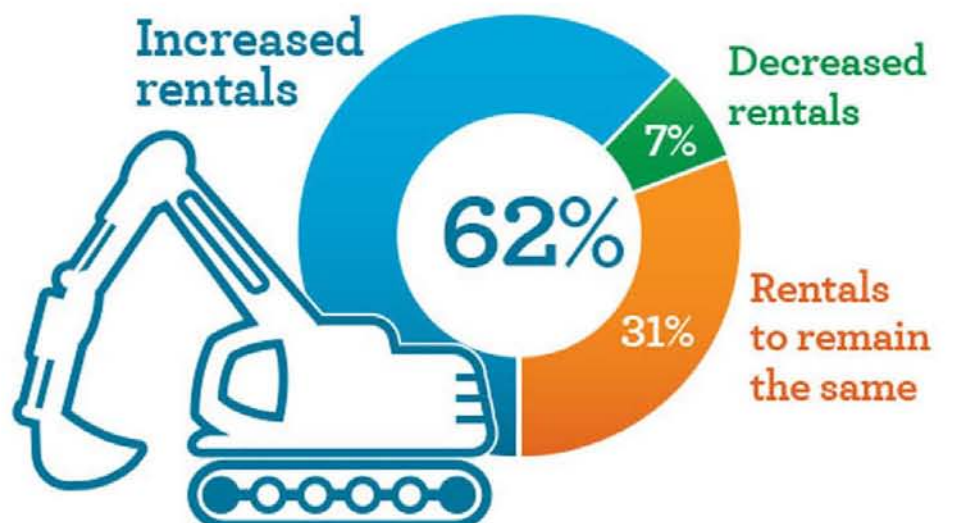
see **FINANCING** pg. **F14**

Equipment Rental set to continue its growth in 2015

Construction contractor heavy equipment rental expectations compared to 2014



Distributor heavy equipment rental expectations compared to 2014



© 2015 Wells Fargo Bank, N.A.

Forest Service rethinking La Sal uranium mining project

The Manti-La Sal National Forest is in the process of assessing the planned expansion of La Sal Mines Complex, owned by Energy Fuels Resources, following formal objections and claims last month of environmental violations from Uranium Watch and other conservation groups.

The La Sal Mines is a complex of four old uranium mines located near the town of La Sal.

Uranium Watch, along with four other conservation groups, cited violations of the National Environmental Policy Act, Endangered Species Act and other laws and regulations and objected to the Forest Service's draft approval of the plan.

In a press release, the environmental groups alleged that the expansion had been halted. However, this was later denied in a statement by Energy Fuels Resources.

These groups have claimed that as part of the large-scale expansion, 3,800 new exploration holes will be drilled and an estimated 50 springs would be dewatered, in addition to creating surface disturbance of more than 200 acres. They claimed that the mining will pose risks to wildlife and people, as it is expected to threaten radiological and heavy metal pollution of groundwater, soil and air.

Uranium Watch program director Sarah Fields said, "The continued operation of the La Sal Mines Complex will cause increasing emissions of radon gas, a radioactive hazardous air pollutant, into the community. The USFS cannot claim that radon emissions, only a quarter-mile from the La Sal Elementary School, are safe."

Western Mining Action Project attorney Roger Flynn said: "Federal law requires that significant threats

to human health and the environment posed by uranium mining be very carefully reviewed. The regional office correctly determined that these mines cannot be approved without a much more comprehensive review, including the addition of required protective measures to safeguard the public."

Uranium ore gathered from the La Sal Complex mines will be transported to the White Mesa Mill in San Juan County.

In a statement, Energy Fuels Resources said, "The company is continuing to work with the U.S. Forest Service as they evaluate minor amendments to the plan of operations for the La Sal Mines Complex. Contrary to the press release issued by the activist groups, the US Forest Service has not 'halted' our plans for the La Sal Complex, but is merely addressing all

public comments, so that the plan of operations will continue to be fully protective of public health, safety and the environment."

Like thousands of uranium mines across the Four Corners region, the La Sal Mines Complex has been operating intermittently since the 1970s — opening and closing in response to uranium's boom and bust cycle. Energy Fuels Resources, the owner of the mines and the White Mesa Mill, suspended operation of the mine in late 2012 with plans to resume mining when the market price of uranium ore rises.

The La Sal Mines Complex is made up of the Beaver Shaft on private land and the Pandora, La Sal and Snowball mines and Beaver Shaft waste-rock pile on Bureau of Land Management land.



At the Center of Utah Industry Since 1915



The mining industry is the foundation of our economy, and for the past 100 Years the Utah Mining Association (UMA) has been the voice of the mining industry in Utah. We advocate for the mineral resource and related industries, represent and inform our members in the legislative and regulatory arenas, and educate elected officials, regulators and the public on the importance of a strong Utah mining industry.

Join us in celebrating our centennial in 2015!

- 100th Annual UMA Convention - "Utah Mining: The Next 100 Years" - August 19-21

UMA proudly represents every facet of the mining industry, including:

- Companies that explore for, mine, process, smelt and refine Utah's metals and minerals;
- The many companies that provide equipment, supplies, engineering, legal and technical services, banking, power generation and other forms of support to Utah's mining industry; and
- Individuals interested in supporting and promoting the Utah mining industry.



If It Can't Be Grown, It Must Be Mined!

Utah's mining industry provides the materials needed for daily life in our modern world. We provide high paying jobs that support Utah families. We assist in satisfying our energy needs at home and beyond. And we mine in a way that keeps our employees safe and our operations environmentally sustainable. As the beginning of the supply chain for everything we use and everything we do, everything really does begin with mining.



Utah Mining Association | 136 S. Main St., Suite 408 | Salt Lake City, Utah 84101
801-364-1874 | Email: mining@utahmining.org | www.utahmining.org



Author: Incentives could lead to employees hiding accidents

Brice Wallace
The Enterprise

Bill Sims Jr. has a message for companies rewarding employees and employee groups with pizza parties for having a clean safety record: Stop it.

The president of the Bill Sims Co. and author of a book about employee engagement, motivation and recognition suggests that parties and other incentives for spotless safety records can lead to employees hiding injuries rather than preventing them.

"I'm going to blow your mind today, folks: Zero injuries is not your goal," Sims said at the recent fourth annual Safety Conference, sponsored by the Utah Mining Association and the Utah Manufacturers Association. "It's the start of your journey, not the end."

Employees will hide injuries for a variety of reasons, he said, ranging from not wanting to blow the incentive party for their colleagues to not wanting to be fired for unsafe activity.

"It ain't rocket science," Sims said. "Poorly designed, lagging-indicator incentive systems cause injury-hiding nine out of 10 times."

The proper goal is not zero injuries but instead zero at-risk behaviors, which he acknowledged is a higher standard.

"Zero at-risk behavior is perfection. ... Are you going to get perfection? Realistically, no. But if you pursue perfection, you achieve excel-

lence. We achieve zero injuries only by pursuing zero at-risk behaviors," Sims said.

Instead of parties potentially rewarding injury-hiding, a company might instead ask employees and their family members about unsafe conditions or behaviors at the workplace and what can be done to fix them, provide incentives for that input, and then put fixes in place.

Sims said any company can change its culture in one hour by changing the behavior of its leadership team. After that, the change will permeate through the company. He suggested positive reinforcement. His own example came from his youth, when his mother said he needed to eat his green beans before being allowed to have ice cream.

"By god, it worked, folks. I changed my behavior. What did Mom do? What you've got to do to change the behavior of your 2-year-olds, your teenagers, your employees or your spouse. She pinpointed the critical behavior and then when my behavior change occurred, I got a smile, a hug and big bowl of ice cream and — hello! — I got all those reinforcers immediately," he said.

That immediacy is key, he said, noting that scientific studies show that positive reinforcement needs to

be delivered within 10 seconds to be effective.

"What does that mean for us in business? Here's what it means: When you hand your worker his \$50 gift card and his T-shirt and he says, 'Thank you very much. What's this for?' if he has to ask you why he's getting it, you've just wasted your money, because he doesn't connect your 'ice cream' — the T-shirt and the gift card — with his behavior because you didn't do it within 10 seconds."

Financial incentives can change human behavior, but positive reinforcement is much more effective — a fact proven by brain wave scans, Sims said.

"When your spouse, when your kid, when your boss tells you you did something right, you light up like a Christmas tree. And let me just ask you all one little question: Does

it cost any of you in this room any money to tell your kids, your spouse or your employees or your boss they did a good job? Does that cost you any money? No. Why don't we do it more often?"

That kind of positive reinforcement yields discretionary effort — "they do it when you're there and they do it when you're not," he said. That's a far cry from workers who wear safety glasses or act in a safe manner only when the "safety police" are around.

Sims decried companies who use negative reinforcement, in the form of punishment, to try to change behavior.

"You cannot positively reinforce people if they hate your guts. True. You can't. ... You can't punish or discipline a team into winning the Super Bowl," he said.

What's more, if negative reinforcement actually worked, "the death penalty would've stopped murder years ago," he said.

Companies generally have four types of workers when it comes to safety, he said. Incompetent ones take an "I can't do it" approach. Noncompliant ones reflect an attitude of "I will not do it." Compliant ones will "do it if I have to." Committed ones will do it "because I want to" and even look out for their coworkers, whether the "safety cop" is there or not.

Unfortunately, a Gallup survey indicates that only 5 percent of the nation's workers are at the commitment stage. "Why? We leave people alone and say nothing when they're doing it right and then zap them when they make mistakes," Sims said, demonstrating the need for more positive reinforcement as a means of gaining a culture of safety.

"It's positive reinforcement, coaching and leadership," he said. "It's the only way to get people doing it in the moment of choice when you're not there to watch them."





TO FINISH MY JOB ON TIME,
I NEED MY TOOLS ON TIME.

DONE AND DONE

INDUSTRIALSUPPLY

We know your job is tough. That's why we've made it our job to save you time and get things DONE. We deliver any tool you need right to your jobsite. So stop wasting time searching for tools and start crossing jobs off your list. Visit www.indsupply.com/DoneAndDone to learn more.



Honeywell



Crescent®

SALT LAKE / OGDEN / OREM / VERNAL / LAS VEGAS / ELKO / ROCK SPRINGS / GILLETTE

Rio Tinto's CRM seeks to halt activities that lead to fatalities

Rio Tinto, the parent company for Kennecott Utah Copper, is instituting a new process designed to protect workers from dangerous activity that could lead to fatalities.

Critical risk management, or CRM, was championed by Rio Tinto's copper products group and is rolling out, on a pilot basis, to all of the company product groups.

At its heart, CRM protects workers from risks by putting identified controls in place before they even begin their work, according to Greg Walker, a principal advisor for safety risk management at Rio Tinto. Managers, supervisors and workers all verify that controls are in place before proceeding.

"This is a process that really gives the worker the confidence to stop work," Walker said during a breakout sessions of the recent fourth annual Safety Conference, sponsored by the

Utah Mining Association and Utah Manufacturers Association.

"You know, we always tell workers, 'You're empowered to stop work,' but we see time and time again instances where they don't do it because they feel other pressures."



Describing CRM as a process that is "revolutionary but beautiful in its simplicity," Walker said companies need to have a balanced approach in preventing injuries, fatalities and catastrophic

events. Each has different levels of frequency and severity. Concentrating on injury prevention can distract companies from "the things that we need to be doing to prevent fatalities as well as catastrophic events," he said.

To that end, CRM "involves relentless verification to focus on the critical few controls that actually prevent fatalities," he said.

"We're still concerned about injuries but if we're

trying to manage fatality risk, this is where our focus ought to be."

CRM begins with leadership and a culture that understands the risks, puts critical controls in place and then con-

stantly evaluates their effectiveness. Walker called it "mindful" leadership.

"A mindful leader is leader preoccupied with the possibility of something going wrong. There's a sense of chronic unease and they understand that bad news does not travel upwards," he said, adding that those leaders interact with workers to "learn what's going on" at their level.

An earlier version of what would become CRM "missed the worker" because the activities were at a high company level, Walker said. "It didn't take it to the workplace, where the risk really exists."

At Rio Tinto, critical risks were distilled to 19, including working in confined spaces, contact with electricity, exposure to hazardous substances,

see **RIO TINTO** pg. **F13**

EarthFax Engineering Group, LLC

Providing engineering solutions to the mining industry since 1982.

- Civil Engineering
- Environmental Engineering
- Geotechnical Engineering
- Hydrology
- Geology
- Land Reclamation
- Environmental Planning



Consulting engineers and scientists helping to develop, protect, and meet the challenges of the earth's resources.



EarthFax Engineering Group, LLC
 7324 So. Union Park Ave.
 Midvale, UT 84047
 Phone: 801-561-1555
 Fax: 801-561-1861
 www.earthfax.com



A COMMITMENT TO THE MINING INDUSTRY.



Wheeler Mining Systems provides an unparalleled range of Cat[®] mining and support equipment and technology for all types of surface and underground mining. The reliability and durability you need to mine efficiently and productively is paired with unmatched service, integrated solutions, after-sales support and fast and efficient parts fulfillment. Wheeler is built to help modern mines succeed.

- Blast Hole Drills
- Haul Trucks
- Dozers
- Radio Systems
- Cat[®] Minestar[™]
- Draglines & Rope Shovels
- Underground Mining Equipment
- Motor Graders
- Power Generation
- Condition Monitoring

BUILT FOR IT.™

wheelercat.com | 800-662-8650

Wheeler
Mining Systems





Equipment maintenance: A lesson in 'an ounce of prevention'

What if you spent a couple of million dollars for a new piece of equipment for your job site and then had to pay a quarter-million dollars more because a small part had failed, causing a total engine failure? What if that scenario could have been avoided with a predictive diagnostics system?

This near-crisis situation was recently averted for a mining company in Nevada. The engine oil pressure on a Caterpillar 793C haul truck was dropping dramatically, which was causing a drastic increase in engine oil filter restriction. But there was no way to know that the problem was happening.

The 793C is a big truck. It is more than 44 feet long and 25 feet wide. It has a payload of 240 tons. It is a workhorse and having it out of service would have been costly for the company. "This truck runs seven days a week,

hauling material out of the mine," said Tyler Andersen, condition monitoring supervisor for Wheeler Machinery. "It would have been a serious setback for the company if this truck was taken out of produc-



tion by a catastrophic failure while hauling ore. One of the most costly repairs is an unscheduled major failure on a haul truck."

The predictive diagnostic system in this case is called a Condition Monitoring Analyst, which is attached to the truck. It sent an alert to the mine site supervisor who immediately shut down

the truck. A subsequent inspection by mechanics found a failed fuel injector, which was causing raw fuel to be dumped into the engine

oil pan. That led to a big drop in the engine oil pressure, which then cause the oil filters to plug. If the truck had not been immediately shut down, there would have been a total engine failure resulting in a repair costing more than \$257,000. Instead, the customer paid \$1,239 to replace the fuel injector. The savings was more than \$255,000.

The Conditioning Monitoring Analyst technology was sold with the truck by Wheeler Machinery in Salt Lake City as part of the company's effort to integrate and utilize more technology to create a "repairs before failure" situation for customers. "We want to add value to the products we sell and service," said Leon Ernest, mine site supervisor for Wheeler Machinery. "We believe that our customers appreciate things like the Condition Monitoring Analyst, because it makes them productive and profitable and helps them avoid costly situations."

Mineral Mines in Utah

Listed Alphabetically

Rank	Mine Name	Primary Product Mined	Mine Location	Mining Method	Owner ----- Owner Location	Year Mining Began
1	American Gilsonite	Gilsonite	Southwest of Vernal, Uintah County	Sub-surface	American Gilsonite Co. Bonanza	1904
2	Ash Grove	Portland cement products	Leamington, Millard County	Surface	Ash Grove Cement Co. Overland Park, Kansas	1980
3	Bingham Canyon Mine (Kennecott Mine)	Copper	Southwest Salt Lake County	Open pit	Kennecott Utah Copper Corp. Rio Tinto Group London, England	1906
4	Cricket Mountain	Limestone and associated products	Southwest of Delta, Millard County	Surface	Graymont Corp. Richmond, B.C., Canada	N/A
5	Devils Slide	Limestone, cement products	East of Morgan, Morgan County	Surface	Holcim Inc. Bedford, Maine	1904
6	Great Salt Lake Minerals	Sulfate of potash, magnesium chloride	Great Salt Lake, Tooele County	Solar evaporation	Compass Minerals Overland Park, Kansas	Approx. 1972
7	Iron Mountain Project	Iron	West of Cedar City, Iron County	Open pit	CML Metals St. George	Late 1800s
8	Lisbon Valley Mine	Copper	Southeast of Moab, Grand County	Open pit	Lisbon Valley Mining Co. Moab	1999
9	Moab Facility	Potash	Great Salt Lake, Tooele County	Solar evaporation	Intrepid Potash Inc. Denver, Colorado	1965
10	Morton Salt	Salt	Great Salt Lake near Grantsville, Tooele County	Solar evaporation	Morton Salt Grantsville	N/A
11	Rowley Operation U.S. Magnesium	Magnesium, calcium chloride, iron chlorides	Rowley, Tooele County	Solar evaporation	U.S. Magnesium LLC Salt Lake City	1972
12	Simplot Vernal Mine	Phosphates and derivatives	Northwest of Vernal, Uintah County	Surface	J.R. Simplot Co. Boise, Idaho	1960
13	Timpie Facility	Salt	Great Salt Lake near Grantsville, Tooele County	Solar evaporation	Cargill Salt Inc. Minneapolis, Minn.	N/A
14	Topaz Mountain	Beryllium	Northwest of Delta, Juab County	Surface	Materion Corp. Mayfield Heights, Ohio	1968
15	Wendover Facility	Potash	Great Salt Lake, Tooele County	Solar evaporation	Intrepid Potash Inc. Denver, Colorado	Approx. 1938



BRAHMA
GROUP, INC.

WORLD-EXPERT INDUSTRIAL CONTRACTORS

TRUST IN WHAT WE DO

Providing Solutions in Mining:

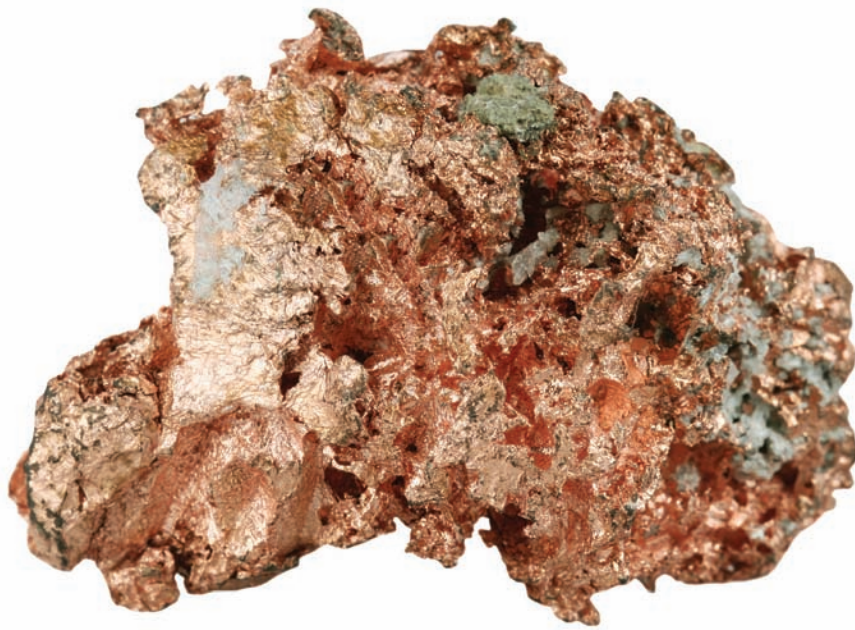
Capital Construction | Maintenance | Shutdowns | Material Handling Systems
Major Renovations | Dismantlement & Demolition | Instrumentation & Electrical



BRAHMA

Headquarters: Salt Lake City, UT | 801.521.5200 | brahmagroupinc.com

Salt Lake City UT | Mesa AZ | Ridgecrest CA | San Diego CA | Colorado Springs CO | Baton Rouge LA | Mandan ND | Elko NV | Cheyenne WY



Will it become a cell phone or a computer?

The Bingham Canyon Mine is one of the top producing copper mines in the world. As a result, lights turn on, computers power up, music is played, cell phones get charged, cars run and apps can be downloaded. The list goes on and on. The truth is, copper makes modern life possible.

riotintokennecott.com

RioTinto

RIO TINTO

from page F7

falls from height and underground fire. After analyzing critical risks, the controls were selected, and criteria addressed the design, implementation and training associated with each control.

At the manager, supervisor and worker levels, controls are checked to address each of the risks before work begins, all in a seamless manner. All front-line workers and contractors are empowered to stop work if critical controls are missing, Walker said.

“We do believe that critical risk management is a game-changer. ... There’s an energy and excitement about it that’s hard to explain. It gives us laser focus on critical risks and critical controls. It really helps build this type of operational discipline, and the workers are every bit a part of this process as the managers and supervisors,” he said.

“It gives us a systematic means of checking all the controls and not going off of memory. I don’t know how we’d feel if our [airline] pilots did their checks just going off a memory.”



PHILLIPS™

We are the Mining Machinery Rebuild Specialist



- * Modern Machine Tools
- * Highly Skilled and Motivated Employees
- * Pride of Craftsmanship
- * Dedication to Quality
- * Service After the Sale



Let us rebuild your miner or sell you one of our rebuilt machines!

367 George Street • Beckley, WV 25801
(304) 255-0537



1140 Highway 50 • Delta, CO 81416
(888) 874-9910

phillipsmachine.com

Now with locations in Kentucky, Tennessee, and South Africa.

Coal Mines in Utah

Listed by 2014 Coal Production in Tons

Rank	Mine Name	Mine Location	Mining Method	Owner Owner Location	Year Mining Began	2014 Coal Production (tons)
1	Sufco Mine	Northeast of Salina, Sevier County	Underground, longwall	Bowie Resource Partners LLC Louisville, Kentucky	1941	6,539,000
2	Skyline Mine	Southwest of Scofield, Carbon County	Underground, longwall	Bowie Resource Partners LLC Louisville, Kentucky	1981	4,170,000
3	West Ridge Mine	East Carbon, Carbon County	Underground, longwall	UtahAmerican Energy Inc., subsidiary of Murray Energy Group St. Clairsville, Ohio	1982	2,514,000
4	Deer Creek Mine	Northwest of Huntington, Carbon County	Underground, longwall	Energy West Mining Co., subsidiary of PacifiCorp Portland, Oregon	N/A	2,089,000
5	Bear Canyon Mine	West of Huntington, Emery County	Underground, longwall	Castle Valley Mining Huntington	N/A	1,056,000
6	Dugout Canyon Mine	Northeast of Price, Carbon County	Underground, longwall and room & pillar	Bowie Resource Partners LLC Louisville, Kentucky	1998	676,000
7	Coal Hollow Mine	Alton	Surface strip	Alton Coal Development LLC Cedar City	2011	563,000
8	Lila Canyon Mine	South of Price, Carbon County	Underground, longwall	UtahAmerican Energy Inc., subsidiary of Murray Energy Group St. Clairsville, Ohio	2010	335,000



*Coal production figures courtesy of the Division of Oil, Gas and Mining, Utah Department of Natural Resources. Please note that some firms chose not to respond, or failed to respond in time to our inquiries. N/A = Information not available. All rights reserved. Copyright 2015 by Enterprise Newspaper Group. The Enterprise strives for accuracy in its list publications. If you see errors or omissions in this list, please contact us at lists@slenterprise.com.

FINANCING

from page F3

transaction may be structured so that the risks of obsolescence, devaluation and changing markets are borne by the lessor. Depending on the type of lease structure, there may be no obligation to purchase the asset at the end of the term of a lease.

3. Expense deductions. With a loan and certain lease structures, the borrower is considered the owner of the equipment for tax purposes and often may claim depreciation expense and interest expense that could reduce a company's taxable income. With an operating or true lease, the lessee typically claims no asset or liability on its balance sheet with the lease payments treated as an expense deduction on the lessee's income statement. As part of the evaluation of any lease

or loan structure, you should consult with an accountant and tax advisor to be certain of the applicability for your company. Flexible payment terms and interim financing may also be available in lease and loan transactions.

A key advantage in leasing equipment is that the lessee decides what to do with the equipment at the end of the lease term. End-of-lease options for the lessee may include purchasing the equipment, renewing the lease, or returning the equipment. The option to return the equipment can benefit a business because disposal of equipment can be uncertain, costly and time consuming. It also allows a company to focus on its core business versus managing non-core assets. Purchase options can be structured in a wide variety of ways, including fixed dollar amounts or fair market value.

Companies that do not have tax liabilities (because of net operating

losses, etc.) may also benefit by leasing, where depreciation deductions can be taken by the lessor, which can be passed on to the lessee in the form of lower rental payments. Leasing may also assist with debt covenant compliance.

Loans also offer distinct advantages to companies that need capital equipment. For instance, loan payments can be based on fixed or floating rates, fixed principal and interest, or fixed principal plus interest. This allows a company to lock in rates and terms that fit its long-term capital or financing strategy. Some companies benefit from owning assets that are central to their business when the equipment has a useful life beyond the repayment terms of the loan. In such cases, it may make more sense to own the equipment and retain the benefit of depreciation expenses.

Once you've determined your equipment needs, talk with a banker who can connect you with a mining equipment finance specialist. Together, they can help you determine which of your financing options — whether it's a loan or one of many different types of leases — may fit your needs. A mining equipment finance specialist may also be able to assist with knowledge about equipment vendors or help in the review of competitive bids. Before making a decision about your equipment investment, be sure to consult with your accountant and/or tax advisor.

Steve Pratt is the Utah territory manager, Wells Fargo Equipment Finance, Construction Group.

Nothing contained in this article should be considered tax or accounting advice and you should consult with your own tax, accounting and financial advisors.

RUGGED DOORS FOR HARSH MINING ENVIRONMENTS



**Solving door
problems for the
mining industry
since 1946**

Crawford Door Sales
1-800-533-8539
801-487-7442
www.cdc-slc.com



An Employee Owned Company



Contractor's License

Utah: 380756-5501

Idaho: RCE-13507

Nevada: 0029753

HISTORY

from page F1

Salt Lake. Early on, stone, clay, sand, gravel and cement were used to build homes, businesses, various buildings and churches.

In 1863, soldiers stationed at Fort Douglas under the command of Col. Patrick Connor, were sent into the Oquirrh Mountains to explore for minerals. Their discoveries led to the development of mines producing gold, silver, copper, lead and zinc and earned Connor the title of "Father of Utah Mining." Over the next 30 years, immigrants from northern and western Europe poured into the mining camps in and around Bingham Canyon to seek their fortunes.

The abundant low-grade copper ore was largely ignored in those early days and it wasn't until the turn of the century when Daniel C. Jackling, a young metallurgical engineer, developed a mass production method of profitably mining and processing the ore that commercial copper mining began. To mine from the surface on a large, industrial scale required labor and thousands of immigrants from southern and eastern Europe, Asia and Mexico came to the area.

In about 1869, the Park City District was established and soon became one of the most outstanding gold, silver, copper, lead and zinc producers in Utah. Mines in Summit County also were major nonmetallic



Colonel Patrick E. Connor
"The Father of Utah Mining"

producers, with such minerals as oil, coal, clays, shale, sand, gravel and stone. The Park City mines generated fabulous wealth for many who used their fortunes to help develop the growing and thriving Salt Lake City area.

The rest, as they say, is history. Exploration and discovery continue to this day.

Today's safe and environmentally responsible mining industry continues

to be the foundation of Utah's economy. The industry employs thousands and pays among the highest average wages in the state. Utah ranks seventh in the nation in non-fuel mineral production, producing more than \$4 billion in gross value annually. And more than half of all Utah exports are minerals.

Mining also contributes to Utah's economic development in other ways. Approximately 80 percent of the state's electricity is coal-generated, resulting in energy costs 30 percent lower than the national average. Lower energy costs helps Utah businesses and families and make Utah more competitive in attracting quality manufacturing and high technology jobs.

Mining truly is a foundational industry in Utah and throughout the world. As the industry trade association, the Utah Mining Association (UMA) has been the voice of the mining industry since 1915, celebrating its centennial throughout 2015. The association's 100th annual convention is scheduled for Aug. 19-21 in Provo.

The first gathering of the Utah Chapter of the American Mining

Congress (which later became known as the Utah Mining Association) took place on a Monday evening on April 5, 1915, at the Newhouse Hotel in Salt Lake City. At the meeting, R.C. Gemmel, general manager of the Utah Copper Co., was elected governor of the Utah Chapter. As recounted in an article in *The Salt Lake Mining Review* in 1915, in his acceptance speech Gemmel "emphasized his belief that the organization would have great weight and an influence for good in the local mining field, and urged earnest cooperation by all who were interested in mining affairs and kindred industries, pledging himself to work for the best interests of the new chapter."

Thanks to the "earnest cooperation" and strong support of UMA's members and friends, 100 years later the Utah Mining Association does indeed have "great weight" and continues to be "an influence for good" in the mining industry.

As we look toward the next 100 years and beyond, the Utah mining industry strives to continue to enhance our role as the foundation of Utah's economy and to improve the quality of life and standard of living for all Utahns.

Mark Compton has been the president of the Utah Mining Association since July, 2012, prior to which he was government affairs manager for the Northwest Mining Association (now the American Exploration & Mining Association) in Spokane, Washington.





WRS KNOWS RENTAL

WRS

WORLDWIDE
RENTAL SERVICES

1125 LEGACY VIEW ST
SALT LAKE CITY, UT 84104

DENVER 303.341.5555 • GRAND JUNCTION 970.858.0093 • SALT LAKE CITY 801.978.3300

DALLAS 817.556.6466 • HOBBS 575.397.0808 • LUBBOCK 806.747.3792 • ALBUQUERQUE 505.897.5929

LAS VEGAS 702.407.0099 • DICKINSON 701.483.9494 • DURANGO 970.426.8071 • CASPER 307.234.7777

TOLL FREE 888.997.3687 | RENTALS@WRSRENTS.COM | WWW.WRSRENTS.COM



Courtesy of
Utah Mining Association

For more than 160 years, mining has played an integral role in the development and economic growth of the State of Utah. Today's safe and environmentally responsible mining industry continues to be the foundation of our economy. Mining creates new wealth and provides the high-paying, family-wage level jobs with good benefits that both Utah and our country need. In fact, mining jobs in Utah pay wages nearly twice the statewide average.

To most people, mining is something they never experience firsthand; yet they benefit from the products of mining everyday of their lives. Without the hundreds of thousands of material benefits that come from the mining industry, your world would be completely different from the way you now live.

Mining helps satisfy our energy needs, as well as everyday items such as televisions, cell phones, computers, refrigerators, vehicles and even your toothpaste. And no infrastructure projects, including bridges, buildings or transportation, in fact, no society can move forward without mining. If you think about all the things you use every day, you will discover the almost endless uses of metals, plastics and paper, all of which depend upon mining for their existence.

Mines can only be located where economically viable mineral deposits exist, so the ability to access mineral

deposits is critical, especially in a state with 70 percent public land. Land use decisions have denied access to much of our important mineral resources.

If we are able to access the deposits, the ability to permit projects in a timely manner becomes a critical component to attracting mining investment in the United States and in Utah. Considering the foundational importance of the mining industry, these are issues that deserve our attention.

Our modern society runs on energy. Think for a minute about the relationship between mining and the energy we demand and consume. From the coal mined in Utah that accounts for approximately 80 percent of our state's electricity generation, to the uranium used to power our nation's nuclear energy reactors, to the copper, molybdenum, iron ore, lead, zinc and other important metals and minerals that make renewable energy possible, mining is critical to energizing our modern society.

In fact, all aspects of our economy — electricity, communications, transportation systems, computer networks, space and medical technology, national security — require minerals and coal. Fortunately, the U.S. possesses extensive domestic reserves of many important mineral resources, if we are able to access them.

We take for granted in this country that the lights will go on when we flip the switch and our heating and cooling systems will keep us comfortable. But the fact is as many as half the world's 7 billion people live without proper access to energy for basic human

needs.

Like food and water, energy is essential. It's the key to a better, longer life for half the world's population and it can bring improvements in education, health and longevity. Yet, electric heat, lights, refrigerated food and medicine — crucial for basic needs that some people take for granted — are still unavailable in many parts of the developing world.

To eliminate extreme poverty will require affordable access to energy. And to satisfy the world's energy needs will require a true "all-of-the-above" approach to energy generation, including coal, gas, oil shale/oil sands, nuclear, hydropower and renewables. Using today's advanced technologies to improve emissions, all of these forms of energy development will play a significant role in ending global energy poverty.

There has been much discussion in the U.S. about increasing production of renewable energy. A diversified energy portfolio can be a good thing, but we must keep in mind the continuing importance of coal and hardrock metals and minerals to our energy future. Coal has been an abundant source of reliable and affordable energy for the U.S. and the world for many years. In fact, the U.S. is often referred to as the "Saudi Arabia of coal," as we have the largest supply of coal reserves in the world. Forecasts indicate coal will continue to be a key component of our energy mix well into the future.

As we diversify our energy portfolio, a plain and simple fact is that renewable technologies require miner-

als — and lots of them. Expanding renewable energy production will require significant amounts of copper, steel, molybdenum, zinc, gold, silver, cobalt, lead, rare earth minerals and more. Any way you look at it, mining will continue to be a critical part of our energy future.

Here in Utah, energy plays a key role in our state's economic development. Utah is well known nationally as a business friendly state, with a low burden of regulation and low cost of doing business. Importantly, we must keep in mind that one of Utah's significant advantages to attracting businesses, including manufacturing and high technology jobs, is our low cost of electricity. Simply put, cheap power lowers business costs and makes Utah more competitive.

Therefore, it is more important than ever to responsibly utilize our own mineral and energy resources. In fact, our economic and energy security depends on it. The Utah mining industry stands ready to provide the jobs and materials needed to sustain economic growth and improve the quality of life for all.

You may hear catchphrases like "It all starts with mining" or "If it isn't grown, it must be mined" to help make the connection between mining and everyone's daily lifestyle and standard of living, but it really is true. As the beginning of the supply chain for everything we use and everything we do as a society, everything really does begin with mining. What could be more fundamental to our economy and our lives than that?

rb RITCHIE BROS.
Auctioneers®



**Sell
where people
are buying**

Add your equipment to an upcoming Ritchie Bros. auction.

Every Ritchie Bros. auction attracts a huge crowd of buyers from around the world. Add your equipment and trucks to an upcoming unreserved public auction and benefit from:

- ▶ All-inclusive service
- ▶ Flexible consignment options
- ▶ Expertise selling heavy construction equipment
- ▶ Global marketing that targets buyers in your industry
- ▶ Competitive bidding, on site and online
- ▶ Sale & payment dates you can count on

Call **1.801.250.1836** and ask about selling at our next big auction in **Salt Lake City (June 23)**.

Learn more at

rbauction.com/sell



SUPERIOR POWER AND PERFORMANCE DON'T ALWAYS EQUAL SUPERIOR ROI. UNTIL NOW.

15% MORE FUEL-EFFICIENT

You don't need more fuel to get more function. CASE C Series excavators deliver up to 15% greater fuel efficiency than our past B Series models. We provide an average of 3% faster cycle times than previous models, 6% more lift capacity and can fill up to 6 more trucks every shift. Get all this along with our Intelligent Hydraulic System, and you'll see why choosing CASE really adds up. The muscle to get your work done is here. Visit your CASE dealer today.

CaseCE.com

CASE
CONSTRUCTION

Case is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V. its subsidiaries or affiliates.

CENTURY
EQUIPMENT COMPANY
801-262-5761