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PRESIDENT

"Barite Boom is Underway"

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Dear colleague,

Although our "first love" is testing frac sand here at the lab, we are the up-and-coming, go-to lab when it comes to serving explorers looking for that next big find, for nearly every metal and mineral that you can think of.

We have the capability to test metals and minerals from Aluminum to Zirconium – and everything in between! This includes precious metals like gold and silver, copper, the rare earth elements, and of course barite, frac sand, and bentonite.

This month, let's rap on the barite, which is used in drilling fluid, paints, and chemicals. Barite is a strange animal because very little is found in the United States, but there are often quality control issues when buying foreign barite.

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Grizzly bears and Barite

I went camping with my family last weekend, and we stayed just west of Yellowstone National Park, along Hebgen Lake.

On the way home, the highway dips into Yellowstone Park for about 20 miles.

Wouldn't you know, we saw a grizzly bear a couple hundred yards off the side of the road during that stretch. The bear was frolicking around in some bushes. He was probably going after a small animal, or eating flowers or berries.

Anyway, it was the first time that I had seen a bear in the

wild.

Check that box for Brandon!

And it was a big grizzly bear, and the grizzly is the North American king of animals (in my opinion).

Awesome animal

There is great human fascination with the grizzly bear – bears are the stuff of constellations, fairy tales, and stuffed animals.

Bears are fascinated with us as well.

We are their match in the food chain, and we both stand on approximately the same rung – cautious of each other.

If people are headed into bear country, it's likely that they will read the news for articles on bear attacks, study the best ways to avoid and deter bears, and maybe even buy some bear spray.

I have a fascination with barite that rivals that of my fascination with bears! Ha

Barite is mysteriously rare to find in the United States, yet it is plentiful in Mexico.

However, it's still a challenge to get fresh supplies of Mexican barite into the US.

Good ores are *pure white* and I pulverize them into a handsome, flour-like powder for testing.

In fact I know of at least 3 great teams that are working on getting new sources in right now.

Of course, my lab provides barite testing of all types.

Barite can be used for drilling. For drilling grade barite, you need to meet at least 4 main standard of the American Petroleum Institute 13A.

Density, purity, and size make up those API 13A drilling grade barite requirements.

In order to sell drilling grade barite, though you may need to do testing on heavy metal content and purity.

For heavy metal testing, I would recommend testing for lead, cadmium, and mercury. This helps to meet the EPA standards for offshore drilling requirements.

For purity testing, you can order up some x-ray powder diffraction testing to help get at the percentage of barite in your sample.

If you have barite with very high density (higher than 4.2), white, and pure, you have a shot at getting into the chemical and paint industries.

If you are a barite explorer, our lab can do testing for you on a budget, as well as contact information for learning about how to get your barite into the market.

How can we be of service to you?

Frequently Asked Questions on Barite

Q1: What are the specs for drilling grade barite?

A1: The current American Petroleum Institute (API) 13A specifications for drilling grade barite are:

- Density: 4.20 g/cubic cm, minimum
- Water soluble alkaline earth metals as calcium: 250 mg/kg, maximum
- Residue greater than 75 microns: 3.0 % by weight, maximum
- Particles less than 6 microns in diameter: 30 % by weight, maximum

As with all the testing done at Global Energy Laboratories, the barite testing is done to exacting API specifications, with a high speed, and at an affordable cost.

Q2: How much does barite testing cost?

A2: Barite testing costs

Drilling grade barite testing (API 13A)

A. Density \$300/sample

B. Water-soluble alkaline earth metals \$500/sample

C. Particle Size Distribution \$350/sample

D. All Barite Tests A-C \$950/sample

E. Crushing from ore to powder \$150/sample

Heavy Metals Testing (for EPA requirements for offshore drilling)

F. \$75/heavy metal tested (we recommend testing for lead, cadmium, and mercury)

Purity of barite testing

G. \$500 for x-ray powder diffraction testing

Why my lab rabbits are spoiled

Ok, they aren't technically "lab rabbits" as in I do testing on them, but they live in the fields and under the equipment just outside my lab building. I think they would be happy to be associated with such a prestigious lab. Ha

You see, my lab sits on a large industrial park campus with multiple buildings. There are many open acres of nice grassland for the rabbits to graze on.

The other night I was outside chatting on the phone – loud sieve shaker was running in the lab – and spotted a bunny not too far away.

He was munching on grass like a champ. He'd bite off a stalk, then chew on it. Looked for a second like a farmer with some hay sticking out of his mouth.

I started thinking about this rabbit.

He was busy, eating away like a degenerate gambler hitting the buffet at the casino after a 2-day binge at the tables.

This bunny was not the least bit concerned about a human standing just a few yards away.

And this started to bother me

Why wasn't this rabbit more scared of me? He could have hopped just a bit further into the field, getting away from me but still able to stuff his furry face.

Then it hit me.

This rabbit has probably lived his entire life on the complex.

And the complex is surrounded by a nice high chain link fence, topped with barb wire.

At night, a gate drops down and limits access to only those with passes.

Predators rarely make their way in here.

This rabbit has led a sheltered life (for a rabbit, anyway), and

probably has not had to ever deal with foxes, dogs, cats, wolves, honey badgers, and other rabbit predators.

And the people here aren't spending their time hunting rabbits. We are all just focused on our businesses.

So this rabbit and his relatives are artificially sheltered and protected from the savage things in life.

That's most likely NOT like you and your business.

It's certainly not like mine.

You and I are constantly fending off "attackers" and trying to get bigger and stronger.

If we were rabbits, we would be wary of predators bigger than us, but we'd also be "evolving" and getting a thick tough skin, more speed, and sharp claws and teeth to fight back.

There are lots of business predators that prey on us: lawsuit-happy people and groups, government regulators, cut throat competition, and massive shifts in supply and demand.

In my business, we are expanding our testing lines (frac sand is our first love, of course). Into areas like barite testing, bentonite testing, rare earth metals, gold, silver, copper. If you want it tested, we can likely do it. XRD, SEM, ICP machines are at our disposal, and we have competent people to run them.

How about you?

How are you improving yourself and your business to deal with business predators and fight back? Let me know! I'd love to learn from you.

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Targets of Opportunity

HOT! Frac sand deposit for sale in Mississippi. The owners want to sell, and I have some information on frac sand testing that was done on sand from the the deposit (by a lab other than mine). Let me know if you want that packet of information. I'm not a broker or anything on this deal – just looking to make a connection between decision makers and get out of the way.

Drilling Grade Barite ore and finished 200 mesh product. Recently I have been talking to several teams of great people that are getting into the

barite mining business, or are already producing. Let me know if you are looking for new sources of barite, and I can put you directly in contact with them.

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Testing Services: we can do all this and more...

Frac sand testing to API/ISO standards	Barite testing – API 13A drilling grade barite, chemical grade barite
Bentonite testing – API 13A drilling grade bentonite	X-Ray Powder Diffraction (XRD) Testing
Heavy Metals Analysis – lead, cadmium, mercury, you name it	Inductively Coupled Plasma (ICP) testing
Scanning Electron Microscope (SEM) analysis	Magnetic separation of material
Trace metals testing	Ore processing
Precious metals testing – gold, silver, platinum	Copper testing
Tungsten	Uranium detection
Garnet testing	Water testing
Materials crush testing	Sieve analysis

Please drop me a line – e-mail me at Brandon@GlobalEnergyLaboratories.com or give me a call at (406) 490-1415 and let me know how I can be of service to you.

Sincerely,



Brandon DeShaw

PS If you know someone that might like to receive this newsletter, please e-mail me their mailing address.

PPS I am going to be publishing the first episode of a podcast called "Energy, Metals, Minerals Podcast" very soon – more information to come, but if you would like to be a guest on my podcast, let me know the topic you would like to discuss. You would have a chance to blatantly plug your business for some free publicity during the interview, of course.