

Mesabi, A Tale of Red Jasper

By Rick Hudson, Victoria, BC, Canada

"How many times is this?"

"Five."

"Five times! How big is the place?"

"Not that big. At least, it's not HUGE. But it's very steep. Simon Deane and I have spent whole days climbing up, and dropping down, and climbing up, and ... till my legs ached."

"And you still can't find it."

"I found one piece. Once. Down near the bottom of the hill."

"Jasper?"

"The best jasper you ever saw. It's blood red .. shot through with snow white veins of quartz. I've never seen anything like it. Not in the Nanaimo Basin, not even up at Labour Day Lake."

"So that's the attraction?"

"That's the attraction."

Phillipa and I are sitting on the Salt Spring Island ferry, bound for Fulford Harbour. It's a cool spring day; clouds are low, with few gaps, and it looks like rain by noon. That doesn't seem to deter the other passengers; mountain bikes and kayaks abound on cars. You'd think it was mid-summer, not the wettest spring on record.

I have this 'thing' about a jasper deposit on the southwest side of Salt Spring. "Mesabi". For a start, I've always liked jasper. It's one of my favourite gemstones. Rich in quartz, stained red or yellow or green, or a multitude of subtle colours between, jasper symbolizes diversity within a group, differences, variety, that makes it all the more interesting.

Believe it or not, I learned about this particular deposit while in mid-Atlantic on a 40 day research cruise. The nights are long and diversions few when you're at sea. To while away the wee hours, I'd brought along a copy of MINFILE, that amazing collection of all the mineral deposits on record in British Columbia, complete with descriptions, mineralogy, references, locations (more about that later) and history, all compressed onto a few computer disks. About a thousand nautical miles west of the Canary Islands, I "discovered" Mesabi. Just up from Musgrave Landing, on Samsun Narrows. Practically on my back doorstep. The documentation mentioned a field geologist's report of "deep red jasper interlain with hematite and cut with quartz veins". On my own doorstep. And no one in the VLMS knew about it, when I asked later.

So I set out to find it. The first time we went, Simon and I were looking for Hollings' rhodonite quarry as the primary objective, and Mesabi as the fallback. We found neither. It took me three trips and a lot of research to pin down the rhodonite, and when we found it, it had been under our noses all the time. Well, you had to expect that. Hollings had worked that famous deposit for twenty years, so there had to be a well-defined road to it.

But Mesabi was different. There had been a little exploration back in the 20's, and again in the 60's. But no development. So, no road. Few clues. We searched for days, and found nothing. Then I had a stroke of luck: quite by chance, I met Ed Travers, retired prospector and farmer, now living in Victoria. His basement was a library of old geological information about the 50's and 60's, and what he'd done. And in amongst the piles of old maps, and aerial photos, and scribbled notes, and correspondence with the BC Dept of Mines, was Mesabi.

"I staked it in 1965," he said simply.

"Then you're the person to ask," I cried excitedly.

"Perhaps not. Roads change, you know."

He was right. The lines on his faded pages bore no resemblance to the tracks I'd trudged during my reconnaissance trips. Not that we didn't try to make them agree. The result was a confusion of lines.

"Better take all this stuff with you," said Ed.

I borrowed a stereo viewer from a friend, and spent long hours with Ed's airphotos, looking at the relief on the west side of Mt Sullivan and Bruce Pk, where they dropped down towards the Narrows. Only the Narrows weren't in the picture, so I could never be sure exactly where the little red dots were in relation to the slope I knew. But the feeling grew that I HAD to find it ... Ed had given me a report that described the deposit as being 200 metres in length up and down the slope, and 60 metres wide across slope. Surely I could find a deposit of that size!

We couldn't. Visit after visit, and we returned empty handed. Except for one tantalizing piece of float, found well down

the slope, which did nothing to show where the deposit was. It only confirmed what I knew already ... it was there SOMEWHERE.

Finally, this Sunday with Phillipa. Simon is away at some competition, and sends his regrets. Phillipa is my rockhounding buddy. Plus Bali, a 9 week old puppy, who proceeds to get very sick during the long drive over Mt Tuam to Musgrave Landing. The gravel road is in terrible shape, and the old Ford shudders at every pothole. Finally we are at the road's end. Taking the aerial photos, we start the long, very steep climb up the flank of Mt Sullivan, following the line of a creek that I believe is the same one as in Ed's photos. At the top, we are almost in cloud. It is gray and cold, with a stiff breeze, but the views down across to Duncan are breathtaking. Waves of rain are approaching from the direction of Shawnigan Lake. The light on Saanich Inlet is like burnished steel. Or hematite.

There is no hematite in the most likely area. Lots of crystalline quartz, and a blush or two of jasper. A little green chert too. But nothing to convince me that this is Mesabi. Two hundred metres by sixty metres. Definitely not.

We case the upper slopes for over an hour. The puppy is surprisingly bouncy, given she has climbed over 500m up a rugged mountain. The weather starts to lift, and patches of sun break through. The rain veers north, and sweeps over Maple Bay instead. Everything is improving. Except, there is no Mesabi.

On the way down, I check another possible valley. Lots of deer, undergrowth, nettles, deadfall, but no jasper. Back at the truck, we eat a late lunch and watch the puppy sleep the kind of sleep that only puppies are capable of. Motionless. Like a brown rag, flat on the warm moss.

"Well, it was a lovely day."

"Another time."

There is still about ten minutes before we have to leave, if we're to catch the 3:45 ferry back to Swartz Bay.

"You know, we're not that far from where I remember finding that one and only piece of jasper. I think I'll just go and take a quick scout around there, even though the maps all say it's higher up the hill ..."

There is little time, so I jog along a heavily overgrown track. Alder and young fir crowd in on both sides, and I find myself sweating in the afternoon warmth. Crossing a small creek, I examine the contents of the stream bed. Schists, a bit of greenstone ... nothing interesting.

Farther on, the slope is still surprisingly steep. Arbutus block out the sky above, and the ground is densely carpeted in old leaves that crackle as I walk across them, despite the rain. I glance at my watch. Five minutes are up; I must turn back. And then, as I turn, I see something that makes my heart skip a beat ... a piece of blood red jasper, shot through with snow white quartz. It lies gleaming amongst the leaves. We look at each other for a long, long time.

"Hello, Mesabi," I say, not caring who hears me.

Back at the truck, Phillipa has already turned the truck around on the narrow track, but at the sight of the sample, she is as excited as I am. "It looks like the 5:15 ferry, doesn't it." It's not a question, but a statement.

With an hour to spare, I can now give the area the attention it deserves. In all our visits, we have searched the upper slopes, based on the site locations given by the MINFILE and geology reports. (To be fair, MINFILE seldom claims to be more accurate than +/- 1 km.) So, perhaps the old road was lower down the slope. Perhaps the present road is higher up. Perhaps the deposit is BELOW the present road, and ABOVE the old road. Perhaps ...

Fifteen minutes later, I am working the slope, eyes peeled, searching for any sign of the mother lode. A piece of crystalline quartz catches my eye, and when I crack it open, its interior is covered in metallic black flakes of hematite. The colour contrasts are striking, and I am delighted with the sample. I carefully wrap it and place it in a pouch. As I bend down to close my pack, I realize that I am looking at a gray boulder on the slope in front of me. It is about the size and shape of a car wheel. It is like thousands of other boulders on the slope around me, ... only ... it has a red blush to it. I chip off a corner, and the freshly broken surface is blood red. It is solid jasper! I stare in disbelief, while my mind races. This is too large to be far from the source.

Then I notice another rock close by. It is red too, under its weathered exterior. And the one next to it! And the one next to it! The whole slope is red, and I haven't even noticed!

There is a vertically dipping dyke, striking SE up the slope above me, and as I climb up to it, I realize with delight that the whole formation is jasper. It's red, red, red. Only, from a distance, it looks ... well, it looks quite ordinary, really. Just like any other dyke running up and down the hill.

Over the next half hour, I examine the full length of the deposit. It is indeed almost 150 metres up and down slope, and certainly 10 metres wide. Some pockets have druzy quartz; other areas contain vuggy jaspers offering all sorts of minerals within. Some of the jasper has a sugary look to it, due to a high concentration of quartz facets. In places, green chert borders the deposit. Bands of hematite and magnetite interlay the quartz and jasper, and possible psilomelane (manganese hydroxide) deposits are also visible.

A Geological History

The Mesabi deposit is part of the Mt Sicker complex, which is the oldest formation comprising what is today Vancouver Island. Formed about 280 million years ago, these igneous basalts and associated materials were thrust up from the deep, close to where Hawaii stands today, and formed in much the same way as those modern islands. The Mt Sicker materials never reached the surface, and were subsequently overlain by numerous other formations to form the Wrangellia Terrain. Riding on a tectonic plate, the formation (which includes much of modern day Vancouver island, Queen Charlotte Islands and SW Alaska) was pushed NE towards the North American continent. About 80 million years ago, the two terrains collided.

The Mt Sicker formations are of particular interest to island prospectors: the rhodonite deposits of Salt Spring Island and Hill 60 lie in this complex, as do the jasper deposits of Mesabi, the Upper Nanaimo River, and Camron River. Perhaps the best known deposit of significance today is the Mt Myra/Lynx copper mine at the south end of Buttle Lake in Strathcona Park.

The formation is named after Mt Sicker, which lies between Duncan and Chemainus. At the turn of the century, the Mt Sicker copper mines just north of Duncan were so rich and so famous that two entire towns were built on the mountain, and two separate rack railways brought ore down to smelters at Cowichan Bay and Ladysmith. The one line had the steepest grade in Canada, and adventurous Victorians travelled to Duncan (on the E&N Railway), from where they could be thrilled with a ride up the gravity defying railway line, with its tight corners and triple switchbacks.

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[Home](#)