

CERRO GORDO, A SEARCH FOR WATER

Part 2

by Steve Rush

The first time I set eyes on Dave Pruett, he was wearing a near new straw hat, a flannel shirt, and a friendly grin. He arrived in Cerro Gordo the early morning of April 18, looking fresh from his long drive down from Gardnerville, Nevada.

Shaking hands all around, he commented that it was nice to see us all still alive after our adventure with the ladder in the Cerro Gordo shaft the previous evening. Inquiring as to the condition of cable and cage, he glanced around at us youngsters and said "well, let's go on up and take a look."

I have worked at a number of jobs over the last thirty years, for a number of bosses, some good, and some bad. Dave immediately set himself apart from all those bad bosses by taking a walk around the hoist works, crawling up among the timbers of the shaft house where the all important cable ran, and peering into the shaft at the suspended cage, all the while keeping up a running commentary of "boy, that could use such and such, and see that? It could use this."

There were six of us at the Cerro Gordo Mine this early day, and though Dave never gave a direct request for assistance, you never saw such a scramble to help as he made the seemingly offhand statements of what needed doing. Even Roger Peterson broke into a trot to fetch a needed tool from Dave's truck.

Apparently, Dave had given his plan of action a considerable amount of thought, and he wasted no time in showing us how to remove the original drive motor from where it sat beside the immense gears of the Joshua Hendy hoist. It was Dave's intent to replace this 150 horse electric motor with an eight horse hydraulic motor. In terms of weight, the ratio was about 1000 pounds of electric motor to about forty pounds of hydraulic motor. Okay...

Remember the television show from the 80's called MacGyver about a mechanical wizard who could spot weld a hydrogen bomb casing with two nickels? Dave quickly acquired the nickname MacGyver as he lined out tools, brought out modern replacement parts for the hoist, and showed us how to align the new motor and reduction gears to integrate with the hundred year old parts still in good working condition.

Fortunately the mine buildings already had power to a modern fuse box, run in the 1970's to power the hoist works for mine exploration. A new line was run from the hydraulic motor to the fuse box, the new motor was aligned in place of the old, and "wallah" (an old mining term) the hoist works was back in operation and ready for men and equipment to begin our exercise to mine not ore, but water.

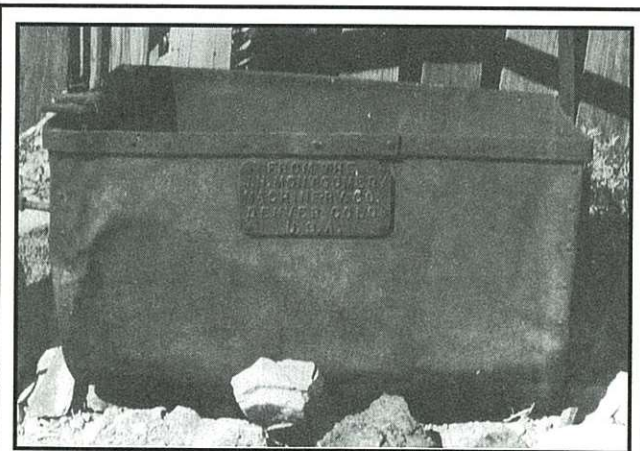


Figure 1. Aerial tramway bucket from the Cerro Gordo Tramway that ran to Keeler, a 15 mile distance. Buckets manufactured by the J.H. Montgomery Machinery Company in Denver.

Of course, it wasn't quite as simple as it sounds on paper. I've worked on construction projects most of my life, and I have to admit that on this job I learned a number of new expletives; singular, plural, and strung

together in recognizable sentences. Rather than go into the intricate difficulties of obtaining power to a hundred year old piece of equipment and getting the cage to simply move from its stops at the shaft collar, suffice it to say that under the expert direction of Dave "MacGyver" Pruett, it was accomplished in one day.

In retrospect, getting the Joshua Hendy hoist rolling again was the simple phase of our water mining project.

As you loyal readers recall from the fall issue and part one of this article, the Cerro Gordo mine shaft is 900 feet in depth. Collectively, that's 1800 feet worth of wooden cage guide from the shaft collar to the 900 level. We were all to achieve an intimate knowledge of these guides very soon.



Figure 2. Porcelain sign found in the bottom of an out house pit in Cerro Gordo. Tramway hauled ore in buckets from Cerro Gordo to the Smelter in Keeler.

With a ragged cheer among the onlookers Dave fired up the hoist and ran the cage several times up and down the first one hundred feet or so of the shaft. Bringing the cage back up to the collar, he called for volunteers - two of 'em - to place a realistic weight into play. Roger and I were identified as those among the group with their hands in the air first. Actually, speaking for myself, I was merely scratching the top of my ear, and didn't even hear the original question of "who's up for going down first?" This is also how I became vice president at my company during a meeting on management restructuring, but I don't want to get into that.

Roger's son, Chad Peterson, nervously posed the question of wouldn't it be safer to pile the accumulated weight of two men in the cage in the form of rocks or something, but this was waived aside as a needless endeavor. Didn't we just witness the cage traveling free with not even the slightest hesitation from the hoist mechanism? Laden with hard hats, lights and equipment to work below at the 700, Roger and I took our places in the cage. "Say something historic", a bystander said. Rogers was "to infinity and beyond" (he apparently has grandkids), and mine was "don't let us fall" (I apparently was frightened). Brave smiles in place, we collectively nodded to Dave at this position as chief engineer to lower away.

And down we went. All the way to the 110' mark. Where we stuck fast, hung up within the wooden guides which had gradually resigned to the weight of rock pressure from behind the cribbing, decreasing the shaft width somewhat.

During the process of hanging up in the shaft, a couple feet of cable had become slack, effectively releasing suspended weight from the cage. With a great clatter and clack, the rowled dogs of the cage's safety apparatus set fast into the wooden guides. I must admit, it gave Roger and I a bit of a start. Well, okay, maybe a step above start.

Roger told me later that his first impression of my face was that I only had one huge eye in a field of white. My impression was that he lunged towards me with a bear hug, blubbering "I really love you, man!". Both impressions may have been correct.

Once Dave observed a problem (the slack cable being the tip off) he attempted to bring us back up. The safety dogs held tight. With our weight in it, it wasn't going anywhere. Our first radio communication was a calm, "Houston, we have a problem". Well, okay, our first communication was a hysteric "what's going on? Help us! Aghhhhhh!" Dave's response was calm. He

directed us to move out of the cage onto the manway ladder so that he could release the cage. I must say, the ladder certainly seemed to be in excellent shape, as compared to what it looked like the previous day. Near new, in fact. The cage rose a few feet to our level and we stepped back aboard for the slow ride to the surface.

The apparent problem had occurred over the past several decades and did not affect the entire shaft. At several areas, the 110' level among the first, the guides would need to be lagged back into the cribbing or shaved away with a draw knife to allow free travel of the cage. Dave took this in stride, and spent a bit of time training several of us in the fine art of running the hoist. Frank Purkhart, Cerro Gordo's present watchman par excellence, was chosen as the one least likely to drop anyone.

The next several hours stretched into several days as a crew of two to three men, Dave in the lead, spent time repairing the shaft guides. Dave proved to have ice water in his veins as he showed us the best way to proceed, having a considerable amount of experience in shaft repair. Taking a heavy plank long enough to span the inside of the shaft, he would use this as a platform to work from *below* the suspended cage. Dave would eye where he figured the cage would hang up, then proceed to chisel away the wood, which was as hard as rock — and covered with old grease, until he felt he could get a lag bolt through into the cribbing. This would be tough work standing on level ground; working in limited light below a thousand pound safety cage over a yawning abyss hundreds of feet deep...



Figure 3. Irish buggy, ore bucket remains, ore car and other iron items from Cerro Gordo's past. Old safe in center once held Cerro Gordo's payroll.

Dave was attached by safety line to the cage, of course, with one of us lackeys crawling about the cage floor handing him tools as called for. Occasionally the cage would still stick going through a repaired spot, requiring Dave to work from the cage roof so as to allow access back up the shaft. This was interesting work, but not something I would want to put on a resume for fear someone would make me do it again.

April 21st was our last day in the mine, the outside world having waited long enough for our return. With the work far from over, shifts would continue with assistance from

Don Becker, Rick Bates, Chris Biedermann, Sean Terry and George Copenhaver.

My return from Colorado on Friday, May 2nd was in the fine company of Leo Stambaugh and Roger Peterson. Work at the Cerro Gordo had progressed to the water source itself in the 700 level, with the cage and hoist works now performing as if there

had been no seventy five year gap in its history.

Dave Pruett arrived on Saturday, the same as the previous three weekends, as one apparently tireless individual with the same friendly grin and his "let's see what's out there" enthusiasm. We immediately descended to the 700 level. Frank Purkhart had, by now, become a first rate hoist engineer, with the patience to remain in his chair in vigilance of his cage charges for as long as we were down below.

The cage still rubbed a bit within the guides, but its travel was no longer impeded as before. Soon we were within the 700 level drift, with the next course of action being the replacement of an ancient two stroke pump



Figure 4. Artifacts from Cerro Gordo's past line the shelves of the old grocery store. Items turn up practically every day to add to this "in-progress" museum.

there since the early 20's. A modern pump had been brought down earlier, time to put our perspective plumbing and electric hats on.

The cistern excavated into the drift floor measures approximately twenty feet by four feet by four feet, holding about 2500 gallons of very clean water. The source appears to be seepage directly from a formation known locally as the Chainman Shale, with a bar ditch carrying the inflow into a cistern. Since the water never flows through tailing piles or adjoining ore bodies, it seems to be as clean (if not a good deal cleaner) than tap water from say, Denver or L.A.

While Leo and Dave poked and prodded the new pump, I set out new water pipe and electric lines. It's easy to forget that you have no peripheral vision working with a cap lamp, so like many a new miner I would turn and bang into a timber or the rib with a comment bursting forth as to how disturbed I was with this every time I did. Leo told me later that he and Dave would have been done sooner with

their work if I hadn't been so distractingly entertaining.

The weekend crew before us had brought down all the supplies necessary, as well as having performed quite a bit of early installation work. It was left up to us to place a submersible pump within the cistern itself, reattach wires and pipe, and flip the switch. Dave had inspected the water pipe and electric conduit which ran down the shaft, not much needed to be done here. This was surprising, since so much junk had obviously been tossed down the shaft by tourists over the years, but no apparent breaks could be seen.

"Stand back", Dave instructed us as he threw the switch. We stood back. An immediate hum from the pump, some movement of parts, and a stir of silt from the cistern showed that we may have accomplished something. We grinned at each other, then turned toward the shaft with consternation as the sound of rhythmically splashing water reached us. A break we'd

missed. Oh well, pump off, repair pipe, pump on and grin again. Read back two sentences and repeat numerous times.

Another problem became apparent upon repairing all breaks. To move water seven hundred foot up a 1" galvanized pipe may require that we revisit high school physics. But, of course Dave had made it into the advanced physics class (heck, he probably taught it) and knew what tweaking was required where.

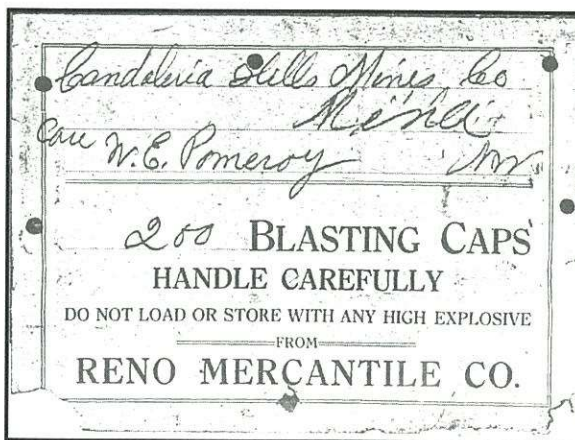
A long weekend behind us, Leo, Roger and myself had to hit the long road back to Colorado. Water was not quite in sight, but close enough to the shaft collar to make us start believing it really might become a wet reality.

Unfortunately, I was not witness to water finally flowing into the Cerro Gordo tanks the following weekend. I understand though that it did so among applause and happy tears. Sufficient to say that the silver town of old Cerro Gordo has achieved a new lease on life over one hundred thirty years after the first pick was sent into its stony ground.

Upon my last visit to Cerro Gordo with Leo in October, water has successfully been flowing since May. Mike has not had to make another trip up the Yellow Grade with his overworked water truck, and has been able to put valuable time toward rebuilding what history apparently won't let die.

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An Interesting Label



Found by Larry Mayne in a drift at Candelaria. The label is from the 1920's.

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