

**Transcription: Grand Canyon Historical Society**

**Interviewee:** Jay Combs (JC)

**Interviewer:** Tom Martin (TM)

**Subject:** Jay recounts his recollections of living at the Orphan Mine while going to Grand Canyon High School.

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**Keys:** Living at the Orphan Mine Glory Hole

TM: Alright, today is Thursday. It's November 15<sup>th</sup>, 2018. This is a Grand Canyon Oral History with Jay Combs, and my name is Tom Martin. Good evening, Jay, how are you?

JC: I'm doing well, thank you.

TM: Great. May we have your permission to record this oral history over the telephone?

JC: Yes, you do.

TM: Thank you very much. What year were you born?

JC: I was born February 20<sup>th</sup>, 1945, in Kingman, Arizona.

TM: What were you folks doing in Kingman?

JC: Well, that was the nearest hospital. My mother and father, or our family, was in Chloride, Arizona so the nearest hospital was Kingman.

TM: So, Chloride is kind of between Kingman and the Hoover dam. It's a mining community there. Were your folks working in the mines?

JC: Yes, my mom and dad came to Arizona in the... I'm not sure the year, but they came in the late thirties, and my dad got into underground mining. He's from a farming family back in Oklahoma. He worked in the CC's and traveled around a little bit. Then he ended up as a hard rock miner. I know that he... They lived in Vegas right before they came to Chloride and he worked at what they call Basic. He helped build the buildings to all the factories and the mills out in Henderson at that time. Like to brag about the fact that Maryland Parkway was only like 3 or 4 blocks long when they lived there. Then for some reason, they decided that there was nothing going on in Vegas, so they moved out near Chloride. There was a mine called the Golden Door down towards the Colorado River, between the Colorado River and Chloride. He started out driving truck for the Golden Door in a mine and then progressed from there.

TM: Okay. Do you have any brothers and sisters?

JC: I have a sister. She's a year older than I am. She's got four kids and she's currently in Benson, Arizona. She lived in Michigan for 30-some years. Her husband retired with Chrysler in Detroit city. They lived in Monroe, Michigan. He's currently going through... Oh, this is terrible, what do you call it when you're losing your memory?

TM: Oh, he's going through Alzheimer's type thing?

JC: Alzheimer's. Yeah. He's going through that.

TM: Okay. What are some of your early childhood memories? Chloride, it's hot in the summertime there. It's nice in the winter. Desert, it's a kind of mountain range there, with a big valley off to the west. What do you remember about that?

JC: Oh, I just take a lot of pride and joy in my childhood. All these old mines and abandoned buildings and abandoned mills. My dad was away most of the time. The way my mother was is... I remember 6/7 years old, being out on the street by myself, and street in Chloride is not *the street*. What I mean is, I was allowed to go out of the yard and pretty much free rein until... Especially as I got a year or two older, mom would just stand out on the back porch and yell "Jay, Carol," and you had about 10 minutes to get home. It was usually about sundown, you know, and you had to come home for dinner. My mother and father would probably be in some kind of trouble nowadays the way that I was as a child. I had so much freedom that it would, I think, be considered criminal nowadays. But when I was 9, I carried a 22-rifle and was out in the desert, shooting rabbits and tin cans, and...

TM: Did you get good at that? Were you good at...

JC: Oh, I was a very good shot.

TM: Great.

JC: Actually my mother taught me. My dad was a good shot, but as I mentioned, he wasn't around a lot of the time, so my mom taught me how to shoot, how to drive. Was adamant. She'd just tell me, "If you don't want your butt kicked, get outside and do something, or I will find something for you." So I was an outside hiker. I just hiked to hills and played in the mines that nowadays scare me.

TM: Did you camp out at all?

JC: No. No, I didn't really... I think as I got... When my mother and father got divorced sometime in 1956/'57, the man she married was a hard rock miner also. Then we got into a lot of camping, like deer hunting and camping out in the wintertime and stuff like that. As I got into high school, I was always bouncing back and forth, so I didn't camp out much.

TM: Hang on.

JC: Sure.

TM: Before we get to high school, I'm thinking Chloride had a population of about 35 people?

JC: No. Back in the day, like the 20's and so forth, Chloride had up to 2500/3000 people.

TM: So, what was happening when you were there? Born in '45, so in '55, what was the population there?

JC: The population at that time, and there are those would dispute me here in the town, but somewhere between 500 and 700.

TM: Oh, okay. Alright.

JC: Because the mines were really popping at that time. They weren't really popping, they were still existing. They were kind of slowing down, not kind of slowing down, with the ending of World War II and Korea, they didn't need all that iron and lead and the minerals that the miners thrived on. So, the need for the underground miner was basically on a decline.

TM: Okay. So when you went to school, was there a school there in Chloride?

JC: Yes, there was. I have no idea... It was one of the most beautiful buildings. It was a big old school with a bell steeple, a nice big bell. Somebody burned the school down and I'm trying to think... It happened while I was away. I think it was in the early 60's somebody burned the school down and they put in like a prefab building on another piece of property here in town. Actually my aunt and my uncle, my aunt on my father's side, they taught for and my uncle was principal for the school for quite some time. It was heartbreaking too, to see that beautiful building.

TM: Oh, yeah.

JC: One of my favorite memories is when they would let me ring the bell. The rope would wrap around the main pulley, that belt, and it'd pull you up. I think it had probably 12 or more foot ceiling in it. It'd pull you clear up to the ceiling.

TM: Take you for a ride.

JC: Oh yeah, so it was such an honor to let me ring the bell. All the kids would help pull you down and get to wait and then pull up to the ceiling.

TM: Nice, nice. Oh, that's fun.

JC: So, that was pretty cool.

TM: So, was there a high school there as well, or did you have to transfer out to Kingman for that, or where'd you go?

JC: No. They were bussed to Kingman. Then in the later years, when they rebuilt the school, now they bus the high school kids to Kingman and bus the grade school kids to Dolan Springs, which is about 12 or 14 miles north of us.

TM: Out on the Meadview road.

JC: Towards Las Vegas. It's the road actually going to Lake Mead. Like to Meadview and Pierce's Ferry and...

TM: Right. Okay. So, high school was in Kingman, and that's like what, an hour's drive every day on the bus, one way?

JC: Well, it would be, in a bus, I would imagine picking up the kids and everything, probably 40/45 minutes at least, yeah. You're probably more right, I didn't think of the bus itself. I can get to the middle of town in 20 minutes now with the freeway.

TM: Yeah, but you're not stopping to pick up other kids and...yeah.

JC: Yeah.

TM: What kind of things did you like in high school?

JC: Well, actually what happened is, I moved out of Chloride. Went to a place called Alamo Crossing, which is now Alamo Lake. The dam, I believe, was built in 1967, but I went to Alamo Crossing for a 1½ or 2 years, came back to Chloride, then my parents divorced. Then we moved to right down below Yosemite Park in the Sierras between the San Joaquin Valley and Yosemite Park. In my 8<sup>th</sup> grade year, I went to school in Oakhurst, California. When I graduated from grade school, the high school was Sierra Joint Union High School and it was in the little town of Tollhouse. Tollhouse was 60 miles each way by school bus...

TM: Wow.

JC: ...from where we lived. In grade school, I did pretty good in track. I've won several plaques for the most points when they have 3 or 4 schools. I really enjoyed that. When I got to high school, I was way out of my element. We lived 9 miles from Oakhurst and it was a mile and a half to 2 miles coming from our house, which is in a little valley above Oakhurst, a mile and a half off the highway. We lived close to a little stream so my time in the evenings was just hiking the hills and fishing or... I probably shouldn't admit it, but at that time of my life, I had ready access and really enjoyed playing with caps and dynamite.

TM: That's normal. As children of miners, it's absolutely normal. But dynamite, a little bit is a good way to go fishing if the holes are deep there for the water.

JC: Well, it was more caps around the stream. I would put them on like a little piece of wood and shoot at them with my 22.

TM: Oh okay, so no fuse. You had caps but no fuse.

JC: Yeah, the dynamite I actually got into when I was at Alamo Crossing. If you would go to Kingman and then take I-40, another 20 miles south on I-40 there's a little town called Yucca. You would hit a dirt road and it was dirt road from Yucca to our mining camp in Alamo Crossing. It was 67 miles of dirt road.

TM: Okay, so this is south of Oatman, is that right?

JC: No. Let's say you leave Kingman and you're headed south on I-40, you would go west about 5 or 6 miles out of Kingman. Oatman was another, I would guess, 8 or 10 miles from I-40 on the west side of I-40. The Alamo Crossing was on the east side. When you left Yucca, you were going southeast.

TM: East and south, yeah.

JC: It's kind of between Yucca and Wickenburg.

TM: Okay. In the hills there near Oakhurst, did you have a 22?

JC: Oh, yeah, yeah. The man she married, his name was Kenny Hall, he was an outdoors person. He was a fisherman, a hunter and he kind of taught me that it was okay to cry for a man, and it was okay to pick flowers for your mom and your girlfriend. He was a cat skinner and a miner from the time that he was very young, but he was different. He was very different. I hit the jackpot when she picked him.

TM: Nice.

JC: Yeah, it was great. I inherited a stepbrother that was 7 years older than me, 6 or 7. That probably wasn't the best part of the deal. But what is is, you know. He passed away 6/8 months ago.

TM: He would've been leaving the house fairly soon, I'm assuming, cause you would've been, what, 10 or 11?

JC: Yeah. I think when mom married Kenny, I think I was 10 or 11. I didn't see much of my brother in the early years because he was... I think he was in '50... I think he graduated in '58, '58 or '59 from Kingman. Then he was on to summer jobs and college and his mother was able to help him with college and so forth.

TM: Okay, alright. Did you follow in your fathers and your stepfathers footsteps in looking for summer jobs in the mines? How did that work out?

JC: Well, basically, when I got thrown off the school bus in California or got in any kind of trouble, we built our own house back in that little valley and so I was always digging. We found a little spring up above us and I was always, for punishment, either digging water lines or septic systems as far as like the summertime, and just roaming around. Then in '61, when I was being punished for my dealings with dynamite and caps, in '61 they sent me down to live with my dad who worked at the Orphan mine.

TM: Okay. How much do you wanna talk about getting in trouble? Well, dynamite and caps that's no big deal, you expect to have that around. I mean, did you take it to school and try to impress somebody? "Hey, watch this," or, how does that...?

JC: Well, yeah, yeah, I did. Unfortunately, or fortunately, I don't know, I didn't hurt anybody, so I don't regret it. At the Alamo, we lived in an old stripped out Trailways bus. So all we had, we had 2 of those buses, some of the miners had little trailers that they brought out there, and they had a change room there. In the evenings you'd sit around and the miners, not real often, would have a little Mescal or whatever in the evenings and they'd spin their yarns about how to crimp blasting caps with your teeth and what happens to your face when you make a mistake. I'm talking about guys that have lost their fingers, you know, mining stories. Hard luck stories and humor. But in that change room is where they kept the caps and the fuses. The fuse came in a big spool and then right on the bench had the time, like this length was 2 minutes, this length is... The crimpers lay on the bench and dynamite caps were under the bench, so it was like, "Hey, come play with me."

TM: Put 2 and 2 together, this is pretty easy.

JC: Oh, yeah. It didn't take much. I wasn't as stupid as I look.

TM: Well, they had a crimper there. You didn't have to use your teeth, that's great.

JC: Truly, truly. I did do it occasionally, but actually, my hobby was rolling boulders. So that tied in. I learned the strength or the lack of strength. First you try blasting caps to move a boulder and the explosion is... It's not enough to move a boulder, it's too fast and too small.

TM: Was gonna say not enough power.

JC: Right, and then if you got your... You know, I started off with like little pieces, 1/8 of a stick and so forth, and got carried away a few times.

TM: Well, you moved the boulders, I'm sure.

JC: Oh, you moved the boulders. They sometimes... Depending on how you laid it in there, it would either very easily help it down the hill or it just sent it scattering, you know. I was taught at a very young age how to plaster boulders especially at Alamo Crossing. When it would rain, a lot of times a large rock would roll down in the middle of the road between the cook shack and the mine. Instead of just trying to move them, a lot of the times they'd plaster them. Then you'd just throw it off with your hands and a pry bar or whatever. When you plaster boulders, depending on the size of the boulder, you'd take the dynamite itself. You'd cut it out of the paper and flatten it up against a boulder. Then you'd take dirt, you carry water with you and you take dirt and you put a mud pie over the dynamite. That way, I forget what the military calls it but anyway, it forces the blast into the boulder. I learned all that at a pretty young age.

TM: And then you're gonna take this wonderful rock-moving skill to Grand Canyon. This is gonna get exciting.

JC: Oh, I didn't have access to dynamite at the Grand Canyon in the Orphan. They kept a pretty close eye on it. I could be getting ahead of you, but me and a guy named Neil Rumans...

TM: How do you spell Neil's last name?

JC: Rumans, R-U-M-A-N-S. It could be a double M, I'm not sure. But I introduced him... We ended up at Indian Gardens. I'll tell you the whole story when you're ready, but it's...

TM: Yeah, you know what, hang on.

JC: Yeah.

TM: Let's back up just a bit. Why don't you get me to Grand Canyon? Sounds like you're in the 8<sup>th</sup> grade. You're going to Oakhurst. How is it that you ended up... Cause your dad, your biological dad, is working at Grand Canyon?

JC: Right.

TM: How did you get over there?

JC: Okay, what happened is somewhere in '61, I was in high school. My grades were crap. I was not big enough for football, I didn't make the football team. Everybody on the track team was like going to the west coast relays and, you know, way out of my class. So, they decided... What happened is I had some caps at home and I took a... My stepfather's favorite rake was a half-inch pipe for a handle on a rake. You know how the little prong comes up and he just slipped that half-inch black pipe handle on there and that was his rake. It gave him enough weight so that he wouldn't have to push. So, I took a blasting cap and stuck it up in the bottom part of that rake and filled the top with some rocks to see if it would shoot the rocks.

TM: Uh-huh. Good thinking, how'd that work out?

JC: Yeah, good thinking. My engineering skills weren't quite developed yet. When the cap went off, it just put a little butterfly in the middle of the rake. So I pounded it out and I was cool for 3 or 4 days. Then one day Kenny beckoned me over and I went over and he asked me what happened. I couldn't lie

to him, so I told him and it wasn't long after that they decided that I should be with my dad. And, you know, one would have to question the wisdom because he was a single man, a hard rock miner at the Grand Canyon, a beer-drinking steak eating miner. (chuckle) But anyway, he was working at the Orphan mine, and that's when... As a surprise, I got to spend about a month down in the canyon with my dad. Then we ended up... We were kind of waiting for a trailer. I didn't understand it at the time, but that's when we moved to Western Village out at Tusayan.

TM: I'm assuming that your biological dad may have had an actual hand in getting you out to the Grand Canyon.

JC: He could very well have.

TM: Just because there may be some benefits, not only for housing, but also... Clearly, it sounded like Kenny and your mom were looking out for you, so they may have thought that it was actually a good thing to send you over there.

JC: Oh yeah, I don't dispute... I was kind of joking when I said I questioned the wisdom. Actually, my point of view was it was one of the coolest things that ever happened to me. I mean, if you can imagine... From my point of view, Sierra Joint Union High School had 700 or 800 kids, and they were... I mean, California is different. After going to school in Chloride, then going out to Alamo Crossing, which was *really* isolated, and then getting shipped to California that was terrible. I still had a good time with my freedom, but boy, things just changed for me so quick when I got to Grand Canyon. That's one of the luckiest things. You think about all the different tribes of the Indians that went to school there, and the Park Service kids. Oh man, what a blessing.

TM: Do you remember the month that you actually came to the Canyon?

JC: No, I don't.

TM: Do you think it was summer time?

JC: No, it was winter time. It was halfway through my junior year. Or I think it was. I didn't pay... My timeline, I have a real hard problem with my timeline.

TM: So, I'm just thinking the winter of 1961-'62, or '62-'63? Something like that?

JC: Winter of '61.

TM: Okay, winter of '61, alright. Then, you mentioned being a month down in the Canyon. Describe that. Where was it?

JC: Well, what happened is... He just met me at the train station. I took the train in from Williams and he met me at the station. He was driving in his old '55 Ford and there was snow on the ground. I'd been to the Canyon before, but I didn't remember that much about it. We went right from the train station, went up, turned in to the mine, he parked his car. He took me through where they cut the timbers and the change room and showed me how they hung their clothes and all that because I'd been around mines my whole life. He just showed me around. Then he took me out to the tramline and we got in it. He has having a lot of fun with me because I was just... I am not necessarily afraid of heights, so it was just one of the coolest things. It was beautiful. He sent me down in the bucket and stood over me with one foot on either side of the bucket, laughing at me, and signaled for the hoistman, Benny... Trying to

think, seemed like Benny Coker or... Anyway, he signaled and down we went. When we got to the bottom, to the ore bins, he had some friends that... Let's see, Jack Marzo was a shift foreman. I met him and a guy named Tom Curkum and one of his buddies named Hambone. When you get to the ore bins down below, then the cabins are back up about 100 feet.

TM: Okay, so hang on a second. I've only been over to the Orphan at the glory hole once. Just started down the Bright Angel.

JC: You hiked it?

TM: Yeah, just started down the Bright Angel and went down to the bottom of the Coconino and I hang a left and we walked around to the glory hole. When you came down, did you go down the shaft or were you in on an actual tramway external out in the air, kinda bucket that was bolted down the side?

JC: It was the tram bucket. They didn't have the shaft completed. I don't know what stage they were in because I didn't pay that much attention. I wish I had paid more attention, because I'd been down in so many mines. I think on my 10<sup>th</sup> birthday, my grandfather took me down the mine above Chloride here to the 1300-foot level. I'd been around them and they didn't interest me that much, although they were very cool. But compared to the tramline, it's no comparison. It was totally different.

TM: So at that point, were they doing... If the shaft hadn't been built... This is a breccia pipe mine, there's a fairly large glory hole and the ore, then, would've been pulled out of this kind of large stope, and then they would put it in a bucket and haul it up externally.

JC: Oh, yeah.

TM: Alright, I get the idea.

JC: What they would do when... I don't think that glory hole was totally developed. And I'm just fishing here, because when I got down there, I had to watch what I was doing because obviously it was against the rules. I don't know what Castagne... I don't know if he was there. I think shortly after that was when Castagne came. I can't place that. I know that some of the miners were kind of upset with some of the changes that were going on.

TM: Okay. Hang on, hang on, because I'm clueless to this. So the miner's cabins... Lodging was an issue always and there were cabins for some of the miners. Was this at the Coconino level?

JC: No.

TM: Base of the Coconino? Where were you?

JC: When you leave the top, you go down to the terminal where the ore bins are. That's 1800 feet from top to bottom. That's where the tramline ends. Then, the cabins are up under the rim about a 100 feet above the ore bins. Back up... They're like on the east side up under the first rim of the canyon.

TM: So to get supplies to the cabins, food and whatever, was that the common transport was just hop in the bucket and just take the cable down?

JC: No. What happened is you'd take your groceries, butane, kerosene, whatever you needed, down to the ore bins. Then when you got off the ore bin... They had a tigger, a little air hoist, and it was hooked to... Like a mining car has the wheels missing, the trolley. I can't remember what the hell they call it.

TM: Yeah, it's just a little ore car that...

JC: Yeah, but the bucket part, they had it connected to a cable that did a loop from the tugger up to a pulley on top and back down to the tugger. You'd load all your groceries and everything and then you'd use that little air hoist to take your groceries to the top or where the cabins are. Then you'd hike up and unload your stuff.

TM: So, this was basically like an ore car, without wheels. It was a little bucket without wheels. You put that stuff in there and then just fire up the air hoist and run that thing up there.

JC: Yes, sir.

TM: And then walk up and unload it, I'm assuming.

JC: Unload your stuff. Of course, when you got to the bottom, you were able to drag it back. I remember my dad complaining, because he said, "We need to get some kind of a switch or signal when the ore car hits the top," because what he'd do, he'd send me up and I'd yell at him, when we went through that process, when it was at the top. What he would say, is that when you were by yourself you had no way of being able to tell exactly when that ore cart got to the top and then it would overshoot its limits. It would come off the cable and just cause all kinds of crap.

TM: Get wrapped up in the pulley up there.

JC: Oh, yeah. Yeah. When I got there, he told me that his buddy... They're 2 cabins, and he told me that his buddy got fired and that they would not allow him down the tramline not being an employee, not being a miner. One of my surprises was when we got down there is, he had bought the guy's stuff for \$10. Included in that little package is a pair of boots, some tapestry, you know, that gambling dogs that you hang on the wall, *real art* is what I'm talking about, and a 22 Marlin rifle with a scope on it.

TM: For 10 bucks?

JC: For 10 bucks. I still have that rifle. He gave that to me. I don't shoot it anymore, but it's a good reminder. But, anyway, what I was gonna tell you is that the glory hole... I remember my dad, what he did, he was trying to show me part of the history. What we did is we walked around the base of the cliff to the place where Hogan, Dan Hogan, drilled his peg holes. Dan Hogan, in the early days, made many trips just going up the Hummingbird. He went right up the slide, he called it, and climbed... If you can imagine the tramline not being there and him just climbing up the path of where that tramline is that's a dangerous situation.

TM: It's mighty steep. How did he do that? Did he pin in bits of steel to hang on to? How did that work, do you remember?

JC: No. I recall the hole that I saw, you could barely get the toe of your shoe in there. Some of the holes were probably 3 inches in diameter and they're only about, I'll guess and say 4 or 5 inches deep.

TM: So, this is basically just a toehold route.

JC: Right, and what he would do is he'd take a couple of pegs of wood and use the pegs and then use the footholds, plus ladders, you know, but what a ballsy person.

TM: Yeah, no kidding.

JC: Oh my god. But anyhow, what he was doing... I remember him at that time saying, "You stay away from that damn hole down there." But, what he was doing is in the shaft, below the ore bins, while I was there, his daily job most of the time—some of the time, he was tram hoist man and I'd just stay in the tram hoist building, but the tunnel... They had the Hogan tunnel and then to the east of that tunnel they had the tunnel that they were developing. So, what you do from the entrance, you'd go in I'd say 30 feet, something like that, and then you'd kind of drift to the left and made a turn. I would say, I don't know, I'm just guessing 60 feet in there, and I'd been around them, like I say, my whole life, but they had a little tigger in there. The tunnel led to a shaft and the shaft had a man cage. So, you'd go back on the tracks and the tracks then would go on that man cave cage. It had tracks in it so that you would match it to the tracks when it came up. The way I understand it is I remember it was about 300 feet down to the next level. And, I made that trip, I don't know if it was 2 or 3, I just remember going down on that. What I would do during the day is I would help. He would let me push the ore cars. They'd come up, he'd bring them up, I'd pull them off the cage, sometimes he'd have to help me, and then I'd push it out to the skip. The skip, sometimes like if there was wet muck you would lose that. I don't know how many times we had to drag the damn ore car out of the skip because it would stick to the side of the car. But anyway, then from there, your guess is as good as mine, I'll say somewhere around 50 or 60 feet, the skip, there was like another tug or a hoist, whatever you wanna call it, on top. It would pull that skip up and dump in the bins. Then, they'd drop the skip back down. So, if you think about the logistics, what a pain in the ass, excuse me. They'd mine the stuff, they'd drag it up that 300 feet or so, maybe it was only 150, I can't fully remember. Then, you'd take it out, you put it in the skip. The skip takes it to the ore bin. The tramline then on the east side, and that's kind of interesting, if you wanna get technical I can tell you about...

TM: I do. Yeah, let's do it.

JC: Well, when the tramline came down, there was a big pulley there. I'd say it was like 6 feet in diameter, we'll go for 6 feet. And it was at an angle, it tilted out. I don't know how to explain it. The problem being that in an up and down situation, all they had was 2 buckets and they were rated at like 800 pounds they could carry apiece. Okay, so you have a bucket down there at the bottom and then when you send the bucket up full and you're empty when comes down, you've got one on the far side of that pulley. So, the inside tramline bucket is readily available for a chute to come out of the bottom of that ore bin. You follow me?

TM: Yes, I think so.

JC: Okay, so that pulley... When you're coming down, the inside bucket, let's say just arrived down there, is below, very accessible. There's a chute that you open that chute, there's a gate on the chute and you dump ore into the tramline bucket. Okay. When that bucket leaves up near that ore bin to get unloaded at the top, at the ore bin on top, the next bucket that comes is coming down at the same time that other bucket's coming up. Then, it is that 6 feet in diameter away from the ore bin. So, what they had was... I can't remember if they did it with the same chute. It seems like they had two chutes.

TM: Okay, that would make sense.

JC: What would happen to keep the chute out of the way for the nearby bucket was on a swivel. The chute side would then, when they swung that chute around, was bigger than the metal on the ore bins, so it would come down and kind of enclose the ore chute on that swivel. You'd just swivel it around and

all of the sudden you have an ore chute that's 5 or 6 feet longer than the other chute. That wheel is at an angle, so it drops lower than the bucket that just left, right? Does that make sense?

TM: Yeah.

JC: That chute then has the momentum, or the inertia, to come off that chute, because that tramline ore bucket is lower. Do you understand what I'm saying?

TM: No, you've lost me there. But it makes sense. Look, what I'm mining is 300 feet down. So I'm gonna blast that out, I'm gonna load up an ore car, I'm gonna push that ore car into a skip, and the skip's gonna go up 300 feet to a little bit of rail, and that rail's gonna... I can push that out of there and get it over to a hopper, which is gonna have a chute on it, and there's gonna be a...

JC: It's a skip. An ore car is flat, it's flat and square.

TM: Yes, so it's like a cube or a rectangle, if you will. It's open at the top, but yeah.

JC: It's kind of like that. Right. And then you pull that by cable up 50 or 60 feet to dump it in the top of those ore bins.

TM: Got it. And then from there, the ore is gonna go out of the ore bins into the tramline buckets.

JC: Yes, sir.

TM: Okay, alright.

JC: And then, and I have been meaning to draw this out so that it can be explained. By drawing, I mean like mechanical engineering, like draw it out. But what happens then is it goes up that 1800 feet. It goes past the ramp where my dad and I got on the tramline bucket. Goes past that, up to an ore bin positioned under the tramline hoist. Then a truck comes in, loads up, takes it to Tuba City.

TM: Okay. So the mill was at Tuba City. Okay, so that's on the east side of Tuba City, that mill there, which is now a Super Fund site and there's nothing left except some foundations of the employee buildings on the north side of the road and the mill itself was on the south side down on that hill there.

JC: Right, yes sir, yes. I've not been there, but what I've read is that it regularly employed somewhere around 400 people. And then, of course, the bottom started falling out. Oh god, I'm trying to recall what happened. The main reason that the... Even when they got the shaft was and their work was like five times, they'd get five times the ore it seems like. You know what I mean?

TM: Yeah.

JC: Even with that and multiple trucks running that stuff to Tuba City, what happened is that they either closed that facility... I'm not sure about the chain of events, but it ended up... The thing that really killed the mine was transportation, was logistics. You know, and those poor, I know I'm wrong calling them Indians, but it's said with love, but if you can imagine building a life around that and all of a sudden have it jerked out from under you is pretty rough.

TM: When you first arrived there, the main shaft was it being driven then or had it not even been started?

JC: It was being driven. I arrive and I think that my dad took me down to the first level on that as part of the... They were giving rides.

TM: Like an orientation kind of thing?

JC: Yeah. And I was all disappointed because what I wanted to do was to go down to the bottom and by tunnel go out to the old tunnel.

TM: Sure, and just walk out.

JC: Yeah, just walk out. But that never happened. But I lived through it anyway.

TM: Well, yeah, which is great. So your dad's there at the train station. He puts you in the truck, go out to the mine, you walk through the drive and you get out and you get on this bucket and you go for this pretty wild and crazy ride down to the end of the bucket. Then you head up to the cabin, which is a little walk back up there, and you're in 8<sup>th</sup> grade. Now, you need to go to school. How did all that work out?

JC: At that time, it was winter time. It was in '61, I was then a junior in high school. I was a junior in high school and what was happening is my grandma and grandpa on my father's side were fading fast. They were having medical problems. So we were driving on the weekends from Grand Canyon to Chloride. I have trouble with this part, because I remember Art Eastman, I think was the purchasing agent, and his daughters, Anna Eastman and Sandy Eastman, were walking to school down the rim. I remember walking with them along the rim. That did not last long. It was shortly after that, that we got a trailer and then I start taking the bus from Western Village to school at the Grand Canyon. Does that make sense?

TM: Yeah, so the cool ride down to the cabin and this killer view.

JC: I know.

TM: the Grand Canyon to the north there, oh my gosh. All that...

JC: I'll tell ya, I'm in the process of trying to write a book, but the main thing is I'm trying to write about my experience with the Orphan mine and the school there. How do you write it down, when painters and photographers are having trouble describing it, you know what I mean?

TM: Yeah, you do the best you can. It's really tough. But I can imagine the sunrises and the sunsets out the window, down there at the base of the Coconino. Pretty spectacular.

JC: Well, I'll tell ya, several years ago I decided to walk out to the Orphan mine and I ended up over by Battleship Mountain. Since you've been there, you know how that ends. Because since then I've tried it 3 or 4 other times. My wife and I tried it and we ended up a little on the other side of Battleship Mountain, and you know how that ended. Then, this David Scheier and I tried... I don't know the technical names, but the first shelf or cliff that goes around when you're going down the Bright Angel, David and I gave that a shot. David and I, and a guy Friederici, Peter Friederici, who is kind of a historian and a writing professor at NAU, we went out and we had to turn around because we weren't prepared for what we ran into.

TM: It's a bit of a scramble. It's a steep, steep scramble. The trouble is you're right there in the view of all the people on the trail, and the people are yelling at you saying the trails over here. And you're like yelling back, going, "I know, I know. We're doing something else."

JC: Yeah, I know where the damn trail is.

TM: Exactly, yeah. So, it's a bit of a scramble.

JC: How did you get...did you use that first shelf there?

TM: Yeah, we just headed down the trail. Went through the second tunnel, went down to the base of the Coconino and just broke off the trail. And it was a, you know, it's a scramble. Until you get out of sight, people are yelling and whistling, saying "come back." We're scrambling on this really steep slope.

JC: Oh, yeah.

TM: You know, letting rocks loose and what not.

JC: It's a little worse than scrambling. It's hard.

TM: Yeah, yeah. Okay, so my recollection of those cabins was they faced north and you were there in the winter.

JC: Yeah.

TM: It would've been kind of cold.

JC: Well, with that 1,000-foot drop, you know, there wasn't any snow down there.

TM: Did you have a wood stove or a propane heater for the cabin at night? What'd you have?

JC: I think it was a propane heater. It wasn't wood. And they had a portable toilet that they... One of the things I really remember, it was rather disgusting because nobody tended that toilet, so people would just go where you could go. That was one of the things that didn't set well with me, but hey, that's life, you know. Dad stayed in one and I stayed in the other. He stayed closest to the toilet. [chuckle] You can walk to the toilet.

TM: Nice. So, do you remember how long you were down there in those cabins down there?

JC: It had to be...I say a month. I just can't remember. It appears to me like it was around the holidays. I was pretty free. He would warn me, he'd say, "You stay out of sight." He'd tell me where and where not to go, but he tried to keep me fairly close. I'm thinking that Castagne, the mine super, if he was a super at that time, I think might've been in Minot, Nevada, where he came from. I know that I had to watch my Ps and Qs.

TM: Got it, because the officials, the top guns, didn't know there was a child of one of their mines down there?

JC: Oh yeah, yeah, he'd a been fired. Actually, the shift foreman and friend with my dad ended up firing my dad.

TM: Why? Am I getting ahead of the story here?

JC: Oh, no. That's alright. We can go back any time. This Jack Marzo was a heavyweight boxer in the day, I think in the 50's. He and dad... See, the Western Village was right next door to the Tusayan bar. It was right across the highway, and boy, what a mess that was. In my senior year, I could get served over there

if I was with dad. Anyway, dad and Marzo got a little tiff and then the next morning, of course, dad had alcohol on his breath and Jack fired him. I'll tell you a quick story about Jack Marzo.

TM: Yes, please.

JC: Where they cut the timber, that's another logistic thing. For any kind of timbering in the mine, of course, they had to cut it above, put it in a bucket, and go reverse.

TM: To get it—yeah, go exactly the reverse of what the ore was doing to get the timber down to the face, sure.

JC: Yeah, exactly. So, Marzo, and this is my version of the story, I've heard it several times. They had a big...you know what a swing arm saw is? It's like a radial saw on a long arm that will swing. Let's say the motor is up like 8 feet up in the ceiling and the belt comes down and runs the blade and there are handles on both sides. Well, Jack Marzo somehow... One version that I go by is the handle was missing on the inside. He reached around the other side and pulled the saw through and cut his arm off. So, the ambulance took him to, I think, Williams or maybe even the airport, and then to Phoenix and he got his arm sewed back on. There used to be a bar in Kingman called the Frontier Bar. A well-known guy, he was a tough guy and ran the bar. My mom and I were in there when I got back from Vietnam...were in there having a beer and I hear somebody yell, "Hey Jay, is that you?" I said, "Yeah," and he said, "Hey Jack Marzo, how you doing?" I said, "Oh, pretty good." He had on a short sleeve, white T-shirt. I looked at him and his right arm was well-developed and his left arm was shriveled. He looks at me, picks up a beer, chugs his beer with his left hand and says, "It works!" Of course, he's dead now. That was probably in...

TM: So they were actually able to re-attach his arm. But some of the nerves, it sounds like, didn't work, so he lost his muscle mass.

JC: Oh, yeah, yeah.

TM: But, he was able to do some things with it.

JC: Yeah.

TM: Wow, that's phenomenal. This would've been in the 60's, wow.

JC: That is, in that day. Yeah, pretty amazing. But anyway, it's wherever you wanna go from there.

TM: Well, we have been yick-yacking away quite contently now for about an hour and 10 minutes by the clock here. Maybe it's a good time to wrap up Part 1 because I've got a ton of questions for you for next time about life in Tusayan, about the Tusayan bar, about high school and the friends that you made. You know, your dad in the mines and other stories.

JC: Sure.

TM: What you remember. That's gonna take us another while to recount that stuff.

JC: Okay, that's okay.

TM: Is there anything before we turn off the recorder today that you wanted to tie in to what we've talked about, or are we good for that?

JC: So, the next time we meet, you want me to kind of tie it in to where we're leaving off?

TM: Well, we were talking about there was a portable toilet down there and you were staying in the cabin down there for a while then kind of moved up to Tusayan. I just wanna make sure there's nothing else you want to mention about Marzo cutting his arm off or anything else here. Threads to stories we were talking about. Doesn't sound like it.

JC: Yeah, let me think about that and I'll be ready for you the next time you call.

TM: Okay, well that sounds good. In that case, today is Thursday, November 15<sup>th</sup>, 2018. This is the end of Part 1, Grand Canyon Oral History interview with Jay Combs. My name is Tom Martin. Jay, thank you very much.

JC: Oh, you're very welcome. Thank you. It feels good to talk about it.