Josh Salmi

## tweenty-five

"It's Been a Wonderful Life!"

Mr. Jim Hebbard started our interview by telling me, "I presently have three engineers and twelve technicians working for me. Our job is primarily to provide support to the Tilden Mine. They are the main customers, so we troubleshoot any problems they might have. We try to develop new processing equipment for them, devise improvements to the existing process." Mr. Hebbard went on to explain the intracies of the research lab.

Jim Hebbard was born in Ishpeming, November 28, 1942. His parents' names are Arthur and Edith (Pauline) Blocken. Arthur was a personnel director for C.C.I. and Jim's mother was primarily a housewife. Jim has a brother Royce, who was three years younger than Jim, and a sister Julianne, seven years younger.

After Jim graduated from Ishpeming High School in 1960, he chose to go to college at Michigan Technological University.

There, Jim received a Bachelor's degree in Metallurgy. Because Jim had always liked math, science, engineering, and working in the iron mines, he chose to go into the field of iron mining.

Jim was born and raised in the area, and was familiar with iron mining so that helped him a lot too. Also, Jim's grandfather,

John Blocken, was a miner for Cleveland Cliffs. Jim's great,

great grandfather was the chief electrician for C.C.I. back in the early 1900's.

Jim had started off his career by working at the Tilden and Empire mines. After working there, he was transferred to the Pioneer Pellet Plant where Jim worked for eleven years.

Afterwards, he was transferred to the Cliff's Research Laboratory in downtown Ishpeming, where he is presently working.

The Pioneer Pellet Plant processed the underground ore from the Mather B. The process involved grinding the rock, drying it, and pelletizing it. The Tilden mine is a hematite mine. It differs from the Empire mine because the Empire Mine iron ore is magnetic and is processed with magnetic equipment. On the other hand, the hematite ore is non-magnetic and is processed by flotation processes.

In the laboratory, Jim helps the Tilden and Empire mines by looking for problems and improvements. He does this by using smaller laboratory-sized equipment which mimics the actual equipment used at the mines. The equipment is set up to duplicate each of the projects at the Tilden and Empire.

Anything that the mines can do, Jim can do on a smaller scale.

In the lab, Jim does not have any "hard" jobs to do, but in recent years he has had some difficulty. Jim has had the responsibility of making sure the laboratory operates well. On the other hand, when Jim was at the Tilden and Empire mines, as well as the Pioneer Pellet Plant he said the hard push to keep the cost of the projects low. "In recent years, the hard push that we've had to reduce the cost of the operations to keep our mines operating and keep them competitive. It has put a lot of pressure on everybody," stated Jim.

The most challenging job, for Jim and the research lab occurred about five years ago. The Tilden Mine had a problem

with phosphorus in the ore. Because of the high phosphorus level, the mine was having a hard time selling the ore. The employees devised a plan to solve the problem. The Tilden implemented a magnetic operation, which was geared up for a non-magnetic operation. The job was Jim's responsibility to develop it and get everything layed out and make sure it ran well.

The most thing that Jim enjoys about his job is people.

"The people I work with and associate with. That always makes the fun out of the job. Much more than work itself," comments Jim.

The biggest responsibility of Jim's job is supervising people. He has to make sure everybody knows what has to be done, getting it done in a productive, cost effective manner.

The hardest job that Jim has had to do was discharge an employee. He had to do that a couple of times and he said that he was not comfortable doing that.

Jim has been in only one dangerous situation. It was when Jim was in the conveyor galler in the Tilden Mine, and the line broke. Bentanite was a very fine clay powder and was pumped with air on the conveyor belt. The line broke and the bentanite totally cut off Jim's ability to breath. Fortunately, the door to get out of the gallery was only ten to fifteen feet away and he was able to get out. It was not life-threatening because the door was close by.

Jim has seen safety standards change over the years. "The emphasis on safety just increases every year," said Jim. The companies are more aware how much an accident costs. "Safety is now stressed every hour of every day," stated Jim. "The safety

standards, in my opinion, have come a long way since the early 1900's," he continued.

Jim's job duties have changed very little, except when he was transferred from the Pioneer Pellet Plant to the Research Laboratory. "These jobs require totally different thinking," says Jim Hebbard. "It was quite a change; I was suprised how big it was."

Jim has recently been working in Quicolsey on the project with the Republic Mine. There they are looking to make what is called a direct reduced iron for sale to the mini mills. Another special project involved the Tilden Mine. The Tilden mine ore is very, very fine in nature like face powder and because of that, at one stage of the process, the miners have to remove the water from the ore and that's called filtration. It was extremely expensive. It was approximately <u>24 million</u> dollars more than what the Empire's process cost. The mine devised a plan to buy a piece of machinery from Austria for about <u>22 million</u> dollars. Right before the Tilden was going to buy the machine, the American dollar doubled and the project died.

Jim thinks the Tilden mine is going to stay successful for the next ten to twenty years into the future, but that will only happen if the nation's economy will stay the same.

Jim predicts that C.C.I. needs to improve in some things to stay competetive like controlling their cost. They should continue their very strong research and development program, because through research and development come projects that will reduce cost. The last thing the mines have to start cutting is direct reduced iron. Jim thinks they have to get to that area, and when they start supplying many units to the mini mills, their

cost will lower.

Jim revealed the keys to the success for the Cleveland Cliffs. He said the key to their success is that they have the natural resources in the area. Over 100 years C.C.I. had the foresight to purchase the land to start mining on. Another reason why Jim says Cleveland Cliffs is successful is because of hard-working employees. He says if you do not have good employees, you do not have a good mine.

Jim has seen the women play a part in iron mining. "When I started working with C.C.I., women were secretaries only!," says Jim. "Now, you'll find women in almost every role." Jim is happy that women have shown their work ethic, their willingness to work, and some women are better workers than the average male miner. "The women I work with are very hard workers," states Jim in a complimentary manner.

Jim thinks the young workers of today need to obtain a strong college education. "The more education you get, the better job you get," stated Jim. Jim said "If you can't go to college, get into the electrical, instrumintation, and the welding areas. There's always jobs for people, and they are well-paying jobs, too. Get a good, strong education if possible!"

Jim likes to do other things besides iron mining. For instance, Jim likes to golf in his spare time. He goes away in the winter for one to two weeks on a golfing trip. Golf is Jim's favorite sport to play. Besides golf, Jim enjoys playing basketball every Monday night. He also enjoys fishing, hunting, and he always loves a good card game!

Jim has been successful in his twenty-eight years of working

in the iron industry. He has had a lot of fun in his career. I hope Jim has had fun telling me about his job and memories. Most certainly, I enjoyed them a lot! Thanks Jim!

I have learned that C.C.I. is very important and successful.

I know realize the tough duties that these men and women have to perform. I envy that and encourage the miners to keep up the good work. Good Luck!