Interview with John Marshall Iron Ore Industry Employee Location: Marquette, Michigan May 1st, 2007

START OF INTERVEIW

Joshua Cowpla [Spelled phonetically]: This is Joshua Cowpla, interviewing John Marshall, the date is May 1st, 2007. Alright. I already asked your name. What is your date of birth?

John Marshall (JM): 1/25/45.

JC: Place of birth?

JM: Hancock, Michigan.

JC: Alright.

JM: Actually Houghton, Michigan. But you can't be born in Houghton you have to be born in Hancock because that's where the hospital is. But I consider my hometown there, so.

JC: Alright. For how long did you work in the mining industry in this area?

JM: Actually, I worked in the mining industry for about 38 years. In this area, 30 years with Cleveland Cliffs.

JC: Alright. How had the job changed over that 30-year span? Your specific job, how did it progress?

JM: My specific job?

JC: Yep.

JM: I actually started out with Kennecott and went through a variety of positions, primarily lower management positions, foreman type positions. Then I took a job back here in 1973 with Cleveland Cliffs and the Republic Mine as a mining engineer in the mining engineering department. I progressed from there up, what was called a General Foreman, Pit General Foreman. and I was actually Pit General Foreman for several years. A Pit General Foreman basically runs the pit area under the Pit Supervisor. I then was asked to go to Cleveland in 1976 and I went down to Cleveland for 8 years and I was Assistant to the Senior Vice President of Operations and also was promoted while I was down there to Senior Staff Engineer. I basically moved my wife and brought her to Cleveland and spent most of my time on an airplane going to Minnesota or Canada, or up here to Northern Michigan as a liaison for the Senior Vice President of Operations when there were problems, when there were meetings, and he needed a representative to attend when he didn't have time himself. I did that type of thing. I also did a lot of partner relationship work, at that time Cleveland Cliffs had as series of partners, steel

company partners, that owned a portion of the mines. So they were at one time all partnerships, so I had that job for about 8 years and in 1983 I got transferred back up here as Manager of Human Resources. Which was sort of as it stands, human resources, labor relations. At that time, it included safety, it included industrial engineering and then I, several years later, was promoted again to manager of Cliff's larger service company which had the 4 hydros, here in Marquette County, hydro plants. Also at that time Cliffs owned 93% of the Presque Isle Power Plant, which provided all the power to the mines. The interesting aspect of that job was that in 1986 there were a number of the steel company partners in bankruptcy. Cleveland Cliff's stock had plunged from \$42 a share in July to \$6 a share in December of '86 and the company was seriously in trouble of going bankrupt because of the bankruptcy of its steel company partners. The decision was made to sell the Presque Isle Power Plant because that was all of Cliff's equity money and so I spent a year selling my job and selling the power plant, which we did. We sold the 4 hydros as well. But the money that Cliffs got from that operation, from selling the power plant, allowed it to keep the bonds currents on the expansions on both the Tilden and the Empire and kept Cleveland Cliffs out of bankruptcy and kept those mines going. So that was kind of interesting. I actually, after that, spent about a year as General Superintendent at the Empire Mine. Which is a, a General Superintendent position is a second in command. They had a Mine Manager at that time then usually two General Superintendents, one for the pit and one for the concentrated power plant. A year later, there was some retirements. My boss at Empire retired and they brought a man from Tilden over and they asked me to go over to the Tilden Mine as General Superintendent in the pit, and those were kind of exciting times because the Tilden Mine was putting in a magnetite project. Again very...the '80s, in the mid to late '80s the ironing mining and steel industry were in a lot of difficultly, there was still a lot of bankruptcies in the steel industry. In order to keep Tilden functioning they need to find a cheaper process and so they went to a magnetite ore body that was nearby, developed it, converted the plant to process magnetite so they could process both magnetite and hematite at different times of the year. That startup was quite exciting, it was 16 hour to 20 hour days, 7 days a week trying to get that off the ground. Around about 1993 when I was still General Superintendent at Tilden, an opening came up as president of the Lake Superior-Ishpeming Railroad, which at that time was about 99.5% owned by Cleveland Cliffs. It's now 100% owned by Cleveland Cliffs and the management of the railroad, the Tilden and the Empire has now been rolled into one management team. But at that time, the LS&I was actually a separate company. I reported to a chairman of the board and a board of directors actually because that was the way the railroad regulations in this country ran that if it was not a whole host subsidiary then they couldn't control day to day operations except through a Board of Directors. So I got an opportunity to be president of the railroad, and for 10 years, and then when they did roll the management and everything into the Tilden-Empire and the outside railroad _____ and I retired after my 30 years.

JC: Alright, how has the industry changed over those years? Technological or structural changes within the company, or the mining operations?

JM: When I started with this in '73, the Mather B Underground Mine was still operating. And we, the Republic Mine that I talked about was still operating, it was a smaller mine about a 3.5 million tons a year operation. Empire started in 1963, ten years earlier, and was in the process of

being expanded. The Tilden Mine was just under construction when I came to work for Cleveland Cliffs. So what I've seen throughout my career is a tremendous technological change and equipment change. The original open pit mines in this area used small 65 ton trucks, drills actually used jet piercing where they combined oxygen and fuel oil and literally burned holes in the rocks because the taconite, the iron ore, was particularly in the Republic and Humboldt mines were so hard, and the shovels were small. 10, 12, 15, cubic yard shovels, electric shovels. Now, just to take a look at the equipment, they're running 250, 260 ton trucks. They're running huge shovels and drills are much bigger. If you get into the power plant or the concentrator, the grinding mills and all the processing equipment has just gotten huge. Instead of having lots of small grinder mills, you have fewer, but much larger with higher horsepower. The technological change, most of the mills as they were put in were put in with analog controls and the power plant and the concentrator control room, which required a number of people to operate and a huge expanse of switch gear, now it's all computer controlled and there's two men sitting there controlling the whole plant. And they're not really controlling it, they're merely watching what the computer is doing to operate it. So the technological changes have been amazing, along with the size of the equipment.

JC: How well can the transportation of the raw and processed material, how has that changed? Has it changed significantly?

JM: Well, the raw material is processed from the pit via trucks and shovels. The material is moved from the pit to a crusher to be crushed to size to be going to the grinding by haulage trucks. As I said, the size of those has gone from 65 ton to 250 to 300 ton trucks that are operating in this area at Empire and Tilden today. The transportation of the finished product, which in this case is a pellet, which then gets shipped down to, on the great lakes freighters, down to the steel mills in the various areas of the country where our steel mills...The railroad has changed in that, they're using much larger locomotives than what they did earlier. The ore cars that we use at the LS&I are actually over 60 years old, and we've upgraded them, like putting different bearings on them and rebuilding rather than buying new. The dock operation itself is actually a 1911 ore dock, and I think the people that built, it I'd like to congratulate them, because they had the foresight to build it 1275 feet long and I suspect when they built it they were thinking of loading 2 to 3 ships on each side at the same time. But they built it long enough so that that dock could handle a 1000 footer, if need be. So the railroad aspect of the transportation has changed in that there's larger locomotives. The ore carts haven't changed that much, but the technological changes are bigger rail, again computerize controls, dispatching systems that are computer controlled, that control the movement of the trains in and out of the mines and in and out of the yards into the ore dock and waste yard.

JC: Alright. What has been the relationship between labor and management in this area and in this industry?

JM: The iron ore industry and the steel industry has traditionally been the United Steel Workers of America, and there have been some real serious battles. But I would have to say, during my tenure, I found that the union representatives for the most part to be, I wouldn't say easy to work with but were interested in the welfare of the people that they represented and interested in the

company going forward. If the company doesn't make money, they don't make money. So I think overall, the people in this area are more responsive and more responsible, the labor people, than what I have experienced in other areas of the country.

JC: Alright, what can you say about your memory of the Edmund Fitzgerald and that crash?

JM: Well, and I think it's November 10th, that the Edmund Fitzgerald went down. I recall, I had the day off of work that particular day, and I don't remember for what reason. But my wife and I were sitting at our kitchen table drinking coffee and had the radio on. We knew that there was quite a storm blowing, because it had been blowing all night long. We knew that the waves were very high, because at that time I actually lived on the east side of Marquette, and we could hear the lake and its fury from the storm. Then sometime, 9:30, 10 o'clock in the morning, we heard that the Fitzgerald had gone down. We actually went down that day to watch the waves washing over the top of both the break walls in the lower harbor and upper harbor. So again, I just happened to be off work that day when we heard of that tragedy.

JC: How do you think the iron mining industry, the Cleveland Cliffs, has contributed to the region and the Upper Peninsula as a whole?

JM: Well, if you look a number of years ago, the first hospital was built in this area in Ishpeming was built by Cleveland Cliffs to try to help the welfare. The first welfare funds were provided by the company, of course at that time they had company houses for the workers. But I think Cleveland Cliffs has been a strong supporter of the Upper Peninsula, particularly the Marquette County area. It's supported Northern in a lot of its endeavors. Its supported through the Cliffs Foundation and through contributions by the company. Matches for their employees when they contribute to the United Way or they contributed to other charitable causes. They provided, at one time they were the largest employer in the Upper Peninsula of Michigan, they're currently third I think behind the tribe, well the two tribes with their casinos, and Marquette General Hospital. I think they're just ahead of Northern in terms of the number of employees that they have all the time, probably 2,500 I think. But they've always provided good paying jobs and had good benefits. The thing about the iron mining industry, being as large as it is in the area, there's a lot of spin off jobs. It's said that there are 5 jobs in the community for every 1 job in the iron mining industry. So the economic impact is, has been tremendous. I happen to work with the Lake Superior Community Partnership, that's our local economic development organization, and we're looking to the day when they're won't be a Cleveland Cliffs. That's why we are very high on seeing Kennecott come in here, because they're some other mining opportunities in the Upper Peninsula that will help us replace the jobs that eventually won't be here, because the iron ore isn't going to be here forever. Right now they're talking about Cleveland, about the Empire Mine existing, operating for about another 3 or 4 years and the Tilden Mine probably has about 30 to 35 years of reserves left. The question is, do they remain economic? The economy happens to turn someway; we could lose that sooner than 35 years.

JC: Alright, that leads into my next question. The expansion of mining in the area, you've mentioned some other mining opportunities. What other mining opportunities are there in this region?

JM: Well there are still two iron ore reserves that I'm aware of. There's a Cascade reserve which is just to the east of Powell, Michigan which would be just opposite of where the Empire Mine is. There's a North Lake reserve which is up behind where the Midas store and everything in Ishpeming is. So there's reserves there, the question is will they ever be economical, or will the economy allow those reserves to be developed. Not having a crystal ball, I don't know. There's enough iron ore today coming from outside sources, Australia, Brazil, Venezuela, that there may or may not be another iron ore mine built in the area. The mining that I'm talking about is, there's no real large deposits in this country anyway, no real large deposits of copper, zinc, and various non precious metals. But there are small deposits and high grade deposits, one of which is Kennecott's Eagle Project here in Marquette County. There's another one in Menominee County that's currently being explored. There's another copper/zinc play just to the west of where Kennecott's Eagle Project land is. And that's going to be the future of mining in the Upper Peninsula. I doubt we're going to see another large iron ore mine built, but you're going to see a series of smaller, probably mostly underground mines, and they're going after the smaller, high grade deposits that are 10 year mines, 12 years, 15 year mines. That's the future of mining, not only in the Upper Peninsula but most of the country.

JC: Alright, I think that's all I have so.

END OF INTERVIEW