12/02-5

Outline of Vern Gilman's Interview Questions

1. When and where were you born?
2. Where did you grow up?
3. What was growing up like for you?
4. Why did you move to Butte?
5. Did you go to school, college?
6. What were some of your early jobs as a young man?
7. Did you work in any of the Butte mines?
8. If so what was that like, did you enjoy it, any close calls?
9. How did you get started working in some of the labs with the Anaconda Company?
10. How many labs have you worked in, do you have a favorite?
11. Any close calls working in the labs?
12. Was there a pretty good difference in the amount of copper in a sample you analyzed back when you worked for Anaconda and most recently when you worked for Montana Resources?
13. Technology has changed quite a bit since you started working in the labs. What is the best tool to come about that made your job easier?
14. Is there any tool you used to use that would be better to use today rather than the high tech equipment?

Outline of Vern Gilman's Revised Interview Questions

1. When and where were you born?
2. Where did you grow up?
3. What was it like growing up out there?
4. When did you move to Butte?
5. What was that like?
6. What did your job in the mine detail, what did you have to do?
7. Did you have any close calls working in the mines?
8. Did you ever go to school or college?
9. How did you get started working in the labs with the Anaconda Company?
10. How many labs have you worked in, do you have a favorite?
11. Did you have any close calls working in the lab?
12. Anybody you worked with ever have any close calls, have to dose him with the shower or anything?
13. From working in labs with the Anaconda Company to working in labs for MRI is there a pretty good difference in the amount of copper in a sample you analyzed, or moly?
14. Technology has changed quite a bit since you started working in the lab, what do you think is the best instrument that has come about during your years working in labs?
15. What does it do?
16. Has the procedure for analyzing a sample sped up quite a bit since your first started doing it?
17. Did your workload increase when you worked at MRI because technology made it faster to do a sample or did you do more with Anaconda?
18. With new technology has that decreased the need for as many people working in the labs?
19. Did you use any tools back when you started that seem better than some of the tools they have now or is technology really good for the lab?
20. Would you say its more accurate now also?
21. Do you think MRI will reopen?
22. With you analyzing the samples do you think they have enough copper left to run for a while?

Interview of Vern Gilman

Chris: This is an interview of Vern Gilman by Chris Antonioli at MRI's guard shack on November the 20th 2002.

C: O.k. will start out with when and where were you born?

Vern: I was born in Butte Montana on May 10th 1943.

C: Where did you grow up?

V: I grew up out in the Ruby Valley, by Sheridan, Virginia City area.

C: What was it like growing up out there?

V: It was a great place to grow up I grew up on a ranch, and I consider that one of the best places to grow up.

C: When did you move to Butte?

V: I moved to Butte in December of 65. Went to work as a motorman in the Leonard Mine.

C: What was that like?

V: I enjoyed it a one thing that I I really enjoyed about the underground is the different people you met working underground.

C: What did your job in the mine detail, what did you have to do?

V: When I went to work as a motorman in the mine my job in detail was to go take the train into the working areas and haul out either the ore to the ore pocket to the waste to the waste pocket with the electric trains.

C: Did you have any close calls working in the mines?

V: Not while I was a motorman, but when I went sampling in March of 66 I had a couple close calls when I was sampling.

C: Did you ever go to school or college?

V: I went to I graduated from Sheridan High, and had 2 years college at Bozeman.

C: How did you a get started working in the labs with the Anaconda Company?

V: I a happen to know a certain person that worked in the personnel office at the Anaconda Company, and when a sampling job came up I went sampling. Then in 1960, the 1967 strike, the samplers were put in the geological lab uptown during the strike, and that's where I started my career at working in labs.

C: How many have you worked in, do you have a favorite?

V: Worked in 5 different labs over the course of my years a I suppose that my most favorite was with the Anaconda Company in the Hennessy Building.

C: Did you have any close calls working in the lab?

C: Danger wise.

V: Oh, there is always what you consider close calls with the working in a lab mainly with because of all the acids you use a I stop.

V: One other time when we were moving the lab out of the Thorton Building I a my job was to disconnect the power from a hood that we were going to take to the Hennesy Building and I was sure that I had thrown the right breaker , but when I went to cut the wire I got hung up I couldn't let go because the power had me grabbed me and I just couldn't get low and I finally had to a get loose and I finally had to push myself away with my knees to break the contact.

C: Anybody you worked with ever have any close calls, have to dose him with the shower or anything?

V: Yah, we've had a couple people that a accidentally poured the wrong acids together and you get an explosion when you mix the wrong acids

together, and it sprayed all over you, and we had to get him under the a shower as soon as possible.

C: A from working in labs with a Anaconda Company, Anaconda Company to working in labs for MRI is there a pretty good difference in the amount of copper in a sample you analyzed, or moly?

V: Actually when we worked in the Anaconda labs a we really hadn't a gotten into the moly business until the last year or so before Anaconda shut down. A copper wise between Anaconda and MRI the copper was probably a little higher grade when we were considered Anaconda Company. A moly like a say was the last year or two with Anaconda. Moly wise between the two companies were pretty much the same assay.

C: Technology has changed quite a bit since you started working in the lab, a what do you think is the best a instrument has come about during your years as a working in the lab?

V: I think probably the best a addition to the lab was the atomic absorption spectrum batraomitor.

C: What does that do?

V: That a once you put samples into solution it will analyze the solution for the percent copper, zinc, lead ,moly, whatever metal you are a determining, by aspiration through a flame and you use a hole catheic lamp that a detects how much copper, or whatever metal is going up through the flame.

C: Has the procedure for analyzing a sample sped up quite a bit since you first started doing it?

V: Definitely, because when I first started in the labs we used to a lot of wet chemistry analysis, which took a lot longer time. With a AA you a really sped up the assay plus you a could do several determinations on the solution once it was in liquid form, were with the wet chemistry method you had to do a separate method for each element.

C: Did your workload, did your work load increase when you worked at MRI because technology made it faster to do a sample or did you do more with Anaconda?

V: Actually I think the sample load increased with Montana Resources because we did more determinations in the processes through the concentrator all the way from the blast hole samples in the pit through to our final product that we shipped out on the rail cars.

C: With new technology has that decreased the need for as many people working in the labs?

V: Yes, a with the AA atomic Absorption like I say you can run several different assays on one solution were with the wet chemistry method you had to really if you had quite a few samples you had to have one person run the copper method, the zinc, the lead assays and however many different samples you needed you would have to have one person per assay.

C: Did you use any tools back when you started that seem better than some of the tools they have now or in technology really good for the lab?

V: I would say the technology has really been a boom for the lab work because it has sped it up, has speeded the assays up, so there isn't as much time involved.

C: Would you say its more accurate now also?

V: A certain methods were more accurate with the AA, but there are still certain methods were wet chemistry is still more accurate. Mainly because the atomic absorption is built for low-grade assays were the wet methods like copper, short Ki copper you could analyze high concentrations.

C: Do you think MRI will reopen?

V: That's a loaded question.

V: A I think it will, I think the price of copper has to increase and a conditions have to be right, and I think they will reopen.

C: With you analyzing the samples do you think they a have enough copper left to run for a while?

V: Well to a hear about the mine plan for another 20 years of running a depending on the price of copper and all other prices.

C: Allrighty thanks Vern.