Today is January 22, 1996. I'm in Las Cruces, [New Mexico] at the home of Robert Byrd. We're going to visit with Mr. Byrd about some of his experiences in the mining industry in Mexico and elsewhere. Mr. Byrd, can you just briefly describe how you got involved in mining...something about your early training and early experiences?

Well, after the war I went to New Mexico Tech. It was the School of Mines then. And after I went to Mexico in September of 1951.

Was that your first job out of school?

That was my first job, after. I went down as a junior engineer, I guess it was called, doing principally surveying. And the plan generally was you worked a year in the engineering office and then you went underground as a shift boss. Well, after the second year I was still in the engineering office and I ended up then taking the geologist's job that left. (chuckles) And I stayed in that job until they got a geologist, which was practically another year, I guess. And they brought a good geologist in.

So your formal training was as a mining engineering?

In mining. I'm a mining engineer. In [19]54 I was transferred to Taxco in the Huayapa section as a shift boss. And I was in charge of finishing the shaft, which I had no
experience in, but that's alright. They had a good crew. 
(chuckles) And so we finished the shaft and then we did the 
development there in Huayapa. And I was there for two years 
and I moved up to, I guess, assistant foreman. And, actually, 
that's where I met Bob Limón. He was transferred down there 
as assistant superintendent.

And from Taxco I went to South Africa with Newmount to 
O'Kiep. And that's north of Capetown up in the desert. And 
I was there three years as assistant mine superintendent, but 
actually I did more of the mining superintendent's job because 
the mining superintendent was crippled. He couldn't get 
around and I did all the leg work. And there it was really 
interesting and it was quite different, of course. The mining 
and everything was very advanced, as far as I was concerned, 
compared with Mexico. And I was there three years and then I 
quit. I had to be there on three-year contract. Then I left 
in [19]59 and came back to the States. My oldest was ready to 
go to school and I didn't want to send him out to Capetown to 
private school.

And I came back and I went up to Grants, New Mexico, 
which was about the only place you could get a job at that 
time because copper was on strike. And I was up there a 
little over a year and then I went back to Mexico. I went to 
Parral as mining superintendent.

M: And when was that about?

B: In the beginning of [19]61. And I went to Parral as mining 
superintendent and...

M: At La Prieta?
At La Prieta. And the following year I was made assistant superintendent. I think I was there until the beginning of either [19]64 or [19]65 and I was transferred to Santa Bárbara as assistant superintendent. And I was there for two years, nearly three—over two years. And I was transferred back to La Prieta because they were bringing in another superintendent. And that was in [19]65. And the other superintendent, he used to be my boss in Charcas, a fellow named Bill Marshall. And then he came there and he was very sick. He had cancer. He arrived in September and he died a couple of weeks later. And then they made me superintendent in La Prieta. As far as the mining was concerned, it was very low grade. In fact, in [19]59 they decided they were going to close it down, but they kept hanging on and hanging on. It's hard to kill these old mines.

And so, I remember, when I got there, I think Bob Limón was Northern manager then. And he told me the only thing he wanted was one peso profit, (chuckles) which was... Well, we did alright, actually. We ended up making some money in [19]65. That's when they nationalized and then the government was putting a lot of money in there on development and on everything else. And I went there, as I said, in [1967]. And we were, also, starting the florita mine, florita mill, where we treated the tailings. And the government put in a lot of development assistance and we started to open the old Veta Grande again, that had been closed since about 1929 and...

That was in Chihuahua or in Zacatecas?

No, no, no. The Veta Grande was the mine that ASARCO was
working around [19]29 and then they moved everything in to La Prieta. That was your main mine then.

M: Okay. Right there in...

B: And then in Veta Grande they had principally silver with a little lead sulfide. They had a lot of oxide up there. And so we went back to try to open the old areas, which was interesting.

M: So then when did you leave La Prieta?


M: In 1967?

B: No, no, no...sorry. In [19]74.


M: Okay.

B: And I was in Leadville until the end of [19]78 and then I was transferred to Nicaragua at the Bonanza Mine, the ASARCO mine that was in conjunction with Rosario. Well, Rosario had thirty-five percent or something. Anyway, I was there until the revolution started in about the middle of [19]69, in earnest. In November, they took over the country in July, I think, of [19]69 and...

M: [19]69 or [19]79?

B: No, sorry, [19]79. And then in November, or the end of October, they nationalized the mines and they booted everybody out.

And then from there I went to Casa Grande in Arizona. And I was put in charge of the shaft they were sinking with
the sinkers. And they were a Canadian outfit called, well, it used to be the Canadian Mine, then they had an office. They called it the American Mine Services or something. I don’t remember exactly, but they did the sinking. And about the time we got to the level and started drifting out from the level there toward the lower body they ran out of money and they sent me to Bolivia.

I lived in Cochabamba and we had a tin mine that was over toward Oruro called... And the lead zinc was called Quioma. And I was the manager of Quioma Mines, they called it. Well, it was called Bolivian Lead.

M: Was that an ASARCO company, too?
B: Yeah, it was an ASARCO company owned in conjunction with a group that owned about forty-two percent, somewhere along there, of Bolivians. And I was there until the beginning of 1985. And then they sold to another Bolivian outfit. That’s when I retired. I don’t think I left anything out.

M: Well, let me go back and ask you, what were your first impressions of Charcas when you went there as an entry level engineer?
B: Well, it was all completely new, you know. You end up in San Luis [Potosí] and then you catch the train that goes out. They’ve got two trains out: one in the morning and one at night. And to get off in Charcas you have to know where to get off because it just pauses sometimes. (chuckles) Well, it used to. So the same way going down they’re going out of Charcas. You could go north either to Monterrey or go south to San Luis. And we used to go to San Luis. We played tennis
against the local country club, I guess, or people down there. And it was a lot of fun.

M: What were the living conditions like in Charcas? Was there a camp there, a colonia?

B: I was always down there in Mexico, except in Taxco, in a mining camp. And, actually, in Charcas the food was pretty good. The meat, you know, they'd cut a chunk off. It was hanging off of a nail, I guess, but the vegetables seemed to be pretty good. And during Semana Santa they brought fish in and it was pretty good. Then we had a fellow in camp, Zach Taylor, that had a garden. He supplied vegetables to just about everybody. (chuckles) It was quite a nice place. I really enjoyed it there.

M: Was the operation at Charcas fairly large in the early [19]50s?

B: Well, I was in a small mine called La Bufa, but they had the big mine, the Minería General they called it, it was quite an extensive [operation]. It was an old operation. It was falling quite a bit and they had a lot of problems with their fill and their heavy ground and so forth. But I was in La Bufa where they did strictly shrinkage as far as I remember. Then they had another one called Morelos. It was further away. They were doing shrinkage. The production was very little there, but I had to measure and so forth.

M: What about in Taxco? That was an underground operation there.

B: Yeah, it was underground. And they had two or three mines: Jesus, that was in Huayapa, and then they had the bigger one. I was in all except in Jesus. I never did go there. But they
did top sizing in Huayapa. In upper level they had a fellow named Zamaripas from San Pedro. They were just a little south of San Luis. I think Limón was there, too. But there, I remember, one thing. You know, they had these electrical storms that would just blow you out practically there, you know. And they had these old crank phones, you know, and the sparks flying and you had to go through Fraile and they connected you to Pedrigal. That was an old mine where everybody met to get on their vehicles. And it was just like a parking lot. And the communication was pretty lousy.

(chuckles)

M: Were the miners all Mexican nationals?
B: Yeah.
M: What was the makeup of the technical staff?
B: In Taxco?
M: In Taxco.
B: In Taxco we had Mexican shift bosses. And when Bob [Limon] went there he was assistant superintendent. But they had some good shift bosses. And the safety bosses, they always were Mexican. That was about all.
M: How would you assess the quality of the Mexican miners?
B: Well, such as Taxco, God, it was a hand-to-mouth operation. I remember the piping we put in there. Old Foster was superintendent and he wouldn’t give you anything. You had to put string on the threads to keep it from leaking...your air lines. And you ordered three sets of timber to work on Sunday and he’d cut it to half of that so (chuckles) there could be a set and a half there. It was just automatic. But it was
There was this old Mexican shift boss that I knew down there, Lemos was his name, Arturo. He was from Chihuahua. And he brought the best food, I think, and he used to bring enough for half a dozen. He was a great big fat fellow. And I used to just about give mine away, throw it away, and eat with him because he had enough for everybody. God, he had good food! And he was sort of like the godfather there, you know. He looked after the mine. When they'd get any new supplies in he managed to get a hold of it and you had to go to him (chuckles) to work it out of him, such as valves. And if you had to get any you had to account for everything. And old Lemos, he controlled that. He was always around when the truck delivered the supplies. (chuckles)

M: Sounds like the supply sergeant. (chuckles)

B: Yeah, but I liked old Arturo. He was a good fellow. Then I got along well with all the shift bosses. I liked them.

M: Now, you mentioned that after leaving Taxco and you worked in South Africa that that was quite a bit more modern operation. In what sense compared to the mines you were accustomed to...

B: Well, it was probably a different type of ore body. There were large bodies and we benched and long holed. When I went there we were doing down hole, but after that we changed to just rings. And we would blast whatever we needed for production. We still blasted too much. And we had grizzlies down below. And we left these huge open stopes. I mean, they were huge. For example, the big body there in O'OKiep was about 700 feet long and 300 feet wide and about, oh, 500 feet
M: And what were you mining?

B: Copper. We had to take out... Our grade there was supposed to be 1.42 percent and it was all long-hole drilling and we had a good grizzly system set up down below and they were pulled down to the...

M: Now, were the miners that you were working with, were they natives?

B: Yeah, they were natives there.

M: How would you compare them as far as their general work force in training and so forth to the miners you were used to in Mexico?

B: Well, in South Africa... I have to tell you something, what they do in the gold fields. We didn't do that at O'Kiep, but in the gold fields they bring these people in, the natives, and they spend three months training them. And, I mean, they classify them if they're mechanically inclined or not, and they try to place them where they'll do the best work. And they go through a rigorous training then. They have to put boots on and...

I visited up there once with an Anglo friend. I went underground and I saw, must have been, about a hundred and some odd people in an area. They were loading cars by hand. And I asked the fellow with me, you know, "What's going on there?" He said, "Well, that's part of the training." And they had doctors down there checking to see how they would, you know, respond to being underground because over there, particularly in the free state, it's quite deep. Your primary
shaft is 6,000 feet. And then they have their sub-verticals. They go down deeper in some of them. And it's hot. And then they added refrigerated air. They had modern...at that time, back in the [19]50s. I thought they were very, very advanced.

M: But now the conditions at O'Kiep were not nearly as severe?

B: No, we were very shallow there. Our lowest level was about 400 feet. And then we went down in an old mine down to about 700 feet. This east of O'Kiep had been worked back in the 1870s by the Dutch. And they had awfully...the water was very acid, except occasionally you'd find what they called sweet water. They always marked and made sure. They controlled that.

But I went down in an old mine in the old lower level when we were opening it. And the mud was about knee-deep. And you walk along on the track and then you'd break because you didn't know where any of the raises were. But, you know, the raises were exactly where they had marked on the map. We had the map, see? And they were awfully good, or correct, in their mapping.

And they brought timber there from Australia. And in the old shaft on the station sets they had twenty-inch square timbers, beautiful timbers. The pumping system was the old Cornwall pump. I guess that they brought this timber and displaced the water up and worked it all the way up to surface. They had the old...it was just for display there. It had the old steam engine...

M: Now, the miners that actually worked at the O'Kiep Mine, were they as well-trained as some that worked at...
B: I think they were. You know, the laws in South Africa are very strict. And just anyone... for instance, we had our drillers. They drilled off the face, but they didn't blast. They had what they called the ganger that went in and loaded, along with his helpers there, they loaded the blast. So when he finished drilling he'd go home, which was alright.

And long-hole drilling, they worked on a per foot thing. And then when they blasted, why, we made our big blast on the weekends. We blasted midnight on Saturday and then go in Sunday morning and make sure that it was safe for Monday.

And we pulled pillars once in this big stope when we finished. And we ended up with a bridge that went from one side to the other. It was just arched over. And we had a heck of a lot of ore still hung up there, so I drilled off one end and they cantilevered it and then blasted it and it came down. And then the whole thing came in. It had arched itself there. And we must have... (chuckles) I don't know how many hundred thousand tons we had in there of waste. But, you know, it was an norite. Granite was our host rock, and it was good, but it arched. And you could hear... you could stand and hear these things come down and go (imitates sound of falling ore) it'd make a heck of a noise. If you were ever confined in an area you'd probably get air-blasted out, but it was quite an experience.

M: Now, what were living conditions like in South Africa? Was it a mining camp you lived in?

B: Well, I lived in a mining camp. And the vegetables were absolutely lousy and the only meat you could get was something
like mutton or some tough critter, you know. And the meat was pretty lousy and the vegetables were lousy, so... (chuckles) You could get carrots.

M: What about the facilities? How would you compare the facilities at this mining camp in South Africa to Charcas, for example, or even to the housing facilities and...

B: The housing, there's not much difference.

M: Not much difference. Did they provide schools and...

B: No. In South Africa they didn't because they had their African school. And I don't remember if they had any English school or not because a big part of the people working there were African so they sent them to their national schools they called it. We sent our son for six months there one semester. And that's when we decided we'd better leave or else send him to Capetown. Although the kids, you know, they pick up languages fast.

M: So then when you came to Grants, now, what was like that, particularly after two stints in foreign countries?

B: To me, Grants was probably the worse mine I ever worked in my life.

M: Just the conditions of the mines?

B: Just the conditions, the sandstone and the shale beds and all. It was just terrible...and water, of course. I took over a mine, Section 30, and when I went over to take it over in February, I guess it was, they hired me first as chief engineer or something just so I'd get to know the place because the manager of mines there was from South Africa. He was a Canadian, but he had worked over in South Africa and
then he'd retired and gone back to Canada and then he was in charge of mining.

And they had there two chunks they had on the skips there. They had the skips then a large cage where they lowered their trackless equipment. But they had these two chunks of ice they must have weighed, phew, six or seven hundred pounds. And [when] the skip would come up they'd just teeter there on the edge. And the first Sunday, of course, everything was, you know, six or seven days a week, I pulled those two things out. I got a front-end loader in one Sunday and brought my cages up and I pulled them out of the way because I was afraid (chuckles) they'd go down my shaft.

But then somewhere down in the shift, before we got to the first level, we'd gone through a bed of shale and the shaft was actually floating in there. It had no blocking, no nothing and I had the... it was terrible. It was Kerr McGee was the one that ran it. Oh, it was tough. I've never run into such tough mining in my life, never. It seemed like everything was just problems all the time.

M: So then when you went to work in La Prieta, now, La Prieta was a big, big mine, too.

B: It was a big mine there. And I had a fellow there named Montes, Roberto Montes. They called him the assistant superintendent. He'd been there for years. In fact, he had helped negotiate the contract when they unionized back in the [19]30s, but he was a fair person. He was a good person. They had made him sometime a salaried fellow, but he was good. Just ask him questions on the old part of the mines. And I
used him. I took him up to Veta Grande. He had worked up there. He was like a walking dictionary. He'd tell you anything. And I had him look after mainly the safety side because he was so good. As a matter of fact, Frisco had asked him once over to arbitrate a labor problem. And the men liked him. Everybody liked him because he was honest. He was good.

End of Side A

Beginning of Side B

M: [You were talking] about mining experiences. You were talking about the La Prieta Mine in Parral and some of the general problems of just getting familia with such a large mine. What were the working conditions like at La Prieta? Was that pretty labor intensive?

B: Well, let me see. Yeah, it was labor intensive. I'm trying to think how many people we had, you know, working underground. I was trying to come up with that, but I don't remember.

When I went there you had a machine man and you had a helper. And little by little... . Because our men in La Prieta were a lot better union wise than they were in, like, Santa Bárbara, a rich mine.

M: Now, better in what sense?

B: They were more understanding.

M: Okay.
B: Or they didn't give us the problems that they had in Santa Bárbara. Santa Bárbara was a rich mine and, of course, they wanted everything. And we finally worked in La Prieta. We eliminated one helper and, finally, we eliminated both helpers, so we could work with less people and then produce the same way. We took what the helpers got on the bonus, we put in with the drillers, and they became quite happy. But when I tried that over in Santa Bárbara the union...the two miners I had in the stope, they suspended them for two weeks. So we went back to zero again. (chuckles)

M: Well, you mentioned that the profit margin was very slim at La Prieta.

B: Yeah.

M: La Prieta. Was that just because the mine was essentially getting to be mined out and you were having to mine at lower and lower grade parts and deeper and deeper...and more expensive mining?

B: Yeah, it was mined out. When I arrived down there they were just about finishing up sinking to the twenty-five level...which from the 22, 25, 300 feet and they were just finishing on that. And you had a lot of water. We pumped around 3,000, 3,300 gallons a minute there. And in the upper levels when they started out on their development they hit a fault and they had water go in. And they had to drain that out. They got up to 8,000 a minutes in those faults. But then they would go down.

M: But by the late [19]50s and the early [19]60s the profits were pretty low in most mines in Mexico, weren't they?
B: Yeah.
M: Was that just due to low metal prices?
B: Yeah, I would imagine that. I don't even remember the prices.
M: Or there were some high taxes with the government. Wasn't that part of it?
B: Yeah. Well, you see, when they Mexicanized they eliminated part of that tax, so they said. I mean, you didn't have to nationalize, but then you would pay through the nose so you were just about forced to. And even now the law is you have to Mexicanize. Although if you go in and open a mine now I believe that you can open it and then recoup your money plus whatever profit that they allow, but then you got to Mexicanize. So you got to hire yourself a Mexican lawyer, a good one first, an honest one.
M: What do you remember about the living conditions there at La Prieta?
B: Oh, they had a nice place there.
M: They had their own camp right in the middle of town.
B: Yeah, and a fence around it. I think A. A. Brown did that back when they moved in there. He laid out a good camp with real nice houses, I thought.
M: Now, what was the makeup of the staff there in the early [19]60s? Were they all still foreigners in the technical staff?
B: No, when I went back in [19]67 I got a mine superintendent that was Canadian. And then I got an assistant that was a Mexican that I'd known in Taxco. But most of them were Mexican.
M: And were these people that had been trained through ASARCO or they...
B: Most of them had.
M: Well, how would you assess their capabilities?
B: Oh, I thought they were, well, just like any place. You've got some good ones. You've got some that's not as good. But I thought they had some Cracker Jacks that really knew things. They'd get a little carried away, perhaps, in some things, but they were good. They were sound.
M: Well, before the Mexicanization... Now, ASARCO Mexicanized in about [19]65.
B: 1965.
M: Were there conflicts? What were just the general attitudes like, say, from [19]61 to [19]65?
B: You know, I never noticed any in La Prieta. I didn't notice anyone that was against...I think our shift bosses were Mexican. And our carpenter shop, it was Mexican. And our mill, they had- who did they have as a mill superintendent there? They got a Mexican there. He was of Italian descent, but he was Mexican. And the chief engineer was Mexican. In fact, I don't remember when I was there, really, any other gringos around. I was about the only one.
M: Do you remember any particular changes? What were the principal changes that you remember with ASARCO after the Mexicanization after 1965?
B: Well, the set up, as I understand, was that when they Mexicanized the Mexican partners had a managerial agreement with ASARCO for five years with an option for another five
years. And so they exercised the option for ten years. Then after that, then, unless...I think there's only one person I know, one gringo, that stayed down there.

M: So what were those? I mean, under that administration agreement that they had were those changes mainly in Mexico City in the principal offices? Or what changes did you see on an operational level, like at La Prieta?

B: You just got more Mexican young people in there. That was the only thing I could see. In Mexico City they kept- I don't know when they made a change- their mine manager down there, Chuck Campbell. I don't remember when he left, but he stayed down there at least five years. And Bob Limón was down there. They had Marlow. He was the Southern manager and he left sometime, I don't remember just when, but they were replaced by Mexicans.

M: What was the quality as far as training, the technical abilities, of the people that were coming in, say, after the Mexicanization? Where they still well-trained?

B: Oh, yeah. I think the schooling down there is first-class. I know some real good ones. I know some lousy ones, but I know some good ones. It's just like up here, you know, you get goods ones and bad ones. I didn't really have any complaint with standards of the Mexican engineers.

M: How would you compare when you later worked, then, in Nicaragua? Tell me something about what were things like at Bonanza.

B: Well, in Central America they had these ex-patriates they called them. My son is in Honduras, now, and he's been down
there nearly three years. But these ex-pates, they sort of go around. They work at all the places, you know, and then maybe into northern South American there in Colombia, for example. And they always seem around there. And that was where we got most of our outsiders.

M: Now, what nationalities, generally, would they have been?

B: Oh, God. I had a German, I had a Spaniard, I had a Peruvian, I had a Chilean. And I had them from all over.

M: Now, these were engineers?

B: Yeah, they were engineers. They were good in their way, but, I mean, they signed a contract for two years, or whatever it is, and you didn't know whether you'd get them back or not. They might go over to the other mine. (chuckles)

M: What about the miners? Were they locals?

B: Our miners at Bonanza were all Mosquito Indians. We had no Spanish descent in there. They were all Mosquitos.

M: Were there any particular problems in dealing with them?

B: No. Every now and then they'd come marching in and want something because we didn't have a union there. And on the surface we had some blacks from around Blue Fields. You know, that's their black colony that when the Sandinistas came in there they wanted it to go back to the British. They figured the British were better than the Sandinistas. (chuckles) But our miners there, I thought, were pretty good. And this German that was in there, the line superintendent, he had worked in Haiti and Canada. He had worked all around, but he had a pretty good group in the mines there. And he treated them pretty good, too.
M: Anything that particularly comes to your mind about trying to work in Nicaragua at the time the revolution was going on or getting started?

B: Well, every time that these Sandinistas, the rumor would come they were coming in, you know, and I'd have a bunch not come to work. And then if they were gone a week I had to fire them. Then they'd come wandering back sometimes, you know, but that was the big trouble.

M: Were they involved in the revolution or were they just afraid to come because...

B: They were afraid. And we had some that were...our chief engineer was one of them, one of the Sandinistas. As a matter of fact, after they took over he used me and I used him because when I wanted something I'd go through him and when he wanted something he'd (chuckles) come through me. So that's the way we worked.

M: So the mine continued to operate, then, after the Sandinistas?

B: Yeah, we continued to operate. In fact, we did pretty good there. We were making around 3,000 to 3,500 ounces [of gold] a month. That's when it got up to 800. And then when I left we had around 9,000 ounces at the Banco Central in Managua on hold. And they were supposed to pay. I don't know if they did. I guess they did because they had the gold...9,000 ounces. They made an agreement, but I don't know if they ever paid off or not.

M: Tell me something about your experiences in Bolivia. Of course, Bolivia is another country with a long, long mining tradition like Mexico. Were there similarities?
B: No, not really. In Mexico, your southern miners and your Chihuahua miners, they're a lot different. Down south they're more Indian and they walk around with machetes (chuckles) all the time.

Anyway, in Bolivia we had all Indians in there and they'd take off when they'd feel like it. And all of them would sit down and chew their cocoa leaf, which was admissible. That was part of the contract. And the government runs the unions. And down there the unions were a lot different than what I saw in Chihuahua here. Down there when they go on a strike they start drinking and they get belligerent and they get mean, so you don't want to be around them. They blocked the train once because we got in a bad shape down there because of the money situation. We went down...it was probably twenty-five to one. When I left it must have been 700, 800, to a 1,000 to one. I couldn't pay them. And they wouldn't give me dollars. And we were getting loans from the bank in pesos, but by the time we'd get the loan, why, then it wasn't worth anything. We couldn't buy any drill steel because they wanted dollars and we couldn't buy reagents and we had hell of a damn time. The miners blocked the government-run train over in Cerro Grande tin mines. They were worse there, probably. It's like they said, "Well, we didn't take the track out." Because that's what they generally do. They really get belligerent.

And in Quioma, it's in a lower elevation and they were a little bit better. They were well isolated. They were away from anything, you know, but they got drunk. And when we'd leave there in the morning you had to be careful because
somebody might be asleep in the middle of the road in these little villages. There's one of them that we went through, particularly. But it was quite an experience.

M: What about the technical staff in Bolivia? Were they expatriates, also?

B: No. No, no, no, no. We had, except for myself, they were all Bolivians. And, I mean, they're running the mine. They called me the administrator. And I put an engineer in there because I was being cheated on the contract, you know. And they ran the engineer off. And I thought, "Well, what I'll do is I'll bring in one of these labor men from La Paz." And I got him in there, but the only thing we ever wanted to talk about was this one engineer. And he knew the engineer because when he had been... . During any uprising down there, when the army comes after them, they run. They don't stand up. And so this guy, back in [19]52 or whenever it was they nationalized the mine, this fellow was on the run and he went to this engineer's father's house - he was a miner - as a refuge and they kept him there for about a week till where he could slip out. They'd generally go to Argentina or to Peru just to get out of the country. And so I brought this guy out. He wouldn't even talk. He wouldn't even discuss it, so it was a trip for nothing and a waste of our money and our time as far as I was concerned. And they just wouldn't take him back, so I thought I'd get some help, like in Mexico you can work things like that, but here's it's just different people.

M: What would you say the principal differences would have been between, oh, the mining people in general...not only the
technical people, but the miners in Mexico and some that you found in Central America and South America?

B: Well, I think, in Bonanza they were comparable to Mexican miners. Those Mosquito Indians, they were good workers. And they worked safe. In Bolivia they weren't too safety conscious because they had a lot of... . I know in one place there was an argument—this is what I found out, I don't know how true it is—between the moter man and his helper. It was a property they had, a little farm they had there, and they got in some kind of an argument. And the motor was derailed and this helper there fell in a little old hole about that big (demonstrates size) and drowned, but everybody said that this other guy (chuckles) hit him over the head and put him in. Anyway, I don't know. Excuse me just a minute, I've got to go in here. (taping stopped and started again)

M: Alright, we had talked about comparing some of the Mexican mines with other mines. One of the changes, certainly, that went on after the Mexicanization was, as you were just mentioning, a fair amount of mechanization and, in some ways, modernization, of some of the mines.

B: Yeah. Yeah, they added a lot of money to equipment and so forth.

M: Do you think the mines, for example, that ASARCO operated been somewhat neglected as far as capital investment in those years in the [19]60s?

B: Near the end I'm sure it was because you only replaced when it stopped. And I'm sure it was because of this pending Mexicanization.

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M: Just the uncertainty of what was going to happen?
B: Yeah, that's my opinion. Of course, I don't know for sure, but they didn't spend much capital there.
M: Do you think that the Mexicanization was a good thing for Mexican mining?
B: Oh, I think it was inevitable. I think it was due.
M: But does that mean do you think it was good for Mexican mining? Was it good for the country?
B: Oh, I think it is, but I don't know. (chuckles) I can't answer that. I think it was.
M: Was there some particular other incidences or kind of adventures that come to mind of the various places you've been and worked in the world?
B: I can't remember anything right now, but I'm sure that I had run into these places that... . Well, one thing they did... well, I was told because they put a little wince down in the tin mines in Cerro Grande, and it was a one-compartment thing. They went down on these winces and they had their timber and they went down in a bucket with an air hoist. And when they would light the round in the bottom, why, they lit by hand. They didn't have anything, you know, electric or anything. And then they'd bring that guy up on that air thing, you know, (chuckles) like this, (demonstrates lifting procedure). And once he didn't quite get up there when it was off, but he wasn't hurt. But we were contemplating sinking a shaft and I was determined (chuckles) we weren't going to get that way. I wouldn't work like that.
M: Well, looking back, have you enjoyed your life in the mining
business?
B: Oh, yes.
M: And all the places you've worked?
B: And you miss it. But now I'm out of touch with all...
M: Now, your children were born in these various places.
B: Yeah, the son was born in Charcas and the eldest daughter in Taxco and the youngest in South Africa.
M: And they grew up in mining camps?
B: Yeah. And, actually, they enjoyed Mexico very much. Of course, I had two Mexicans. And it was interesting. It was good.
M: Mr. Byrd, thanks very much for your time. It's been interesting talking with you.
B: If I could give you more, I would. I guess I just can't remember everything.
M: Thank you.

End of Interview