FORM 396 11-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

December 22, 1939

Waelhan Mine

Mr. Tom Lyon, Chief Geologist
International Smelting & Refining Co.
818 Kearns Building
Salt Lake City, Utah

Dear Tom:

Since diamond drill Holes No. 36 and 37 have proven that the footwall vein exists as far south as the 712 main Orebody, it appears to be more logical to develop it on the 600 Level from 693ExcW than from 668XDC as Mr. Sales recommended a couple months ago. Either case would necessitate a certain amount of work in waste, but 693E affords a short tram and service directly from the shaft, while all work done from the other side necessitates climbing from the 700 Level. Also, we would like to open up the ore that was cut in 692E.

Very truly yours,

S. K. Droubay

SKD:SW S. K. Droubay

cc - Mr. Sales
Mr. Dugan

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FORM 396 11-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

December 22, 1939

Mr. Tom Lyon, Chief Geologist
International Smelting & Refining Co.
818 Kearns Building
Salt Lake City, Utah

Dear Tom:

The accompanying tabulation represents diamond drill progress at Walker Mine during the first half of December.

Hole No. 29. This hole driven northwest from the face of 1017DN was finished at a depth of 496 feet. As previously stated, chloritized schist containing some mineralization was cut from 412 to 426 feet. From 426 to 447 feet solid quartz containing disseminated bornite and chalcopyrite was cut, then fissle schist extended to the end of the hole.

Hole No. 34 is being extended N 55 E from the face of 1056BxcE and was advanced from 423 to 573 feet. With the exception of a few scattered specks of chalcopyrite no mineralization has been encountered and the formation ranged from a solid speckeled schist to chloritized zones that contained considerable epidote.

Hole No. 36 was driven from the 712 sub-level to determine whether the footwall vein was strong enough to justify driving a haulage level from the south. The first seventy feet was altered schist containing a number of small veinlets of good mineralization. From 70 to 182 feet the formation was a solid, barren, speckeled schist. Beyond 182 feet the schist became green and altered with scattered mineralization and an occasional veinlet showing exceptionally heavy chalcopyrite. Low grade vein material was cut from 246 to 273 feet and although there were a few good looking streaks in it, the thing as a whole looked quite poor. Geological projections indicated that the vein should not be encountered until 300 feet, so the hole was extended to 354 feet through barren schist. Apparently this vein rolls the same as the main vein.

Respectfully submitted,

S. K. Droubay

SKD:SW

S. K. Droubay

Encl.

cc - Mr. Dugan
Mr. Sales

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DIAMOND DRILL REPORT

December 1 - 15, 1939, Incl.

HOLE NO.	OREBODY	LEVEL	START	END	FEET	COST PER FOOT	PERIOD COST	MONTH TO DATE
29	712	1000	407	496	89	$1.25	$ 111.25	$ 111.25
34	712	1000	423	500	77	1.25	96.25	
			500	573	73	1.35	98.55	194.80
36	712	600 Sub	0	349	349	1.25	436.25	436.25
		Total			588		$ 742.30	$ 742.30

620A Stope Diamond Drill Holes:

Drilling was done on Holes No. 47 to 58, inclusive to the extent of 347 feet.

SW

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FORM 396 11-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

December 19, 1939

Mr. Tom Lyon, Chief Geologist
International Smelting & Refining Co.
818 Kearns Building
Salt Lake City, Utah

Dear Tom:

The accompanying composite map of the 712 Orebody shows to date development of the footwall vein.

Holes No. 29, 30, 32, and 35 indicate fairly strong mineralization on the 1000 Level and from the looks of 471CDS and the barren quartz from Hole No. 35, it appears that Hole No. 36 has cut the vein near its southern fringe. Hole No. 37 is being driven to cut the vein 210 feet further south with the hopes that enough mineralization will be found to justify driving a main haulage level out this way so that the ore from this fissure will not have to be hand trammed. If hole No. 37 shows a fairly strong mineralization, then a third hole will be fanned from the end of 628C.

It appears as though we will have at least 90,000 tons of 1.25% plus available ore that could be produced through a haulage level that will involve about 200 feet of drifting in waste and the rest in vein material.

As our large 820 and 820A and 1080 Stopes will be finished in a very few months, it is of vital importance that we replace these places. The North Orebody pillars will furnish part of this, but Mr. Hartmann is anxious that some plan be gotten underway, wherein, we can prepare to produce this footwall ore both above and below the 700 Level. We would appreciate very much if you would talk this over with Mr. Sales and Mr. Dugan and advise us as to what may be done. We had thought that starting a 700 Level drift about 200 feet south of the 712 Hoist room and extending 1055BxcW would be logical procedure.

The 692C has cut about thirty feet of nice looking rock and I think we can start a stope on this from the footwall of 705B Stope. It should be better than 1.50% rock. It looks as though we should crosscut from the face of 690C and if nothing is opened up we should stop it.

In projecting the footwall mineralization south of 706A Winze to the 1200 Level, 1202DS will not have to be turned west to hit it. The fault steepens below the 1000 Level and the footwall vein should be almost straight ahead.

Very truly yours,

S. K. Droubay.

SKD:SW

S. K. Droubay

Encl.

cc - Mr. Dugan, Mr. Sales

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Form 41 2-1-38 5M

WESTERN UNION

COPY OF TELEGRAM

December 20, 1939

NIGHT LETTER

Walker

S. K. Droubay
Walker Mining Company
Walkermine, California

After consideration by Sales, Dugan and myself have decided that except for the down hole from the 1000 level no further prospect drilling is planned after the completion of hole number 37. If down hole from 1000 encounters materially higher grade ore at least one more down hole should be drilled from end of 1017 drift north. Crosscut for new ore body from 1055 B and from 700 level approved. Crosscut from 690 C not approved.

Tom Lyon

Copies sent to Mr. C. F. Kelley
Mr. R. H. Sales ✓
Mr. C. E. Weed
Mr. J. F. Dugan

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Walker

New York, N. Y.
December 6, 1939.

AIR MAIL

Mr. S. K. Droubay,

Walkermine, California.

Dear Droubay:

I have your letter of December 1st, and note that hole 35 was a blank and that you are moving to deepen #29. According to geological projections, it should not be necessary to extend 29 to a depth of 500 feet. But you can be guided by what is disclosed as the hole is deepened.

I am leaving here December 10th, for Tucson, Arizona, expecting to get back to Butte a few days before Christmas.

Yours very truly,

RENO H. SALES

RHS:F
CC: Mr. C. E. Weed.

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FORM 396 3-31-37 2M

WALKER MINING COMPANY

WALKERMINE
PLUMAS COUNTY, CALIFORNIA

L. F. BAYER, MANAGER

Walter Mine

December 5, 1939

Mr. Tom Lyon, Chief Geologist
International Smelting & Refining Co.
818 Kearns Building
Salt Lake City, Utah

Dear Tom:

The accompanying tabulation represents diamond drill progress at Walker Mine during the last half of November.

Hole No. 29 is the one driven N 76°31' W from the face of 1017. It was originally layed out to prospect for the main 712 vein, but since other holes No. 30 and No. 32 cut the extension of the 517 footwall fissure, it was decided to extend this hole to 500 feet which will be sufficient to cut the extension of the best looking mineralization as exposed on the 600 sub-level. This hole cut barren schist up to 207 feet when a few specks of scattered sulphides started showing. This condition continued with an occasional fair looking streak of chalcopyrite up to 354 feet where eight feet of low grade vein material was cut. Scattered specks of sulphides continued to 412 feet where chloritized schist and quartz zones containing scattered chalcopyrite and bornite extends to 426 feet, then the vein becomes a good solid quartz with local zones of fair looking ore. The quartz continues to 447 feet, where schist comes in again.

Although the average tennor of the vein from 412 to 447 feet will probably not run over 1% copper, there are zones that carry a considerable amount of disseminated bornite. This is about the only place I have seen zones of good glassy quartz carry a mixture of bornite and chalcopyrite. No sludge assays are available as yet.

Hole No. 33 was finished at 244 feet into the footwall of the Central Orebody, about 350 feet south of 706A Winze. Other than the glassy vein material cut from 22 to 54 feet and reported before, there was nothing but crystalline schist with an occasional speck of chalcopyrite.

Hole No. 34 was extended N 55°E from the face of 1056BxcE to a depth of 423 feet. No mineralization has been cut, but several heavy slips and a couple of water courses have made drilling rather slow the past week. The hole must be reamed and cased.

Hole No. 35 was drilled 269 feet deep to cut any southerly extension of the mineralization cut with Holes No. 30 and 32. The quartz vein was encountered at 220 feet and it extended to 242 feet, but it carried practically no sulphides. This is approximately 200 feet south of where the vein was cut with Hole No. 32. The rest of the hole showed altered schist with an

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occasional speck or two of mineralization.

By plotting the results of Holes No. 29, 30, 32, and 35 on the sketch sent to Mr. Sales, Mr. Dugan, and yourself on November 18, it will be noted that we have evidence of at least 500 feet of fair vein material extending along the footwall of 1017DN. As Hole No. 33 was barren of mineral, it looks as though the logical thing to do now is to extend 1055BxcW to the vein and drift north along it to determine how much minable ore we have there.

Respectfully submitted,

S. K. Droubay

SKD:SW

S. K. Droubay

cc - Mr. Sales
Mr. Dugan

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DIAMOND DRILL REPORT

November 16-30, 1939, Incl.

HOLE NO.	OREBODY	LEVEL	START	END	FEET	COST PER FOOT	PERIOD COST	MONTH TO DATE
Pervious drilling this month of Holes 24, 28, 30, 31, and 32								$ 1,135.20
29	712	1000	207	407	200	$ 1.25	$ 250.00	508.75
33	Central	1000	43	244	201	1.25	251.25	305.00
34	712	1000	40	423	385	1.25	478.75	528.75
35	712	1000	0	269	269	1.25	336.25	336.25
	Total				1053		$ 1,316.25	$ 2,813.95

620A Stope Diamond Drill Holes:

Drilling was done on Holes No. 42 to No. 50 inclusive to the extent of 237.5 feet.

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FORM 396 11-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

December 1, 1939

Mr. Reno H. Sales, Chief Geologist
Anaconda Copper Mining Company
25 Broadway
New York City

Dear Sir:

Diamond drill Hole No. 35 has been completed to a depth of 269 feet, but no ore was disclosed. This hole cut the 517 vein approximately 200 feet southeast of where Hole No. 32 cut it, but the quartz carried practically no sulphides. The hole was driven South 68 degrees east from a point twenty feet back from the face of the short 1049BxcW and cut the vein from 220 to 242 feet.

The drill was moved to Hole No. 29 which will be extended to a depth of 500 feet which should be ample to cut the 60 degree dipping fissure that carries the best looking vein material as exposed on the 600 sub-level. We exposed this fissure again by crosscutting from the extreme north end of the sub-level, as suggested in your latest development recommendations, and although we have cut no quartz to speak of there is considerable alteration of the schist and a dissemination of chalcopyrite and bornite in places.

We will move the drill to the sub-level just as soon as Hole No. 29 is completed.

Very truly yours,

S. K. Droubay

SKD:SW

S. K. Droubay

cc - Mr. Lyon
Mr. Dugan

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Walker

New York, N. Y.
November 22, 1939.

Mr. S. K. Droubay,

Walker Mining Company,

Walkermine, California.

Dear Droubay:

I have received a letter from Lyon suggesting a down hole from 1055-B Crosscut. We think this a good suggestion. I think a hole should be put down directly in line with #32, which should be laid out to cut the vein at approximately 200 feet below the 1000 level. Should this down hole show favorable results, I think we should fan a couple of down holes from the same station.

Lyon suggests an up hole to hit the vein at the 900. We do not think this hole necessary, but at any rate, please defer it until the 600 sub-level holes are finished.

Yours very truly,

RENO H. SALES

RHS:F
CC: Mr. C. E. Weed.
Mr. J. F. Dugan.
Mr. Tom Lyon.

AIR MAIL

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Walker

November 21, 1939.
New York, N. Y.

Mr. S. K. Droubay,
Walker Mining Company,
Walkermine, California.

Dear Droubay:

I received your map and cross-section illustrating drilling results in Holes 31 and 32. I note the position of the proposed hole from the 600 sub-level. I have discussed this with Mr. Weed and we think another hole should be drilled from the 600 sub-level approximately 200 feet south of your proposed hole, provided, you get an ore showing in this first hole.

We suggest this second hole and possibly a third still further south for the reason that if this 517 vein approaches the main vein, the possible haulage drift should be driven along the vein rather than in the country rock.

I am quite pleased with the disclosures in Holes 30 and 32. I will be much interested to learn the results in #29.

Yours very truly,

RENO H. SALES

RHS:F
CC: Mr. C. E. Weed.
Mr. J. F. Dugan.
Mr. T. Lyon.

AIR MAIL

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FORM 396 11-39 2M

WALKER MINING COMPANY
WALKERMINE
PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

November 20, 1939

Mr. Tom Lyon, Chief Geologist
International Smelting & Refining Co.
818 Kearns Building
Salt Lake City, Utah

Dear Tom:

The accompanying tabulation represents diamond drilling progress at Walker Mine during the second week of November:

Hole No. 30 was advanced from 198 feet to 272 feet, the end of the hole. The object of this hole was to prospect for the extension of the 517 Footwall Fissure vein of the 712 Orebody. Mineralization started around 240 feet and approximately twenty-two feet of fair looking vein was cut. Although mineralization continued to the end of the hole, the last eight or ten feet was mostly schist. Sludge assays ran:

	Cu	Ag	Au
230 to 240 ft.	0.70	0.10	0.02
240 to 250 ft.	0.65	0.10	0.02
250 to 260 ft.	2.25	0.58	0.09
260 to 270 ft.	0.70	0.16	0.015
270 to 272 ft.	1.20	0.29	0.02

Hole No. 31 was drilled 167 feet into the footwall of the Piute 900 Level about 275 feet south of the shaft. The purpose of this hole was to test the footwall mineralization that is exposed at the shaft station and seems to run parallel to the vein. With the exception of a few specks of bornite and chalcopyrite, the hole was barren up to ninety feet. From 90 to 157 feet the hole cut low grade vein material that yielded sludge samples that ran:

	Cu	Ag	Au
90 to 100 ft.	0.70	0.10	--
100 to 110ft.	0.40	--	--
110 to 120 ft.	0.25	--	--
120 to 130 ft.	0.60	tr.	--
130 to 140 ft.	0.70	0.025	--
140 to 150 ft.	0.65	tr.	--
150 to 160 ft.	0.55	tr.	--

Hole No. 32 was fanned south from Hole No. 30 with the idea of cutting the 712 Footwall vein about 80 feet south of where it was cut with Hole No. 30. At 186 feet vein material was cut and it extended to 224 feet. Sludge samples from the vein ran:

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Mr. Tom Lyon, #2 November 20, 1939

	Cu	Ag	Au
190 to 200 Ft.	1.00	0.24	0.15
200 to 210 ft.	2.15	0.55	0.04
210 to 220 ft.	1.00	0.44	0.035
220 to 230 ft.	0.55	0.20	0.02

The last fifty feet of the hole was through crystalline schist that showed considerable alteration and several veinlets of magnetite.

Hole No. 33 was drilled into the footwall of the Central Orebody at a point about 350 feet south of 706A Winze. Holes number 22 and 25 indicated footwall mineralization and it was decided to get another cross-section of the country. Glassy vein material was cut from 22 to 38 feet and again from 45 to 54 feet. Although there is considerable sulphides in the vein, a good portion of it is pyrite. No assay returns have been received on the sludges, but it is not bad looking rock. It may be well to drill this zone again from 1203DS at a point some where ahead of the present face with the idea of locating enough vein material to drift along. Holes No. 25 and 22 could have cut the vein near the point of echelon, and there may be something worth while to the south.

Hole No. 34 is being drilled North 55 degrees east from the face of 1056B crosscut east of the 712 Orebody. The forty feet so far drilled is through barren schist.

Very truly yours,

S. K. Droubay.

SKD:SW S. K. Droubay

cc - Mr. Sales
Mr. Dugan

Encl.

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DIAMOND DRILL REPORT

November 9-15, 1939, Incl.

HOLE NO.	OREBODY	LEVEL	START	END	FEET	COST PER FOOT	PERIOD COST	MONTH TO DATE
Pervious drilling this month on Holes 24, 28, and 29								$ 510.20
30	712	1000	198	272	74	$ 1.25	$ 92.50	340.00
31	Piute	900	0	161	161	1.25	201.25	201.25
32	712	1000	0	274	274	1.25	342.50	342.50
33	Central	1000	0	43	43	1.25	53.75	53.75
34	712	1000	0	40	40	1.25	50.00	50.00
		Total			592		$ 740.00	$ 1,497.70

620A Stope Diamond Drill Holes:

Drilling was done holes No. 38 to No. 42 inclusive to the extent of 206.5 feet.

NOTE: Surface Hole No. 26 was abandoned at 419 feet. Another hole was not started because of uncertain weather conditions.

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AIR MAIL

INTERNATIONAL SMELTING AND REFINING COMPANY

Kearns Building, Salt Lake City, Utah

TOM LYON
GEOLOGICAL DEPARTMENT

ANACONDA
from mine to consumer

November 20, 1939

Mr. Reno H. Sales
Room 1726
25 Broadway
New York City, N. Y.

Dear Reno:

I have just received Droubay's letter of November 18 together with sketches concerning diamond drilling on the 1000 level of the Walker mine.

It appears to me that it would be a good idea to drill a down hole from 1055 B crosscut to cut the mineralization at least 100 feet below the 1000 level. It also might be well to drill a hole angling upward to cut the mineralization in the vicinity of the elevation of the 900 level.

If you think this should be done, will you please write Droubay direct as out present campaign is about completed.

Very truly yours,

Tom Lyon

TL:P
CC: Mr. Weed
Mr. Dugan

Fan 2 holes
200' depth
+ dip + formation

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FORM 396 11-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

H. M. HARTMANN, MANAGER

November 18, 1939

Mr. Reno H. Sales, Chief Geologist
Anaconda Copper Mining Company
25 Broadway
New York City

Walker

Dear Sir:

The last part of your wire dated November 16 was mixed up a little but I took it that you wanted a more complete picture of the 517 Fissure. The enclosed composite sketch and vertical section No. 5 will illustrate more clearly the object of the drilling your approved.

If we cut the vein with the proposed drill holes on the 1000 and 600 sub-levels, we should be justified in starting a 700 Level haulage level some where south of the 712 hoist room, which would be much better than back-switching from the north end of the 712 Orebody.

All approved diamond drilling, other than the 620A Stope holes, should be completed within the next two weeks. The long hole being drilled North 55 degrees East from the face of 1056B crosscut east may take a little longer.

Any suggestions will be appreciated.

Respectfully yours,

S. K. Droubay.

SKD:SW

S. K. Droubay

cc - Mr. Lyon
Mr. Dugan

Encl.

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Walker mine

Wm T. Warren

Walkermine, California
September 21st, 1939

Dear Mr. Sales:

It seems as tho Marion does all the letter writing for this family, and every once in a while I feel sort of embarrassed about it - so, decided to write and say hello.

You fly all over so fast that we never know just when and where you might receive the mail - at any rate it is a safe guess that you arn't in Poland at the moment.

Everyone here is eating deer meat now - the season just opened and it seems that about every other man here has picked off a buck. Qe had a steak for dinner. Marion soaked it in vinegar for an hour, then washed it - fried it in onion and garlic salt, olive oil etc. and turned out a very delectable morsel. Mouth watering? If so better come on out and have some with us.

Mr. Bayer told me today that we had better register so as to be able to vote in November on the "$30.00 every Friday" bill coming up. Some bill - what a fine effect it will have upon tax rates on we 2age earners.

Diamond drilling all over now - but have it in for you// You sure pick tough places to drill in - that 1045 xc on 1000 hasn't been open for years, and what a job// Also your drills about flooded us on the 1200 when they hit more water than we could handle; also we have been chasing down leaks in air lines, etc. and rotating drilling to try and get enough air for our machines and the diamond drills; but we love it.

In 712 that 471 country is getting interesting - and looks as if the vein (517 fissure) is swinging around to parallel the main Walker vein in the footwall. We have opened up a lot of country above the 400 and are now trying to pick it up on the 500. How about giving us a hand? It certainly is an interesting possibility and the ore is averaging about 2.00% - but the way the vein is behaving has the operating department and geologist all tearing their hair.

We have a nice little stope on the "Reno Sales" bornite streak - not very large, but damn nice rock. Heads for the mine yesterday were 1.60% - good for the Walker.

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Mr. Bayer said yesterday that Mr. Weed and a whole bunch of men are coming out to see the mine next week. Have my fingers crossed. From an operating standpoint the "battleworn" Walker is coming along, and am proud to say so. The only thing that gives me nightmares is the coming winter, and the thought of the inevitable power failures and consequent loss of pumps. Lots of times I dream about them.

Our best to Mrs. Mills, and hope you all have enjoyed a very pleasant summer. Be sure to send my very best to Mrs. Longlee and don't forgat to tell her about the venison.

Yours faithfully,

Bill

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FORM 396 2-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

L. F. BAYER, MANAGER

September 8, 1939

Mr. Reno H. Sales, Chief Geologist
Anaconda Copper Mining Company
Butte, Montana

Dear Sir:

After receiving your letter of September 5, I discussed matters with Mr. Bayer and we will see that future diamond drilling will conform with your recommendations.

Two drill outfits, a surface and an underground machine, were sent in here August 23 and I put them immediately to work as their contract stated. Neither Mr. Bayer nor I had received a copy of your recommendations to Mr. Elton, so I took the liberty of using the drill to replace crosscuts that I felt were necessary to be sure that 1201 drift north would not be driven parallel to any important mineralization. I felt that the 1100 crosscut east may not have been driven far enough, and that such a hole would be justified. This hole was practically completed and instructions had been given to start the footwall hole, by the time a copy of your recommendations were sent to us. These drillers set up and outfit in about four hours and drill from thirty to forty-five feet per shift.

Although the footwall hole should be drilled nearly 600 feet deep to cut the 713A vein, it was making around 150 gallons of water per minute at 313 feet and as our pumps are taxed to a maximum, I had them cap the hole for the time being and continue drilling the hanging wall hole to at least 700 feet as you suggested. When station pumps are installed, the wet hole can be finished.

The 17 veinlets from the footwall hole varied from two inches to three feet in width and were cut from 60 to 140 feet from the collar of the hole. All of them are of good glassy quartz containing disseminated chalcopyrite. Several are up to six inches in width and only about one-half of the three foot vein is mineralized. High water pressure caused more or less of a panning effect on the sludges, giving a concentrated product. Some assays ran rather high. We can split and assay the core as a check.

The surface hole was drilled 275 feet when all the water was lost and cement kept washing away. I figure it is sub-surface. The holehad to be reamed and cased through, and I expect to see schist in the core they get today.

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Reno H. Sales, #2 September 8, 1939

As the drilling order calls for approximately 2000 feet of underground drilling per month, we had surmised that part of this could be used to replace crosscuts, especially along the 1200 level, the 1017 drift north, and the 904B drift north. In talking this over with Mr. Lyon and Mr. Dugan, it had sounded all right that we could drill two crosscut holes from the present face of 904B, and by the time these were finished if 1017 had not encountered mineralization, we could run test holes from the face of there. The footwall hole from 904B would be drilled to cut the footwall quartz vein 200 feet north of where it is exposed with 900xcW. However, after reading your recommendations, and receiving your letter yesterday, it appears as though no provisions were made for such a program.

It looks as though our 517 fissure is going to develop into a good sized orebody. The vein on the 400 Level is at least forty feet wide at a point 150 feet beyond the end of the 500 Level workings, and the hanging wall has not been reached yet. The crosscut assays 1.4% copper with low gold and silver.

Respectfully yours,

S. K. Droubay.

SKD:SW S. K. Droubay

cc- Mr. Lyon
Mr. Dugan

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Walker Mine

September 5, 1939.

Mr. S. K. Draubay,
Walkermine, California.

My dear Draubay:

I have your letter of August 31st and the two maps attached thereto. I was quite surprised to learn that you had drilled a hole so near the shaft into the hangingwall country from 1201 drift north. I was under the impression that the 1100 level crosscut from the shaft was long enough to fully determine the width of the Walker vein zone. According to your own section, B12, the 300 foot hole on the 1200 level is not long enough to explore the downward possibilities of the mineralization in drill hole number 8 drift from the 6 Sub-level. In that hole the mineral showing is 400 feet from the hangingwall of the main Walker vein. The dip is unknown, but should it be flatter than the Walker vein, it might require 4 to 700 feet to fully cover its possible downward projection at the 12th level.

For the present, I hope you will not do any further drilling from the 12th level. I note you have 6 holes laid out to be drilled from the 12th level at certain intervals along the proposed north and south 12th level drifts. The holes already proposed to be drilled into hangingwall country are for the purpose of finding out whether or not there is a parallel vein or ore zone within drilling reach. If any one hole determines the non-existence of such an ore or vein zone, you will agree that it would be folly to repeat such drilling into the same country. In the case of the 298 foot hole already drilled from the 12, your letter indicates that there is but little mineral showing and certainly no vein showing of any strength. Under these circumstances there is no reason to project more drilling. Especially at such short intervals as indicated on your map. My only suggestion would be that the 298 foot hole be extended to at least 700 feet, or even a greater distance, providing it encounters no serious operating difficulties.

I believe the hole already proposed from the 1000 level into the footwall is sufficient to explore that country. However, I have no objection to seeing it drilled from 1201 drift north, as you marked it on your map, although it does seem to me that 1200 drill operations might interfere with operating work on that level. Under the circumstances, I am unable to approve the drilling suggested in the last two paragraphs of your letter.

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#2

Mr. S. K. Droubay September 5, 1939.

You may recall that the reasons for locating the hanging-wall hole, which you designate item #1 on your map, were to give us some information on the possibility of a split in the Walker vein going northerly from 706 shaft, and to check at a relatively short distance on dip, the showing in drill hole #8.

I expect to go to Salt Lake within the next few days, at which time I will more fully discuss this drilling situation, and advise you. I would like, however, that in the future you do not vary the drilling program already laid out without first securing the approval of Mr. Weed and myself.

Very truly yours,

RHS:MBS

CC-Messrs. C. E. Weed
Tom Lyon
J. F. Dugan

RENO H. SALES

AIR MAIL

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FORM 396 2-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

Walkermine

L. F. BAYER, MANAGER

August 31, 1939

Mr. Reno H. Sales, Chief Geologist
Anaconda Copper Mining Company
Butte, Montana

Dear Sir:

With reference to the diamond drill holes under items No. 1 and No. 3 in your letter of recommendation to Mr. Elton dated July 1, 1939, I would like your advice as to the following situations that have come up:

Development drifts north and south along our 1200 Level had to be stopped pending completion of a sump and installation of pumping equipment. So much water has been encountered, especially in the north heading, that we cannot take chances on opening up any more ground until this can be taken care of (about three more weeks). In the mean time rather than run crosscuts to insure against driving our headings parallel to any sizable vein, I advised that two short drill holes, normal to our vein in general, be driven from the face of 1201DN

The hanging wall hole has been completed to a depth of 298 feet and the footwall hole will be started in a day or two (when a broken part of the drill machine is replaced). The first 260 feet of the completed hole shows a few one-half stringers of chalcopyrite. I have not seen the last forty feet of core.

These two holes will test ground that lies near the objectives of the holes referred to above, if the footwall hole be driven six hundred feet in depth.

In view of the water hazzard, it may be advisable to test for the vein along the 1200 level with drill holes instead of crosscuts by placing them approximately three hundred feet south of 706A Shaft, and again three hundred feet north of the present 1201DN.

Is such a program permissable, and if so, will it reach the objectives intended for the holes of item No. 1 and No. 3.

Respectfully Yours,

S. K. Droubay

S. K. Droubay

cc - Lyon
Dugan

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INTERNATIONAL SMELTING AND REFINING COMPANY

Kearns Building, Salt Lake City, Utah

TOM LYON
GEOLOGICAL DEPARTMENT

ANACONDA
from mine to consumer

August 23, 1939

Mr. Reno H. Sales
P. O. Box 457
Butte, Montana

Dear Reno:

Mr. Dugan has just returned from the Walker mine. We have been discussing the location of the drill hole which is to be drilled from the surface north to the Piute ore body.

Due to the fact that the drill hole will necessarily have to be drilled for a distance of 1000 to 1200 feet, I suggested to Mr. Dugan that the 900 drift north be stopped until the drill hole had been completed. If this is done it will only be necessary to locate the hole 500 feet north of the present breast. I think this is far enough to project any structure we may have in the mine. I also think it is possible that the information obtained in the drill hole will enable us to drive the 900 north to a more definite objective and possibly save considerable footage. As you know, anything that can be saved at the Walker will be beneficial to the operation.

Mr. Dugan agrees that it would be a good thing to stop the 900 until the drill hole is completed. If this plan meets with your approval, please wire.

Very truly yours,

Tom Lyon

TL:P

cc: Mr. C. E. Weed
Mr. J. F. Dugan

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F. 423 3-25-39 2M

INTER-DEPARTMENTAL CORRESPONDENCE

MINING DEPARTMENT

INTERNATIONAL SMELTING AND REFINING COMPANY

818 KEARNS BUILDING SALT LAKE CITY, UTAH

SUBJECT:

August 23rd 1939.

Mr. C. E. Weed, General Manager of Mines,
Anaconda Copper Mining Company,
Hennessy Building,
Butte, M O N T A N A.

Dear Sir:

Just returned from Walker and have been discussing the North Piute development with Tom Lyon.

While at Walker I sent you a wire asking permission to move the site of the surface hole further north than the original location, as due to the advance they are making in 904 Drift North it would be into the drill hole before it reached the 900 level. I then received your wire authorizing preparations to start the hole at the point proposed by Bayer, Droubay and myself.

This morning I also received a copy of Sales' letter to Droubay in which he said the location on coordinate 21200 North was satisfactory.

It was my understanding that we were to keep 904 Drift going in connection with the drilling, but to do so we would have had to move the location of the surface drilling further north than originally planned.

I discussed this with Tom Lyon today and he suggests that we stop 904 until we get the hole down and locate the hole 500 feet north of the present breast, which, by the way, is in a good looking hard, black siliceous shale, this change in formation occurring within the last few rounds.

We can do this and locate the hole 500 feet north of the present breast, which will be in accordance with the original plans. 904 can be resumed at any time. From an operating standpoint this would be more desirable as I think we should push 903-B Drift South and open up the country under 886 Drift. This is the closest place to open up new stopes and increase our available ore reserves.

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I had already told Bayer to start it and to work the two drifts (903 and 904) with the same crew. However, by stopping 904 we can push 903 South much more rapidly.

So, if satisfactory to Mr. Sales and yourself we will stop 904 and locate the drill hole 500 feet north of the present breast. In turn we will operate 903 Drift South with all possible speed.

The drilling outfit will not be in there until the first of the week, and spotting the hole is only a matter of a few minutes.

Yours very truly,

John F. Dugan.

JFD:JJS.

CC: Messrs. Sales
Lyon.
KCC.

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Walker

July 1st, 1939.

Mr. J. O. Elton,
820 Kearns Bldg.,
Salt Lake City, Utah.

Dear Jim:

I spent Monday, June 26th, at the Walker Mine. Since returning I have read Tom Lyon's letter of June 23rd, in which he recommends a certain drilling program for the Walker Mine. I have also gone over the matter very fully with Mr. Droubay, the mine geologist.

There is but little doubt that the Walker Mine has reached a critical stage. The mine is operating and there is being added to the ore reserve nothing substantial in the way of tonnage. If the mine is to continue operations very far into the future, important ore discoveries or developments must be made.

Viewing the Walker as a general picture, there are two angles to any development program. There are certain ore possibilities which might be developed under the so-called short range development recommendations, and there are the longer range possibilities of orebody extensions and new ore discoveries. The short range program can do nothing more than prolong the present situation for a limited time. I believe the prospecting for important ore extensions or ore discoveries is the vital matter needing our serious consideration.

The Walker Mine is essentially a low grade ore operation. The margin of profit even in good times has been relatively small, considering the tonnage handled. In the past it has enjoyed the advantage of a large proportion of the ore coming from above the tunnel level. It has enjoyed the very low cost ore produced from that portion of the wide Piute orebody lying above the tunnel.

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Looking to the future, the mine is facing higher ton cost ore from below the tunnel level, because of sinking, pumping, ventilation, etc. There is also the possibility of stoping costs being increased in depth, due to the presence of a strike fault along the vein. On the basis of present metal prices, say with copper at 12¢ or under, we must hope therefore, that the Walker ore extensions in depth will not only be maintained in size, but that there will be an increase in metal content. Otherwise a profitable operation may not be possible.

The behavior of the vein in depth below the 700 level adit tunnel has been far from satisfactory. The extreme south end oreshoots have been on a par, or slightly better perhaps than above the adit level. The Central orebody which averaged around 4% copper above the 6th level, dropped to low grade at the 700, 800 and 900, and is too poor to mine at the 1000. The north orebody, 1200 feet long at the 700, is only half that long at the 1000, but the grade at the 1000 is better. The 712 oreshoot has not been tested below the adit level. The Piute oreshoot, over 1200 feet long at the adit level, is too poor to mine on the 900 and 1000 levels.

In the light of the above facts, the question naturally arises, what are the prospects, if any, that the Walker Mine can be rehabilitated? In my opinion, the prospects are poor but not entirely hopeless. There are several pieces of mine development work which should be carried out as rapidly as possible and, in addition, a number of drill holes are advisable. These recommendations are listed below:

Mine Work.

1. Continue 1017 drift north, followed by sufficient crosscutting to test the downward extension of 712 orebody. This might require 500 to 800 feet

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of drift and several hundred feet of crosscut depending upon results.

2. Extend the 1200 northerly from 706 A Shaft to develop the north orebody. Probably 1000 feet of work. A few hundred feet of drifting to the south from 706 S Shaft may also be advisable.

3. Extnd the 900 Piute drift northerly for 1000 feet with sufficient crosscutting or diamond drilling to prove the vein.

The above three projects will probably either make or break the Walker Mine in my opinion. In spite of the unfavorable behavior of the Walker vein in depth, the expensesof the above projects are justified, partly because of the excellent mine and milling plant facilities on the property, and because of the fact that the Walker vein zone is a very strong one, having been developed on strike for 7500 feet, of which, a length 4200 feet was minable at the elevation of the tunnel level. The chief copper mineral is chalcopyrite, and in one ore-shoot at least, the south orebody, the best grade of ore is at the bottom (10th) level.

In addition to the mine development work above suggested, I recommend the following diamond drill projects:

1. A hole run easterly 500'+ either from the 900 or 1000 level to cut the mineralization disclosed in old D.D.Hole #8 run from 6th Sub-level.

2. A hole run easterly into hangingwall country in the general vicinity of N-S coordinate 17800. The purpose of this hole is to test the possibility of a south continuation of the Piute zone to the east of the 712 and North orebodies. Old Drill Hole #15 indicates such an extension. As to elevation it can be run from the face of crosscut 1056-B or 1043-B, or from the 7th level, or 6th Sub-level. Favorable results should be followed by additional holes

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fanned from the same set-up or in next crosscut to south.

3. Drill westerly from the face of 1000 level crosscut just north of Raise 1026. Distance 500-600 feet. To test footwall vein zone in 715 A drift.

4. Drill northwesterly on 1000 level, probable location 1055 B crosscut, to test downward continuation of 517 vein zone .

5. Drill angle hole from surface 500 feet ahead of present 900 Piute north drift. To test extension of Piute vein zone. Any favorable results to be followed by a second hole.

In addition to the diamond drill projects above specified, there are a few shorter prospect holes in different parts of themine which can be drilled when convenient, but they are relatively unimportant. Some of the short hole projects recommended by Droubay should be replaced by crosscuts.

Yours very truly,

RHS:KM

cc: Messrs. Kelley
Weed
Lynn
Dugan

RENO H. SALES

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June 23, 1939

Mr. J. O. Elton, Manager
International Smelting and Refining Company
O f f i c e s

Subject:
WALKER MINING COMPANY
Drilling Program

Dear Sir:

Mr. Dugan and I have carefully considered the diamond drilling program at the Walker mine which was submitted June 6, 1939 and totaled 11,300 feet. The program was drawn up by Mr. Droubay and included every possible test which could be made by the diamond drill. Mr. Droubay listed these under three headings - "A", "B", and "C".

The recommendations listed under "A", which Mr. Droubay considered to be of importance, total 2800 feet. The projects which he has listed under "B" represent 2500 feet of work, and the projects listed under "C", which are still less important, represent 5000 feet of drilling. After carefully considering all of the recommendations, Mr. Dugan and I have agreed upon the following program:

400 LEVEL

One hole to be drilled southwesterly from the vicinity of 768 B raise for a distance of 300 feet. This hole to be drilled when the diamond drill machine is not busy drilling more important holes. This will prospect the main vein over 605 D stope.

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600 LEVEL

Several long holes were recommended from this level which we have decided to eliminate from the present budget. Several short holes were recommended to determine the limits of the known vein. These holes are being considered by the mining department.

700 LEVEL

No drilling is recommended from the 700 level.

800 LEVEL

No drilling is recommended from the 800 level.

900 LEVEL - Piute Ore Body

It is recommended that drilling be done both easterly and westerly from the north face of 904 B drift, 500 feet in each direction, to prospect for the continuation of the main vein to the north of the Piute ore body. This drilling will replace crosscuts. The hole which is recommended to be drilled south from the Piute shaft on this level will be held in abeyance until the results are obtained from the west drill hole above recommended.

900 LEVEL - North Ore Body

Drill northeasterly from 904 drift north near coordinate 15,150 North and 11,000 East, for a distance of 300 feet, to prospect the hanging wall of the main vein. This hole to be drilled when machine is not busy on more important holes.

900 LEVEL- South Ore Body

This hole to be drilled from 981 A drift south near coordinate 11,800 East and 11,100 North, for a distance of 200 feet easterly. This hole will prospect the footwall of the vein between the North and South ore bodies. This

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hole to be drilled when machine is not busy drilling more important holes.

1000 LEVEL

Between North and Central ore bodies, one hole drilled northeasterly from 1017 drift near coordinate 15,200 North for a distance of 200 feet, to prospect the northern split of the main vein.

One hole drilled from the breast of 1008 B, easterly for a distance of 300 feet, to prospect for the hanging wall splits of the vein.

One hole to be drilled northeasterly from the breast of 1056 B crosscut, northeast for a distance of 500 feet. This hole can be classed as general exploration.

One hole to be drilled westerly from the breast of 1055 B crosscut for a distance of 500 feet, unless granite is encountered before that distance is reached. If granite be encountered the hole should be stopped. This is also general exploration.

The last two holes are to be drilled for general exploration to see whether or not the shear zone continues at this point and contains enough values to justify further development work.

The total of the above holes amounts to 3300 feet and will take the place of at least 1,000 feet of crosscutting which would cost about $18,000. By drilling we will reduce this cost to about $5,000 and obtain information in excess of the 1,000 feet of necessary crosscuts to the extent of 2,300 feet.

In addition to the above, in the course of ordinary mining operations many crosscuts have to be driven from various points in the mine to determine the width of the ore. These crosscuts cost as much as the regular exploration crosscuts and can be supplanted by drilling. I feel certain that the use of the diamond drill at the Walker mine for prospecting and determining mining

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widths of the vein will save the company a great deal of money.

After the 1200 level has been driven, we feel that further drilling will be necessary on this level but until such a time as this level is opened up we are unable to determine where the drill holes should be located and in what direction they should be run.

As the 900 level north of the Piute advances it will probably be necessary to drill both easterly and westerly for a distance of 300 feet in each direction. This work, of course, will save many long crosscuts and is not included in the above recommended budget.

Very truly yours,

Tom Lyon

TL:P

cc: Mr. Dugan

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WALKER MINING CO.

ASSAYS OF ORE BLOCKS

Block	Cu %	Ag oz	Au oz	Per Ton	Per Cu.Ft.	Past Cost Per Ton Jan + Feb.	Per Ton	Per Cu.Ft.	Per Ton	Per Cu.Ft.	Per Ton	Per Cu.Ft.
PIUTE OREBODY												
615-725	0.94	0.50	0.040	$1.16	$0.098	1.97						
735-765 Pillars	1.06	0.80	0.050	1.73	0.144							
815	1.47	0.80	0.040	2.14	0.178	2.29						
815A	1.20	1.00	0.030	1.62	0.134	2.00						
825	1.06	1.00	0.030	1.40	0.116							
835	1.15	1.00	0.030	1.45	0.121							
845	1.24	1.60	0.050	2.49	0.207							
855	1.10	1.26	0.040	1.84	0.153							
865-865A	1.02	0.80	0.030	1.21	0.101							
915	1.25	1.00	0.030	1.70	0.141							
915A	1.10	1.00	0.030	1.47	0.122							
712 OREBODY												
405#2&#1 405A	1.96	2.00	0.040	3.61	0.302	2.28						
505#2	4.10	2.00	0.040	6.93	0.577							
505B	1.40	1.00	0.030	1.94	0.163							
505N	1.28	1.50	0.030	2.05	0.171							
605A-C	1.92	1.00	0.030	2.77	0.231							
517	2.24	0.70	0.020	2.92	0.243							
705A Pillars	1.48	1.20	0.080	3.28	0.273	3.60						
NORTH OREBODY												
210 & 220 Pill.	1.82	0.50	0.040	2.54	0.212							
240-440	1.25	0.50	0.020	1.09	0.091							
340	0.93	0.50	0.030	0.90	0.075							
340HW	1.50	0.50	0.030	1.81	0.151							
510-720B	1.10	0.30	0.030	1.06	0.087	1.36						
720A-620A	1.00	0.40	0.040	1.18	0.098	2.10						
920-820	1.58	0.80	0.050	2.54	0.211	1.46						
920A-820A	1.30	0.60	0.050	1.99	0.166	1.58						
920B	1.00	0.40	0.040	1.18	0.098							
930-830	1.52	0.60	0.050	2.34	0.195							
940-840	1.41	0.60	0.050	2.16	0.179							
940A-840A	1.37	0.50	0.050	2.04	0.169							
1020	1.44	0.73	0.042	2.08	0.173							
1030	1.45	0.50	0.030	1.72	0.143							
1040A-1040	1.46	1.00	0.030	2.03	0.169	1.53						
CENTRAL OREBODY												
480B	2.87	0.50	0.010	3.49	0.290							
780B	1.07	0.40	0.050	1.50	0.125							
880	2.08	0.70	0.080	4.05	0.346							
980A-980B	1.52	0.40	0.050	2.21	0.184							
1080	1.45	0.40	0.040	1.88	0.156							
1080B	1.50	1.00	0.040	2.32	0.193							
SOUTH OREBODY												
650A-750A	1.36	0.94	0.056	2.42	0.201							
775	1.01	0.70	0.045	1.48	0.123							

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F. 423 3-9-38 2M

INTER-DEPARTMENTAL CORRESPONDENCE

Copy

MINING DEPARTMENT

INTERNATIONAL SMELTING AND REFINING COMPANY

818 KEARNS BUILDING SALT LAKE CITY, UTAH

June 19th 1939.

SUBJECT:

WALKER MINING COMPANY

Mr. J. O. Elton, Manager,

O f f i c e s.

Dear Sir:

This letter is an answer to yours of May 27th with reference to the Walker Mine operation which has been showing an operating loss the last few months.

As a result of a two weeks inspection trip, during which time everything in connection with the operation was carefully considered, the following conclusions were reached.

ALL BASED ON 10¢ COPPER

No. 1 On the present production basis, coupled with the grade of ore produced (1100 to 1300 tons. 1.25% Cu. .60 to .70 Oz. Ag. and .03 to .04 Au.) Walker mine cannot operate on a break-even basis and do the long-range development work now contemplated on the lower levels. The operating loss every month will represent the money which is spent on this lower level development.

A break-even basis can be maintained by doing only the current development work above the 700 level in connection with present mining operations. This development work is showing very good results and developing new ore, especially along the 517 Fissure in the 712 orebody, but the ore reserve cannot be built up fast enough for large production.

No. 2 The lower level development on the 900 level north in the Piute and the 1200 North & South from 1080 Winze should be classed as a Special Development Project similar to the lower level development project below the 700 level at Mountain City, and a special appropriation allowed for this work. This expenditure would range from $7,000 to $12,000 per month, depending on the development program adopted, which, in substance, is as follows:

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	Per Month
1201 DN, with an estimated advance of 12 feet per day, or 312 feet per month (1500 to 2000 Feet)	$5,500
904 DN, with an estimated advance of 12 feet per day, or 312 feet per month (1500 to 2000 Feet)	5,000
1200 feet of prospect diamond drilling per month .....(One Machine)	2,000

There is also under consideration a project by which pillars could be won with the use of a diamond drill operation, the preliminary figures indicating that sufficient reduction in costs could thus be attained to offset cost of development diamond drilling set forth above. Diamond drilling is deemed very necessary in conjunction with all Walker development.

Based on the above estimates, the Special Appropriation would be only $1,000 to $7,000 more than a shutdown expense of $6,000, from which latter expenditure we would derive absolutely no benefit.

No. 3 A long range development program with the mine shut down was also considered. No ore would be mined and everything concentrated on speedy development of the 900 Piute and 1200 central ore bodies. This program would entail an expenditure of about $33,000 per month for at least three months with an average advance per month of 1,350 feet on the combined 900 and 1200 levels.

This program is not recommended as no collateral in the form of refined copper would be received, thus making the development expense a heavy net out-of-pocket burden.

No. 4 A complete shutdown without any development was also studied and considered very carefully. Without pumping the estimated expenditure would be $5,000 per month; with pumping $6,000. In either event, the fixed charges amount to $2,300 per month, or 40% of the shutdown expense.

There is a heavy investment at Walker in the form of buildings and equipment, and the Winter snows cause irreparable damage if the buildings are not properly cared for. Besides, when the mine is operating, rents and concessions net about $2,000 per month. This income is, of course, lost when the mine is closed.

The expenditure necessary to reopen Walker after the last shutdown would have financed a long-range development

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program for at least six months. In other words, a shutdown of Walker should be the last thing to consider, for it really means the virtual abandonment of the property.

The final conclusion reached after carefully considering things from every angle is that the better plan would be to continue to operate as we are, classing the lower level development as a separate project in itself, supplemented with some diamond drilling, and to be financed above a break-even on the other mining operations. This is what is recommended, and we believe the present operation is fully justified and much better than a shutdown.

Of course, the question is a financial one, as the International Company will have to finance the set-up to the extent of $78,000 to $90,000 per month after gold and silver credits, but in return collateral would be created in the shape of finished copper which would have a value of about $77,000. This latter assumption is based on a copper price of 9.8475¢ after selling and delivery expense.

The direct and indirect benefit of the Walker operation to the smelter is unknown, but must consist of something fairly substantial over any period of time, and it is only fair to consider it when looking at the Walker picture.

Quick development is what Walker needs, and the time to do it is now before the available ore is exhausted. This development can be done with a nominal expenditure over shutdown expense and is vital to the future of the Walker mine.

At one time in Walker's history only the Central orebody was known. Then the North and South ore bodies were found; finally, 712 and the Piute were discovered. This ore zone was over a mile long. Is it not reasonable to assume that there may be other ore bodies north of the present Piute and covered with lava? This also applies to the downward extension of the Central orebody on the 1200 level.

Recent developments in the 712 orebody on 517 Fissure on the 400 level shows much promise and looking better every round. The only way it was developed was to drive on a small streak until it began to open up.

The Piute orebody was supposed to have terminated on a fault at the North end. Present developments in 904B Drift disclose that this fault may not be of great importance as fairly good mineralization is showing up in the drift beyond this fault. Some of the samples run .5% Cu., and it is possible that we may now be in a lean zone or

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gap similar to that which occurred between the North and 712 ore bodies.

The hard work has been done getting down to the 1200 level, and we should have a look at the vein North and South of the winze. Such a large, wide ore body as we have had above should not terminate abruptly below the 1000 level.

Looking at it from every angle I think this lower level development is fully justified and should receive very careful consideration.

It has taken some time to put the mine in shape and recover from the effects of the last shutdown. Physically, it is in much better condition than formerly, and stopes are now being worked which were considered lost.

If allowed to operate, Mr. Bayer estimates that working 26 days per month, the daily production should be

		Cu.	Ag.	Au.
1300 tons ore	assaying	1.34%	0.74	0.0437
64.7 " concts.	"	23.91%	11.45	0.632

29,842 pounds of recoverable copper per day.
775,915 " " " " " month.

Research work carried on in the mill in the last two months indicate that a better recovery can be obtained with finer grinding. This will be carried to a conclusion.

However, no matter what set-up is decided upon it will required all possible operating economies and complete coordination of all operating units in order to achieve the necessary results.

To operate more efficiently and speed up development work, at least ten more drilling machines are needed; also one large and one small mucking machine. The scarcity of drilling machines is one contributing factor to high costs at Walker.

To effect greater economies in pumping a new pump may have to be purchased for the 1200 level, provided the ones we have are not suitable, but it will pay for itself in a few months.

P e r s o n n e l:

There is a much better class of miners now at Walker than formerly, and if assurance could be given of continued operations on a 26-day basis, even better miners would be seeking employment there.

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An exceptionally high class grade of engineers compose the staff. They are well trained, young, ambitious and keenly aware of the responsibilities placed upon them.

The Mine Superintendent and the shiftbosses under him are working together 100% and doing a good job. This could not be said of the former operation.

The Mill personnel is excellent and everyone of them is trying to improve the metallurgy.

Certain economies have been ordered which should benefit the whole operation.

In conclusion I earnestly recommend that Walker be allowed to operate and vigorously push its development work. In this event and in order to relieve the demoralizing effect of the uncertainty prevailing among the employees, it is suggested that any decision should, if consistently possible, consider a minimum period of time.

Yours very truly,

John F. Dugan.

JFD:S.

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Walker

April 26, 1939.

Mr. Seth K. Droubay,
Walkermine,
Plumas County, Calif.

Dear Mr. Droubay:

I received your letter of April 21st with geological sketches showing recent advances made in 471-C drift and 904-B drift in the Walker Mine, also copy of recommendation No. 22, and three tabulations of available ore reserves in the mine on February 1st, March 1st and April 1st.

I note the following monthly decreases in ore reserves to be:

During	January	22,399 Tons
"	February	22,599 "
"	March	5,994 "

which, on April 1st leaves a total reserve of 1,338,922 tons, averaging 1.27% copper.

I concur with your suggestion to drive 471-C drift southwesterly beyond 559-B Raise on the extension of 712 Ore zone, in preference to drifting on the weaker vein structure exposed in the southwest faces on the 500 and 600 levels. Last summer, Mr. Kildale and I traversed the surface above this mineralized zone and concluded that it would be desirable to drift some distance to the southwest towards a plug of diorite porphyry, which terminates a highly silicified, iron-stained, sheared zone that cuts across the schist. The porphyry plug is approximately 1600 feet, S. 50° W. from the face of 471-C drift.

I also note that Recommendation No. 22 proposes a plan for the normal development on the 900 level of the downward projection of the south

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portion of the Piute orebody. This proposed work should make available a considerable tonnage of ore.

I find that our maps do not show the position of diamond drill hole No. 10, drilled from the surface and in the area north of the Piute orebody. Did this hole cut any mineralization? Judging from the northwest strike of the northernmost ore found in 904-B north drift, it may be advisable to soon turn a crosscut to the west from the north face of the drift to test the possibility of the vein structure extending in that direction.

I am glad to know that Virgil Chamberlain is rendering good work.

Yours very truly,

MHG:KM

M. H. GIDEL

cc:Messrs. Kelley
Weed
Sales-(Inc.sketches and
Lyon Apr.1, ore reserve
Dugan Statement).

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FORM 396 2-39 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

L. F. BAYER, MANAGER

April 21, 1939

Mr. M. M. Gidel, Asst. Chief Geologist
Anaconda Copper Mining Company
Butte, Montana

Dear Sir:

Please find enclosed several geological sketches that may be of interest to you, a copy of recommendation #22 as submitted to Mr. Lyon and Mr. Dugan for approval and the last three monthly tabulations of our available ore reserves which should bring up to date the set I had been sending to Mr. Sales from time to time.

The composite sketch and section of the 517 footwall fissure zone of the 712 Orebody gives a picture of development to date. 619E has been stopped for the time being. Mineralization was so weak and scattered, that it seemed wiser to see what the extension of 471C beyond 559B raise would bring. Although we have ample information and mineralization to warrant a raise being driven, in preparation of mining ground under the 500 Level, we may have to extend 654ExcNW to determine whether the vein steepens or pinches below the 500 Level.

The 904B DN from the Piute Orebody is well under way. We are out of the grey, sheared fissle schist and into a more crystalline formation. It may be wise to extend a crosscut to the footwall slip to be sure we do not get too far away from it.

If 904B is continued on its present course for 800 feet it will be 500 feet in the hanging wall of the ground explored by surface diamond drill hole #10.

Recommendation #22 gives a general picture of how the ore along the Piute 800 Level pinches to the south. Although it is questionable whether strong mineralization will extend to the 900 Level, there will be a substantial tonnage of ore to be mined from below the 800.

Vergil Chamberlain is getting along very nicely.

(Copy to:
Messrs. Kelley
Weed
Sales
SW Lyon
Dugan

Very truly yours,

Seth K. Droubay

S. K. Droubay

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March 14, 1939

Mr. S. K. Droubay
Walker Mining Company
Walkermine, California

Dear Red:

Mr. Lyon has requested me to acknowledge receipt of your last letters which were accompanied by the geological notes and progress maps for the Walker mine for the month of February. We have noted all your comments on the same.

The new mineralization exposed in 673 E. crosscut in the 517 ore zone looks interesting. I hope that you can raise on it to the 500 level and can follow it southwesterly in case the 517 ore shoot should rake in that direction. I note also that 471 C drift on this vein did not connect directly with the top of 559 B raise. Didn't the vein extend to the top of 559 raise or is there a split here?

The mineralization in the 888 drift south on the Piute ore zone seems to have become weaker and more scattered south of 828 A and 829 A crosscuts but I believe some additional drifting and crosscutting according to your previous recommendation should be done here before this exploration is stopped.

Regarding the northward exploration on the 900 level in the Piute ore body and your question to Mr. Lyon concerning the direction to be taken by the 904 B heading, we are quite sure that Mr. Gidel's idea is to continue the drift northerly along the main footwall slip. Such a drift will serve to prospect the footwall fault and at the same time determine if there are any other faults or slips branching off to the northeast in the footwall of the one already known. I note that the last geological notes on the 800 drift north show the footwall

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fault swinging slightly more to the northwest but it nevertheless should be prospected for some distance to the north on the 900 level as long as it shows any strength or any mineralization. Your original recommendation sheet for the extension of 904 B drift north shows the proposed drift following close to the northward projection of the footwall fault and I believe that this is Mr. Gidel's recommendation also. The question in your mind is apparently whether to continue 904 drift along the main footwall fault or to drive it northerly on a north-south line and to crosscut at intervals in two directions - both to the footwall fault and to the east split. I believe that following the fault will more satisfactorily prospect the footwall zone and the total amount of crosscutting will of course be the same by either method; and I believe that this was what Mr. Gidel meant in his letter to Mr. Lyon. I would therefore start the new drift along the fault which it has previously been following and if this should not be according to Mr. Gidel's ideas it can be swung off into a north-south line later.

Trust that the new long-range development work here and on the 1200 level will soon be under way and that you are gradually succeeding in getting enough stopes started to relieve the pressure for mill feed.

Hope that all goes well and here's sending best regards from Mr. Lyon and myself.

Sincerely yours,

MBK:P M. B. Kildale

cc: M. H. Gidel

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Walker

Feb. 20, 1939.

Mr. S. K. Droubay,
Walkermine,
Plumas County, Calif.

Dear Mr. Droubay:

Mr. Virgil R. Chamberlain, who has been employed to fill the vacancy at the Walker Mine, resulting from the transfer of your assistant Edward Broadwater to a position in Chile, started to work in our Geological Department on Feb. 6th, and is leaving this evening, Feb. 20th, for the Walker Mine. He has received a check for $84.85 (excluding $0.86 Social Security) for 15 days work while in Butte, which will be charged to the Walker Mining Company. Therefore, he will have 8 days more pay due him through the 28th of February on your payroll. His salary rate is to be $160.00 per month.

Railroad transportation, amounting to $39.25 from Butte to Spring Garden, has been purchased here and will also be charged to the Walker Mining Company. Chamberlain may have a small additional expense for meals enroute, which he will submit through you.

Mr. Chamberlain was formerly a sampler at the Leonard Mine. During the past two weeks he has been given a review of our work; taking geological notes, posting, making cross-sections, summarizing sampling and stope data, all of which we feel will be of use to him in assisting in your work. Broadwater was given similar preliminary training in our Department.

You will find that Chamberlain is ambitious and desirous of doing his best on the job.

MHG:KM
cc:Mr.Tom Lyon
Mr.W.J.Wilcox

Yours very truly,

M. H. GIDEL

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Walker Mine

Feb. 8, 1939.

Mr. Tom Lyon,
818 Kearns Bldg.,
Salt Lake City, Utah.

Dear Tom:

Thank you for copy of Mr. Kildale's letter concerning the recommendations for development at the Walker Mine, which were submitted by Mr. Droubay.

With limited funds for development, Recommendation No. 15, proposing development of the North Orebody on the 1200 level, undoubtedly is the most important one to start first, to determine whether or not commercial grade ore extends beneath the best ore exposure on the 1000 level.

In regard to prospecting the northerly extension of the Piute orebody on the 900 level (Recommendation No. 18), I believe it would be best to extend the drift on its present course through all possible footwall branches of the fault, 100' to 200' into solid ground before turning a crosscut to the east to test for a right hand displacement or an eschelon branch of the vein structure. In the stope at the north end of the 700 level, I noted "drag" blocks of vein material to the right, implying a throw in that direction. The first test crosscut should give some idea of structure to the north, and thereby govern the plan of prospecting beyond that point; which might be considerably different from that sketched on the Recommendation Sheet. Any lateral that is to be driven should not be too distant from the vein structure.

Should a diamond drill be available at the mine, I would suggest that some drilling be done in lieu of crosscutting off the new lateral. If ore should be found in any of these projects, drifting should be done on same in preference to lateral work, unless heavy, wet ground should preclude making desired advances.

In other words, the recommendations as written suggest a plan for development, subject to whatever changes it may be desirable to make as the work proceeds, based on the relation and character of vein and fault structures.

Yours very truly,

MHG:S

M. H. GIDEL

cc - Mr. Reno H. Sales
Mr. C. E. Weed

2/9/39
Sent sketch of
1st Fl. - N. Face Piute
Orebody on 700 Level.
M.H.G

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Feb. 8, 1939.

Mr. Tom Lyon,
818 Kearns Bldg.,
Salt Lake City, Utah.

Dear Tom:

Thank you for sending the two copies of Seth K. Droubay's "Statement of Ore Reserves" at the Walker Mine as of January 1, 1939. This repast has been well prepared, the Longitudinal Section being a desirable supplement. I shall send one copy to the Eastern Office.

Yours very truly,

M. H. GIDEL

MHG:S

cc - Mr. Reno H. Sales
Mr. C. E. Weed

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Feb. 6, 1939.

Mr. W. J. Wilcox,
General Office,
Butte, Montana.

Dear Sir:

Pursuant to the request of Mr. Tom Lyon, of the International Smelting and Refining Company, Mr. Virgil R. Chamberlain will start to work today in the Geological Department at Butte, for a period of about two weeks to obtain preliminary training in our local work, following which he will go to the Walker Mine as a junior geologist and sampler. Therefore, Mr. Chamberlain's time is to be charged to the Walker Mining Company beginning today, Feb. 6th. His base rate of salary is to be $160.00 per month. The Walker Mining Company will stand the expense of transfer from Butte to Walkermine.

Mr. Chamberlain was employed as a sampler at the Leonard Mine, his last shift being on January 23rd, following the closing of the mine.

Yours very truly,

MHG:KM
cc:Mr.Tom Lyon

M. H. GIDEL

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Form 16

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1939 FEB 3 PM 9 31

M H GIDEL=

:526 HENNESSY BLDG BUTTE MONT=

:PLEASE GIVE CHAMBERLAIN TWO WEEKS TRAINING AND SEND HIM TO WALKER ADVISE DROUBAY WHEN HE WILL LEAVE. WALKER WILL STAND EXPENSE OF TRANSFER=

:TOM LYON.

Chamberlain started in Prod. Dept on Monday Feb. 6th preliminary training for 2 weeks - base rate $160 per month.

M-H-Gidel

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TIME FILED

SEND the following Telegram, subject to the terms on back hereof, which are hereby agreed to.

Form 2

BUTTE, MONTANA, FEB. 2, 1939.

TOM LYON,
818 KEARNS BLDG.,
SALT LAKE CITY, UTAH.

VIRGIL CHAMBERLAIN MINES GRADUATE WHO WAS ON GEOLOGICAL SURVEY WORK LAST SUMMER RECENTLY SAMPLER AT LEONARD, SINGLE, AVAILABLE FOR WALKER JOB AT ONE HUNDRED SIXTY MONTHLY STARTING RATE STOP CAN REPORT IMMEDIATELY BUT SUGGEST WE GIVE HIM COUPLE WEEKS PRELIMINARY TRAINING IN BUTTE GEOLOGICAL DEPARTMENT ON WALKER ACCOUNT. ASSUME WALKER WOULD PAY TRAVELING EXPENSE FROM BUTTE STOP WE RECOMMEND HIM WILL AWAIT YOUR REPLY.

M. H. GIDEL

(Chg.A.C.M.Co.)
(Geological Dept.)

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1939 FEB 2 PM 2 15

KHA73 22=SALTLAKECITY UTAH 2 205P

M H GIDEL=

526 HENNESSY BLDG BUTTE MONT=

BROADWATER HAS RECEIVED NOTICE TO BE IN NEWYORK AS SOON AS POSSIBLE. HAVE YOU SOMEONE IN MIND TO REPLACE HIM AT WALKER=

TOM LYON..

Virgil R. Chamberlain
Phone 3413.

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INTERNATIONAL SMELTING AND REFINING CO.

ANACONDA
from mine to consumer

TOM LYON

GEOLOGICAL DEPARTMENT
KEARNS BUILDING

SALT LAKE CITY, UTAH

January 20, 1939

Mr. M. H. Gidel
P. O. Box 26
Butte, Montana

Dear Murl:

Enclosed herewith is a 50-scale print of the cross-section through 1082 winze at the Walker mine which you requested at the time of your last visit here. This section shows the geology of 1101 crosscut and the elevation of the new 1200 level work which is to be started.

I am having your copy of the North Lily composite geological map posted up to date and it will be sent to you within a day or two.

Sincerely yours,

Mike

MBK:P

M. B. Kildale

Encl.

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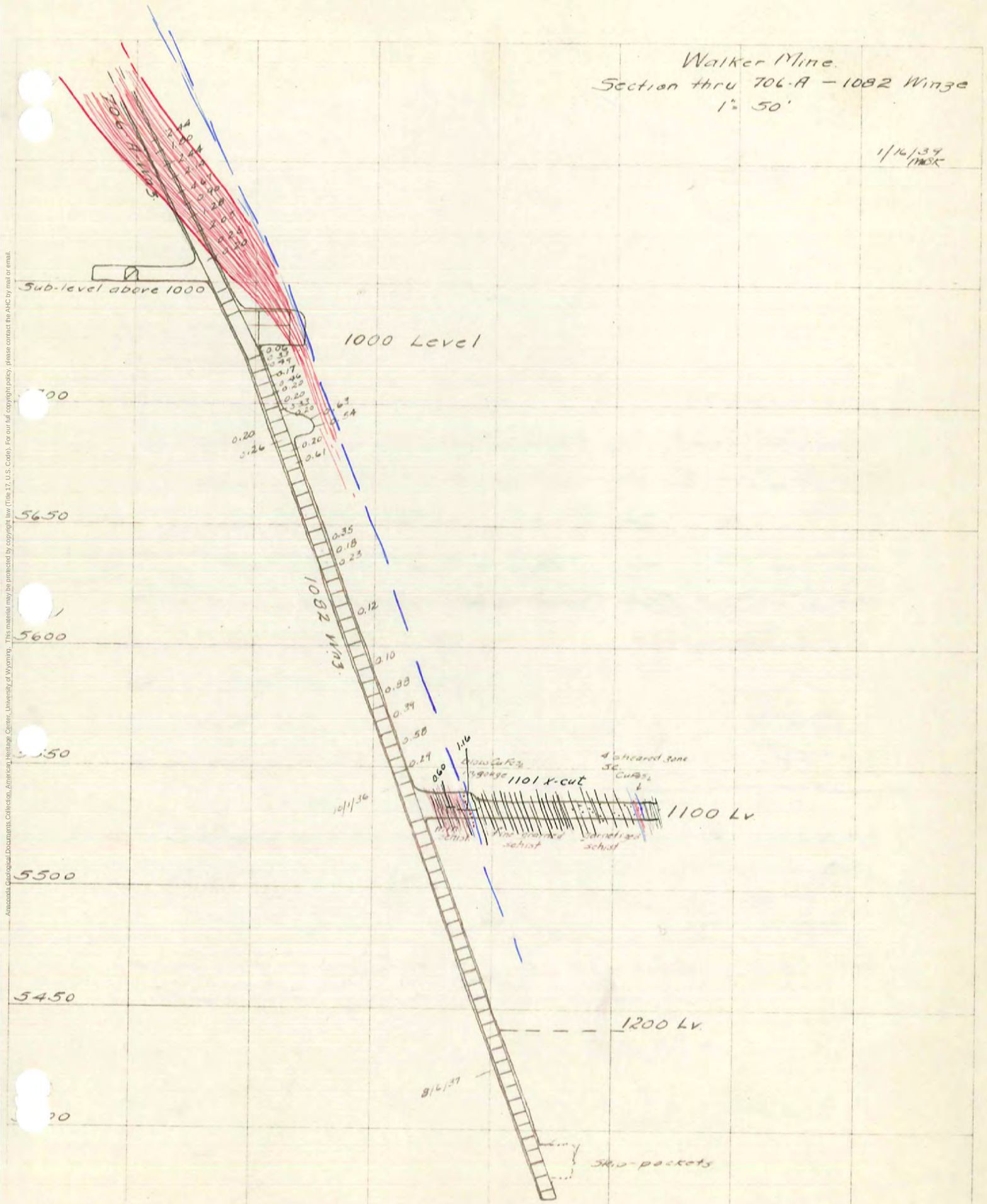
I. S. & R. FORM 16-G

Walker Mine.
Section thru 706-A – 1092 Winze
1" = 50'

1/16/37
MSK



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INTERNATIONAL SMELTING AND REFINING CO.

ANACONDA
from mine to consumer

TOM LYON

GEOLOGICAL DEPARTMENT
KEARNS BUILDING

SALT LAKE CITY, UTAH

February 6, 1939

Mr. M. H. Gidel
P. O. Box 26
Butte, Montana

Dear Murl:

Enclosed are two copies of the ore reserve report as of January 1, 1938 of the Walker mine by Seth K. Droubay.

Very truly yours,

Tom Lyon

TL:P

2- Encl.

2/8/39 Copy sent to Mr. Wm. Fausak. M.H.G.

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INTERNATIONAL SMELTING AND REFINING CO.

ANACONDA
from mine to consumer

GEOLOGICAL DEPARTMENT
KEARNS BUILDING

SALT LAKE CITY, UTAH

TOM LYON

February 3, 1939

Mr. M. H. Gidel
P. O. Box 26
Butte, Montana

Dear Murl:

I have asked Mr. Kildale to write a letter concerning the recommendations for development at the Walker mine which were submitted by Mr. Droubay, a copy of which were sent to you.

I am sending you a copy of Mr. Kildale's letter regarding the matter for your consideration.

Very truly yours,

Tom Lyon

TL:P

Encl.

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January 28, 1939

Mr. Tom Lyon

O f f i c e s

Dear Sir:

The following comments are submitted on the last four development recommendations for the Walker mine (Nos. 15, 16, 17, 18) as submitted for your approval by Mr. Droubay in his letter of January 25, 1939.

Recommendation No. 15

This is the recommendation applying to the drift northerly on the 1200 level off of 1082 winze. It follows the general plan already agreed upon and appears to be satisfactory with the possible exception of the two pairs of crosscuts designated to be run from this drift at distances of 140 and 340 feet from the winze. If no strong mineralization is encountered along the fault zone in the crosscut easterly directly off the winze station, it is believed that the north drift should be pushed as rapidly as possible along the footwall of #1 fault until a point under 1060 A drift and on the downward projection of the north ore body is reached -- without delaying this drift to run the first two sets of crosscuts as shown on the recommendation sheet. When a point about 600 feet north of the winze is reached, crosscutting of the zone should be done to locate the downward projection of the north ore body along which, if found, the drift can be continued to the north as shown.

Recommendation No. 16

This applies to a drift southerly from 1082 winze on the 1200 level. Its general plan is suitable but if sufficient development funds are not available at the present time for both the north and south drifts on the 1200 level, this proposed drift to the south should be left in abeyance until the north drift is completed. The ore zone of the Central ore body on the 1000 level in this area is narrow and it is believed that the northerly development drift under the north ore body is more important than this drift to the south.

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Recommendation No. 17

This applies to the continuation of the south drift on the 800 level in the Piute ore body. It now appears possible that the southern limit of the commercial ore on the 800 level has been reached in the vicinity of 828 A and 829 A crosscuts. However, as shown on the recommendation sketch, the 886 drift on the 800 level has reached the area below the point where the Piute vein splits into two branches on the 700 level, one split following the footwall fault to the south, the second branch turning to the southeast. Thus the 800 level drift should be continued along the footwall fault as shown on the sketch and the proposed crosscut easterly at a point about 100 feet ahead of the present face should be driven a sufficient distance to be sure of cutting any southeasterly split as shown on the 700 level. The mineralized zone shown as being cut in D.D. hole #15, drilled from the sub-level above the 700, may represent this easterly branch. Recommendation as outlined covers these possibilities except that the easterly crosscut as shown should probably be extended about 50 feet further than shown.

Recommendation No. 18

This recommendation applies to the prospecting of the area north of the present Piute ore body on the 900 level off of the Piute shaft, according to the general plan already agreed upon. It is recognized that in this area two possibilities must be tested - (1) the continuation of the ore zone northerly along the flat footwall fault and (2) the presence of other ore bodies along the northeast-striking fault which appears to branch off the footwall fault in this area. This fault may itself be mineralized or may be a fault of the "cross-over" type which will lead to another ore body parallel to but lying north and east of the Piute ore body. The recommendation as submitted calls for the continuation of 904 B drift northerly along the footwall fault, with frequent long crosscuts easterly toward the northeast branch fault. It appears to the writer that these long crosscuts are neither so economical nor so satisfactory as would be a drift directly along the northeast fault. Such a drift will require less footage than the long crosscuts and give more geological information. The geological mapping of the two drifts along the footwall and northeast faults should detect any branching mineralized zones which may split off into the area between the two drifts. Hence it is recommended that this recommendation be revised to call for a drift along the northeast fault and the elimination of the long crosscuts off of the extension of 904 B drift.

Respectfully submitted,

M. B. Kildale

MBK:P
cc: Mr. M. H. Gidel
Mr. J. F. Dugan

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Walker

Feb. 1, 1939

Mr. Tom Lyon,
820 Kearns Bldg.,
Salt Lake City, Utah.

Dear Tom:

I received a copy of S. K. Droubay's letter of January 25th, descriptive of and including four recommendations for development work as planned on the 800, 900 and 1200 levels of the Walker Mine. These are good recommendations, especially the proposed work on the vein to the north and south of the shaft on the bottom or 1200 level.

In discussing the matter with Mr. Weed a few weeks ago, he requested that drifting be done on any ore that may be cut in new foot-wall or hanging wall test crosscuts, in preference to continuing the laterals parallel to an orebody.

Yours very truly,

MHG:KM
cc:Mr.C.E.Weed

M. H. GIDEL

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ANACONDA COPPER MINING CO.

COPY

Feb. 1, 1939

Mr. Tom Lyon,
820 Kearns Bldg.,
Salt Lake City, Utah.

Dear Tom:

I received a copy of S. K. Droubay's letter of January 25th, descriptive of and including four recommendations for development work as planned on the 800, 900 and 1200 levels of the Walker Mine. These are good recommendations, especially the proposed work on the vein to the north and south of the shaft on the bottom or 1200 level.

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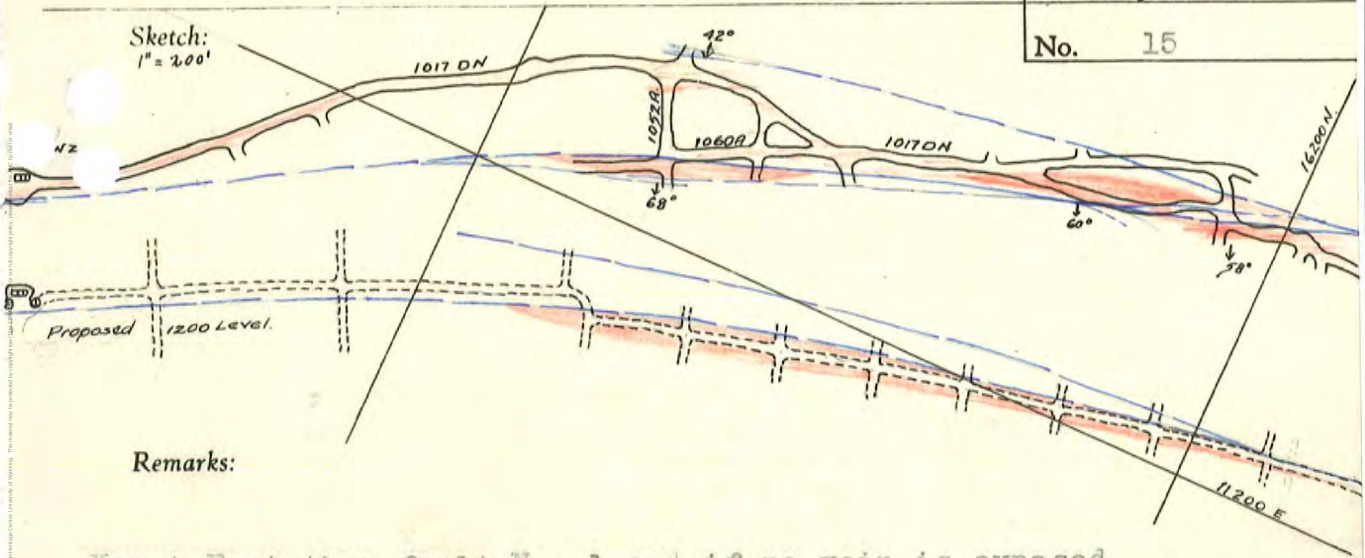
RECOMMENDATION FOR DEVELOPMENT WORK

GEOLOGICAL DEPARTMENT

INTERNATIONAL SMELTING & REFINING CO.

Mine	Walker
Level	1200
Ore Body	North
No.	15

Sketch:
1" = 200'



Remarks:

X-cut East thru fault No. 1 and if no vein is exposed immediately, drift Northerly along foot-wall mineralization. Drift along and cross-cut vein when it is located. Cross-cutting and direction of lateral to be controled by position of mineralization and faulting.

Amount of work 1400' Drift. 800' XC. *Recommended by* S. K. Droulay

Date of recommendation 1-20-39

Date started _____ *Approved by* _____

Date completed _____

RECOMMENDATION FOR DEVELOPMENT WORK

GEOLOGICAL DEPARTMENT

INTERNATIONAL SMELTING & REFINING CO.

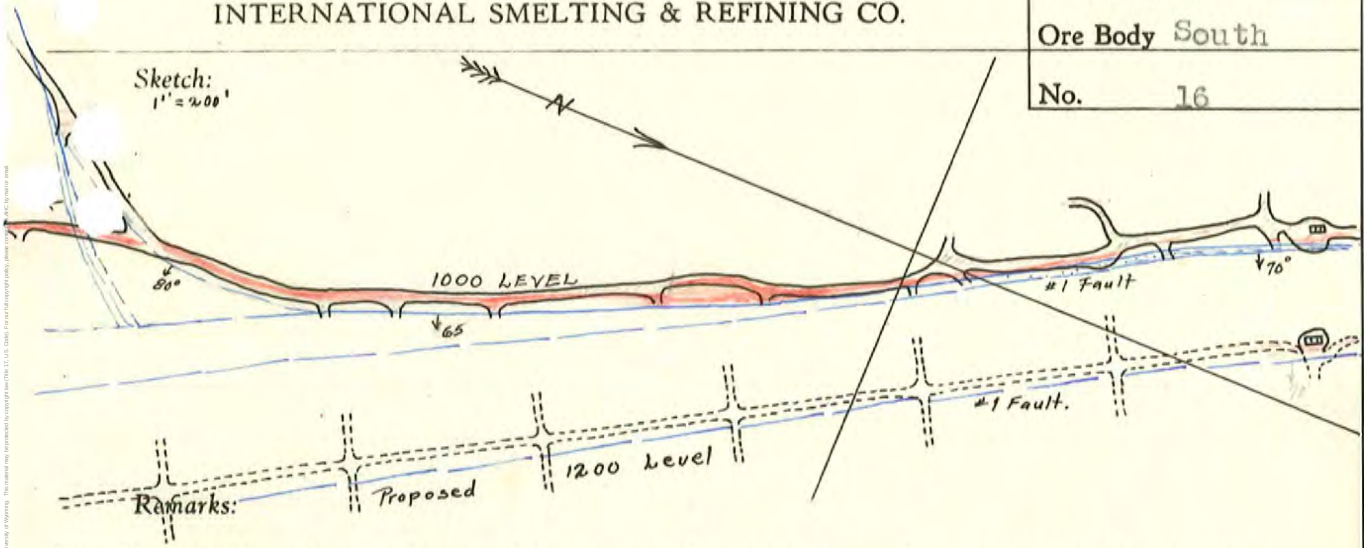
Mine Walker

Level 1200

Ore Body South

No. 16

Sketch:
1" = 200'



Remarks:

Drift south along footwall mineralization and prospect footwall and hanging wall at 200 foot intervals. If no vein is located to drift on, it will be necessary to prospect farther into the foot wall and hangingwall than indicated on the sketch. Exact position of drift and length of cross cuts will depend on the location of mineralization and faulting.

Amount of work 1300'Drift & 600'X cuts *Recommended by* S. K. Dronbey

Date of recommendation January 23, 1939

Date started _____ *Approved by* _____

Date completed _____

RECOMMENDATION FOR DEVELOPMENT WORK

GEOLOGICAL DEPARTMENT

INTERNATIONAL SMELTING & REFINING CO.

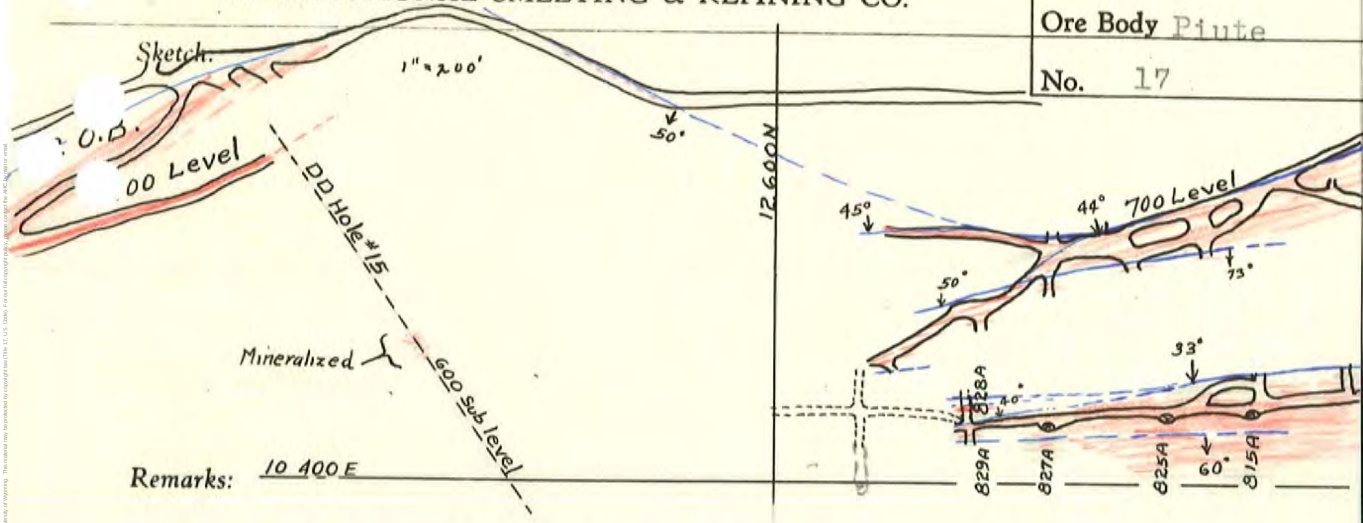
Mine Walker

Level 800

Ore Body Piute

No. 17

Sketch.



Stop 829A. XCE until 827A Rs., (+50° in hanging wall) is up 40 feet. If 827A Rs. shows no minable ore, continue 886 DS along foot wall mineralization to end of ore. Longer range prospecting South should be done from the 700 level to avoid hoisting waste.

Amount of work 200' drifting:60' X-cut. *Recommended by* S. K. Broadley

Date of recommendation 1/23/39

Date started _____ *Approved by* _____

Date completed _____

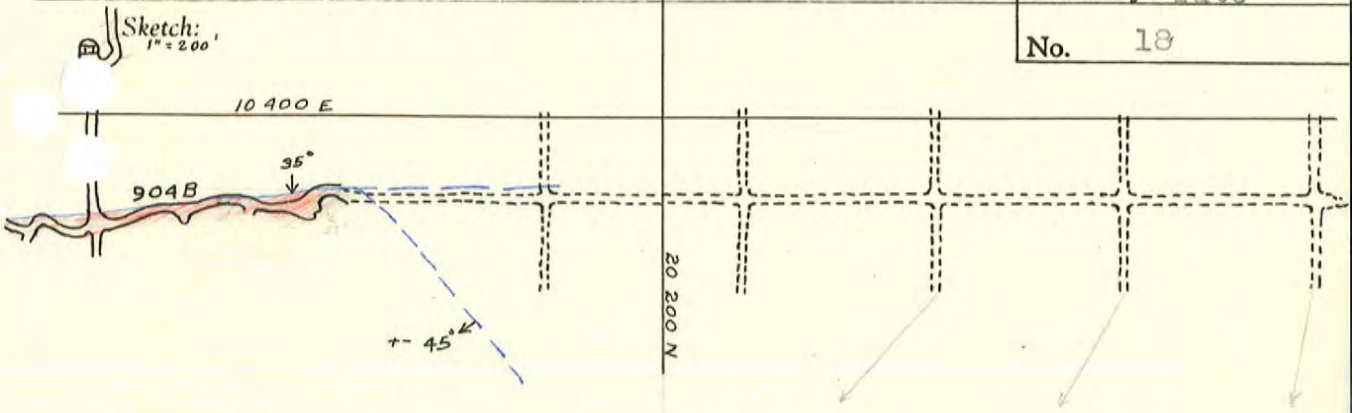
RECOMMENDATION FOR DEVELOPMENT WORK

GEOLOGICAL DEPARTMENT

INTERNATIONAL SMELTING & REFINING CO.

Mine	Walker
Level	900
Ore Body	Piute
No.	18

Sketch: 1" = 200'



Remarks: Extend 904 BDN and prospect footwall and hanging wall every 200 feet. Longer range prospecting than is shown on the sketch should be done if no extension of the piute mineralization is located within the zone indicated.

Amount of work 1000' drift & 1000' X cut *Recommended by* S. K. Drouboy.

Date of recommendation January 23, 1939

Date started _____ *Approved by* _____

Date completed _____

FORM 396 3-31-37 2M

WALKER MINING COMPANY

WALKERMINE

PLUMAS COUNTY, CALIFORNIA

L. F. BAYER, MANAGER

January 25, 1939

Mr. Tom Lyon
Chief Geologist
818 Kearns Bldg.
Salt Lake City, Utah

Dear Tom:

Please find enclosed four recommendations for development work at Walker Mine. These have been more or less under consideration for some time, and now that the mine will soon be in condition to have this work started, I have drawn up the 200 scale sketches.

As the No. 1 hanging wall fault steepens below the 1000 level, being 70° between the 1000 and 1100 levels, it is questionable just how it will act to the north and south. Recommendations No. 15 and No. 16 were drawn up by projecting structure to the 1200 level and making it fit the known position of the fault at 706 winze.

Recommendations No. 17 and No. 18 have to do with Piute. No. 18 is to prospect for ore north of our present extreme exposures of mineralization as recommended by Mr. Sales in his letter of October 27, 1937, a copy of which was sent to you. The slip coming in from the northeast just ahead of the present face is projected down from the 600, 700 and 800 levels. It may be well to prospect back through this from a point several hundred feet ahead if no mineral is found in the zone indicated. No. 17 is to keep the 800 level from taking off on an east split, as happened on the 700 and 600 levels. It looks as though we are at the end of our commercial ore here, but we should continue going south as long as we are able to drift on ore. When this fails, any further prospecting could be done from the 700, where the level is not so congested for handling waste. We have located hanging wall with ±50° raises, which cost much less to run than do crosscuts.

All copies of the annual ore reserves were sent to you, and the additional long section that you requested will be sent in as soon as Ed Broadwater can finish making it up.

In the past, Mr. Sales requested that I keep him posted on our development work here. He wrote me on January 6th that he was going to South America and that in communicating geological matters to you I should send a copy of the letters and maps to Mr. Gidel at Butte. I will also send Mr. Dugan a copy of the recommendation maps, and tell him they are subject to your approval.

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Any comments or suggestions as to the proposed development will be very gladly received.

Respectfully yours,

S. K. Droubay.

S. K. Droubay

cc-Mr. Gidel

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