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February 23th, 1944

Mr. W. H. Loerpabel, Manager  
American Smelting & Refining Company  
P. O. Box 2229  
Tucson, Arizona

Re: Allis Group of Claims

Dear Mr. Loerpabel:

I acknowledge your letter of February 23rd in regard to the above, also the map which you returned, and copy of Mr. Shedden's letter to you of February 11th, which I have gone over with much care.

Mr. Shedden is so much more familiar with the conditions in the Patagonia District and with the work which was done by your Company on the California Claim that I do not feel that I am in any position to argue against his conclusions, although I regret that a raise was not driven from the end of the long adit tunnel so as to definitely determine the conditions in the ground above.

I fully realize that the general results of your work on this property have been extremely disappointing and involved a considerable loss to your Company, and I can well understand that you do not feel justified in spending additional money to explore the downward extension of any small vein in the rhyolite, and although this is disappointing to both the Allis Company and to me personally, I presume that we can only accept your decision as final.

Would you kindly call Mr. Ring's attention to the fact that I have not yet received any statement of the supplemental royalty and payment for same, although he sent me the preliminary settlement with his letter of January 10th. *in Ltr # 6.*

Yours very truly,



GMC/b

AMERICAN SMELTING AND REFINING CO.  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

*Copy*  
W. H. LOERPABEL  
MANAGER

*A. 2/28, '44*

February 23, 1944

Mr. G. M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

CALIFORNIA CLAIM  
Patagonia District, Arizona

Dear Mr. Colvocoresses:

When you were in the office early this month, you left with me a map and a copy of your letter to Mr. Snedden of January 19th, relative to some possible additional exploration on the above property.

This information I sent to Mr. Snedden with the request that he give your suggestion further study. In response to this, Mr. Snedden now writes me, under date of February 11th, (copy of his letter hereto attached) from which you will see that he does not think further work justified.

I am enclosing herewith copy of your map which you requested be returned, and am sorry that we do not see our way clear to do further work on the California.

encls: map, and copy of  
Mr. Snedden's letter  
of Feb. 11, 1944

cc: TAsnedden

WHL:blc

Very truly yours,

*W. H. Loerpabel*  
W. H. LOERPABEL  
Manager

*we had letter of slip #6, p. 1  
from letter I had on Jan 10.*

AMERICAN SMELTING AND REFINING COMPANY  
Patagonia Arizona

February 11, 1944

Mr. W. H. Loerpabel, Manager  
American Smelting & Refining Company  
P. O. Box 2229  
Tucson, Arizona

California Claim  
Patagonia District

Dear Sir:

In our mapping, the contact between the rhyolite and the hornstone on the California Claim, has been called the Patagonia Vein and the vein to the east of the Patagonia vein has been called the California vein. The California vein dips west  $15^{\circ}$  and the Patagonia vein dips west  $45^{\circ}$ , thus they intersect a short distance below the surface. In my letter to you dated November 21, 1942 I stated, "The California vein is of no consequence, only a bedding plane in the hornstone and the main fault is the contact between the rhyolite and the hornstone as illustrated on Pollocks section."

Later development work showed that there was no mineralization on the contact at the adit level except for a little pyrite and that there was practically no alteration accompanying this contact. With these conditions, development of any ore on the Patagonia vein appears very unlikely. Now as to the California vein, it outcrops in hornstone, intersects the Patagonia vein and goes into rhyolite. Only a few tons of ore was produced below the intersection and I do not feel that this showing justifies any further development work. In general, veins in rhyolite in this district are weak and non productive.

The raise proposed by Mr. Calvocoresses in his letter of January 19th would cut the California vein only a short distance below present unfavorable showing, leaving very little back above the point where the raise would cut the vein. With this in mind and in view of the comments made above I do not feel that we would be justified in driving the proposed raise.

Attached is a carbon copy of this letter which you may forward to Mr. Calvocoresses, or make reply directly to him as you desire. Also attached is the map forwarded to me with your letter of February 7th.

Very truly yours,

*T. A. Snedden*

T. A. Snedden, Supt.

TAS:jdw  
cc: with orig:

April 16th, 1943

The Edward P. Allis Company  
427 Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

Gentlemen:

On the 6th instant I wrote to the American Smelting and Refining Co. requesting a progress report on the work which they are conducting on your California Claim as per Article 12 of their lease on your property, dated November 1st, 1942.

I am now in receipt of their report dated April 13th of which a copy of the text and assay map are enclosed and concerning which I will comment as follows:

It will be noted that during the first five months of the term of that lease the A. S. & R. have expended \$4221.74 for development and this fully complies with the requirement of Article 5 of the lease. This expenditure has served to carry out 403' of crosscutting and drifting which thus appears to have cost a little less than \$10.00 per lineal foot and it is evident that, - considering the present high costs of wages and materials, - the work of the A. S. & R. is being conducted in a very efficient and economical manner.

The results of this work have been disappointing in that no ore was encountered at or near the contact between the rhyolite and the quartzite-shale, which is termed "hornstone" on the map

and evidently the A. S. & R. do not believe that it would be worth while at present to continue the crosscut westward into ~~this formation~~ <sup>the shyalite</sup> although I hope that they may decide to do so at a later date since I do not think that they have yet reached a point where they should find the downward extension of the principal vein.

On the other hand they have discovered in the shale a vein on which they are now drifting and in which one small lense or shoot of pay ore has been opened up for a length of 30' according to their samples. These samples indicate that this shoot has in round figures a width of 4' and an average assay of 2.5 oz. silver; 4.70% lead and 3.90% zinc.

According to Article 6 of the lease the net payment for ore of this grade, - after including the premium metal payments and deducting the treatment charge, - will be a little over \$10.00 per ton calling for a royalty to the owner of \$1.00 per ton. It is encouraging to note from the lessee's report that in spite of the extremely limited tonnage which this showing apparently represents it is their intention to mine and mill the ore although it is not so rich as the average mined from either the Flux or the Trench Mines.

From the map it appears that the newly discovered vein strikes nearly due north and south and while the dip is not indicated I presume that it is to the west and at a comparatively flat angle similar to the dip of the veins noted on the surface. If this assumption is correct and the shoot carries values up to the surface it might yield from 1500 to 2000 tons of ore.

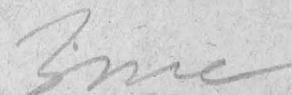
Many small faults are shown on the map and it is apparent that one of these cut off the ore at the north end of the shoot and that it is believed to have thrown the vein some 40' to the west since the most recent work consists of turning this drift into a west crosscut and then again drifting to the north.

This work is being continued but the report and map give no indication as to whether or not there is ore in the face of the drift which may not as yet have been sampled.

My general impression is that the actual underground conditions must appear to be rather more promising than disclosed by the map and that the Lessee probably has some reason to believe that larger or better grade lenses of ore are likely to be found as otherwise I do not think that they would continue their exploration; but this is merely a surmise on my part.

It is my suggestion, subject to your approval, that it might be to your interest to have me make a personal inspection of this work, say sometime during the month of May when further progress will have been made and a more definite impression of future prospects can be obtained.

Yours very truly,

  
G. M. Colvocoresses

GMC:t

AMERICAN SMELTING AND REFINING CO.  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

April 13, 1943

Mr. G. M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

TRENCH UNIT  
RE: ALLIS GROUP DEVELOPMENT  
Jan. 1, 1943 to April 1, 1943

Dear Sir:

Replying to your letter of April 6, 1943, this letter will serve as a report to you, as agent for the owners of the above group of claims, for the period January 1, 1943 to April 1, 1943.

The total amount expended by us in opening up and development work on this group during this period was \$4221.74.

The work was done in the lower adit on the California claim.

A map is attached herewith showing the development work done and assays taken. The ore developed is apparently a small lense which will be mined and milled. Exploration is being continued along this zone of mineralization.

No ore was found on the contact near the West Side Line of the California - only a very slight mineralization and alteration.

A total of 403 feet of drifting was done in this period.

ENCLS MAP

Very truly yours,

cc: extra copy to Mr.  
Colvocoresses, with encl  
HAGuess- with encl  
WHLoerpabel - with encl  
TASnedden - no encl

*A. E. Ring*  
A. E. RING

WHL:blc

January 18th, 1944

Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

Report on Recent Visit to Property

Gentlemen:

On the 13th instant I called at the office of the American Smelting and Refining Company in Tucson for a conference with Mr. Ring and Mr. Loerpabel and I was then given a copy of their letter to you of that date and of the notice of their intention to relinquish the lease on your property on the 29th of February.

While such an outcome of this transaction had been more or less anticipated, none the less the notice came as an unpleasant surprise to me since no mention of their intention had been made in any of their recent letters and the record of shipments indicated that they had found some ore below the agit level, the extent of which I had previously had no means of judging.

In view of the information given me in Tucson I somewhat hesitated to continue my trip, but concluded that under any circumstances you would wish to have me make a final inspection of the property in order to advise you fully of the actual conditions and moreover Loerpabel stated that his company would be glad to reconsider their action if after a personal investigation

January 18th, 1944

and conference with their Mr. Snedden I could convince him that they had over-looked any worthwhile possibility of finding additional ore.

In connection with the balance of this report may I suggest that you refer to the map which the American Smelting and Refining Company sent us on September 17th, 1943 and also to the map captioned "Exhibit E" which accompanied my report to you of August 23, 1940. At a later date, either the American Smelting and Refining Company or I will furnish you with a final map showing the extent of the stoping, but this has not as yet been completed, and no work other than stoping has been carried on since last September.

On the 14th I called on Mr. Snedden at the Trench Mine and we carefully went over the maps and records of operation and discussed the present situation which was obviously very disappointing to Snedden as well as to me, since he had strongly advocated the original work on your claims and naturally regretted to be obliged to advise its discontinuance.

In this connection I enclose a copy of a brief report made by Harrison Schmitt, geologist for the A.S. & R. last October, and it appears that the A.S. & R. were largely guided by Schmitt's recommendation since Loerpabel told me that in the past they had always found him to be somewhat optimistic and whenever he finally lost confidence in any of their exploratory work they felt that this should promptly be abandoned.

In general Snedden agreed with Schmitt's opinions and particularly because the result of their drilling had proved to be so unsatisfactory and had only indicated a very small showing of ore which was really not worth following up. Snedden also described the pinching and faulting of the vein at the bottom of the little stope below the adit level and stated that in his opinion all the ore in this pocket had now been mined with the exception of one small pillar containing about 10 tons which they had purposely left in place since its removal would have resulted in seriously caving the crosscut and the main drift on the vein.

Information which I gained from both Loerpabel and Snedden was to the effect that their recent exploration at the Flux Mine had also proved to be very unsatisfactory and that they had already been obliged to substantially reduce the scale of their operations at that property which they anticipated it might be advisable to entirely close down within the course of this present year. However, Snedden informed me that they were still continuing to drift to the north (i.e. in the direction of the California) on one of the three veins which they had developed in the Flux and he admitted that there was a very remote possibility that they might thus open up a new shoot of ore which could be followed into the California ground and thus entirely change the present picture. In that event he stated that they would be only too glad to take a new lease on the California.

In answer to my questions Snedden assured me that his engineers and geologists had carefully examined all of the

other prospects and ore showings on your claims, including those on the California from which leasers had shipped a small quantity of ore in the past and the surface pits and outcrops on the Allis and Garfield Claims, and he was very emphatic in saying that they did not feel that any of these were sufficiently promising to justify them in carrying on any further exploration or development work.

After leaving the Trench, I visited the California Mine and made a careful inspection of same, particularly the work which had been done there since my last visit in May of 1943. My findings confirmed all that Snedden had told me, for the one little shoot of pay ore had been confined to a small pocket which had extended along the drift for a maximum length of 40 feet and above it to a maximum height of 60 feet. along the incline of about 25 degrees. Going down below the adit the maximum depth was only 25 feet and the bottom of the shoot seemed to have been cut off by a fault, but in any event the vein appeared to have been pinching out and I judged that the quality was poor.

The maximum width of the vein was in no case more than four feet while generally it was much narrower and near to the edges it appeared that much of the sulphides of lead and zinc had given place to worthless sulphides of iron. The one small pillar of ore which had been left in place was supporting the upper workings and should not be removed as long as there is any possibility that any further work may be done at some future time.

Inspection of all other portions of the underground workings and also of the surface in that particular locality failed to disclose any other showings of importance and the portions of the vein in the south drift from which I obtained some rather encouraging samples last May had all been pretty thoroughly prospected and had proved to be only narrow stringers or little pockets, none of which had any permanence.

The most discouraging phase of the entire situation lies in the absolute lack of any commercial ore along the fault contact between the shale and rhyolite through which the adit crosscut had passed last Spring and it appears that this same contact has been prospected at two or three other points on the Flux Claims and there also had proved to be barren of values.

I noted the location of the drill holes and from the logs which we have received I must agree with the officials of the American Smelting and Refining Company in feeling that there is no reason to expect that any downward extension of the ore shoot would be found below the fault which I have previously mentioned, nor that there is any justification in carrying the exploration to a greater depth.

There is just one additional piece of work which I regret that the Company did not see fit to carry out and this consists in driving a vertical raise or drill hole from the extreme end of the adit crosscut extending upwards in the rhyolite to cut the upper vein which outcrops along the road and from which leasers mined some ore in previous years. It is probable that

this vein may prove to be only a "gash" and such portions of the old workings as are now accessible give no good promise that the ore will extend to any great depth, but on the other hand the raise which I suggest would have had a maximum height of only about 80 feet and the total cost should not have exceeded \$1000 if it had been put up while the compressor and other equipment were still on the property. A drill hole would have been much less expensive when the rig was set up at the end of the crosscut.

Both drill and compressor have now been removed so that the cost of any such procedure will now be much greater, and it seems probable that the A.S. & R. engineers must have given careful study to the advisability of exploring above the end of the adit crosscut and perhaps developed some condition which seemed to make such work entirely futile.

Aside from the removal and installation of either a drill or compressor any further work would involve considerable additional expense as the floor of the adit crosscut would have to be raised in the vicinity of the stope and rails and pipe replaced from that point to its western end,--a distance of about 150 feet,--and I fear that the A.S. & R. may not be willing to favorably consider my suggestion, but none the less I am following the matter up by correspondence and will later advise you of the result.

January 18th, 1944

I would like to suggest that, in the event that the A.S. & R. should favorably consider this last piece of exploration, and perhaps in any event, it might be well for you to offer to suspend the provisions of the lease in respect to development work and payment of minimum royalty for a period of say six months, but otherwise to leave that agreement in full force and effect until after above mentioned exploration ~~and the~~ work which they are now conducting at the Flux has been completed since the result of these might possibly lead them to wish to renew the operations on the California.

Should the lease be cancelled either now or at a later date without any new ore having been discovered in or near your property I regret to say that I have no worthwhile suggestion to offer in respect to your future program.

The American Smelting and Refining Company, because of their work at the Flux and at the Trench and because they are operating a custom mill at the latter property, are obviously very much better placed than any other party to develop and work the California and I feel satisfied that they have made every reasonable effort to make their operations successful and would not now discontinue the same except for the fact that they can see no reasonable possibility of obtaining a return of any additional money which they might expend.

The Federal Government are no longer in such great need of lead and zinc as they were a few months ago and while they will

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probably continue for several months to come to pay a bonus price on these metals as they have been doing in the case of the California, the producers are no longer disposed to risk any large amount of money on work which could only be profitable as long as these bonuses are maintained.

Taken altogether, I fear that we must regretfully conclude that the operations of the A.S. & R. have tended to diminish rather than to increase the value of your property since the results of same have been of a negative character and it looks as if the mine might be destined to again lie dormant for a number of years.

With particular reference to the terms of the present lease agreement, I might state that in accordance with Article 16, the A.S. & R. could only cancel the lease after having spent at least \$8,000 in exploration and development. I do not have any exact record of such expenditure of their part, but they have built approximately 700 feet of new road, driven more than 600 feet of underground drifts and crosscuts, put in a few short raises and winzes and carried out some 200 feet of diamond drilling. The aggregate cost of all of the above has certainly been in excess of \$8,000.

In accordance with Article 18 of the Lease they are entitled to remove all of their machinery and equipment, excepting underground track and pipe lines. Actually they have removed the track

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and piping from the adit crosscut from the drift to the west end and also from the drift itself which was run along the ore bearing vein for a total length of some 300 feet. This action on their part would appear to have been in violation of the lease agreement, but under the circumstances, I do not believe that you would wish to have me make any formal complaint since it might give rise to some dispute as to the meaning of the term "main levels" as used in the said paragraph and in any event the pipe and rails would merely rust away unless some future operations are promptly undertaken.

The piping and rails have been left in place from the stope to the portal of the adit and the rails were left on the dump to the little wooden ore bin, which last constitutes the only permanent improvement that has been made on the property.

The location notices are still in place and in so far as production is concerned it appears that the total shipments have been represented by the 961 tons contained in the six lots which have been accounted for and in so far as their financial obligations are concerned it only remains for them to send you the payment of the supplemental royalty on Lot No. 6.

Please let me have your views in regard to my suggestion regarding the proposed raise and the continuance of the lease

Edward P. Allis Company

-10-

January 18th, 1944

with a six months moratorium on minimum royalties and be sure that I shall gladly carry out any other instructions and do everything in my power to encourage a resumption of activity.

Yours very truly,

*S. M. Colver*

GMC/b  
Enclosure

*file*

August 24, 1942

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

Attention: Mr. P. M. Haack,  
Secretary-Treasurer

Dear Mr. Haack:

In further reference to my communication of the 21st inst. on the above subject, I enclose two copies of the notes concerning the Flux Mine which will give you, I trust, a fairly clear idea of the situation there and the bearing of same upon the situation at the California. These notes will also serve to explain my reasons for recommending that you should accept the proposed terms of lease and option to purchase from the American Smelting and Refining Company choosing whichever one of the alternatives set forth in Article I of the contract seem to be most advantageous.

During my visit to Patagonia I learned that Mr. A. S. Henderson of Patagonia is well thought of and I believe holds or recently held the position of Justice of the Peace. He operates mines from time to time in a very small way and apparently also meets his obligations but he is not believed by local people to have any large fund at his disposal nor to be in a position to carry on any extensive mining developments.

Under these circumstances and because the A. S. & R. had already made a firm proposition to take over your property it did not seem to me advisable to make a personal contact with Mr. Henderson as I am very certain that it will be far better to do business with the A. S. & R.

Yours very truly,

*[Signature]*

GMC:CG

### NOTES RE FLUX MINE

From previous correspondence you will have understood that my principal object in visiting the Flux Mine was to determine whether or not the A. S. & R. had actually obtained any definite evidence that the ore in that property extended over into or very close to the California Claim. Had this proved to be the case it is obvious that the acquisition of the California would have become extremely important and that a substantially higher option price than that which is proposed by the A. S. & R. might properly have been asked by the owners of the California with good reason to expect that such a request would have been agreed to by the A. S. & R.

In this hope I was disappointed as will appear from the following notes made on the occasion of my visit on August 19th when I went over the surface and through the essential portions of the Flux in company with the Superintendent, Kenneth Richmond.

The Flux is an old mine that has been worked and shut down at intervals ever since the 80's. High grade oxidized lead ores with good silver values were mined from surface pits and one large glory hole which may have produced 10,000 tons of ore. Work at greater depth including the 260' adit was carried on quite extensively during the First World War and in the 20's but there seems to have been a long period of idleness prior to about 1938 when A. R. Byrd of Tucson secured a lease from the owner, the R. R. Richardson Estate, and undertook fairly extensive exploration which resulted in his selling or assigning his lease to the A. S. & R. Company at the end of August, 1940.

Some of the claims are still unpatented and two of them lie to the north of the Allis Group, the others to the south and east of the California Claim.

## GEOLOGY

The Flux Vein or more properly, vein system, strikes in the mine workings north  $9^{\circ}$  west and has a varying dip which averages about  $40^{\circ}$  to the west. It is a contact fissure vein with a hanging wall of quartzite (which Schmitt calls silexite) and a footwall of volcanic agglomerate or porphyry (rhyolite or trachyte). The vein filling is quartz and the ore is a mixture of sulphides of iron, lead and zinc associated with quartz. Above the sulphides and for a depth of from 100' to 130' below the surface the ore has been largely oxidized and the zinc leached out while secondary enrichment formed pockets of rich lead-silver ore.

In the upper part of the sulphide zone the content of lead is about twice that of zinc while in the lower portions the percentage of the two metals is about the same.

There are at least two cross veins in which ore has been mined but always near to the Flux Vein and Richmond is of the opinion that these cross veins did not contribute to the enrichment of the main Flux Vein but on the contrary that the Flux Vein was the source of the values now found in the cross veins.

Probably the metals were deposited from solutions which accompanied the Tertiary intrusions of the porphyry and the agglomerate and they may have had their origin in a deep seated magma for at a depth of more than 500' the diamond drill holes found a dark gray basic igneous rock (perhaps a diorite) which has not been classified. Some fragments of a limestone formation are found in the footwall but it does not appear that there is any extensive lime formation in this

section although it is noted to the east.

The strike of the main Flux Vein would indicate that its northern extension should pass some distance to the east of the outcroppings of the California Veins and it may be represented by a vein which was noted on the east side of the gulch below the California workings in which no values were found. <sup>Palagonite vein?</sup> Conversely the southern extension of the California Vein may have been picked up on the west side of the Flux Gulch some 600-700' west of the Flux Mine and northwest of the portal of the adit. Here there are old workings now caved from which it is said that some high grade ore was once mined. South of the mine the Flux Vein bends westward and follows up along a gulch to the southwest but no ore was found along this section.

From all the above it appears probable that either the California Vein system is parallel to the Flux system and lies to the west of it or that it is a branch of the Flux System or possibly a faulted segment. Only additional exploration work can solve this problem but all agree that there is sufficient evidence of mineralization in the California Vein to justify exploration on its own account.

The shoots of commercial ore in the Flux Mine are three in number. Shoot #1 has a length of about 100' on the Main Flux Vein and extends from the surface to a depth of about 300' where it has been bottomed 40' below the adit level.

North of this lies shoot #2 which is on a cross vein to east of the main vein and also has a length of about 100' and extends from the surface (where it was mined in the Glory Hole and from the old shaft the collar of which is used as the datum point) to a depth of about 100' below the adit, i.e. 360' below the surface, where values cut off very abruptly.

Shoot #3 lies furthest to the north along the main Flux Vein and

has a length of 350'. It extends up to about 60' above the adit (200' below the surface) and down to just below the 430' level but no ore was found on the 500' level or by the drill holes below and at the bottom the ore pinches out as it does at the north and south ends of this shoot. In the better portion of this shoot the ore has an average width of 8-10' and in a few places as much as 20' and it is by far the biggest and best of the three shoots but the limits now seem to have been definitely determined as many drill holes have failed to find any extensions.

All of these workings are comprised in a length of about 1,000' along the vein.

A drift to the north of #3 shoot is quite barren but a little showing was found in a crosscut in the footwall and it was hoped that a fourth shoot would be developed there but this hope has now been abandoned.

The north end of the mine workings is over 1500' from the ore showings on the California Claim and there are no indications of any intermediate shoot although such may exist in either or both the Flux and the California Vein Systems.

About 75% of the developed ore in the main shoots of the Flux has been mined and shipped and production at present averages about 100 tons per day, say 2500 tons per month. Roughly it may be assumed that some 60,000 tons of ore have been taken out of the mine by Byrd and A. S. & R. and this would indicate that only about 20,000 tons remain in these main workings which would serve to keep up the present rate of production for 6-8 months. Smaller shoots of ore may keep up a smaller production for a few months longer but by the end of a year the mine may have to close down unless new ore has been found here (the search for which seems to have been given up) or in portions of the

California Claim which could be connected with the Flux by a drift probably 1500' to 1700' in length.

Since the A. S. & R. took over the Flux they have discontinued the use of the old inclined track on which the former operators hoisted ore up the hill to a point near to the old shaft and they have built 0.6 mile of new road so that trucks now load at an ore bin below the portal of the adit through which the ore is pulled out by a mule. All power is air furnished by two compressors which give 900 cu. ft. per minute. They have an air hoist at the collar of the winze that goes down from the adit (260' level) to levels and stopes at 360, 430 and to the barren level at 500'.

The A. S. & R. have probably mined and shipped about 50,000 tons of ore and Byrd may have mined 10,000 in which cases the total tonnage in the three main ore shoots must have been about 80,000.

The average grade of ore now shipped from the Flux is 10% Pb, 10% Zn and 4 oz. silver. Trench ore averages 7% Pb, 5% Zn and 10 oz. Ag. On both ores it is reported that the mill makes a very good recovery with tailings running 0.1 to 0.25 Pb, say 97% Pb recovered (which seems too high) and Zn tailings averaging 0.5% (down to a low of 0.28) which means 92-93% recovery. Probably 80% of the silver is recovered with the Pb. concentrates.

If the A. S. & R. take over the California Claim they will first drill from the end of the adit to see if they can pick up ore in the California Veins and any pay ore found by the drills will be further developed by drifts and probably eventually connected with the Flux workings.

From my investigation of the Flux Mine and conference with engineers and officials of the A. S. & R. it does not appear that any of the work so far done by that company in the Flux has encouraged them to believe

that the California Claim will contain any shoots of ore similar to those which were found in the Flux nor even the northern extension of the main Flux Vein. However their examination of the California itself and the geological surveys which they have made in that vicinity have evidently convinced them that there is a good chance of finding one or more shoots of pay ore below the surface workings on the California Claim and that the oxidized material which was found in the shallow stopes will probably give place to sulphides with depth as it did at the Trench and at the Flux.

It is fortunate that the A. S. & R. are willing and able to carry out the actual exploration which will either prove or disprove this assumption.

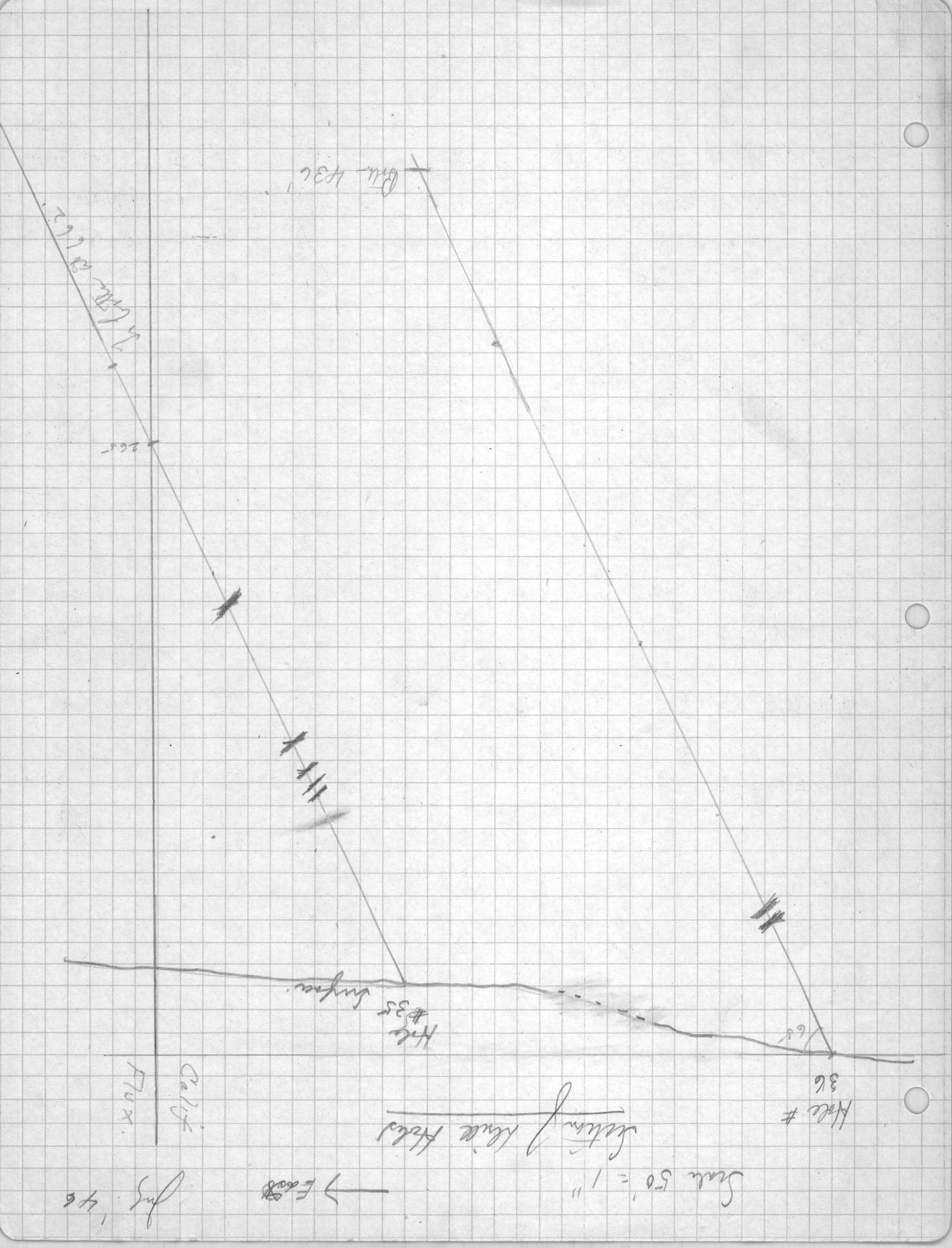
J. M. C.

7/22  
42

3 copies  
Condensed Record of Coby's hole notes in Coby's Claim (see page 4)

# of holes	ES #35	Length of hole	Depth - 65°	Qty	Grains	Gr %	Character of hole
90-91		1	0	0.12	2.21		Adoration, some lime
95-96		1	0.16	2.51	2.93		Adoration, some lime
104-105		1	1.76	8.02	9.96		Adoration, shiny surface
123-125		2	0.52	1.78	5.08		Adoration
186-187		1	1.34		1.74		Adoration
591-592		1	0.56	1.98	6.16		Adoration
62.5-63.6		1.1	0.72	4.90	4.75		Adoration
66.6-68.5		1.9	0.64	5.78	5.19		Adoration

Both holes are drilled at an angle, names 65°  
 #35 around the hole and line?  
 the California claim at a depth of about 265'  
 Apparently nothing has found in either of the holes  
 except the named strings, or there is the same  
 marks between so that they could not be developed  
 or broken into pieces  
 (See other side)



Condensed Record of Drill Holes  
on California Claim (See Logs)

<u>Hole #35</u>		<u>Assays</u>			<u>Character of rock</u>
<u>Depth from collar of hole</u>	<u>Length core angle - 65°</u>	<u>Ag. oz</u>	<u>Pb. %</u>	<u>Zn. %</u>	
90 - 91	1'	0	0.12	2.21	Hornstone, some lime
95 - 96	1'	0.16	2.51	2.93	Limy hornstone
104 - 105	1'	1.76	8.02	9.96	Hornstone, strong sulfids
123 - 125	2'	0.52	1.78	5.08	Limy hornstone
186 - 187	1'	tr	1.34	1.74	Hornstone
591 - 592	1'	0.56	1.98	6.16	Agglomerate
<u>Hole #36</u>					
62.5 - 63.6	1.1	0.72	4.90	4.75	Limy hornstone
66.6 - 68.5	1.9	0.64	5.78	5.19	Hornstone

Both holes were drilled at an angle of minus 65° pointing east. #35 crossed the end line of the California Claim at a depth of about 265'.

Apparently nothing was found in either of these holes except very narrow stringers of ore with barren rock between so that they could not be developed or worked with profit.

Condensed Record of Drill Holes  
on California Claim (See Logs)

<u>Hole #435</u>		<u>Assays</u>			<u>Character of rock</u>
<u>Depth from collar of hole</u>	<u>Length core angle - 65°</u>	<u>Ag. oz</u>	<u>Pb. %</u>	<u>Zn. %</u>	
90 - 91	1'	0	0.12	2.21	Hornstone, some lime
95 - 96	1'	0.16	2.51	2.93	Limy hornstone
104 - 105	1'	1.76	8.02	9.96	Hornstone, strong sulfids
123 - 125	2'	0.52	1.78	5.08	Limy hornstone
186 - 187	1'	tr	1.34	1.74	Hornstone
591 - 592	1'	0.56	1.98	6.16	Agglomerate
<u>Hole #36</u>					
62.5 - 63.6	1.1	0.72	4.90	4.75	Limy hornstone
66.6 - 68.5	1.9	0.64	5.78	5.19	Hornstone

Both holes were drilled at an angle of minus 65° pointing east. #35 crossed the end line of the California Claim at a depth of about 265'.

Apparently nothing was found in either of these holes except very narrow stringers of ore with barren rock between so that they could not be developed or worked with profit.



# DRILL HOLE LOG

Type DD Bit AX Area Surface Date Start 3-8-46 No. FS35  
 Coordinates Section 14 800 N Date Stop 6-12-46  
 N. 14 800 E. -3953 Elev. 4748 Bear. East 4-2-46 Off Calif. Claim  
 Inc. -65

FROM	TO	INTER-VAL	RECOV-ERY	% RECOV-ERY	CHARACTER	REMARKS
0	7	7	0	0	No core. Rhyolite	
7	25	18	14	78	Rhyolite. Sl Alteration	
25	87	62	25	40	Hornstone. Light gray color. Sandy. Fractured 26'-39'. Trace Pyrite on fracture planes. Minute calcite veinlets common.	
87	90	3	2 $\frac{1}{2}$	83	Do Rock.	
90	91	1	1	100	Hornstone containing fair sulfides.	Ag Nil Pb 0.12 C. Zn 2.21
91	95	4	2 $\frac{1}{2}$	63	Mottled Hornstone. Mod. Lime.	
95	96	1	1	100	Fair sulfides in limy hornstone.	Ag 0.16 Pb 2.51 C. Zn 2.93
96	104	8	8	100	Hornstone. Trace lime.	
104	105	1	1	100	Strong sulfides in Hornstone.	Ag 1.76 Pb 8.02 C. Zn 9.96
105	109	4	4	100	Hornstone. St. lime.	
109	123	14	12	92	Do rock. Trace Pyrite	
123	125	2	1	50	Moderate sulfides in limy Hornstone.	Ag 0.52 Pb 1.78 C. Zn 5.08
125	180	55	48	87	Hornstone. Trace Lime. Trace sulfides at 141';147';154';175'. Vug at 150.'	
180	186	6	4	67	Hornstone. Mod lime. Trace Pyrite	
186	187	1	1	100	Fair sulfides in Hornstone.	Ag Tr Pb 1.34 C. Zn 1.74
187	215	28	18	64	Hornstone. Tr Pyrite. Tr Galena 202' Exact location of Hornstone-Agglomerate contact uncertain.	
215	250	35	14	40	H W. Agglomerate. Strong Alteration Trace Pyrite. Pink Color.	
250	284	34	30	88	H W Agglomerate. Fragments up to $\frac{1}{4}$ " in size. Abundant Epidote. Gray color.	
284	366	82	64	78	H W Agglomerate. Pink. Mod Epidote	

Logged By:

# DRILL HOLE LOG

Type \_\_\_\_\_ Bit \_\_\_\_\_ Area \_\_\_\_\_ Date Start \_\_\_\_\_ No. FS 35 cont 1  
 Coordinates \_\_\_\_\_ Section \_\_\_\_\_ Date Stop \_\_\_\_\_  
 N. \_\_\_\_\_ E. \_\_\_\_\_ Elev. \_\_\_\_\_ Bear. \_\_\_\_\_ Inc. \_\_\_\_\_

FROM	TO	INTER- VAL	RECOV- ERY	% RECOV- ERY	CHARACTER	REMARKS
366	380	14	10	71	H W Agglomerate	
380	394	14	13	93	Do. Rock. Trace Pyrite at 388'.	
394	400	6	4	67	H W Agglomerate. Mod Alteration. Moderate to coarse fragments.	
400	422	22	19	86	H W Agglomerate	
422	448	26	24	92	H W. Agglomerate. Pyrite along fracture at approx. 70 with hole at 440'. 448' is possible contact of H W -F W Agglomerates.	
448	484	36	34	94	F W Agglomerate? Slight to Moderate lime. Light gray to chloritic color. Trace Pyrite at 452';455';483'.	
484	539	55	53	96	F W Agglomerate. Mod Pyrite at 506'; Trace Pyrite at 491';508'; 518'.	
539	540	1	1	100	Gouge and Breccia. St. Alteration	
540	548	8	5	63	F W Agglomerate. St Alteration.	
548	591	43	35	81	F W Agglomerate. Siliceous. Speckled appearance. Suggestion of bedding at approx. 70 with hole. 4" of massive Pyrite and sulfides at 572'.	
591	592	1	1	100	Massive pyrite, galena, and sphalerite in veinlet making angle of approx. 65 with hole. Fair ore.	Ag 0.56 Pb 1.98 Zn 6.16
592	608	16	12	75	F W Agglomerate. Gray color.	
608	662	54	50	93	F W Agglomerate. Siliceous. Streaked appearance. Gray to purple color. Trace Pyrite at 644'.	
77% Core Recovery						

Logged By: JCP

# DRILL HOLE LOG

Type D.D. Bit AX Area Surface Date Start 7-18-46 No. FS-40  
 Coordinates Section 15400 N Date Stop 8-13-46  
 N. 15400 E. -4084 Elev. 4707 Bear. --- Inc. -90°

FROM	TO	INTER-VAL	RECOV-ERY	\$ RECOV-ERY	CHARACTER	REMARKS
0	41	41	0	0	No core. Boulders and sand.	
41	53	8	6		Limestone. Light gray. Tr Py @ 45'; 50'.	
53	56	3	1.5	50	Moderate Pyrite. Trace sulfides in limestone. Not ore.	Ag <u>0.46</u> Pb <u>0.76</u> Cu <u>0.54</u> Zn <u>0.35</u>
56	58	2	1	50	Limestone.	
58	60	2	1	50	Moderate Pyrite. Trace sulfides in limestone.	Ag <u>0.42</u> Pb <u>1.20</u> Cu <u>0.91</u> Zn <u>0.84</u>
60	64	4	2	50	Limestone, trace pyrite.	
64	65	1	1	100	Moderate Pyrite, trace sulfides in limestone.	Ag <u>2.70</u> Pb <u>0.95</u> Cu <u>0.05</u> Zn <u>0.65</u>
65	82.3	17.3	12		Limestone.	
82.3	95	12.7	9		Hornstone. Light gray color. Sandy appearance and texture.	
95	96	.1	.5	50	Gouge and breccia? St. alteration.	
96	98	2	1.5	75	Limestone? St. alteration. Tr Py.	
98	135.6	37.6	28		Hornstone. Slight lime. Tr Py 99'-100'; at 119';120';128'. Limy gouge at 124'.	
135.6	138	2.4	0	0	No core.	
138	148	10	4		Hornstone. Sl-mod. lime.	
148	150	2	0	0	No core.	
150	154	4	1	25	Hornstone. Gray color.	
154	158	4	3	75	Limestone. Mod. alteration.	
158	161	3	1	33	Gouge breccia. St. alteration.	

Logged By:





EXPLORATION OF ALLIS CLAIMS LAST QUARTER 1946

Hole No. 43 shows 7 narrow stringers of low grade lead-zinc ore with a little silver. The depth of this hole is 448' inclination 74° from horizontal almost due East.

Considering the increased value of these metals it might seem worthwhile to mine some of this material except that such an operation would require so great amount of development work and the width of the ore is not sufficient to permit economical mining, the best ore being only 1' in width and occurring some 268' to 269' from the collar of the hole. This discovery in itself is of no importance unless it may possibly represent the end of a shoot of ore extending from the Flux into the California ground.

If the A. S. & R. continue exploration at all, I anticipate that they will probably put down one or more holes to the north of No. 43 and they have not yet advised us of their intention to discontinue work and terminate the lease which suggests the possibility that their engineer or geologists have worked out some new theory of ore deposition which is not disclosed in the operating reports.

Hole No. 44 is close to the <sup>South</sup> ~~northeast~~ corner of the California claim and proved to be absolutely blank, but in any case it would not appear that in the 400' on the inclined length of this hole had passed through ground in which the orebodies would be covered by the apex rings of the California claim.

G.M.C

# DRILL HOLE LOG

Type DD Bit BX & AX Area Flux-Surface Date Start 8-24-46 No. FS 43  
 Coordinates Section 15 830 Date Stop 10-23-46  
 N. 15 830 E. -4604 Elev. 4860.5 Bear. East Inc. -74°

FROM	TO	INTER-VAL	RECOV-ERY	% RECOV-ERY	CHARACTER	REMARKS
0	20	20	8	40	Rhyolite. Moderate alteration.	
20	145	125	100	80	Rhyolite. Slight alteration. Pyrite common along fractures.	
145	199	54	50	93	Do Rock.	
199	252	53	50	94	Do Rock.	
252	266	14	13	93	Rhyolite. Slight alteration.	
266	268	2	2	100	Hornstone. Light gray color. Calcite along fractures.	
268	269	1	1	100	Moderate sulfides and Pyrite in Hornstone.	Ag <u>1.52</u> Pb <u>4.10</u> Ch. <u>          </u> Zn <u>4.35</u>
269	274	5	3	60	Hornstone.	
274	275.5	1.5	1.5	100	Trace sulfides in Hornstone. Not ore.	
274.5	304	28.5	24	84	Hornstone. Moderate lime 286'-288'. Trace sulfides at 299'. Disseminated Pyrite and sulfide veinlets common.	
304	308.5	4.5	2.5	56	Hornstone. Trace Pyrite 306'-307'.	Ag <u>0.48</u> Pb <u>2.54</u> Ch. <u>          </u> Zn <u>2.00</u>
308.5	309	.5	.5	100	Moderate Pyrite and sulfides in Hornstone.	
309	320	11	5.5	50	Hornstone. Traces of Pyrite and sulfides rare.	
320	325	5	3	60	Fair sulfides in Hornstone.	Ag <u>0.40</u> Pb <u>2.40</u> Ch. <u>          </u> Zn <u>2.45</u>
325	327	2	1.5	75	Hornstone.	
327	328	1	1	100	Moderate sulfides in Hornstone.	Ag <u>1.20</u> Pb <u>1.36</u> Ch. <u>          </u> Zn <u>2.15</u>
328	345	17	15	88	Hornstone. Trace Pyrite 330'-331'.	
345	347	2	2	100	Fair Sulfides and Pyrite in Hornstone.	Ag <u>0.36</u> Pb <u>0.87</u> Ch. <u>          </u> Zn <u>1.75</u>
347	360	13	12	92	Hornstone. Calcite along fractures.	

178 X

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Logged By:



# DRILL HOLE LOG

Type DD Bit BX & AX Area Flux-Surface Date Start 10-2-46 No. FS 44  
 Coordinates Section 15 000N Date Stop 11-7-46  
 N. 15031.1 E. 3611.7 Elev. 4661.1 Bear. East Inc. -61°

FROM	TO	INTER-VAL	RECOV-ERY	% RECOV-ERY	CHARACTER	REMARKS
0	11	11	0.5	5	Rhyolitic Agglomerate. Strong alteration	
					Large fragments.	
11	82	71	32	45	Do Rock. Strong alteration to 38'.	
82	108	26	22	85	Do Rock. Trace Pyrite 96'-97'.	
108	108.5	.5	0	0	No core.	
108.5	115	6.5	2	31	Rhyolitic Agglomerate. Gray color with pinkish cast.	
115	150	35	21	60	Do Rock.	
150	214	64	48	75	Rhyolitic Agglomerate. FeOx stains common 180'-187'.	
214	267	53	47	89	Rhyolitic Agglomerate. Gray color to 226'. Very coarse fragments.	
267	292	25	12.5	50	Rhyolitic Agglomerate. Reddish color. Trace Pyrite at 277'.	
292	300	8	6	75	Rhyolitic Agglomerate. Gray color.	
300	307	7	6	86	Rhyolitic Agglomerate. Reddish color.	
307	308	1	1	100	Gouge and Breccia.	
308	323	15	12	80	Rhyolitic Agglomerate. Reddish color.	
323	337	14	14	100	Rhyolitic Agglomerate. Gray color.	
337	380	43	32	74	Do Rock. Trace Pyrite at 370'.	
380	396	16	13	81	Rhyolitic Agglomerate. Reddish color. Very coarse fragments.	
396	401	5	4.5	90	Rhyolitic Agglomerate. Gray color. Fair Pyrite 396'-397'.	
401	408	7	7	100	Rhyolitic Agglomerate. Reddish color.	

Logged By:



January 29, 1947

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee 7, Wisconsin

RE: Allis Claims  
at Patagonia

Gentlemen:

I have made a careful study of all of the reports and maps sent us by the A. S. & R. Company in connection with the drilling on the California Claim, and I herewith enclose a memo which contains a brief summary of the results of their work.

I have also studied this data in connection with reports of their development and mining work in 1943 and 1944, and my own reports made after having examined those operations.

I have tried to figure out some plan for continuing the exploration, but the engineers and geologists of the A. S. & R. have had so much more opportunity to study the problem of finding ore on the California Claim and in its vicinity that I do not feel that it would be a good policy for me to make any suggestions at present, particularly since they carefully considered those which I made in January and February of 1944, and their theories regarding the geology of the property did not offer hope that such work as I suggested would be successful.

Within the course of a short time I hope to have an opportunity to talk over the present situation and future prospects with Mr. Ring or some other member of their staff, or it may be that I shall hear from him and learn something concerning their future program, and I sincerely trust that they will continue the exploration in spite of the discouraging results which have been obtained up to the present time.

Yours very truly,

GMC: IM  
Enclosure



MEMO RE: DIAMOND DRILLING BY A. S. & R. CO.  
ON CALIFORNIA CLAIM OF E. P. ALLIS CO.

To be read in conjunction with map prepared by A. S. & R. in January, 1947, on which location of holes is shown.

Hole #35

Bearing east, dip 65°, depth 662', begun March 8, 1946, finished June 12, 1946. This hole crossed the south end line of the California Claim at depth of about 260'. Only narrow stringers of ore (sulfide) were found and cut by the hole below the collar mostly at about 123-125', 186-187' and 591-592'. No commercial ore shoot was indicated.

Hole #36

Bearing east, dip 65°, depth 436', begun April 2, 1946, finished May 8, 1946. Little ore 62-68' below collar might represent aggregate width of 3 or 4' with lead and zinc content of about 5% each. Not attractive but seems to have some possibilities.

Hole #40

Vertical, depth 425', begun July, 18, 1946, finished August 13, 1946. Rock slightly mineralized from 53-65' with very little lead and zinc but better silver values than in other holes, best silver 10.42 ounce for 2' at 56-58' below collar.

This hole is a little over 100' east of the shoot of ore which was mined out by the A. S. & R. in '43 and '44, but the showing does not appear to have any connection between the pocket that was mined out above the adit and which seemed to pinch out with depth a few feet below the adit. Some further exploration might be carried on in this area but the showing is not encouraging because of low grade and narrow width of ore in the drill hole.

Hole #43

Bearing east, dip  $74^{\circ}$ , depth 360', begun August 24, 1946, finished October 23, 1946. Some narrow stringers of lead and zinc sulfides with very low silver values at 268', 308' and from 320 to 347'. No indication of commercial ore.

Hole #44

Bearing east, dip  $61^{\circ}$ , depth 586', begun October 2, 1946, finished November 7, 1946. A complete blank, no ore reported from any section of this hole which was started near south-east corner of California Claim and crossed the east side line a little over 100' below the collar into Flux Claim #23.

No statement is made with report and letter of January 21, 1947, as to any continuation of the drilling program, but to date we have received no notice that they intend to discontinue their exploration and terminate the lease. It must be admitted that the results of their work to date have been most discouraging and no showing of commercial value has been found or indicated by their reported expenditure of \$6,476.35 to the end of 1946, plus \$600 paid to the Allis Company making a total outlay of \$7,076.35.

All of the ore shoots found on the California and the Flux Claims dip to the west and thus the drill holes dipping  $60^{\circ}$ - $70^{\circ}$  to the east might have been expected to cut them at nearly right angles. Therefore, any vein which might be found close to the west side line of the California would probably soon cross the line and continue under the surface of Flux #20, but in all such cases the owners of the California claim would be entitled to apex rights for at least a considerable distance.

This area, embracing the west-central portion of the California Claim and in which the old workings of leasers were located, has always appeared to me to be the best mineralized section of the surface shown on the maps, but the development work done by the A. S. & R. in '43, '44 plus their careful study of the geology seemed to have convinced them that there was no prospect of developing any worthwhile shoots of ore in this section of the California Claim, and it is very unlikely that the recent drilling has served to alter that opinion.

MEMO RE: DIAMOND DRILLING BY A. S. & R. CO.  
ON CALIFORNIA CLAIM OF E. P. ALLIS CO.

To be read in conjunction with map prepared by A. S. & R. in January, 1947, on which location of holes is shown.

Hole #35

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Bearing east, dip  $65^{\circ}$ , depth 436', begun April 2, 1946, finished May 8, 1946. Little ore 62-68' below collar might represent aggregate width of 3 or 4' with lead and zinc content of about 5% each. Not attractive but seems to have some possibilities.

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Vertical, depth 425', begun July, 18, 1946, finished August 13, 1946. Rock slightly mineralized from 53-65' with very little lead and zinc but better silver values than in other holes, best silver 10.42 ounce for 2' at 56-58' below collar.

This hole is a little over 100' east of the shoot of ore which was mined out by the A. S. & R. in '43 and '44, but the showing does not appear to have any connection between the pocket that was mined out above the adit and which seemed to pinch out with depth a few feet below the adit. Some further exploration might be carried on in this area but the showing is not encouraging because of low grade and narrow width of ore in the drill hole.

Hole #43

Bearing east, dip  $74^{\circ}$ , depth 360', begun August 24, 1946, finished October 23, 1946. Some narrow stringers of lead and zinc sulfides with very low silver values at 268', 308' and from 320 to 347'. No indication of commercial ore.

Hole #44

Bearing east, dip  $61^{\circ}$ , depth 586', begun October 2, 1946, finished November 7, 1946. A complete blank, no ore reported from any section of this hole which was started near south-east corner of California Claim and crossed the east side line a little over 100' below the collar into Flux Claim #23.

No statement is made with report and letter of January 21, 1947, as to any continuation of the drilling program, but to date we have received no notice that they intend to discontinue their exploration and terminate the lease. It must be admitted that the results of their work to date have been most discouraging and no showing of commercial value has been found or indicated by their reported expenditure of \$6,476.35 to the end of 1946, plus \$600 paid to the Allis Company making a total outlay of \$7,076.35.

All of the ore shoots found on the California and the Flux Claims dip to the west and thus the drill holes dipping  $60^{\circ}$ - $70^{\circ}$  to the east might have been expected to cut them at nearly right angles. Therefore, any vein which might be found close to the west side line of the California would probably soon cross the line and continue under the surface of Flux #20, but in all such cases the owners of the California claim would be entitled to apex rights for at least a considerable distance.

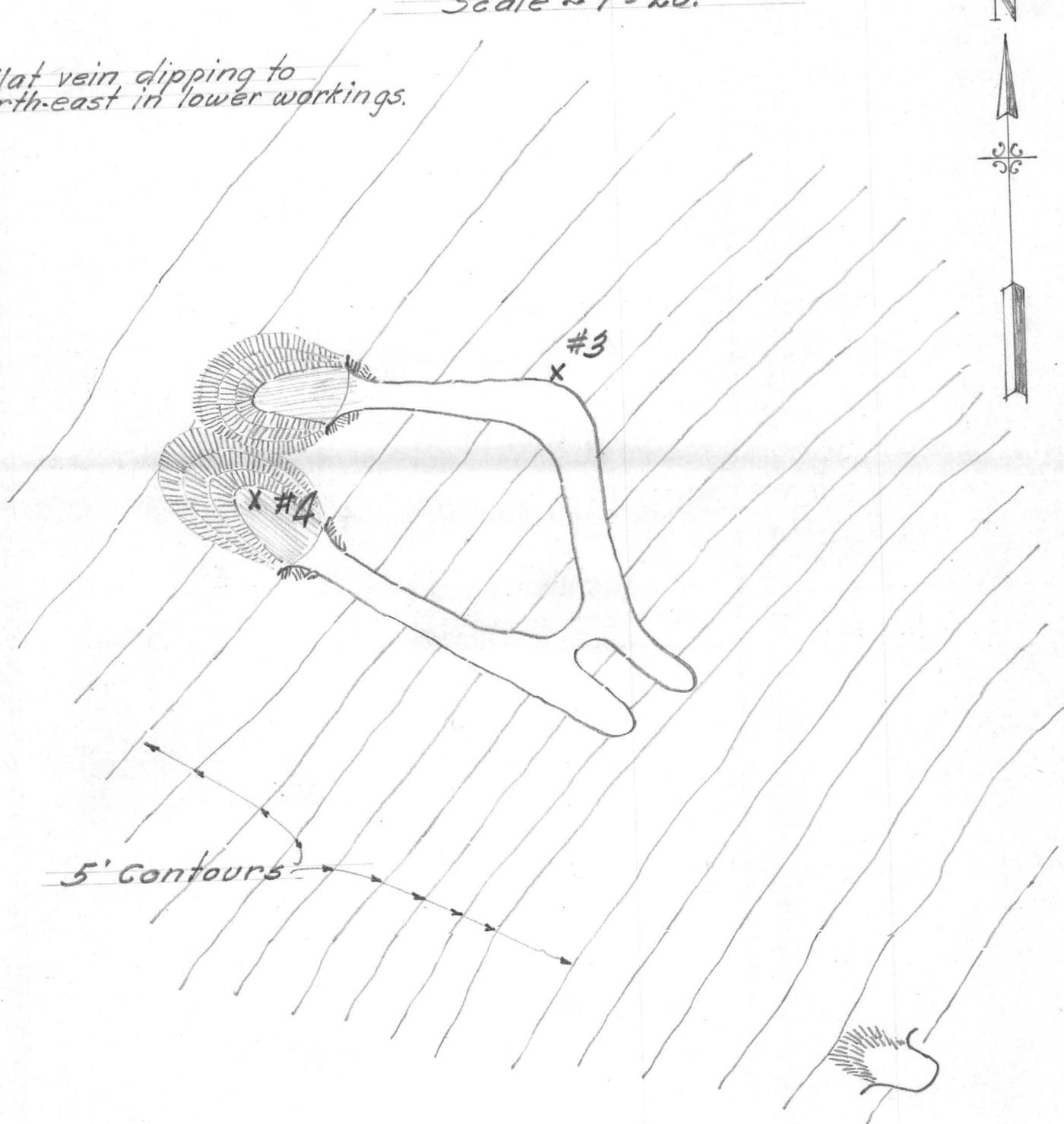
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# ALLIS GROUP REPORT MAP

WORKINGS NEAR EAST END OF  
ALLIS CLAIM.

Scale - 1" = 20'

Flat vein dipping to  
north-east in lower workings.



**THE EDWARD P. ALLIS COMPANY**

PHONE SHERIDAN 2510

427 EAST STEWART ST.

Reliance Land & Mining Co.

Cazenovia Land Co.

*File Allis*  
**MILWAUKEE, WIS.**

December 22, 1948

Mr. Alden P. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

Dear Mr. Colvocoresses:

We received in this mornings mail your letter of December 16 conveying the sad news of your father's death.

We wish, first of all, to extend our sincere sympathies to your entire family.

It has been our pleasure to have your father represent us in connection with mining leases with the American Smelting and Refining Co., but unfortunately the mining company cancelled these leases about six months ago, although your father's files will reveal that they have agreed to continue paying the taxes on our mining claims per agreement dated July 1, 1948, which was submitted with your father's letter to us dated August 2.

Aside from this, therefore, we do not believe there is any occasion to follow our interests further except to keep us informed in the event the American Smelting and Refining Co. is again interested in re-considering a working lease on our properties.

Very truly yours,

THE EDWARD P. ALLIS COMPANY

By 

Secy.-Treas.

PMHaack/dp

AMERICAN SMELTING AND REFINING COMPANY

WESTERN MINING DEPARTMENT

D. J. POPE, GENERAL MANAGER

W. R. LANDWEHR, CHIEF GEOLOGIST

Tr.4.5.7

SOUTHWESTERN DIVISION  
A. E. RING, MANAGER

VALLEY NATIONAL BLDG.  
TUCSON, ARIZONA  
P.O.B. 2229 TELEPHONE 503

*A. 10/11/48*

Sept. 29, 1948

Mr. G. M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona.

PROPERTY TAXES  
ALLIS GROUP

Dear Sir:

As of this date we have forwarded payment of First Half 1948 Property Taxes on the California, Garfield and Allis Claims to the Santa Cruz County Treasurer. We are enclosing copy of the Tax Bill.

Very truly yours,

*A. E. Ring*  
A. E. RING  
Manager.

/mw  
Encl.

Cc: (G. M. Colvocoresses for  
(E. P. Allis Co.  
WTBrown  
Tr. 10.2

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NO. 38

NOTE: First Installment Taxes fall due on the First Monday in September and interest starts the First Monday in November, 1948

OFFICE OF TAX COLLECTOR  
SANTA CRUZ COUNTY, NOGALES, ARIZONA

STATEMENT ONE-HALF OF STATE, COUNTY AND CITY TAXES FOR THE YEAR 1948, ON THE FOLLOWING DESCRIBED PROPERTY.

DESCRIPTION	SEC. OR LOT	TWP. OR BLOCK	RANGE	ACRES	VALUATIONS			T A X E S	ONE HALF OF TAX
					REAL ESTATE	IMPROVE- MENTS	PERSONAL PROPERTY		
PATENTED MINES				19.80			STATE AND COUNTY	6.09	
CALIFORNIA				19.80			CITY		
GARFIELD				20.48			SCHOOL DISTRICT NO. 1 & HIGH SCH. MAIN NO. 1		
ALLIS				20.66	610		HIGH SCH. UNION	3.91	
							SCHOOL DISTRICT NO. 6	4.48	
							SCHOOL DISTRICT NO. -		
			1	9	4	8	TOTAL.....	<u>14.48</u>	

ASSESSED TO: THE EDWARD P. ALLIS CO.,  
% AMERICAN SMELTING & REFG. CO.,  
P. O. BOX 2229, TUCSON, ARIZONA

Mail check to:  
COUNTY TREASURER  
NOGALES, ARIZONA

THIS NOTICE IS FOR EXACTLY ONE-HALF ANNUAL TAXES. ANNUAL TAX DOUBLE AMOUNT OF THIS NOTICE.  
NO NOTICE MAILED FOR SECOND INSTALLMENT. POSTAGE STAMPS ARE NOT ACCEPTABLE IN PAYMENT OF TAXES.

SUPPLEMENTAL AGREEMENT

*Checked 7/19/48  
Allis Co. file*

THIS SUPPLEMENTAL AGREEMENT Made and entered into as of July 1, 1948, by and between THE EDWARD P. ALLIS COMPANY, a Wisconsin corporation, party of the first part, Lessor, and AMERICAN SMELTING AND REFINING COMPANY, a New Jersey corporation, the party of the second part, Lessee, WITNESSETH:

THAT WHEREAS, the parties hereto have heretofore entered into a Mining Lease dated August 31, 1945, and a letter agreement of August 30, 1945, accepted by the lessor on September 5, 1945, which Mining Lease and letter were recorded as one document in the office of the County Recorder of Santa Cruz County, Arizona, on September 12, 1945, in Book 5 of Leases at page 197 thereof; and

WHEREAS, the parties hereto deem it to be for their mutual benefit that certain obligations of the lessee contained in said mining lease be temporarily suspended as hereinafter set forth;

NOW THEREFORE, it is agreed by and between the parties hereto as follows, to-wit:

1. That Article 5 Work Requirements and Article 6-f Minimum Royalty after October 1, 1946 of said Mining Lease be and they are hereby suspended as of July 1, 1948 until further notice as hereinafter set forth.

2. At any time hereafter during the term of said Mining Lease the lessor may terminate this Supplemental Agreement upon giving thirty (30) days notice in writing to the

lessee, and the lessee shall have a period of thirty (30) days after the receipt of said notice within which to elect whether to proceed with the performance of the Mining Lease as written, or to cancel said Mining Lease as provided in Article 16 thereof.

3. In all other respects the obligations of the lessee under said Mining Lease shall remain in full force and effect as therein written, including Article 9 Payment of Taxes.

IN WITNESS WHEREOF, the parties hereto have caused their corporate names to be hereunto subscribed and their corporate seals to be hereunto affixed and attested by their duly authorized officers, in duplicate counterparts, as of the day and year first above written.

THE EDWARD P. ALLIS COMPANY, Lessor

By

*(Signed)* E. P. Allis Pres.

President

ATTEST:

P. Haack Haack  
Secretary

AMERICAN SMELTING AND REFINING COMPANY, Lessee

By

R. F. Gordon

Vice President

ATTEST:

Harold Home  
Secretary.

STATE OF WISCONSIN, )  
COUNTY OF MILWAUKEE. ) ss.

This instrument was acknowledged before me this 6<sup>th</sup> day of August, 1948, by E. P. Allis as President, and P. M. Haack as Secretary of The Edward P. Allis Company, a corporation, for and on behalf of said corporation.

My Commission expires May 27 1951.

S. S. Raymond  
Notary Public

STATE OF NEW YORK, )  
COUNTY OF NEW YORK. ) ss.

This instrument was acknowledged before me this 31<sup>st</sup> day of August, 1948, by R. F. Goodwin as Vice President and Harold Home Asst. G. A. Brockington as Secretary of American Smelting and Refining Company, a corporation, for and on behalf of said corporation.

My Commission expires Feb 30, 1950 1950.

John E. Kempsey  
Notary Public

has after correction

S. M. C. <sup>Correct</sup>  
E. J. M.

MINING LEASE

THIS LEASE Made and entered into this 31<sup>st</sup> day of August, 1945 by and between

THE EDWARD P. ALLIS COMPANY, a Wisconsin Corporation, party of the first part, Lessor, and

AMERICAN SMELTING AND REFINING COMPANY, a New Jersey Corporation, party of the second part, Lessee,

WITNESSETH:

ARTICLE 1. Description of Property.

That the lessor, for and in consideration of the sum of One Dollar (\$1.00) to it in hand paid by the lessee, the receipt whereof is hereby acknowledged, and for and in consideration of the royalties to be paid by the lessee and of the covenants and agreements of the lessee hereinafter set forth, does hereby lease, let and demise unto the lessee, its successors and assigns, upon the terms and conditions hereinafter set forth, all those certain patented mining claims situate, lying and being in the Harshaw Mining District, Santa Cruz County, Arizona, described as follows:

CALIFORNIA PATENTED MINE, Survey No. 351, the United States Patent for which is now of record in the office of the County Recorder of Santa Cruz County, State of Arizona, in Book 3 of Mining Deeds at Page 501;

GARFIELD PATENTED MINE, Survey No. 352, the United States Patent for which is now of record in said Recorder's

Office in Book 3 of Mining Deeds at Page 513 thereof; and  
ALLIS PATENTED MINE, Survey No. 353, the United  
States Patent for which is now of record in said Recorder's  
office in Book 3 of Mining Deeds at Page 507 thereof;

Together with all water and water rights appurte-  
nant thereto, or held, owned, developed or used in connec-  
tion therewith and the right to use the same either on or  
off of said claims.

ARTICLE 2. Term of Lease.

The term of this lease, unless sooner forfeited,  
cancelled, terminated or surrendered, shall be ten (10)  
years from the date hereof.

ARTICLE 3. Possession and Control of Property.

The lessee shall have and it is hereby given and  
granted the right to enter into and take over immediately  
the sole and exclusive possession and control of said  
property and the whole and every part thereof, and during  
the term of this lease to remain in the sole and exclusive  
possession and control thereof, and to investigate,  
measure, sample, examine, test, develop, work, mine, operate,  
use, manage and control the same, and the water and water  
rights appurtenant thereto, and to mine, extract and remove  
from said property the ores and minerals therein and appur-  
tenant and belonging thereto, and to treat, mill, ship, sell  
or otherwise dispose of the same and receive the full  
proceeds therefrom.

ARTICLE 4. Entry, Manner of Work and Conformity with Laws.

The lessee agrees to take possession of said property within thirty (30) days from the date hereof, and to cause all examination, work, development and mining to be done in a careful and minerlike manner, and to conform in all respects to the mining laws and regulations of the State of Arizona.

*Sept 30 1945*

ARTICLE 5. Work Requirements.

Beginning with the month of October, 1945, the lessee shall expend during each three months period thereafter for exploration, development and other work upon said property, a sum of not less than Fifteen Hundred Dollars (\$1500.00) and so in proportion for any part of a three months period; provided, however, that the lessee, in lieu of this expenditure, may pay a minimum royalty as provided for in Article 6, g, hereof.

*Card, Mr. Lee*

ARTICLE 6. Royalties.

The lessee hereby agrees to pay the lessor royalties on all ores, minerals and other products mined and removed from said property during the term of this lease, as follows:

a. Basic Royalties on Milled Ores.

Royalties on such ores milled by the lessee shall be an amount equal to 10% of the net mill returns. The net mill returns shall be the amount the

lessee would pay therefor, exclusive of premium metal payments, as if purchased by it for milling under the following:

MILL SCHEDULE: -Pay for total metal contained at the following prices when lead at New York and zinc in St. Louis are selling as follows, fractions in proportion:-

Metal Price	4	4.5	5	5.5	6	6.5	7	7.5
Pay Per Lb:								
Pb -	1.4	1.73	2.06	2.39	2.72	3.05	3.38	3.71
Zn -	.4	.65	.90	1.15	1.40	1.65	1.90	2.15

Metal Price	8	8.5	9	10	11
Pay Per Lb:					
Pb -	4.04	4.37	4.70	5.36	6.02
Zn -	2.40	2.65	2.90	3.40	3.90

In the event the price of either of the above metals exceeds Eleven Cents (\$0.11) per pound, the lessee shall provide a supplemental schedule therefor which shall be fair to the lessor and shall not be less favorable to the lessor than any schedule then used by it for the purchase of custom ores of a similar nature.

Silver - Pay per ounce 50/70.625 of the prevailing price for domestic mined silver.

Deduct treatment charge \$3.00 per dry ton flat rate.

See letter 8/30 will be revised so as to apply only to A. premium

b. Royalties on Premium Metal Payments.

Royalties on premium metal payments received by the lessee for metals contained in concentrates produced by the milling of such ores shall be an amount equal to 10% of the net premium metal payments received by the lessee.

c. Royalties on Ores Shipped to Smelter.

Royalties on ores not milled but shipped and sold directly to a smelter shall be an amount equal to 10% of all net smelter returns, including premium metal payments, received by the lessee from the sale or disposal of such ores.

d. Definition of Net Smelter Returns.

Net smelter returns shall be deemed to be all sums paid to the lessee for the values of the ores after deducting all charges for transportation from the mine to the smelter and smelter charges.

e. Royalty Settlements.

Royalty settlements shall be made by the lessee on or before the 25th day of each and every month during the term of this lease for all ores milled, premium metal payments and smelter returns

received during the preceding calendar month. Each settlement shall be accompanied by duplicate liquidation or settlement sheets for each lot of ore milled and by duplicate smelter returns for each lot of ore sold to a smelter, and duplicate statements of premium metal payments received.

f. Minimum Royalty after October 1, 1946.

(b)

The lessee guarantees that the minimum royalty to be paid by it for each and every calendar month during the term of this lease beginning with the month of October 1946, and so in proportion for any part of a calendar month, shall be the sum of One Hundred Dollars (\$100.00). If during any such calendar month the royalties hereinbefore provided for do not equal or exceed the sum of \$100.00, the lessee shall, nevertheless, on or before the 25th day of the following month, pay the lessor the sum of \$100.00, or an amount in addition to royalties paid sufficient to make up the minimum royalty of \$100.00.

g. Minimum Royalty in Lieu of Work Requirements prior to October 1, 1946.

For any three months period, during one year beginning October 1, 1945, in which expenditures for exploration, development and other work upon the property have not exceeded Fifteen Hundred Dollars (\$1500.00) as provided for in Article 5, then a minimum royalty of Three Hundred Dollars (\$300.00) shall be paid for said three months period. If during such three months period the royalties hereinbefore provided for do not equal or exceed the sum of \$300.00 and if expenditures have not been made as provided for in Article 5, then the lessee shall, on or before the 25th day of the month following said three months period, pay the lessor the sum of \$300.00 or an amount in addition to the royalties paid, sufficient to make up the minimum royalty payment of \$300.00 for that period.

h. Method of Payment.

All royalty payments herein provided for shall be made by check mailed to the lessor at 427 East Stewart Street, Milwaukee 7, Wisconsin.

ARTICLE 7. Protection from Liens and Damages.

The lessee shall keep said property and the whole and every part thereof free and clear of liens for labor done or performed upon said property or materials furnished to it on or for said property, or for the development or operation thereof under this lease and while the same is in force and effect, and will save and keep harmless the lessor from all costs, loss or damage which may arise by reason of injury to any persons employed by the lessee in or upon said property or any part thereof or which may arise by reason of injury to any persons, livestock or other property as the result of any work or operations of the lessee or its possession and occupancy of the property.

ARTICLE 8. Notices of Non-liability.

The lessee will keep posted upon said property such notices of non-liability for labor or materials furnished as may be posted thereon by the lessor pursuant to the laws of the State of Arizona. In the event any such notices are posted on the property by the lessor it shall furnish the lessee with a copy of the same, together with a statement of the locations at which said notices are posted.

ARTICLE 9. Payment of Taxes.

The lessee shall pay, when due and before delinquent, all taxes upon said property falling due during the term of this lease and while the same is in force and effect, and shall pay, when due and before delinquent, all taxes levied or assessed against any and all personal property, machinery

and equipment placed upon said property by the lessee during the term of this lease. The lessee shall also pay all sales taxes and other taxes of every kind, character and description levied or imposed during the term of this lease upon the ores, minerals, concentrates or products of ores, produced, sold or otherwise disposed of by the lessee, and all taxes levied against the lessee as an employer of labor, all such taxes to be promptly paid when due and before delinquent.

ARTICLE 10. Insurance.

The lessee shall carry at all times during the term of this lease Workmen's Compensation, Liability and other insurance required by the laws and mining regulations of the State of Arizona.

ARTICLE 11. Books of Account.

The lessee shall keep accurate books of account relating to the milling, sale and disposal of ores, minerals, concentrates or other products from said property, which books of account shall be open to inspection by the duly authorized agent of the lessor at all reasonable times.

ARTICLE 12. Reports and Maps.

The lessee shall furnish the lessor quarterly with copies of the logs of all drill holes on the property and with such sample or assay maps as may be made showing the position and assay values of samples taken on said property.

ARTICLE 13. Inspection.

The duly authorized representative of the lessor

shall be permitted to enter into and upon said property and the workings of the lessee at all reasonable times for the purpose of inspection.

ARTICLE 14. Forfeiture Clause.

The failure of the lessee to make or cause to be made any payment herein provided for, or to keep or perform any agreement on its part to be kept and performed, according to the terms and provisions hereof, shall, at the election of the lessor, work a forfeiture hereof. Provided, however, that in the event of a default on the part of the lessee and the election of the lessor to terminate this lease on account thereof, the lessor shall give to the lessee a written notice of its intention to declare a forfeiture of this lease and to terminate the same on account thereof, specifying the particular default or defaults relied upon by it, and the lessee shall have thirty (30) days after receipt of said notice in which to make good such default or defaults, in which event there shall be no forfeiture therefor.

ARTICLE 15. Force Majeure.

If the lessee shall be delayed at any time in keeping or performing any agreement on its part to be kept or performed according to the terms and provisions hereof, except the payment of royalties and taxes, by any act or neglect of the lessor or by strikes, lockouts, fire, unusual delay in transportation, orders of the Government, or any

duly constituted instrumentality thereof, unavoidable casualties, or any causes beyond the control of the lessee, such delay shall not be deemed a breach of this lease or a default on the part of the lessee constituting a cause for forfeiture.

ARTICLE 16. Cancellation by Lessee.

The lessee expressly reserves the right to cancel, terminate and surrender this lease and to relinquish and surrender said property to the lessor at any time, upon giving thirty (30) days prior notice to the lessor of its intention so to do, and by delivering to the lessor upon said cancellation a written relinquishment of this lease.

ARTICLE 17. Surrender of Property by Lessee.

In the event of a valid forfeiture, surrender or other termination of this lease, the lessee will surrender peaceable possession of said property and the whole and every part thereof to the lessor immediately.

ARTICLE 18. Removal of Equipment, Etc. by Lessee.

The lessee shall have, and it is hereby given and granted, ninety (90) days after a valid forfeiture, surrender or other termination of this lease to remove from said property all warehouse stocks, merchandise, materials, tools, hoists, compressors, engines, motors, pumps, transformers, electrical accessories, metal or wooden tanks, pipes and connections, mine cars and any and all other machinery and equipment erected or placed in or upon said property by it, together with all ore broken in the stopes

or workings, except mine timbers and underground mine tracks and pipe lines in place on the main levels or in the shafts, and permanent improvements.

ARTICLE 19. Warranty of Possession.

The lessor hereby covenants and warrants that the lessee, its successors and assigns, shall and may, at all times during the term of this lease, peaceably and quietly have, hold, use, occupy, possess and enjoy said property and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the lessor, its successors and assigns, or any person or persons lawfully claiming or to claim the same.

ARTICLE 20. Notices.

All notices herein provided for may be given by mail at the following addresses, until otherwise changed by written request of the parties hereto, to-wit:

To the Lessor, 427 East Stewart Street, Wilwaukee 7,  
Wisconsin;

To the Lessee, Valley National Building, Tucson,  
Arizona.

ARTICLE 21. Inurement Clause.

Time is of the essence of this lease. The terms, provisions, covenants and agreements herein contained shall extend to, be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the lessor and lessee have caused their corporate names to be hereunto subscribed, and their corporate seals to be hereunto affixed and attested by their duly authorized officers, in duplicate counterparts, as of the day and year first above written. Notwithstanding the date appearing on the first page of this lease, and the different dates of signatures and acknowledgments hereto, it is agreed that the date of this lease shall be September 1, 1945.

THE EDWARD P. ALLIS COMPANY, Lessor

By E. P. Allis  
President

Seal

ATTEST:

P. W. Haack  
Secretary

AMERICAN SMELTING AND REFINING COMPANY, Lessee

By H. A. Jones  
Vice President

ATTEST:

J. A. Brockington  
Secretary

Seal

STATE OF WISCONSIN, )  
COUNTY OF MILWAUKEE. ) ss.

This instrument was acknowledged before me this 31<sup>st</sup> day of August, 1945, by E. P. Allis as <sup>True</sup> President, and P. M. Hoels as Secretary of The Edward P. Allis Company, a corporation, for and on behalf of said corporation.

My Commission expires June 18 1947

(5)

Stephan S. Bismuto  
Notary Public

STATE OF NEW YORK, )  
COUNTY OF NEW YORK. ) ss.

This instrument was acknowledged before me this 7<sup>th</sup> day of Sept 1945 by H. A. Guess as Vice President, and G. A. Brockington as Secretary of American Smelting and Refining Company, a corporation, for and on behalf of said corporation.

My Commission expires Feb 30 1946.

(5)

John E. Kempsey  
Notary Public.

JAMES H. VAN HORN

306 FIDELITY TOWER  
Telephone 3-0513  
PHOENIX, ARIZONA

June 9, 1948

Edward P. Allis Company  
427 East Stewart Street  
Milwaukee 7, Wisconsin

ATTENTION: Mr. P. M. Haack

RE: Allis Claims  
at Patagonia

Dear Mr. Haack:

Enclosed herewith is carbon copy of a letter from the American Smelting & Refining Company advising that they intend to terminate their lease on your property at the end of this month and after paying the regular minimum royalty for the month of June.

I have carefully checked over the contract and correspondence and the A. S. & R. Company are entirely within their rights in terminating the arrangement and their decision in this matter was to have been expected.

Although I have not personally inspected the property at any time during the past year, I have kept in fairly close touch with the general results of development work and there appears to be no reason to doubt that no orebody has been found which might extend over on the California Claim or on any of your other claims which A. S. & R. Company hold under lease. You will doubtless recall that prior to June of 1947 the lessee had carried on extensive drilling on the California and had furnished us with maps and reports concerning their work and the log of the drill holes in which no commercial ore had been found.

Subsequently the work of the A. S. & R. Company has been confined to their own claims in the Flux Group some of which adjoin the California, and I am reliably informed that they have failed to open up any ore shoots which could extend into the California or where the apex might be on the California ground.

As to the Garfield and Alice Claims, you will recall that I could never find any outcrops of pay ore on these claims nor any indications that veins of pay ore were likely to be developed and a similar result has followed the recent investigations of the A. S. & R. Company according to the best of my information.

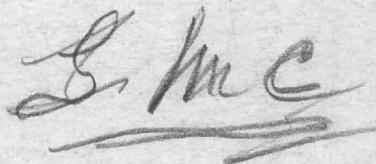
As to the suggestion in the second paragraph of Mr. Ring's letter, you will recall that the last taxes amounted to \$20.18 for one-half of the year 1947 and although the tax rate varies from year to year, it may be assumed that this payment will run to about \$40.00 per annum in future. I think that it may be advisable to allow the

A. S. & R. Company to continue to hold the lease without any other obligation on their part than the payment of these taxes since I do not believe that under the circumstances it will be possible to find any other responsible lessee, but I would suggest that if the directors of the Allis Company decide to follow this advice, a special provision should be made whereby the lessor would have the right to cancel the lease upon thirty days notice. This suggestion is merely made in view of the possibility that some other concern might be interested in taking over the property in which case it might not be advantageous to have it tied up to the A. S. & R. Company until the end of a yearly term.

There has been no underground work on the California Claim since I last visited the mine and I have carefully checked the logs of the drill holes so that I do not believe that anything would be gained by making a personal visit and inspection of the property, but I will be glad to do this if the directors think that it is worth the cost and in any event I shall of course continue to make every effort toward encouraging the A. S. & R. Company to resume work in this neighborhood or to give similar encouragement to any other responsible concern that may be operating in that vicinity.

Kindly let me hear from you on the above at your convenience.

Yours very truly,



GMC:IM  
Enclosure

AMERICAN SMELTING AND REFINING COMPANY

WESTERN MINING DEPARTMENT

D. J. POPE, GENERAL MANAGER

W. R. LANDWEHR, CHIEF GEOLOGIST

SOUTHWESTERN DIVISION  
A. E. RING, MANAGER

June 7, 1948

*A* *6/9/48*  
VALLEY NATIONAL BLDG.  
TUCSON, ARIZONA  
P.O.B. 2229 TELEPHONE 503

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

TRENCH UNIT  
Patagonia, Arizona  
Allis Lease

Dear Sir:

As you know, we have kept the lease of August 31, 1945, alive by paying \$100.00 a month, per letter agreement of May 13, 1947; this arrangement was to terminate June 30, 1948.

Our work during the past year has not changed the picture of any account. We have decided to terminate the lease with the expiration of the letter agreement of May 13, 1947. If your people would care to keep the lease alive on the bare chance that developments a year or so from now might change the picture, and release us from all royalty, work requirements, or payments of any kind, we would be willing to pay any taxes falling due on the property, such release to be renewed from year to year until the lease was definitely cancelled or some other arrangement made.

I regret that the above decision is necessary. Our geologists have reviewed the past year's work and the adjacent areas in connection with former examinations, and our decision is based largely on their recommendations. The regular royalty of \$100.00 for the month of June will, of course, be sent to you to complete the letter agreement.

With best personal regards, I am,

Very truly yours,

cc: WHLoerpabel  
DJPope  
WRLandwehr  
WTBrown  
GMColvocoresses - ex copy

*A. E. Ring*  
A. E. RING  
Manager

AER:blc

*had keep lease alive +  
paying \$ usd cancel in 30 days note  
? taxes*

MEMO RE: :ALLIS CLAIMS AT PATAGONIA

April 4, 1947

Talk with Mr. Pope on phone and Pope, the new general manager of the A. S. & R., explained that they had so far been unable to find any commercial ore on the California claim but wished to continue to drill one hole to a greater depth although the lower portion of same would be off the California ground, but he hoped that we would agree to have this counted as part of the required expenditure for development.

His second request was that after the work for this quarter was completed we would waive the requirement for development for perhaps one year during which they would continue to pay the minimum royalty of \$100 per month but would not continue drilling or other work on our property since they believed that it would be more advantageous to both parties for them to extend the drifts from the Flux claim toward and perhaps into the California.

I told Pope that he could rest assured that the Allis Company would agree to these proposals and asked him to write me a letter explaining just what was wanted.

I asked Pope if his company had already started geology and mining investigations on the Hammon Copper Company claims and other similar deposits in the vicinity of Kirkland, and he said that their geologist Wilson and their field engineer Stephens would probably start these investigations next week and plan to call at my office on their way north.

AMERICAN SMELTING AND REFINING COMPANY  
SOUTHWESTERN MINING DEPARTMENT  
P. O. BOX 2229  
TUCSON, ARIZONA

*Handwritten:* @ 8/7/47

A.E.Ring  
D.L. POPE  
MANAGER

VALLEY NATIONAL BLDG.  
TELEPHONE 503

August 6, 1947

Mr. G.M.Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

TRENCH UNIT  
Allis Lease

Dear Sir:

During the second quarter of 1947, we continued the drilling of hole FS-45 to a depth of 814 feet, without finding any ore in it. A copy of the log from 428 ft. (see report of April 22, 1947) to 814 feet is attached. Copy of our 100-ft. scale plan map, showing the locations of holes on the California claim is also attached.

Expenditures for the quarter were as follows:

Engineering and Geology .....	\$ 98.00
Assaying and general expense.....	103.60
Water supply .....	245.00
Contract drilling .....	1161.50
Total .....	<u>1608.10</u>
Royalty - three months .....	300.00
Total .....	<u>\$1908.10</u>

Check for July royalty of \$100.00 is also enclosed.

Although the bill continuing the Premium Plan has not been actually signed, as yet, by the President, we are continuing operations at Trench Unit on the assumption that it will be signed.

encls: Drill logs  
California plan map  
chk.

cc: WHLoerpabel - no encls  
WTBrown " "  
GMColvocoresses - ex copy  
letter only

Very truly yours,

*A. E. Ring*  
A. E. RING  
Manager

AER:blc

NOTE TO MR. COLVOCORESSES:

Mr. Pope has been transferred to Salt Lake City as General Manager of the Western Mining Department in charge of mining and exploration

(Continued -

Mr. G.M.Colvocoresses  
Trench Unit - Allis Lease

-2-

August 6, 1947

NOTE TO MR. COLVOCORESSES (Continued)

here in the Western States. I have taken his place here as Manager of the Southwestern Division of the Western Mining Department. These changes were effective August 1, 1947. These changes in organization, plus the premium situation, have delayed our getting out our accounts somewhat, and I hope you will pardon this delay.

A.E.R.

# DRILL HOLE LOG

Type DD Bit AX Area Galif-Surf Date Start 4-8-47 No. FS 45  
 Coordinates Section 15 600 N Date Stop 6-25-47  
 N. 15 600 E. -3925 Elev. 4645 Bear. East Inc. -76°

FROM	TO	INTER- VAL	RECOV- ERY	% RECOV- ERY	CHARACTER	REMARKS
428	450	22	15	68	Rhyolitic Breccia. Gray to chloritic color with very large fragments.	
450	476	26	17	65	Rhyolitic Agglomerate. Slight lime. Gray to chloritic color.	
476	547	71	47	66	Do Rock. Trace Pyrite on fractures.	
547	608	61	35	47	Rhyolitic Agglomerate. Slight lime. Gray to chloritic color.	
608	626	18	11	61	Do Rock. Part of core all Rhyolite and flow structure very evident.	
626	644	18	9	50	Rhyolitic Agglomerate. Slight lime. Gray to slightly chloritic color.	
644	695	51	41	80	Rhyolitic Agglomerate. Flow structure evident in fragments. Gray color. Trace lime.	
695	723	28	25	89	Do Rock. Fair Pyrite @712' in veinlet making angle of 45° with hole.	
723	750	27	23	85	Rhyolitic Agglomerate. Slight lime. Gray color. Pyrite common on fractures.	
750	789	39	30	77	Do Rock. Flow structure evident @753'.	
789	813.8	24.8	18	73	Rhyolitic Agglomerate. Slight lime. Trace Pyrite on fractures.	
71% Core Recovery						

TO ACCOMPANY Letter to AER  
 DATED 7-14-47  
 BY J.C. Phelan

Logged By: JCP

# DRILL HOLE LOG

Type DD Bit BX, & AX Area Calif-Surf. Date Start 2-25-47 No. FS 45  
 Coordinates Section 15 600 N Date Stop 3-17-47  
N. 15 600 E. -3925 Elev. 4645 Bear. East Inc. -76°

FROM	TO	INTER-VAL	RECOV-ERY	% RECOV-ERY	CHARACTER	REMARKS
0	16	16	9	56	Rhyolitic Breccia. Moderate alteration.	
					Contains very large fragments.	
16	34	18	12	67	Do Rock. Slight alteration.	
34	46	12	7	58	Rhyolitic Agglomerate. Gray color. Slight alteration. Contains fine, disseminated Pyrite.	
46	61	15	15	100	Rhyolitic Breccia. Slight alteration	
					Very coarse fragments.	End Of BX
61	119	58	50	86	Rhyolitic Agglomerate. Slight alteration.	
119	168	49	42	86	Do Rock.	
168	211	43	38	88	Do Rock.	
211	231	20	18	90	Rhyolitic Agglomerate. Very light colored. Contains specks of sulfides.	
231	286	55	48	89	Rhyolitic Agglomerate. Slight alteration.	
286	347	61	45	74	Do Rock.	
347	397	50	45	90	Rhyolitic Agglomerate. Contains traces of disseminated Pyrite. Pink fragments common. Epidote rare.	
397	402	5	5	100	Rhyolitic Agglomerate. Dark gray to chloritic color. Slight lime with calcite along fractures. Is weakly mineralized. Somewhat resembles rock characteristic of footwall.	
402	409	7	5	71	Do Rock. Minute PbS stringers at 403'.	
					Fair Pyrite at 406'.	
409	413	4	2	50	Quartzite.	
413	422	9	5	56	Chloritic Rhyolitic Agglomerate. Slight lime. Trace Pyrite. Dark green color.	
422	428	6	4	67	Chloritic Rhyolitic Agglomerate. Slight lime. Trace Pyrite throughout.	

Logged By:

*Copy of Report - slightly abridged from original.*

GEORGE M. COLVOCORESSES  
MINING AND METALLURGICAL ENGINEER  
1102 LUHRS TOWER  
PHOENIX, ARIZONA

August 23rd, 1940

REPORT ON ALLIS GROUP OF MINING CLAIMS

CALIFORNIA Lot #41, pat survey #351  
GARFIELD Lot #42, pat survey #352  
ALLIS Lot #43, pat survey #353

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Gentlemen:

Persuant to your request I have completed an examination of the above named mining claims, which I shall term the "Allis Group", and beg to submit the following report with Exhibits A, B, C, D, E, and F. I was guided over this property by Joe Benitez, Harris having moved away from Patagonia.

LOCATION AND GENERAL DESCRIPTION:

The three patented lode mining claims named above are recorded in the name of E. P. Allis and James McC. Elliot and are located on the western edge of Sect. 19 and 30, Township #22 South, Range 16 East, Gila and Salt River Base and Meridian. The Allis and California Claims extend over the west line of this township and into Township #22 South, Range 15 East. The limits of the claims are shown on Exhibit A, which is enlarged from the official survey map of Township 22 in the U. S. Land Office. Further details of the individual claims are shown on Ex. B, C, and D, which are photostats of the original survey plats and show the location of all of the workings made prior to 1882.

These claims have a combined area of 60 acres and they are distant by good mountain road five miles from the town of Patagonia, Santa Cruz County, Arizona. Patagonia is on the Tucson-Nogales branch of the Southern Pacific R.R. and is connected by road with Nogales, which is 23 miles distant and Tucson, 63 miles distant. The elevation of various portions of the claims varies from 4200 to 4800 feet and the climate is mild and suitable for work at all times of the year. There is always ample water flowing in or under the bed of Sonoita Creek, which runs through Patagonia, while two of its tributaries, Alum Creek and Mill Creek, drain a portion of the slopes of Red Mountain and flow respectively through the Eastern and Western section of your claims, as shown on the maps.

HISTORY:

Some of the veins in the Harshaw District were worked by Indians and later by Mexicans over 100 years ago. The first American locations -- subsequent to the Gadsden Purchase in 1853 -- were made prior to 1860, but difficulties of operation and transportation retarded activity until about 1880 when many claims were relocated including probably the Allis Group as these were surveyed for patent in 1882.

I could learn but little of the history of the Allis Group, but some work was evidently done prior to 1880 and such of these old openings as I could find (with the exceptions of those where later work had also been done) were now caved and

practically inaccessible. Most of the subsequent development, according to Joe Benitez, was carried out by a certain Wilson around 1920 and later by a man named Gartney, while the most recent work -- all in the California Claim -- was done by Benitez and Levi Harris, and in late '39 by Harris alone. The shipments made by these recent lessees appear to have amounted to 70 tons of ore with an average content of 6 oz. silver and 16% lead, also very small amounts of copper and zinc.

#### TOPOGRAPHY AND GEOLOGY:

The country is mountainous and some of the slopes are steep and rocky, elsewhere there is a fine stand of grass and native shrubs and numerous live-oaks with cottonwoods and willows growing near the creeks.

The original survey stakes were doubtless of wood, as was customary in those days, and they have long since rotted away or been removed. The rock piles which were placed around these stakes are still to be found and with the help of the survey maps and workings from the shafts which were noted thereon, I was able to locate pretty accurately the lines of the California Claim, but at the Allis and Garfield I could not do so well. Benitez had no idea where any of the corners of these two claims actually lay and so it was necessary to obtain an approximate idea from the openings on the Allis Claim and the position of Alum Creek and Mill Creek between which the bulk of these two claims lie across a very steep and rugged ridge that has an elevation above the creeks of 400 to 600 feet.

Strange to say the relative location of these two creeks is differently shown on the Township map, the U. S. Geological Survey map and the Mineral Surveyors Map of the claims. I have used the latter in conducting my field work and preparing this report.

According to the U. S. G. S. Bulletin #582 by Frank C. Schrader the oldest rocks in this district and vicinity are Cambrian granite, shale and quartzite, which are overlain by Paleozoic sediments mainly limestone and conglomerates that were later intruded by various igneous eruptives. In the immediate vicinity of the Allis Group the prevailing rock is a Tertiary Rhyolite, but further south at the Flux Mine limestone is noted and still further to the south and west there are masses of granite porphyry. The rocks which I noted on your claims were rhyolite, quartzite and quartz diorite, the ore occurrences were entirely in rhyolite as far as I was able to observe them. The metallic minerals occur in fissure veins mainly filled with quartz and hematite with which are associated silver, lead, and zinc and in places a little copper.

The veins of the Allis Group belong to the later period of mineralization, the metallic minerals having been deposited as sulphides from solutions which accompanied the Tertiary intrusion of rhyolite and these sulphides were oxidized near the surface where the zinc has been leached out and iron oxide and lead carbonate predominate.

ALLIS CLAIM:

Mill Creek crosses this claim as shown on the map and both slopes rise abruptly. The formation is all rhyolite. On the west slope of the canyon no workings are shown on the map. Benitez claimed that there were none and none could be found. There would appear to be a chance that the Flux vein crosses this claim near its western end, but if so the outcrop is covered with overburden and it does not appear that it has ever been traced so far to the north.

On the eastern slope, about two-thirds up the ridge, two adit tunnels were visited apparently representing the shafts shown on the survey map and now converted into tunnels. (See Exhibit F).

Some 50 feet higher and 100 feet further east a shallow cut has been put in the hill but no vein was noted here. The two lower adits enter a very flat vein or blanket which strikes in a northerly direction and dips toward the east about  $15^{\circ}$ . The average width of the vein is over three feet near the portals but it seems to pinch as depth is gained and at the ends of the tunnels is not over a foot wide. Quartz and iron-oxide were noted and my sample taken from the vein in the north drift over a width of  $2\frac{1}{2}$  feet carried 5.4 oz. silver per ton and only a trace of lead. A second sample taken from a small pile of ore near the portal of the south tunnel carried 0.6 oz. silver per ton and again only a trace of lead.

This vein, like some others which I observed in the district, appears to have very little depth, and in my opinion holds no promise of producing pay ore in any quantity.

GARFIELD CLAIM:

The upper opencut on the Allis is close to the west end of the Garfield Claim which extends over the top of the ridge and northeastward down the west slope of Alum Creek, which is very precipitous and in places almost a series of sheer rock walls often over 100 feet in height with narrow ledges between.

Apparently there have been no recent workings in the upper part of the Garfield Claim and the old shafts have been largely filled in and could not be accurately located. No evidence of veins or ore were noted here, but down along the lower walls of the canyon many small veins were seen striking to the Southwest and nearly vertical. None of those which I examined within what appeared to be the limits of the Garfield looked at all promising. They were all tight and barren, and whoever may have started drifting on them evidently soon became discouraged and quit without having produced any pay ore as far as could be judged from appearances.

More extensive work along Alum Creek was done on the Blue Eagle or Black Eagle Mine to the north of the Garfield and on another claim to the south but these mines were abandoned many years ago.

I could not at present recommend any further development

on either the Allis or Garfield Claims. Later it may be possible to locate the extension of the Flux vein, which should cross through the western part of the Allis.

CALIFORNIA CLAIM:

By far the best showing in your property is on the California Claim, where most of the old and all of the more recent work has been done and to which I devoted the greater part of my time and attention.

The maps of the old and new workings on this claim (Ex. E) have been prepared from the survey map and my own rough survey with a Brunton Transit on which I plotted in the tunnels and stopes worked by the lessees. Nearly all of this work, being close to the surface, developed and produced oxidized ore which was hand-sorted to yield the shipping product previously mentioned. Lead-carbonates with iron-oxide occurred in pockets and sulphides were noted in one place in C tunnel, from which I took a sample ✓ which carried 3.00 oz. silver per ton, 11.2% lead and an appreciable quantity of zinc. The width of vein matter at this point was only six inches. Another sample of carbonate ore from B ✓ tunnel carried 2.2 oz. silver per ton and 7.4% lead. The great irregularity of these workings is best shown on Ex. E and they are typical of the work of lessees who naturally gouge out or ✓ "gopher" all of the best ore that can be cheaply mined with no thought for the proper development or future condition of the property.

In this particular case the situation was worse than usual because they had back-filled most of the stopes with waste so that most of the vein exposures could not be examined or sampled.

Taken as a whole the visible showings were entirely inconclusive, and I should not care to express any definite opinion as to the future value of your property until this Flux vein has been opened up in depth and its character and value can be determined in the zone of primary sulphides which would probably lie over one hundred feet (on the incline) below the outcrop. As compared to the vein at the Flux Mine its width of about two feet on the California seems to be less and the dip of about 20° to the west is flatter. It is possible that the more extensive mineralization at the Flux is due to the intersection of cross veins, several of which seem to converge near the Flux Mine. At least one cross vein is noted on the California east of the Flux vein and nearly vertical and the old shafts #1 and #2 seem to have been sunk on the vein, but I could not descend them nor learn if they had produced any ore.

The breast of the lower adit tunnel should now be very close to this last mentioned vein, and it has already cut one parallel vein from which my sample carried only traces of silver and lead. However, this tunnel would have to be advanced for at least an additional 200 feet before it could be expected to cut the Flux vein as may be noted from Exhibit E.

The main importance of this claim seems to lie in the reasonably certainty that these surface workings are actually in the strong Flux vein which appears to extend north from the Flux Mine where it is now being worked and in the chance that the pay ore which occurs in pockets and lenses near the surface (such as those which have been mined out by the lessees) will make in more continuous and larger shoots at greater depth as has proved and be the case at the Flux, which is now working at a depth of 400 feet below the outcrop. From my visit to the Flux and investigation of what could now be seen of the upper workings, I was impressed with the similarity of conditions here and at the California.

The contour of the ground is unfavorable for development since the vein dips to the west and whereas on the Flux ground it is easily reached by tunnels from Flux Gulch; this gulch swings away from the vein in going north and lies far to the west of the ridge on which the vein crosses the California claim. While this vein cannot be positively traced from the Flux to the California workings, since much of the intervening surface is covered with overburden, yet its general character, strike and dip all tend to confirm the belief that this same vein extends from the Flux Mine to the tunnels and stopes on the California and at one point just south of or along the California line I found a shallow pit on the outcrop from which a sample carried 3.0 oz. silver per ton and 0.2% lead.

A composite of all of my samples from the different workings carried 3.4% zinc but it is quite certain that the

relative percentage of the zinc will increase with depth and the ore from the 400 foot level in the Flux Mine shows rather more zinc than lead.

CONCLUSION AND RECOMMENDATION:

It is my opinion that the future value of your property rests upon the development of the Flux vein as its extension crosses the California and possibly the Allis Claim.

The Flux Mine was idle for many years but is now being worked by the owner, A. R. Byrd, of Tucson, who is making regular and profitable shipments of sulphide ore to the Trench Mill.

The American Smelting and Refining Company, who own and operate the Trench Mine and Mill three miles further south, have been very favorably impressed with the development and possibilities at the Flux and have recently taken an option on this property by virtue of which they are now making a thorough investigation.

Any further work by lessees would almost certainly be of no real benefit to your holdings and merely result as in the past in the production of a very small tonnage of picked material from which only a trivial royalty would accrue to the owners. Past shipments sent to El Paso have had to stand heavy transportation charges and penalties, as may be noted from the attached schedule, and although somewhat better terms are now being offered by the Trench Mill, it is probable that the only substantial profit that will be derived from mining in this particular

district will be obtained by operators who are in a position to develop and work several properties on an extensive scale and to treat the output in their own mills.

Since the A. S. and R. have already embarked on this policy and seem disposed to expand their activities, I believe that it will be to the best interest of all owners of neighboring properties to endeavor to deal with them or with any other large company which may follow a similar policy, and I therefore put this in the form of a recommendation.

Yours very respectfully,

*L. H. Colvocozen*

COMPARISON OF ESSENTIAL TERMS FOR PURCHASE OF LEAD-SILVER ORES  
FROM PATAGONIA DISTRICT

EL PASO SCHEDULE

Silver, deduct 0.5 oz. per ton and pay for the balance @ 69.125¢ per oz. (based on U.S. Govt. price for silver.

Lead, deduct 1.5# per ton and pay for 90% of the balance @ N. Y. market less 1.56¢ per pound.

Charges.

Treatment charge	\$3.50
Insoluble and sulphur penalties	.76 (about)
Freight	<u>2.00</u>
Total	\$ 6.26

TRENCH MILL SCHEDULE ON FLUX MINE ORE

Silver, pay for all silver @ 50¢ per oz.

Lead, when market is 5.50¢ per pound, pay for all lead @ 2.39¢ per pound

Zinc, when market price of zinc is 5¢ per pound, pay for all zinc @ 0.9¢ per pound.

Treatment charge \$3.00 per ton with increase of 10% of the excess net value of the ore above \$7.00 per ton up to a maximum charge of \$5.00.

Trucking charge should be the same to the railroad or to the Trench Mill.

Allis Truss Report

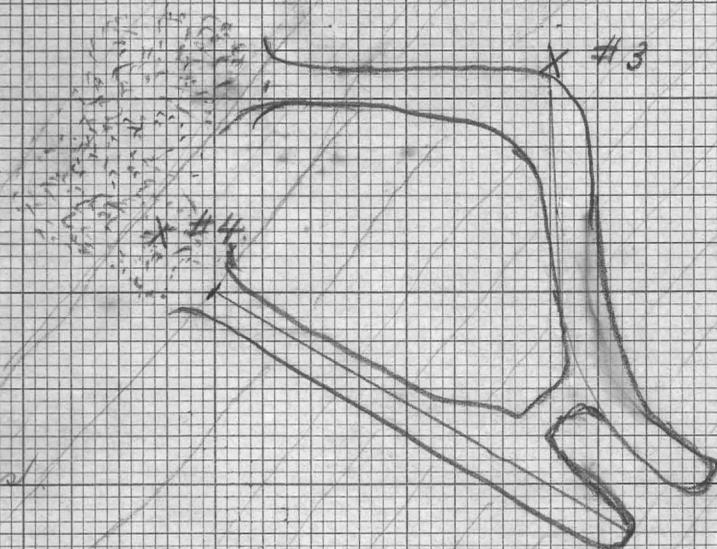
Map



Trussing near east end of Allis Claim

Scale 20' = 1"

Flat iron dipping to north  
east in lower trussing



51  
Continued

Handwritten scribbles and initials at the bottom right of the page.



SURVEY NO. 352.

PLAT

# GARFIELD

MINING CLAIM

Harshaw

Mining District

Pima

County

ARIZONA

Claimed by **E. P. Allis, James M. C. Elliott**

Surveyed by **Solon M. Allis** U. S. D. S.

March 13 1882

Containing an Area of **20.48** Acres

Scale 200 Feet to the Inch.

Variation **12° 38' East.**

The original Field Notes of the Survey of the

## Garfield

Mining Claim from which this plat has been made, have been examined and approved and are on file in this office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises; and that such reference is made therein to natural objects and permanent monuments, as will perpetuate and fix the locus thereof.

I further certify that the value of the labor and improvements placed thereon by the applicant or their grantors is not less than Five Hundred Dollars, and that said improvements consist of

Shaft No. 1. 4+6 ft x 70 ft deep

" " 2. 5+7 " " 20 " "

" " 3. 5+7 " " 78 " "

" " 4. 3+6 " " 3 " "

Open Cut 15+6 ft.

as appears by the report of the Deputy Surveyor and the testimony of two disinterested witnesses.

And I further certify that this is a correct Plat of said Mining Claim, made in conformity with said original field notes of the survey thereof.

*John Madison*

U. S. Surveyor General for Arizona.

U. S. Surveyor General's Office,  
Tucson, Arizona,

April 14 1882.

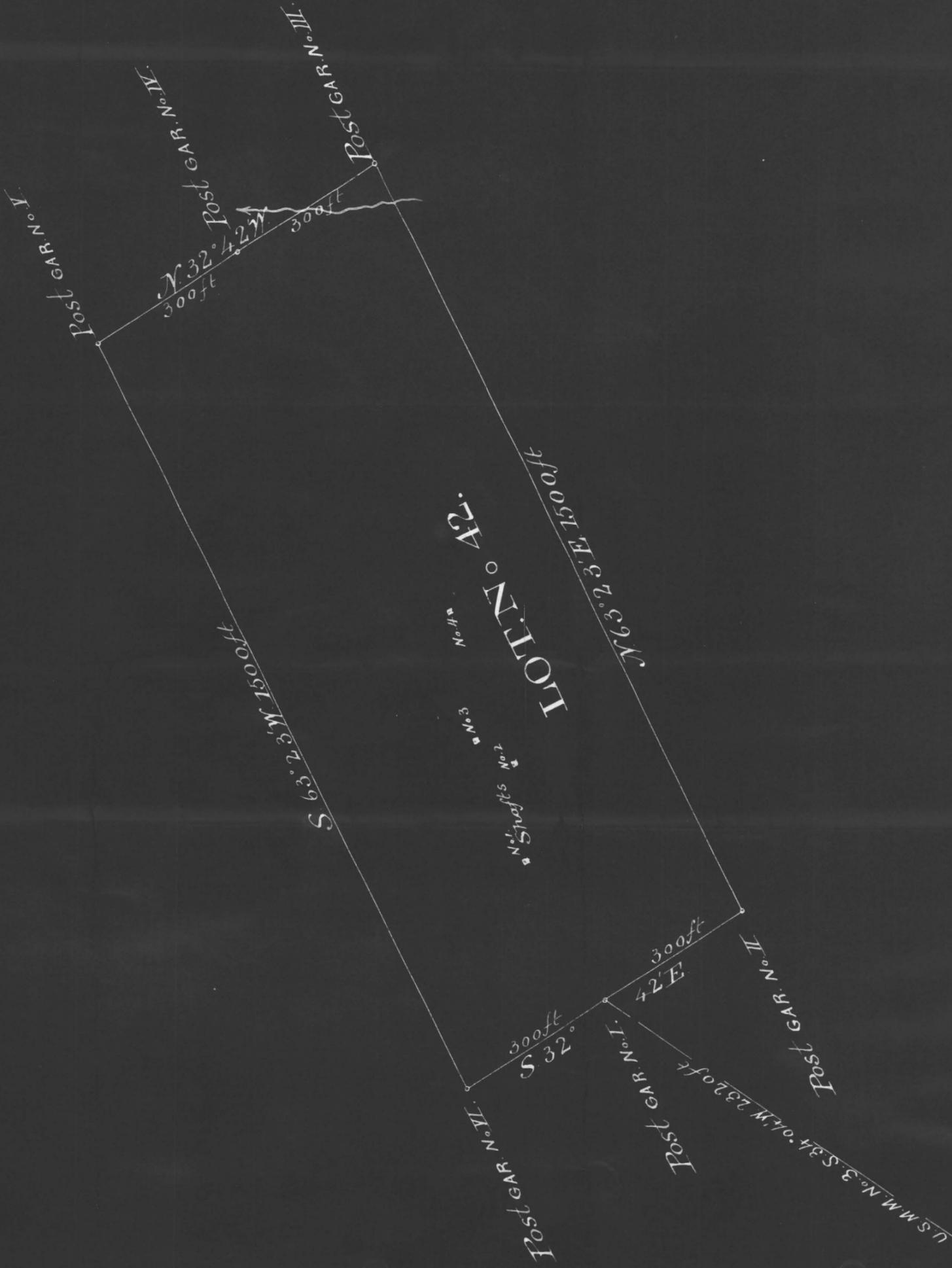


Exhibit C

hole to top h - 20.00  
Flank to  $\frac{3}{4}$  m or  $\angle$

Old mine h + work

It is by  $\frac{3}{4}$  m

Further down to  $65^\circ$

E + dip  $70^\circ$  to  $80^\circ$

of the hole + depth

Little side of Cross

Further down to  $65^\circ$

2 April 11.

SURVEY NO. 353

PLAT

OF THE  
**Allis**

MINING CLAIM

*Harshan*

Mining District

*Pima*

County

ARIZONA

Claimed by *F. P. Allis, James. Mc*

*C. Elliott*

Surveyed by *Solon M. Allis* U. S. D. S.

*March 13* 1882

Containing an Area of **20.66** Acres

Scale 200 Feet to the Inch.

Variation **2° 38' East.**

The original Field Notes of the Survey of the

**Allis**

Mining Claim from which this plat has been made, have been examined and approved and are on file in this office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises; and that such reference is made therein to natural objects and permanent monuments, as will perpetuate and fix the locus thereof.

I further certify that the value of the labor and improvements placed thereon by the applicants or their grantors is not less than Five Hundred Dollars, and that said improvements consist of

*A Tunnel 516 ft & 33 ft long*

*Open Cut 20 ft long & 15 ft high at end*

*A Shaft 616 ft & 10 ft deep*

" " *517 "* **20 "**

" *Cut* " **25 "** long

as appears by the report of the Deputy Surveyor and the testimony of two disinterested witnesses.

And I further certify that this is a correct Plat of said Mining Claim, made in conformity with said original field notes of the survey thereof.

*John M. Adams*

U. S. Surveyor General for Arizona.

U. S. Surveyor General's Office,  
Tucson, Arizona,

**April 14** 1882.

*Garfield Lot No. 42.*

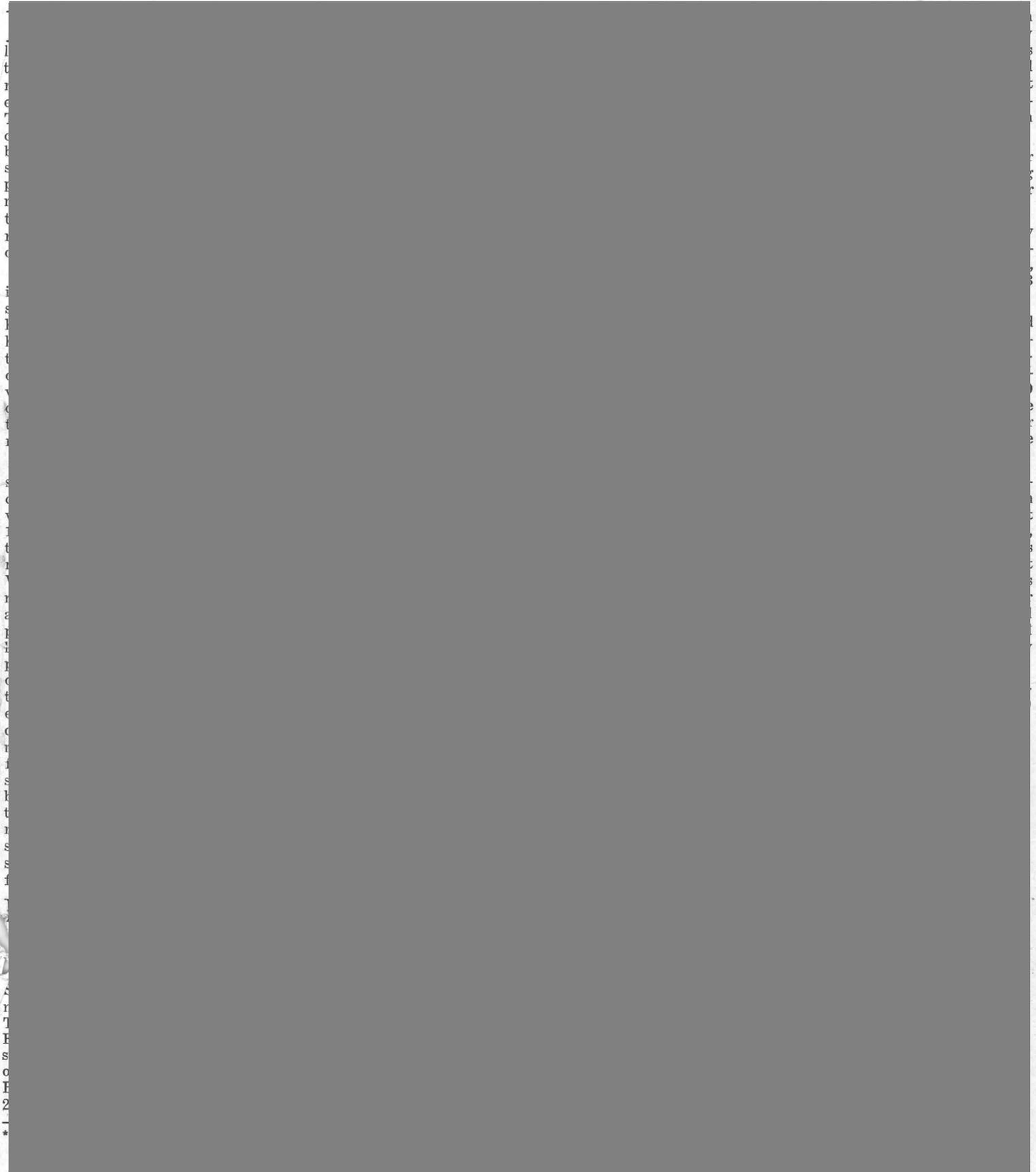


MILES M. CARPENTER\* discusses

*Mine file under P. General*

*file with Albis Clams  
File*

# Mine Operations in the Patagonia District









January 13, 1944

The Edward P. Allis Company  
427 East Stewart Street,  
Milwaukee, Wisconsin

CANCELLATION OF  
ALLIS MINING LEASE

Gentlemen:

Enclosed herewith is Notice of Intention to Relinquish Mining Lease which we have on your property in the Patagonia District, Santa Cruz County, Arizona.

A formal written Relinquishment shortly will be executed and forwarded to you.

We are sorry that our exploration of these claims has not been more successful but, as Mr. Colvocoresses no doubt will inform you, we think we have made an adequate test, and therefore see no reason to make further expenditures.

Very truly yours,

encls

cc: HAGuess -encl  
BenCHill  
TASnedden - encl  
CMColvocoresses-encl

W. H. LOERPABEL  
Manager

WHL:ble

Enclosing also for Mr. Colvocoresses two copies of Harrison Schmitt's letter of Oct. 22, 1943

C O P Y

NOTICE OF INTENTION TO RELINQUISH  
MINING LEASE.

TO - THE EDWARD P. ALLIS COMPANY,  
427 EAST STEWART STREET,  
MILWAUKEE, WISCONSIN.

NOTICE IS HEREBY GIVEN that American Smelting and Refining Company intends to and will on the 29th day of February, 1944 cancel, terminate and surrender that certain Mining Lease dated October 22, 1942 from The Edward P. Allis Company to American Smelting and Refining Company, which said lease is now of record in the office of the County Recorder of Santa Cruz County, State of Arizona, in Book 5 of Leases at page 43 thereof, and will on said date surrender possession of said mining property therein described to the lessor, and on or before said date will deliver to the lessor a written relinquishment of said Mining Lease.

DATED at Tucson, Arizona, January 12, 1944.

AMERICAN SMELTING AND REFINING COMPANY,

By \_\_\_\_\_  
Manager Southwestern Mining  
Department.

COPY

HARRISON SCHMITT  
Silver City New Mexico

*J m c.*

October 22, 1943

To: W.H.Loerpabel, Gen. Mgr.  
American Smelting & Refining Co  
Valley National Bank Bldg  
Tucson, Ariz.

From: Harrison Schmitt

Subject: California mine development

The recent development and stoping on the bedded ore at the California mine disclosed a small ore body from which several hundred tons of a fair grade of ore have been extracted and, according to Snedden, has indicated a remaining reserve of possibly 500 tons of similar ore. This estimate appears to be a fair appraisal. The ore is pyritic. The ore body is the replacement of a bed and bedding plane fault in the limy-shale (now hornstone) which is adjacent to a strong N25W pre-ore fault zone. This zone appears to be the "Patagonia" vein named and defined in my report of February 6, 1942.

The mineralization exposed to date seems weak and to lack the replacing power needed to make good sized ore bodies. Exploration by diamond drilling is not satisfactory because of the blocky and soft character of the ground. It does not seem to me that further expenditures for exploration here under present conditions are justified and that when the present ore is extracted the project should be given up.

cc: HAGuess  
TASnedden

/s/ Harrison Schmitt

COPY *Emc.*

NOTICE OF INTENTION TO RELINQUISH  
MINING LEASE.

TO - THE EDWARD P. ALLIS COMPANY,  
427 EAST STEWART STREET,  
MILWAUKEE, WISCONSIN.

NOTICE IS HEREBY GIVEN that American Smelting and Refining Company intends to and will on the 29th day of February, 1944 cancel, terminate and surrender that certain Mining Lease dated October 22, 1942 from The Edward P. Allis Company to American Smelting and Refining Company, which said lease is now of record in the office of the County Recorder of Santa Cruz County, State of Arizona, in Book 5 of Leases at page 43 thereof, and will on said date surrender possession of said mining property therein described to the lessor, and on or before said date will deliver to the lessor a written relinquishment of said Mining Lease.

DATED at Tucson, Arizona, January 12, 1944.

AMERICAN SMELTING AND REFINING COMPANY,

By

*W. H. ...*

Manager Southwestern Mining  
Department.

Allis Claim - file

Copy as Executed  
MINING LEASE

ON

ALLIS GROUP OF MINES

between

*Gold & Silver*  
*of New Cannelton*

The Edward P. Allis Company, Lessor

and

American Smelting and Refining Company, Lessee.

Effective Nov 1st - 1942

Recorded " 10th 42 in Books 5-7

Years at page 43 in logbook

Minimum royalty of \$100 state Nov 1st 43

5 copies (2 to bluff, 1 to monument) copy  
Hedges & Piqued  
MINING LEASE

THIS LEASE Made and entered into this 22nd day of December  
October, 1942, by and between  
<sup>6</sup>  
~~THE EDWARD F. ALLIS COMPANY, a Wisconsin Corpora-~~  
~~tion, party of the first part, Lessor, and~~  
~~AMERICAN SMELTING AND REFINING COMPANY, a New Jersey~~  
~~Corporation, party of the second part, Lessee,~~  
*Iron Picher Mining & Smelting Co.*  
*first party*  
*Eagle Picher Mining & Smelting Co, a Delaware Corporation*  
*second party*

*W. H. Hedges*

WITNESSETH:

ARTICLE 1. Description of Property.

That the lesser, for and in consideration  
of the sum of ~~One dollar (\$1.00)~~ *One hundred dollars (\$100.00)* to it in hand paid by the  
lessee, ~~the~~ *as advance royalty* receipt whereof is hereby acknowledged, and for  
and in consideration of the ~~royalties~~ *further* royalties to be paid by the lessee  
and of the covenants and agreements of the lessee hereinafter  
set forth, does hereby lease, let and demise unto the lessee,  
its successors and assigns, upon the terms and conditions here-  
inafter set forth, ~~all those certain patented mining claims~~ *that certain dump 9 are located at the Luster on the surface*  
*Morgan Mine, patented mining claim* ~~situate, lying and being in the Harshaw Mining District, Santa Pima~~  
~~County, Arizona, described as follows:~~

~~CALIFORNIA PATENTED MINE, Survey No. 351,~~  
the United States Patent for which is now of record in the  
office of the County Recorder of Santa Cruz County, State of  
Arizona, in Book 3 of Mining Deeds at Page 501;

~~CARFIELD PATENTED MINE, Survey No. 352, the~~  
United States Patent for which is now of record in said Recorder's  
Office in Book 3 of Mining Deeds at Page 513 thereof; and

ALLIS PATENTED MINE, Survey No. 353,  
the United States Patent for which is now of record in said  
Recorder's Office in Book 3 of Mining Deeds at Page 507  
thereof;

Together with all water and water  
rights appurtenant thereto, or held, owned, developed or used  
in connection therewith and the right to use the same either  
on or off of said claims.

ARTICLE 2. Term of Lease.

The term of this lease, unless sooner  
forfeited, cancelled, terminated or surrendered, shall be ~~ten~~ *for two (2)*  
~~(10)~~ years from the date hereof.

ARTICLE 3. Possession and Control of Property.

The lessee shall have and it is hereby  
given and granted the right to enter into and take over imme-  
diately the sole and exclusive possession and control of said *ore dump*  
~~property~~ and the whole and every part thereof, and during the  
term of this lease to remain in the sole and exclusive posses-  
sion and control thereof, and to investigate, measure, sample,  
examine, test, develop, work, mine, operate, use, manage and  
control the same, ~~and the water and water rights appurtenant~~  
~~thereto~~, and to mine, extract and remove from said *dump* ~~property~~ the  
ores and minerals therein and appurtenant and belonging thereto,  
and to treat, mill, ship, sell or otherwise dispose of the same  
and receive the full proceeds therefrom.

**ARTICLE 4. Entry, Manner of Work and Conformity With Laws.**

The lessee agrees to take possession of said <sup>dump</sup> property within thirty days from the date hereof, and to cause all examination, work, development and mining to be done in a careful and minerlike manner, and to conform in all respects to the mining laws and regulations of the State of Arizona.

**ARTICLE 5. Work Requirements.**

During the first six months of the term of this lease, the lessee shall expend for exploration, development and other work upon the property a sum of not less than Three Thousand Dollars (\$3,000.00). If this lease remains in effect after the expiration of six months from the date hereof, the lessee shall expend during the second six months of the term of this lease for exploration, development and other work upon said property a sum of not less than Five Thousand Dollars (\$5,000.00).

**ARTICLE 6. Royalties.**

The lessee hereby agrees to pay the lessor royalties on all ores, minerals and other products mined and removed from said <sup>dump</sup> property during the term of this lease, as follows:

**a. ~~Basic~~ Royalties on Milled Ores.**

Royalties on such ores <sup>removed</sup> milled by the lessee shall be an amount equal to 10% of the net mill returns. The net mill returns shall be the amount the lessee would pay therefor, <sup>to any</sup> exclusive of premium metal payments, as if purchased by it for milling under the following:

*Treatment in its mill at Sahavista*  
Custom Shipper, receiving the most favorable terms under its present schedule which are as follows: - (2/10/13)

SCHEDULE - Pay for total metal contained at the following prices when lead at New York and zinc in St. Louis are selling as follows, fractions in proportion:-

Metal Price	4	4.5	5	5.5	6	6.5	7	7.5
Pay Per Lb:								
Pb -	1.4	1.75	2.06	2.39	2.72	3.05	3.38	3.71
Zn -	.4	.65	.90	1.15	1.40	1.65	1.90	2.15

Metal Price	8	8.5	9	10	11
Pay Per Lb:					
Pb -	4.04	4.37	4.70	5.36	6.02
Zn -	2.40	2.65	2.90	3.40	3.90

In the event the price of either of the above metals exceeds Eleven Cents (\$0.11) per pound, the lessee shall provide a supplemental schedule therefor which shall be fair to the lessor and shall not be less favorable to the lessor than any schedule then used by it for the purchase of custom ores of a similar nature.

Silver - Pay per ounce 50/70.625 of the prevailing price for domestic mined silver.

Deduct treatment charge \$5.00 per dry ton flat rate.

b. Royalties on Premium Metal Payments.

Royalties on premium metal payments received by the lessee for metals contained in concentrates produced by the milling of such ores shall be an amount equal to 10% of the net premium metal payments received by the lessee

b. Royalties on Ores shipped to Smelter.

Royalties on ores not milled but shipped and sold directly to a smelter shall be an amount equal to 10% of all net smelter returns, including premium metal payments, received by the lessee from the sale or disposal of such ores.

c. Definition of Net Smelter Returns.

Net smelter returns shall be deemed to be all sums paid to the lessee for the values of the ores after deducting all charges for transportation from the mine to the smelter and smelter charges.

d. Royalty Settlements.

Royalty settlements shall be made by the lessee on or before the 25th day of each and every month during the term of this lease for all ores milled, premium metal ~~payments~~ and smelter returns received during the preceding calendar month. Each settlement shall be accompanied by duplicate liquidation or settlement sheets for each lot of ore milled and by duplicate smelter returns for each lot of ore sold to a smelter, and ~~duplicate statements of premium metal payments received.~~

6. Minimum Royalty.

The lessee guarantees that the minimum royalty to be paid by it for each and every calendar month during the term of this lease after <sup>six months</sup> ~~one year~~ from the date hereof, and so in proportion for any part of a calendar month, shall be the sum of One Hundred Dollars (\$100.00). If during any such calendar month the royalties hereinbefore provided for do not equal or exceed the sum of \$100.00, the lessee shall, nevertheless, on or before the 25th day of the following month pay the lessor the sum of \$100.00 or an amount in addition to the royalties paid sufficient to make up the minimum royalty payment of \$100.00.

7. Method of Payment.

All royalty payments herein provided for shall be made by check mailed to the lessor at ~~427 East Stewart Street, Milwaukee,~~ Wisconsin.

ARTICLE 7. Protection from Liens and Damages.

The lessee shall keep said <sup>leased</sup> property and the whole and every part thereof free and clear of liens for labor done or performed upon said property or materials furnished to it

on or for said property, or for the development or operation thereof under this lease and while the same is in force and effect, and will save and keep harmless the lessor from all costs, loss or damage which may arise by reason of injury to any persons employed by the lessee in or upon said property or any part thereof or which may arise by reason of injury to any persons, livestock or other property as the result of any work or operations of the lessee or its possession and occupancy of the property.

ARTICLE 7. Notices of Non-liability.

The lessee will keep posted upon said property such notices of non-liability for labor or materials furnished as may be posted thereon by the lessor pursuant to laws of the State of Arizona. In the event any such notices are posted on the property by the lessor it shall furnish the lessee with a copy of the same, together with a statement of the locations at which said notices are posted.

ARTICLE 8. Payment of Taxes.

The lessee shall pay, when due and before delinquent, all taxes upon said property falling due during the term of this lease and while the same is in force and effect, and shall pay, when due and before delinquent, all taxes levied or assessed against any and all personal property, machinery and equipment placed upon said property by the lessee during the term of this lease. The lessee shall also pay all sales taxes and other taxes of every kind, character and description levied or

imposed during the term of this lease upon the ores, minerals, concentrates or products of ores, produced, sold or otherwise disposed of by the lessee, and all taxes levied against the lessee as an employer of labor, all such taxes to be promptly paid when due and before delinquent.

<sup>9</sup>  
ARTICLE 10. Insurance.

The lessee shall carry at all times during the term of this lease Workmen's Compensation, Liability and other insurance required by the laws and mining regulations of the State of Arizona.

<sup>10</sup>  
ARTICLE 11. Books of Account.

The lessee shall keep accurate books of account relating to the milling, sale and disposal of ores, minerals, concentrates or other products from said <sup>leased</sup> property, which books of account shall be open to inspection by the duly authorized agent of the lessor at all reasonable times.

ARTICLE 12. Reports and Maps.

The lessee shall furnish the lessor quarterly with copies of the logs of all drill holes on the property and with such sample or assay maps as may be made showing the position and assay values of samples taken on said property.

<sup>11</sup>  
ARTICLE 13. Inspection.

The duly authorized representative of the lessor shall be permitted to enter into and upon said property and the workings of the lessee at all reasonable times for the purpose of inspection.

<sup>12</sup>  
ARTICLE 14. Forfeiture Clause.

The failure of the lessee to make or cause to be made any payment herein provided for, or to keep or perform any agreement on its part to be kept and performed, according to the terms and provisions hereof, shall, at the election of the lessor, work a forfeiture hereof. Provided, however, that in the event of a default on the part of the lessee and the election of the lessor to terminate this lease on account thereof, the lessor shall give to the lessee a written notice of its intention to declare a forfeiture of this lease and to terminate the same on account thereof, specifying the particular default or defaults relied upon by it, and the lessee shall have thirty (30) days after receipt of said notice in which to make good such default or defaults, in which event there shall be no forfeiture therefor.

<sup>13</sup>  
ARTICLE 15. Force Majeure.

If the lessee shall be delayed at any time in keeping or performing any agreement on its part to be kept or performed according to the terms and provisions hereof, except the payment of minimum royalties and ~~taxes~~, by any act or neglect of the lessor or by strikes, lockouts, fire, unusual delay in transportation, orders of the Government, or any duly constituted instrumentality thereof, unavoidable casualties, or any causes beyond the control of the lessee, such delay shall not be deemed a breach of this lease or a default on the part of the lessee constituting a cause for forfeiture.

<sup>13</sup>  
ARTICLE 13. Cancellation by Lessee.

The lessee expressly reserves the right to cancel, terminate and surrender this lease and to relinquish and surrender said property to the lessor, at any time during ~~the first six months of the term of this lease after it has expended in development or other work on the property the sum of Three Thousand Dollars (\$3,000.00), or at any time thereafter during the term of this lease after it has expended for such development or other work, including expenditures made during the first six months, a total of Eight Thousand Dollars (\$8,000.00),~~ upon giving thirty (30) days prior notice to the lessor of its intention so to do, and by delivering to the lessor upon said cancellation a written relinquishment of this lease.

<sup>14</sup>  
ARTICLE 14. Surrender of Property by Lessee.

In the event of a valid forfeiture, surrender or other termination of this lease, the lessee will surrender peaceable possession of said property and the whole and every part thereof to the lessor immediately.

<sup>15</sup>  
ARTICLE 15. Removal of Equipment, Etc. by Lessee.

The lessee shall have, and it is hereby given and granted, ninety (90) days after a valid forfeiture, surrender or other termination of this lease to remove from said property all warehouse stocks, merchandise, materials, tools, hoists, compressors, engines, motors, pumps, transformers, electrical accessories, metal or wooden tanks, pipes and connections,

mine cars and any and all other machinery and equipment erected or placed in or upon said property by it, together with ~~all ore broken in the stopes or workings, except mine timbers and underground mine tracks and pipe lines in place on the main levels or in the shafts, and permanent improvements.~~

<sup>16</sup>  
ARTICLE 16. Warranty of Possession.

The lessor hereby covenants and warrants that the lessee, its successors and assigns, shall and may, at all times during the term of this lease, peaceably and quietly have, hold, use, occupy, possess and enjoy said property and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the lessor, its successors and assigns, or any person or persons lawfully claiming or to claim the same.

<sup>17</sup>  
ARTICLE 17. Notices.

All notices herein provided for may be given by mail at the following addresses, until otherwise changed by written request of the parties hereto, to-wit:

To the Lessor,

*229 East Wisconsin Ave. ~~St~~*  
~~427 East Stewart Street, Milwaukee, 2~~

*Wisconsin; or its agent S. M. Colburn 1102*

*Libby Town, Phoenix, Ariz.*  
To the Lessee,

~~Valley National Building, Tucson, Arizona.~~

*P.O. Box 231, Tucson, Ariz.*

<sup>20</sup>  
ARTICLE 20. Inurement Clause.

Time is of the essence of this lease. The terms, provisions, covenants and agreements herein contained

*Insert Art 19*

shall extend to, be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the lessor and lessee have caused their corporate names to be hereunto subscribed, and their corporate seals to be hereunto affixed and attested by their duly authorized officers, in duplicate counterparts, as of the day and year first above written. Notwithstanding the date appearing on the first page of this lease, and the different dates of signatures and acknowledgments hereto, it is agreed that the date of this lease shall be November 1, 1942.

~~THE EDWARD P. ALLIS COMPANY,~~ Lessor

By \_\_\_\_\_  
President

ATTEST:

\_\_\_\_\_  
Secretary

~~AMERICAN SMELTING AND REFINING COMPANY,~~ Lessee

By \_\_\_\_\_  
Vice President

ATTEST:

\_\_\_\_\_  
Secretary

STATE OF WISCONSIN,        }  
COUNTY OF MILWAUKEE.    }    ss.

This instrument was acknowledged before me this \_\_\_\_\_ day of October, 1942, by Louis Allis as President and P. M. Haack as Secretary of The Edward P. Allis Company, a corporation, for and on behalf of said corporation.

My Commission expires March 21, 1943.

\_\_\_\_\_  
Notary Public.

STATE OF NEW YORK,        }  
COUNTY OF NEW YORK.    }    ss.

This instrument was acknowledged before me this \_\_\_\_\_ day of October, 1942, by H. A. Guess as Vice President and G. A. Brockington as Secretary of American Smelting and Refining Company, a corporation, for and on behalf of said corporation.

My Commission expires \_\_\_\_\_ 19 \_\_\_\_\_.

\_\_\_\_\_  
Notary Public.

GEORGE M. COLVOCORESSES  
MINING AND METALLURGICAL ENGINEER  
1102 LUHRS TOWER  
PHOENIX, ARIZONA

*Offie G.*

August 23, 1940

REPORT ON ALLIS GROUP OF MINING CLAIMS

CALIFORNIA Lot #41, pat survey #351  
GARFIELD Lot #42, pat survey #352  
ALLIS Lot #43, pat survey #353

*(Harshaw  
Mining Claim)*

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Gentlemen:

Persuant to your request I have completed an examination of the above named mining claims, which I shall term the "Allis Group", and beg to submit the following report with Exhibit A, B, C, D, E, and F. I was guided over this property by Joe Benitez, Harris having moved away from Patagonia.

LOCATION AND GENERAL DESCRIPTION.

The three patented lode mining claims named above are recorded in the name of E. P. Allis and James McC. Elliot and are located on the western edge of Sect. 19 and 30, Township #22 South, Range 16 East, Gila and Salt River Base and Meridian. The Allis and California Claims extend over the west line of this township and into Township #22 South, Range 15 East. The limits of the claims are shown on Ex. A, which is enlarged from the official survey map of Township 22 in the U. S. Land Office. Further details of the individual claims are shown on Ex. B, C, and D, which are photostats of the original survey plats and show the location of all of the

Allis Group of Mining Claims.

workings made prior to 1882.

These claims have a combined area of 60 acres and they are distant by good mountain road five miles from the town of Patagonia, Santa Cruz County, Arizona. Patagonia is on the Tucson-Nogales branch of the Southern Pacific R. R. and is connected by road with Nogales, which is 23 miles distant and Tucson, 63 miles distant. The elevation of various portions of the claims varies from 4200 to 4800 feet and the climate is mild and suitable for work at all times of the year. There is always ample water flowing in or under the bed of Sonoito<sup>a</sup> Creek, which runs through Patagonia, while two of its tributaries, Alum Creek and Mill Creek, drain a portion of the slopes of Red Mountain and flow respectively through the Eastern and Western section of your claims, as shown on the maps.

#### HISTORY.

Some of the veins in the Harshaw District were worked by Indians and later by Mexicans over 100 years ago. The first American locations -- subsequent to the Gadsden Purchase in 1853 -- were made prior to 1860, but difficulties of operation and transportation retarded activity until about 1880 when many claims were relocated including probably the Allis Group as these were surveyed for patent in 1882.

I could learn but little of the history of the Allis Group, but some work was evidently done prior to 1880 and such of these old openings as I could find (with the exceptions of those where later work had also been done) were now caved and practically inaccessible. Most of the subsequent development, according to Joe Benitez, was carried out by a certain Wilson

## Allis Group of Mining Claims.

around 1920 and later by a man named Gartney, while the most recent work -- all in the California Claim -- was done by Benitez and Levi Harris, and in late '39 by Harris alone. The shipments made by these recent lessees appear to have amounted to 70 tons of ore with an average content of 6 oz. silver and 16% lead, also very small amounts of copper and zinc.

### TOPOGRAPHY AND GEOLOGY.

X The country is mountainous and some of the slopes are steep and rocky, elsewhere there is a fine stand of grass and native shrubs and numerous live-oaks with cottonwoods and willows growing near the creeks.

X The original survey stakes were doubtless of wood, as was customary in those days, and they have long since rotted away or been removed. The rock piles which were placed around these stakes are still to be found and with the help of the survey maps and working from the shafts which were noted thereon, I was able to locate pretty accurately the lines of the California Claim, but at the Allis and Garfield I could not do so well. Benitez had no idea where any of the corners of these two claims actually lay and so it was necessary to obtain an approximate idea from the openings on the Allis Claim and the position of Alum Creek and Mill Creek between which the bulk of these two claims lies across a very steep and rugged ridge that has an elevation above the creeks of 400 to 600 feet.

Strange to say the relative location of these two creeks

## Allis Group of Mining Claims.

is differently shown on the Township map, the U. S. Geological Survey map and the Mineral Surveyors Map of the claims. I have used the latter in conducting my field work and preparing this report.

According to the U. S. G. S. Bulletin #582 by Frank C. Schrader the oldest rocks in this district and vicinity are Cambrian granite, shale, and quartzite, which are overlain by Paleozoic sediments mainly limestone and conglomerates that were later intruded by various igneous eruptives. In the immediate vicinity of the Allis Group the prevailing rock is a Tertiary Rhyolite, but further south at the Flux Mine limestone is noted, and <sup>the</sup> further to the south and west there are masses of granite porphyry. The rocks which I noted on your claims were rhyolite, quartzite and quartz diorite, the ore occurrences were entirely in rhyolite as far as I was able to observe them. The metallic minerals occur in fissure veins mainly filled with quartz and hematite with which are associated silver, lead, and zinc, and in places a little copper.

The veins of the Allis Group belong to the later period of mineralization, the metallic minerals having been deposited as sulphides from solutions which accompanied the Tertiary intrusion of rhyolite and these sulphides were oxidized near the surface where the zinc has been leached out and iron oxide and lead carbonate predominate.

ALLIS CLAIM: Mill Creek crosses this claim as shown on the map and both slopes rise abruptly. The formation is all rhyolite. On the west slope of the canyon no workings are shown on the map. Benitez claimed that there were none and none could be found.

## Allis Group of Mining Claims.

There would appear to be a chance that the Flux vein crosses this claim near its western end, but if so the outcrop is covered with overburden and it does not appear that it has ever been traced so far to the north.

On the eastern slope, about two-thirds up the ridge, two adit tunnels were visited apparently representing the shafts shown on the survey map and now converted into tunnels. (See Exhibit F)

Some 50 feet higher and 100 feet further east a shallow cut has been put in the hill but no vein was noted here. The two lower adits enter a very flat vein or blanket which strikes in a northerly direction and dips toward the east about  $15^{\circ}$ . The average width of the vein is over three feet near the portals but it seems to pinch as depth is gained and at the ends of the tunnels is not over a foot wide. Quartz and iron-oxide were noted and my sample taken from the vein in the north drift over a width of  $2\frac{1}{2}$  feet carried 5.4 oz. silver per ton and only a trace of lead. A second sample taken from a small pile of ore near the portal of the south tunnel carried 0.6 oz. silver per ton and again only a trace of lead.

This vein, like some others which I observed in the district, appears to have very little depth, and in my opinion holds no promise of producing pay ore in any quantity.

## GARFIELD CLAIM.

The upper opencut on the Allis is close to the west end of the Garfield Claim which extends over the top of the ridge and northeastward down the west slope of Alum Creek, which is very precipitous and in places almost a series of sheer rock walls often over 100 feet in height with narrow ledges between.

Apparently there have been no recent workings in the upper part of the Garfield

## Allis Group of Mining Claims.

part of the Garfield Claim and the old shafts have been largely filled in and could not be accurately located. No evidence of veins or ore were noted here, but down along the lower walls of the canyon many small veins were seen striking to the South West and nearly vertical. None of those which I examined within what appeared to be the limits of the Garfield looked at all promising. They were all tight and barren, and whoever may have started drifting on them evidently soon became discouraged and quit without having produced any pay ore as far as could be judged from appearances.

More extensive work along Alum Creek was done on the Blue Eagle or Black Eagle Mine to the north of the Garfield and on another claim to the south but these mines were abandoned many years ago.

( In my opinion all the showings on both the Allis and Garfield should be classed as rather unpromising prospects and for the present) I could not <sup>say</sup> recommend any further development. <sup>in either the Allis or Garfield Claims.</sup> Later it may be possible to locate the extension of the Flux vein, which should cross through the western part of the Allis.

## CALIFORNIA CLAIM.

By far the best showing in your property is on the California Claim, where most of the old and all of the more recent work has been done and to which I devoted the greater part of my time and attention.

X The maps of the old and new workings on this claim (EX. E) and F) have been prepared from the survey map and my own rough

Allis Group of Mining Claims.

survey with a Brunton Transit on which I plotted in the tunnels and stopes worked by the lessees. Nearly all of this work, being close to the surface, developed and ~~yielded~~<sup>produced</sup> oxidized ore which was hand-sorted to yield the shipping product previously mentioned. Lead-carbonates with iron-oxide occurred in pockets and sulphides were noted in one place in C tunnel, from which I took a sample which carried 3.00 oz. silver per ton, 11.2% lead and an appreciable quantity of zinc. The width of vein matter at this point was only six inches. Another sample of carbonate ore from B tunnel carried 2.2 oz. silver per ton and 7.4% lead. The great irregularity of these workings is best shown on Ex. E and they are typical of the work of lessees who naturally gouge out or "gopher" all of the best ore that can be cheaply mined with no thought for the proper development or future condition of the property.

In this particular case the situation was worse than usual because they had back-filled most of the stopes with waste so that most of the vein exposures could not be examined or sampled.

Taken as a whole the visible showings were (unpromising (out but) entirely inconclusive, and I should not care to express any definite opinion as to the future value of your property until this Flux vein has been opened up in depth and its character and value can be determined in the zone of primary sulphides which would probably lie over one hundred feet (on the incline) below the outcrop. As compared to the vein at the Flux Mine its width of about two feet on the California seems to be less and the dip of about 20° to the west is flatter.

## Allis Group of Mining Claims.

It is possible that the more extensive mineralization at the Flux is due to the intersection of cross veins, several of which seem to converge near the Flux Mine. At least one cross vein is noted on the California east of the Flux vein and nearly vertical and the old shafts #1 and #2 seem to have been sunk on the vein, but I could not descend them nor learn if they had produced any ore.

The breast of the lower adit tunnel should now be very close to this last mentioned vein, and it has already cut one parallel vein from which my sample carried only traces of silver and lead. However, this tunnel would have to be advanced for at least an additional 200 feet before it could be expected to cut the Flux vein as may be noted from Exhibit E.

~~None the less~~ <sup>the</sup> main importance of this claim seems to lie in the reasonably certainty that these surface workings are actually in the strong Flux vein which <sup>appears to</sup> extend north from the Flux Mine where it is now being worked and in the chance that the pay ore which occurs in pockets and lenses near the surface (such as those which have been mined out by the lessees) will make in more continuous and larger shoots at greater depth as has proved and be the case at the Flux, which is now working at a depth of 400 feet below the outcrop. From my visit to the Flux and investigation of what could now be seen of the upper workings, I was impressed with the similarity of conditions here and at the California.

*cont.* }  
Against the expectation that similar conditions might likewise be found to exist at greater depths one must face the fact that the actual showings in the California workings are in themselves disappointing for everywhere the vein appears

## Allis Group of Mining Claims.

to pinch within less than 60 feet from the outcrop, measured on the incline of the vein, and in the lower drifts I could not find any place where a width of over six inches could be measured for any substantial length. } ant

The contour of the ground is unfavorable for development since the vein dips to the west and whereas on the Flux ground it is easily reached by tunnels from Flux Gulch; this gulch swings away from the vein in going north and lies far to the west of the ridge on which the vein crosses the California claim. While this vein cannot be positively traced from the Flux to the California workings, since much of the intervening surface is covered with overburden, yet its general character, strike and dip all tend to confirm the belief that this same vein extends from the Flux Mine to the tunnels and stopes on the California and at one point just south of or along the California line I found a shallow pit on the outcrop from which a sample carried 3.0 oz. silver per ton and 0.2% lead.

A composite of all of my samples from the different workings carried 3.4% zinc but it is quite certain that the relative percentage of the zinc will increase with depth and the ore from the 400 foot level in the Flux Mine shows rather more zinc than lead.

### CONCLUSION AND RECOMMENDATION.

It is my opinion that the future value of your property rests upon the development of the Flux vein as its extension crosses the California and possibly the Allis Claim.

The Flux Mine was idle for many years but is now being worked by the owner, A. R. Byrd, of Tucson, who is making

Allis Group of Mining Claims. ~~Page~~

regular and profitable shipments of sulphide ore to the Trench Mill.

The American Smelting and Refining Company, who own and operate the Trench Mine and Mill three miles further south, have been very favorably impressed with the development and possibilities at the Flux and have recently taken an option on this property by virtue of which they are now making a thorough investigation. From conversation with their local management and engineers I was given to understand the result of this investigation has so far been favorable and that in the event that they should exercise this option on the Flux Claims they would be disposed to option and develop other adjacent areas including all three of your claims which are nearly or quite surrounded by the ground which they now hold under option.

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Under the above circumstances I believe that it will be advisable to postpone any further work on your property until the decision of the A. S. and R. can be known, and I shall be glad to keep in touch with them, if you so desire, and to advise you further as any progress is made.

ent

Should the A. S. and R. take over the Flux Claims they will certainly need and desire to acquire your holdings and they will be far better placed to operate all the mines in this district than any individual owner, of what must at best be considered as a small property of questionable merit. Any further work by lessees would almost certainly be of no real benefit to your holdings and merely result as in the past in the production of a very small tonnage of picked material from which only a trivial royalty would accrue to the owners. Past shipments sent to El Paso have had to stand heavy transportation

ent

Allis Group of Mining Claims.

charges and penalties, as may be noted from the attached schedule, and although somewhat better terms are now being offered by the Trench Mill, it is probable that the only substantial profit that will be derived from mining in this particular district will be obtained by operators who are in a position to develop and work several properties on an extensive scale and to treat the output in their own mills.

Since the A. S. and R. have already embarked on this policy and seem disposed to expand their activities, I believe that it will be to the best interest of all owners of neighboring properties to endeavor to deal with them or with any other large company which may follow a similar policy, and I therefore put this in the form of a recommendation.

Yours very respectfully,

*G. M. C.*  
G. M. Colvocoresses.

January 19th, 1944

Mr. T. A. Snedden, Manager  
Trench Mine  
Patagonia, Arizona

Re: California Claim  
Allis Group of Claims

Dear Mr. Snedden:

After leaving your office on the morning of the 14th instant I spent the balance of the day looking over the California Claim and the underground workings which you have carried on during the past few months.

I was very sorry to note that the ore which you had mined appeared to have come from only a very small pocket and that there was no indication of any extension of this shoot or of the occurrence of other similar shoots anywhere in its vicinity.

I can readily understand that your company does not feel disposed to continue with the exploration of the California in view of the unfavorable results which have attended by the expenditure that has been made to date, and there is only one suggestion that I would like to make and which I very much wish that I had had an opportunity to make before you removed your drill and compressor from the property.

Will you please refer to the plan map of the workings, dated September 17th, 1943 which you furnished us and also to a section map which I presume that you must have in your possession similar to the rough sketch that I prepared from the Brunton survey showing the slope of the hillside and the upper workings as well as the lower adit tunnel which at that time had only been driven at about 180 feet from the portal? *Similar*

The adit has now been extended to a total length of over 400 feet and the west end of same should be out beyond the bottom of the old workings which were conducted by lessees with openings along the road. It seems to me that a projection of this upper vein would pass less than 80 feet above the west end of the adit and that the vein should therefore be intersected by a raise or drill holes carried up vertically or with a slight incline to the west.

I have no doubt but that this piece of exploration work suggested itself to you and other members of your staff, and I am wondering if in giving the matter consideration you found some special condition which I have over-looked and which led

January 19th, 1944

you to believe that the upper vein would either pinch out or become entirely worthless as depth was gained.

The ore which was mined out near the portal in these upper inclined adits was largely oxidized and therefore would not have been suitable for treatment in your mill, but I noted that some sulphides came in with depth and apparently this condition was also observed by your own geologists since they have made a similar notation on the copy of the map which I loaned them when they first inspected the property.

It seems to me that there is a fair possibility that the ore shoot in this upper vein might continue downwards and carry sulphides that would be well worth mining and the length of the showing as developed by the three little stopes is nearly 200 feet.

Of course all of this ore will be in the rhyolite and perhaps you have some good reason to believe that no ore bodies persist in that formation as depth is gained, but otherwise do you not believe that it would be well worthwhile to either drill up from the west end of the adit, or to put up a raise as above suggested before definitely deciding to discontinue all exploration work at the California Claim?

I shall be much interested to have your comment on the above suggestion, and meantime remain with best personal regards,

Sincerely,

GMC/b

January 18th, 1944

Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

Report on Recent Visit to Property

Gentlemen:

On the 13th instant I called at the office of the American Smelting and Refining Company in Tucson for a conference with Mr. Ring and Mr. Loerpabel and I was then given a copy of their letter to you of that date and of the notice of their intention to relinquish the lease on your property on the 29th of February.

While such an outcome of this transaction had been more or less anticipated, none the less the notice came as an unpleasant surprise to me since no mention of their intention had been made in any of their recent letters and the record of shipments indicated that they had found some ore below the adit level, the extent of which I had previously had no means of judging.

In view of the information given me in Tucson I somewhat hesitated to continue my trip, but concluded that under any circumstances you would wish to have me make a final inspection of the property in order to advise you fully of the actual conditions and moreover Loerpabel stated that his company would be glad to reconsider their action if after a personal investigation

January 18th, 1944

and conference with their Mr. Snedden I could convince him that they had over-looked any worthwhile possibility of finding additional ore.

In connection with the balance of this report may I suggest that you refer to the map which the American Smelting and Refining Company sent us on September 17th, 1943 and also to the map captioned "Exhibit E" which accompanied my report to you of August 23, 1940. At a later date, either the American Smelting and Refining Company or I will furnish you with a final map showing the extent of the stoping, but this has not as yet been completed, and no work other than stoping has been carried on since last September.

On the 14th I called on Mr. Snedden at the Trench Mine and we carefully went over the maps and records of operation and discussed the present situation which was obviously very disappointing to Snedden as well as to me, since he had strongly advocated the original work on your claims and naturally regretted to be obliged to advise its discontinuance.

In this connection I enclose a copy of a brief report made by Harrison Schmitt, geologist for the A.S. & R. last October, and it appears that the A.S. & R. were largely guided by Schmitt's recommendation since Loerpabel told me that in the past they had always found him to be somewhat optimistic and whenever he finally lost confidence in any of their exploratory work they felt that this should promptly be abandoned.

January 18th, 1944

In general Snedden agreed with Schmitt's opinions and particularly because the result of their drilling had proved to be so unsatisfactory and had only indicated a very small showing of ore which was really not worth following up. Snedden also described the pinching and faulting of the vein at the bottom of the little stope below the adit level and stated that in his opinion all the ore in this pocket had now been mined with the exception of one small pillar containing about 10 tons which they had purposely left in place since its removal would have resulted in seriously caving the crosscut and the main drift on the vein.

Information which I gained from both Loerpabel and Snedden was to the effect that their recent exploration at the Flux Mine had also proved to be very unsatisfactory and that they had already been obliged to substantially reduce the scale of their operations at that property which they anticipated it might be advisable to entirely close down within the course of this present year. However, Snedden informed me that they were still continuing to drift to the north (i.e. in the direction of the California) on one of the three veins which they had developed in the Flux and he admitted that there was a very remote possibility that they might thus open up a new shoot of ore which could be followed into the California ground and thus entirely change the present picture. In that event he stated that they would be only too glad to take a new lease on the California.

In answer to my questions Snedden assured me that his engineers and geologists had carefully examined all of the

January 18th, 1944

other prospects and ore showings on your claims, including those on the California from which leasers had shipped a small quantity of ore in the past and the surface pits and outcrops on the Allis and Garfield Claims, and he was very emphatic in saying that they did not feel that any of these were sufficiently promising to justify them in carrying on any further exploration or development work.

After leaving the Trench, I visited the California Mine and made a careful inspection of same, particularly the work which had been done there since my last visit in May of 1943. My findings confirmed all that Snedden had told me, for the one little shoot of pay ore had been confined to a small pocket which had extended along the drift for a maximum length of 40 feet and above it to a maximum height of 60 feet along the incline of about 25 degrees. Going down below the adit the maximum depth was only 25 feet and the bottom of the shoot seemed to have been cut off by a fault, but in any event the vein appeared to have been pinching out and I judged that the quality was poor.

The maximum width of the vein was in no case more than four feet while generally it was much narrower and near to the edges it appeared that much of the sulphides of lead and zinc had given place to worthless sulphides of iron. The one small pillar of ore which had been left in place was supporting the upper workings and should not be removed as long as there is any possibility that any further work may be done at some future time.

Inspection of all other portions of the underground workings and also of the surface in that particular locality failed to disclose any other showings of importance and the portions of the vein in the south drift from which I obtained some rather encouraging samples last May had all been pretty thoroughly prospected and had proved to be only narrow stringers or little pockets, none of which had any permanence.

The most discouraging phase of the entire situation lies in the absolute lack of any commercial ore along the fault contact between the shale and rhyolite through which the adit crosscut had passed last Spring and it appears that this same contact has been prospected at two or three other points on the Flux Claims and there also had proved to be barren of values.

I noted the location of the drill holes and from the logs which we have received I must agree with the officials of the American Smelting and Refining Company in feeling that there is no reason to expect that any downward extension of the ore shoot would be found below the fault which I have previously mentioned, nor that there is any justification in carrying the exploration to a greater depth.

There is just one additional piece of work which I regret that the Company did not see fit to carry out and this consists in driving a vertical raise or drill hole from the extreme end of the adit crosscut extending upwards in the rhyolite to cut the upper vein which outcrops along the road and from which leasers mined some ore in previous years. It is probable that

January 18th, 1944

this vein may prove to be only a "gash" and such portions of the old workings as are now accessible give no good promise that the ore will extend to any great depth, but on the other hand the raise which I suggest would have had a maximum height of only about 80 feet and the total cost should not have exceeded \$1000 if it had been put up while the compressor and other equipment were still on the property. A drill hole would have been much less expensive when the rig was set up at the end of the crosscut.

Both drill and compressor have now been removed so that the cost of any such procedure will now be much greater, and it seems probable that the A.S. & R. engineers must have given careful study to the advisability of exploring above the end of the adit crosscut and perhaps developed some condition which seemed to make such work entirely futile.

Aside from the return and installation of either a drill or compressor any further work would involve considerable additional expense as the floor of the adit crosscut would have to be raised in the vicinity of the stope and rails and pipe replaced from that point to its western end,--a distance of about 150 feet,--and I fear that the A.S. & R. may not be willing to favorably consider my suggestion, but nonetheless I am following the matter up by correspondence and will later advise you of the result.

January 18th, 1944

X I would like to suggest that, in the event that the A.S. & R. should favorably consider this last piece of exploration, and perhaps in any event, it might be well for you to offer to suspend the provisions of the lease in respect to development work and payment of minimum royalty for a period of say six months, but otherwise to leave that agreement in full force and effect until after above mentioned exploration ~~and the~~ work which they are now conducting at the Flux has been completed since the result of these might possibly lead them to wish to renew the operations on the California.

Should the lease be cancelled either now or at a later date without any new ore having been discovered in or near your property I regret to say that I have no worthwhile suggestion to offer in respect to your future program.

X The American Smelting and Refining Company, because of their work at the Flux and at the Trench and because they are operating a custom mill at the latter property, are obviously very much better placed than any other party to develop and work the California and I feel satisfied that they have made every reasonable effort to make their operations successful and would not now discontinue the same except for the fact that they can see no reasonable possibility of obtaining a return of any additional money which they might expend.

The Federal Government are no longer in such great need of lead and zinc as they were a few months ago and while they will

probably continue for several months to come to pay a bonus price on these metals as they have been doing in the case of the California, the producers are no longer disposed to risk any large amount of money on work which could only be profitable as long as these bonuses are maintained.

Taken altogether, I fear that we must regretfully conclude that the operations of the A.S. & R. have tended to diminish rather than to increase the value of your property since the results of same have been of a negative character and it looks as if the mine might be destined to again lie dormant for a number of years.

With particular reference to the terms of the present lease agreement, I might state that in accordance with Article 16, the A.S. & R. could only cancel the lease after having spent at least \$8,000 in exploration and development. I do not have any exact record of such expenditure of their part, but they have built approximately 700 feet of new road, driven more than 600 feet of underground drifts and crosscuts, put in a few short raises and winzes and carried out some 200 feet of diamond drilling. The aggregate cost of all of the above has certainly been in excess of \$8,000.

In accordance with Article 18 of the Lease they are entitled to remove all of their machinery and equipment, excepting underground track and pipe lines. Actually they have removed the track

January 18th, 1944

and piping from the adit crosscut from the drift to the west end and also from the drift itself which was run along the ore bearing vein for a total length of some 300 feet. This action on their part would appear to have been in violation of the lease agreement, but under the circumstances, I do not believe that you would wish to have me make any formal complaint since it might give rise to some dispute as to the meaning of the term "main levels" as used in the said paragraph and in any event the pipe and rails would merely rust away unless some future operations are promptly undertaken.

The piping and rails have been left in place from the stope to the portal of the adit and the rails were left on the dump to the little wooden ore bin, which last constitutes the only permanent improvement that has been made on the property.

The location notices are still in place and in so far as production is concerned it appears that the total shipments have been represented by the 961 tons contained in the six lots which have been accounted for and in so far as their financial obligations are concerned it only remains for them to send you the payment of the supplemental royalty on Lot No. 6.

Please let me have your views in regard to my suggestion regarding the proposed raise and the continuance of the lease

January 18th, 1944

with a six months moratorium on minimum royalties and be sure that I shall gladly carry out any other instructions and do everything in my power to encourage a resumption of activity.

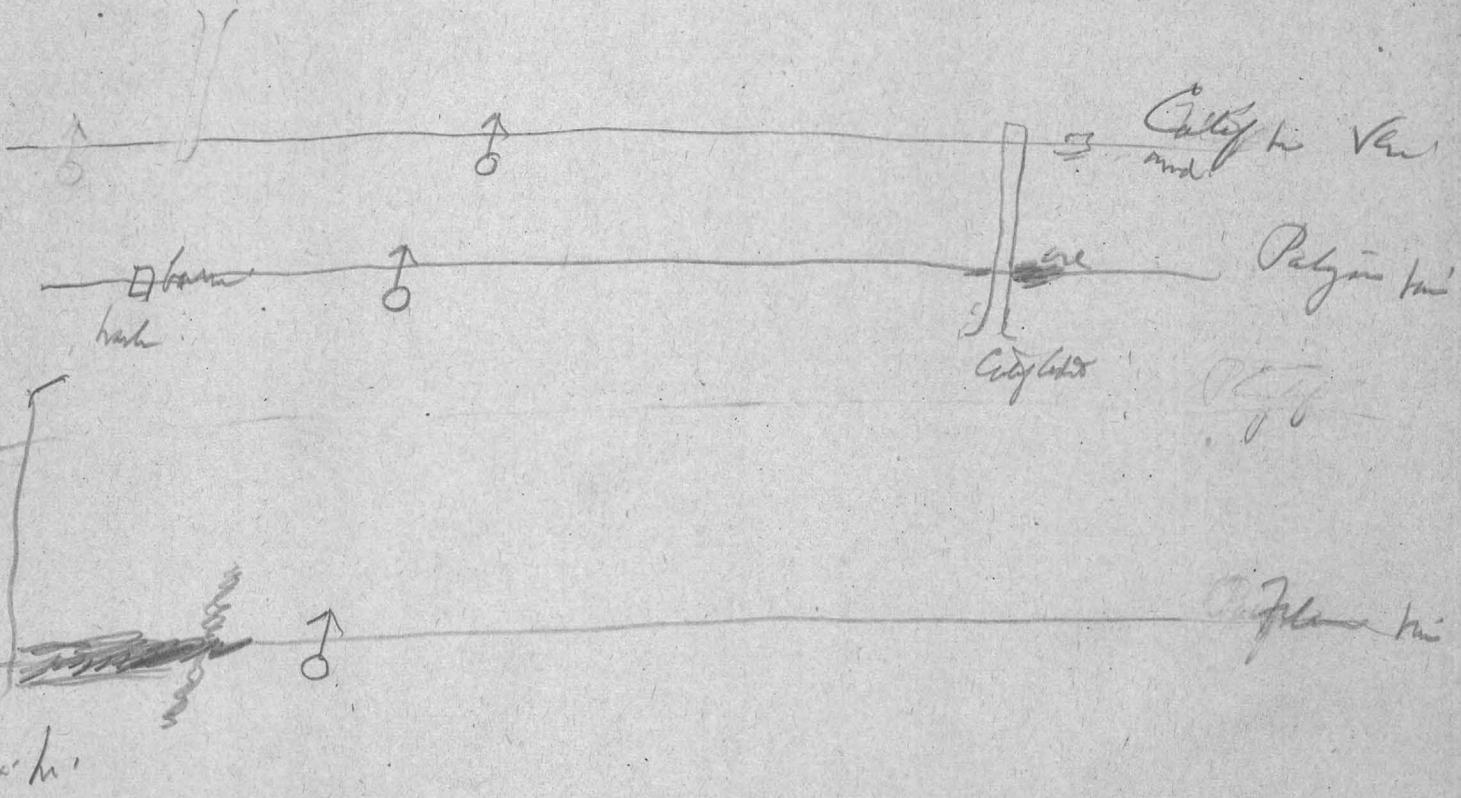
Yours very truly,

*J. H. C.*

GMC/b  
Enclosure

*Three lines at Aluxes Calif.*

→ N

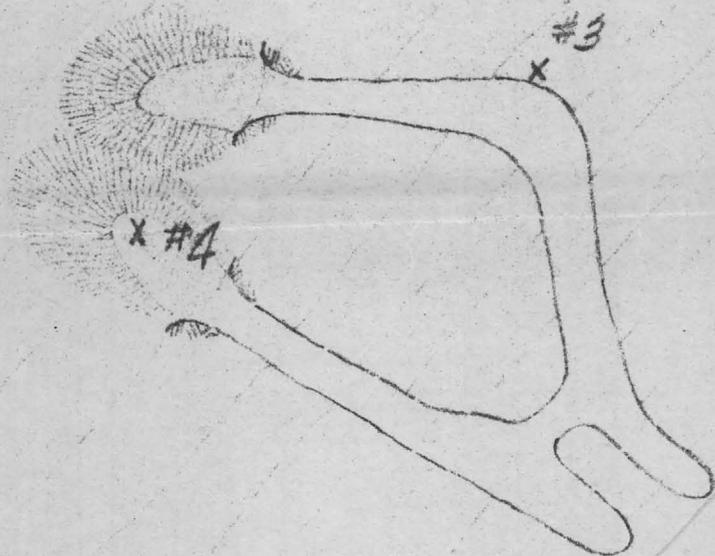


# ALLIS GROUP REPORT MAP

WORKINGS NEAR EAST END OF  
ALLIS CLAIM.

Scale - 1" = 20'

Flat vein dipping to  
north-east in lower workings.



5' Contours

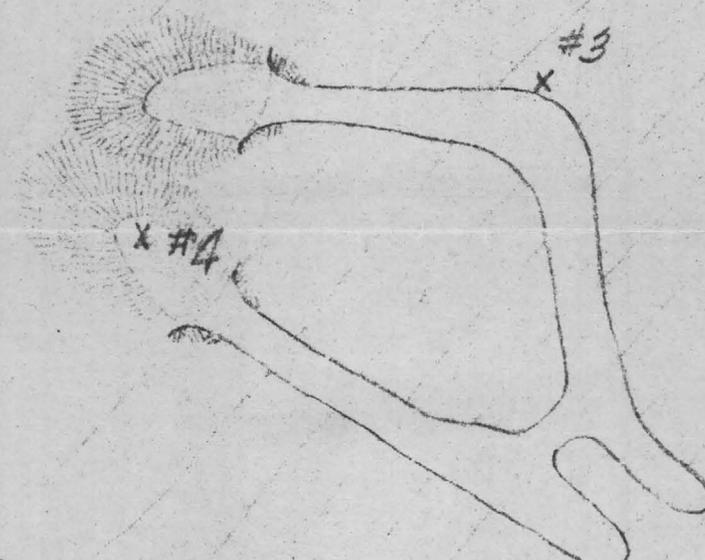
Ex. F.

# ALLIS GROUP REPORT MAP

WORKINGS NEAR EAST END OF  
ALLIS CLAIM.

Scale - 1" = 20'

Flat vein clipping to  
north-east in lower workings.



5' Contours



Ex. F.

May 21, 1943

AIR MAIL

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

Report of Lessees Operations #1

Gentlemen:

In accordance with previous correspondence I went to Nogales on the 18th instant and on the 19th examined the work recently conducted by the A. S. & R. on your California Claim and discussed same with Mr. T. A. Snedden, the Manager of the Trench and Flux Mines, under whose direction this work is conducted. The following brief report should be considered in connection with my original report on your property dated August 23rd, 1940, my notes on the Flux Mine which accompanied my letter of August 24th, 1942 and the report of progress submitted by the A. S. & R. on April 13th, 1943, on which I commented in my letter of April 16th, 1943.

Development & Exploration

I found the condition of the California adit crosscut to be as reported by the A. S. & R. in April except that since that date the drift in the vein has been extended 25' to the south and about 70' to the north.

The showing in both of these drifts is very interesting for while no minable shoot of pay-ore has been opened up beyond the one which was previously found and sampled near the cross-cut, there are many small pockets and stringers of good ore showing at intervals and especially along the floor of the drift which lead me to believe that work at a slightly greater depth should prove to be well worth while. To obtain some additional data on this matter I took two samples as follows:-

#1 From stringers of ore along the floor of the south drift which assayed:

Silver	3.00 oz.
Lead	9.80%
Zinc	9.22%

#2 From stringers of ore in the north face of the drift about 100' from the fork shown on the map. This assayed:-

Silver	3.00 oz.
Lead	8.44%
Zinc	11.10%

Both of these samples were hand picked and therefore of higher grade than the ore which would be mined and shipped unless the waste was first carefully sorted out of the shipments. They are particularly interesting because they show a substantial increase in the content of zinc as compared with vein matter found near the surface and the character of the ore is entirely similar to that which is being mined at the Flux.

The showing in the main shoot was discussed in my letter of April 16th and the only additional work has consisted of a shallow winze which was sunk about 4' below the floor of the drift and showed a strong vein in which the grade of the ore seemed to be improving with depth.

At date of writing the A. S. & R. are starting to put up a raise in this ore shoot where the vein seems to dip about 25 degrees to the west and they will either raise to the surface or connect up with the old shaft (marked #1 on my plan and section map of these workings).

They will then be in a position to stop out the ore in this shoot above the adit and also in a better position to continue further exploration which, according to Mr. Snedden, will probably consist in a further extension of the north and south drifts, sinking in the vein and very probably some diamond drilling from near the contact with the rhyolite to intersect any veins that might lie below along the bedding planes of the shale. Reasoning by analogy with the conditions which exist in the Flux Mine better shoots of ore are likely to make at any point where the dip of these planes flattens out as may prove to be the case a short distance below the adit.

The showing near the face of the cross-cut along the contact between the shale and the rhyolite has proved to be very disappointing since no ore at all is to be noted at or near to this contact and the gouge is absolutely barren. Since the dip of the contact - as proved by the surface and the adit - is about 45 degrees to the west and the dip of the veins is 25 degrees to the west the downward extension of the vein recently developed may be expected to reach the contact with the rhyolite some 300' or less below the adit and it remains to be seen whether or not the values will hold for that distance and then continue on into the rhyolite; but it is to be hoped that the work of the A. S. & R. will yield important information on those points.

May 21, 1943

Mr. Snedden and I also discussed the advisability of conducting some exploration in the upper vein which outcrops along the road and from which the lessees gouged out some ore a few years ago. These workings are above the contact and apparently all in rhyolite and Snedden promised to investigate them more thoroughly than he has done to date and felt that there was a fair chance that they would later do some drilling or other work in that formation.

#### Ore Production

From the development work carried on to date some 80 tons of ore have been mined and piled on the dump. Snedden told me that this material would average about 13% combined lead and zinc with small content in silver so that the net value in accordance with the terms of the lease should be in the order of \$12.00 or more per ton.

A new road some 700' in length was being completed from the main Flux Road to the dump at the portal of the adit where a small ore bin will soon be erected and then the ore now stacked on the dump as well as the future production from the workings will be trucked for treatment to the Trench Mill. The actual milling of the ore should start on or before the first of June and you may reasonably expect that the first returns from the royalty or purchase of this ore will be made to you in July.

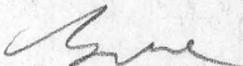
#### General

The work of the A. S. & R. to date has definitely proved up the existence of a small tonnage of pay-ore and while but little can yet be said concerning the future outlook of the mine my general impression is rather favorable and I am inclined to believe that this is shared by Mr. Snedden and other officials of his company. There is not as yet any reason to anticipate that the California will ever prove to be a large producer but I hope and rather expect that the ore shoot will make in greater size and perhaps in better quality below the adit and this situation is likely to be clarified during the course of the next four or five months. Meantime all of the terms of the lease appear to be fully carried out and the work to date has been done in a skillful and efficient manner.

I am enclosing a statement of account which I trust will meet with your approval.

A duplicate of the above goes forward by regular mail.

Yours very truly,

  
G. M. Colvocoresses

GMC:t

May 21st, 1943

STATEMENT OF ACCOUNT

The Edward P. Allis Company

to

G. M. Colvocoresses

Re: Allis Group of Mining Claims, Patagonia, Arizona

Examination of California Claim and work previously  
done in connection with Lease and conferences with  
officials and attorneys of A. S. & R.

Services - three (3) days @ \$75.00 - - - - - \$225.00

Expenses of trip.

Mileage (455) miles

Hotel

Meals, etc. - - - - -

47.00

Recording non liability notice and  
assays of two samples - - - - -

8.50

---

\$280.50

No. 221 00

Phoenix, Arizona,

CHAS. A. DIEHL

May 20, 1943.

# ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

P. O. Box 1148

This Certifies That samples submitted for assay by **Mr. J. M. Colvocoresses.**

contain as follows per ton of 2000 lbs. Avoir.

MARKS	SILVER		GOLD		TOTAL VALUE Of Gold and Silver	PERCENTAGE		REMARKS
	Ounces	Tenths	Ounces	Hundredths		LEAD	ZINC	
<b>Allie</b>								
<b>1</b>	<b>3.0</b>					<b>9.80</b>	<b>9.22</b>	
<b>2</b>	<b>3.0</b>					<b>8.44</b>	<b>11.10</b>	

Charges \$ **7.00**

Assayer **ARIZONA ASSAY OFFICE**



AMERICAN SMELTING AND REFINING CO.  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

*B* 10/7  
43

W. H. LOERPABEL  
MANAGER

October 5, 1943

Mr. G. M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

ALLIS GROUP  
DEVELOPMENT  
April 1, 1943 to October 1, 1943

Dear Sir:

You will remember that after your personal visit to the above work during the summer, you requested that the second quarterly report be deferred until certain diamond drilling was completed. This took longer than we expected and there was some delay in getting the maps out. As it was so near the end of the third quarter, I held this report up so as to make one report to cover both the drilling and other work in the second and third quarters of 1943.

Attached herewith are the following:

1. Map of September 17, 1943, showing diamond drilling done. Only one hole showed a little ore below the adit level. This may be the continuation of the small pocket developed on the adit level in the North Drift.
2. Map of October 1, 1943, showing stoping done in September, 1943.
3. Copies of Logs of Diamond Drill Holes A-1, A-2, and A-3.

MINING:

A connection was made from the adit cross-cut to an old vertical shaft from surface, 163 feet in from the portal of the adit.

Since completion of the diamond drilling, stoping was continued on the small ore body in the North Drift. A winze will be put down on this ore when needed.

During September 159.9785 tons were milled from the Allis claims, of following grade:

<u>Ag.</u>	<u>Pb.</u>	<u>Cu.</u>	<u>Zn.</u>
2.62	6.40	.20	7.50

Settlement for this ore will follow in a few days.

encls. Maps and drill logs.

Very truly yours,

cc: ex. copy to Mr. Colvocoresses with encls.  
HAGuess - with encls  
TASnedden - no encls.

A. E. Ring  
Asst. Manager

AER:blc

LOG OF DIAMOND DRILL HOLE # A-1Logged By DRJMine California Level \_\_\_\_\_Hole started 6-16-43Collar Coord. N 15380 E -4314 Elev 4648Hole completed 6-28-43Direction N 5 E Dip 51°Driller Joe Pyeatt

<u>Drilled From</u>	<u>To</u>	<u>Feet Core</u>	<u>Class of Rock</u>	<u>Remarks</u>	<u>Core Feet</u>	<u>Ag. oz.</u>	<u>% Pb.</u>	<u>% Zn.</u>
0	83	57	Hornstone	Fairly strong alteration very slight pyrite mineralization throughout				
83	84	1	Hornstone	Spotty sulfides of Pb, Zn, and Fe				
84	87	1	Hornstone	Slight alteration very slight mineralization				
		59		No ore				

68 % Core Recovery

LOG OF DIAMOND DRILL HOLE # A-2Logged By DRJMine California Level           Hole Started 6-30-43Collar Coord. N 15378 E -4311 Elev 4648Hole Completed 8-19-43Direction N 75 E Dip -65°Driller Joe Pyeatt

<u>Drilled</u> <u>From</u>	<u>To</u>	<u>Feet</u> <u>Core</u>	<u>Class of</u> <u>Rock</u>	<u>Remarks</u>	<u>Core</u> <u>Feet</u>	<u>Ag.</u> <u>oz.</u>	<u>%</u> <u>Pb.</u>	<u>%</u> <u>Zn.</u>
0	15	12	Hornstone	Very slight pyrite, mineralization. Small amount of gouge at 15'				
15	34	15	Hornstone	Moderate alteration, very slight pyrite mineralization, small amount gouge at 34'				
34	57	15	Hornstone	Moderate alteration, spotty mineral- ization with Pb, Zn, and Fe sulfides				
57	63	6	Hornstone	Stronger mineralization, mostly FeS				
63	74	8	Hornstone	Fairly strong alteration				
74	75	0.5		Fairly strong Pb, Zn, and Fe sulfides	0.5'	2.06	6.35	8.40
75	141	35	Hornstone	Slight to moderate alteration				
141	148	<u>1</u>	Hornstone	Strong alteration and gouge				

92.5

62 % Core Recovery

LOG OF DIAMOND DRILL HOLE # A-3Logged by DRJMine California Level                     Hole Started 8-20-43Collar Coord. N 15374 E666512 Elev 4648HOLE COMPLETED 8-26-43Direction S 43 E Dip -52°Driller Joe Pyeatt

<u>From</u>	<u>Drilled To</u>	<u>Feet Core</u>	<u>Class of Rock</u>	<u>Remarks</u>	<u>Core Feet</u>	<u>oz. Ag.</u>	<u>% Pb.</u>	<u>% Zn.</u>
0	31	16	Hornstone	Moderate alteration 1" gouge at 25'				
31	35	2	Hornstone	Strong alteration Fair mineralization	2	0.80	1.55	2.60
35	40	2	Hornstone	Moderate alteration				
40	44	4	Vein	Fairly strong mineralization	4	1.04	2.75	3.90
44	52	6	Hornstone	Moderate alteration				
		30						
		58	% Core Recovery					

AMERICAN SMELTING AND REFINING CO.  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

November 18, 1943

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

TRENCH UNIT  
Allis Lease

Dear Sir:

Referring to your letter of November 16th, we milled 317 tons from this lease in October, and this about exhausted the small shoot of ore above the adit level. We intend to follow this ore below the level to see if it will extend to the ore found in the drill hole from the cross-cut below the adit level. The extent of this underhand stoping will depend on what grade of ore we find below the level.

I am,

Very truly yours,

*A. E. Ring*  
A. E. RING  
Asst. Manager

cc: TAsnedden

AER:blc

*lots 3 & 4 only total of 648 tons  
above 1 adit*

April 1943

The Jefferson Mine about 15 miles northwest of Patagonia and 28 miles from Nogales is being operated in a small way by J. M. Slater who lives at the Montezuma Hotel in Nogales. There is an old shaft 115' deep with a vein of zinc sulphide in diorite varying from 2 to 25' in width and just beyond a horse of diorite there is a 2' vein of lead sulphide. There is also a big body of low grade (10%) lead ore proved up by a crosscut.

Larsen says that this mine contains some good ore and more should be developed by the money derived from a Government loan has so far been wasted thru inefficient management and Govt. not likely to advance more money unless some competent man is put in charge.

GEORGE M. COLVOCORESSES  
MINING AND METALLURGICAL ENGINEER  
1102 LUHRS TOWER  
PHOENIX, ARIZONA

August 23rd, 1940

REPORT ON ALLIS GROUP OF MINING CLAIMS

CALIFORNIA Lot #41; pat survey #351  
GARFIELD Lot #42; pat survey #352  
ALLIS Lot #43, pat survey #353

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Gentlemen:

Persuant to your request I have completed an examination of the above named mining claims, which I shall term the "Allis Group", and beg to submit the following report with Exhibits A, B, C, D, E, and F. I was guided over this property by Joe Benitez, Harris having moved away from Patagonia.

LOCATION AND GENERAL DESCRIPTION:

The three patented lode mining claims named above are recorded in the name of E. P. Allis and James McC. Elliot and are located on the western edge of Sect. 19 and 30, Township #22 South, Range 16 East, Gila and Salt River Base and Meridian. The Allis and California Claims extend over the west line of this township and into Township #22 South, Range 15 East. The limits of the claims are shown on Exhibit A, which is enlarged from the official survey map of Township 22 in the U. S. Land Office. Further details of the individual claims are shown on Ex. B, C, and D, which are photostats of the original survey plats and show the location of all of the workings made prior to 1882.

*Copy 2 Ref'd Slightly abridged  
from original*

*Subd A.S. & R.  
11/16/40*

These claims have a combined area of 60 acres and they are distant by good mountain road five miles from the town of Patagonia, Santa Cruz County, Arizona. Patagonia is on the Tucson-Nogales branch of the Southern Pacific R.R. and is connected by road with Nogales, which is 23 miles distant and Tucson, 63 miles distant. The elevation of various portions of the claims varies from 4200 to 4800 feet and the climate is mild and suitable for work at all times of the year. There is always ample water flowing in or under the bed of Sonoita Creek, which runs through Patagonia, while two of its tributaries, Alum Creek and Mill Creek, drain a portion of the slopes of Red Mountain and flow respectively through the Eastern and Western section of your claims, as shown on the maps.

#### HISTORY:

Some of the veins in the Harshaw District were worked by Indians and later by Mexicans over 100 years ago. The first American locations -- subsequent to the Gadsden Purchase in 1853 -- were made prior to 1860, but difficulties of operation and transportation retarded activity until about 1880 when many claims were relocated including probably the Allis Group as these were surveyed for patent in 1882.

I could learn but little of the history of the Allis Group, but some work was evidently done prior to 1880 and such of these old openings as I could find (with the exceptions of those where later work had also been done) were now caved and

practically inaccessible. Most of the subsequent development, according to Joe Benitez, was carried out by a certain Wilson around 1920 and later by a man named Gartney, while the most recent work -- all in the California Claim -- was done by Benitez and Levi Harris, and in late '39 by Harris alone. The shipments made by these recent lessees appear to have amounted to 70 tons of ore with an average content of 6 oz. silver and 16% lead, also very small amounts of copper and zinc.

#### TOPOGRAPHY AND GEOLOGY:

The country is mountainous and some of the slopes are steep and rocky, elsewhere there is a fine stand of grass and native shrubs and numerous live-oaks with cottonwoods and willows growing near the creeks.

The original survey stakes were doubtless of wood, as was customary in those days, and they have long since rotted away or been removed. The rock piles which were placed around these stakes are still to be found and with the help of the survey maps and workings from the shafts which were noted thereon, I was able to locate pretty accurately the lines of the California Claim, but at the Allis and Garfield I could not do so well. Benitez had no idea where any of the corners of these two claims actually lay and so it was necessary to obtain an approximate idea from the openings on the Allis Claim and the position of Alum Creek and Mill Creek between which the bulk of these two claims lie across a very steep and rugged ridge that has an elevation above the creeks of 400 to 600 feet.

Strange to say the relative location of these two creeks is differently shown on the Township map, the U. S. Geological Survey map and the Mineral Surveyors Map of the claims. I have used the latter in conducting my field work and preparing this report.

According to the U. S. G. S. Bulletin #582 by Frank C. Schrader the oldest rocks in this district and vicinity are Cambrian granite, shale and quartzite, which are overlain by Paleozoic sediments mainly limestone and conglomerates that were later intruded by various igneous eruptives. In the immediate vicinity of the Allis Group the prevailing rock is a Tertiary Rhyolite, but further south at the Flux Mine limestone is noted and still further to the south and west there are masses of granite porphyry. The rocks which I noted on your claims were rhyolite, quartzite and quartz diorite, the ore occurrences were entirely in rhyolite as far as I was able to observe them. The metallic minerals occur in fissure veins mainly filled with quartz and hematite with which are associated silver, lead, and zinc and in places a little copper.

The veins of the Allis Group belong to the later period of mineralization, the metallic minerals having been deposited as sulphides from solutions which accompanied the Tertiary intrusion of rhyolite and these sulphides were oxidized near the surface where the zinc has been leached out and iron oxide and lead carbonate predominate.

ALLIS CLAIM:

Mill Creek crosses this claim as shown on the map and both slopes rise abruptly. The formation is all rhyolite. On the west slope of the canyon no workings are shown on the map. Benitez claimed that there were none and none could be found. There would appear to be a chance that the Flux vein crosses this claim near its western end, but if so the outcrop is covered with overburden and it does not appear that it has ever been traced so far to the north.

On the eastern slope, about two-thirds up the ridge, two adit tunnels were visited apparently representing the shafts shown on the survey map and now converted into tunnels. (See Exhibit F).

Some 50 feet higher and 100 feet further east a shallow cut has been put in the hill but no vein was noted here. The two lower adits enter a very flat vein or blanket which strikes in a northerly direction and dips toward the east about 15°. The average width of the vein is over three feet near the portals but it seems to pinch as depth is gained and at the ends of the tunnels is not over a foot wide. Quartz and iron-oxide were noted and my sample taken from the vein in the north drift over a width of 2½ feet carried 5.4 oz. silver per ton and only a trace of lead. A second sample taken from a small pile of ore near the portal of the south tunnel carried 0.6 oz. silver per ton and again only a trace of lead.

This vein, like some others which I observed in the district, appears to have very little depth, and in my opinion holds no promise of producing pay ore in any quantity.

GARFIELD CLAIM:

The upper opencut on the Allis is close to the west end of the Garfield Claim which extends over the top of the ridge and northeastward down the west slope of Alum Creek, which is very precipitous and in places almost a series of sheer rock walls often over 100 feet in height with narrow ledges between.

Apparently there have been no recent workings in the upper part of the Garfield Claim and the old shafts have been largely filled in and could not be accurately located. No evidence of veins or ore were noted here, but down along the lower walls of the canyon many small veins were seen striking to the Southwest and nearly vertical. None of those which I examined within what appeared to be the limits of the Garfield looked at all promising. They were all tight and barren, and whoever may have started drifting on them evidently soon became discouraged and quit without having produced any pay ore as far as could be judged from appearances.

More extensive work along Alum Creek was done on the Blue Eagle or Black Eagle Mine to the north of the Garfield and on another claim to the south but these mines were abandoned many years ago.

I could not at present recommend any further development

on either the Allis or Garfield Claims. Later it may be possible to locate the extension of the Flux vein, which should cross through the western part of the Allis.

CALIFORNIA CLAIM:

By far the best showing in your property is on the California Claim, where most of the old and all of the more recent work has been done and to which I devoted the greater part of my time and attention.

The maps of the old and new workings on this claim (Ex. E) have been prepared from the survey map and my own rough survey with a Brunton Transit on which I plotted in the tunnels and stopes worked by the lessees. Nearly all of this work, being close to the surface, developed and produced oxidized ore which was hand-sorted to yield the shipping product previously mentioned. Lead-carbonates with iron-oxide occurred in pockets and sulphides were noted in one place in C tunnel, from which I took a sample which carried 3.00 oz. silver per ton, 11.2% lead and an appreciable quantity of zinc. The width of vein matter at this point was only six inches. Another sample of carbonate ore from B tunnel carried 2.2 oz. silver per ton and 7.4% lead. The great irregularity of these workings is best shown on Ex. E and they are typical of the work of lessees who naturally gouge out or "gopher" all of the best ore that can be cheaply mined with no thought for the proper development or future condition of the property.

In this particular case the situation was worse than usual because they had back-filled most of the stopes with waste so that most of the vein exposures could not be examined or sampled.

Taken as a whole the visible showings were entirely inconclusive, and I should not care to express any definite opinion as to the future value of your property until this Flux vein has been opened up in depth and its character and value can be determined in the zone of primary sulphides which would probably lie over one hundred feet (on the incline) below the outcrop. As compared to the vein at the Flux Mine its width of about two feet on the California seems to be less and the dip of about  $20^{\circ}$  to the west is flatter. It is possible that the more extensive mineralization at the Flux is due to the intersection of cross veins, several of which seem to converge near the Flux Mine. At least one cross vein is noted on the California east of the Flux vein and nearly vertical and the old shafts #1 and #2 seem to have been sunk on the vein, but I could not descend them nor learn if they had produced any ore.

The breast of the lower adit tunnel should now be very close to this last mentioned vein, and it has already cut one parallel vein from which my sample carried only traces of silver and lead. However, this tunnel would have to be advanced for at least an additional 200 feet before it could be expected to cut the Flux vein as may be noted from Exhibit E.

The main importance of this claim seems to lie in the reasonably certainty that these surface workings are actually in the strong Flux vein which appears to extend north from the Flux Mine where it is now being worked and in the chance that the pay ore which occurs in pockets and lenses near the surface (such as those which have been mined out by the lessees) will make in more continuous and larger shoots at greater depth as has proved and be the case at the Flux, which is now working at a depth of 400 feet below the outcrop. From my visit to the Flux and investigation of what could now be seen of the upper workings, I was impressed with the similarity of conditions here and at the California.

The contour of the ground is unfavorable for development since the vein dips to the west and whereas on the Flux ground it is easily reached by tunnels from Flux Gulch; this gulch swings away from the vein in going north and lies far to the west of the ridge on which the vein crosses the California claim. While this vein cannot be positively traced from the Flux to the California workings, since much of the intervening surface is covered with overburden, yet its general character, strike and dip all tend to confirm the belief that this same vein extends from the Flux Mine to the tunnels and stopes on the California and at one point just south of or along the California line I found a shallow pit on the outcrop from which a sample carried 3.0 oz. silver per ton and 0.2% lead.

A composite of all of my samples from the different workings carried 3.4% zinc but it is quite certain that the

relative percentage of the zinc will increase with depth and the ore from the 400 foot level in the Flux Mine shows rather more zinc than lead.

CONCLUSION AND RECOMMENDATION:

It is my opinion that the future value of your property rests upon the development of the Flux vein as its extension crosses the California and possibly the Allis Claim.

The Flux Mine was idle for many years but is now being worked by the owner, A. R. Byrd, of Tucson, who is making regular and profitable shipments of sulphide ore to the Trench Mill.

The American Smelting and Refining Company, who own and operate the Trench Mine and Mill three miles further south, have been very favorably impressed with the development and possibilities at the Flux and have recently taken an option on this property by virtue of which they are now making a thorough investigation.

Any further work by lessees would almost certainly be of no real benefit to your holdings and merely result as in the past in the production of a very small tonnage of picked material from which only a trifling royalty would accrue to the owners. Past shipments sent to El Paso have had to stand heavy transportation charges and penalties, as may be noted from the attached schedule, and although somewhat better terms are now being offered by the Trench Mill, it is probable that the only substantial profit that will be derived from mining in this particular

district will be obtained by operators who are in a position to develop and work several properties on an extensive scale and to treat the output in their own mills.

Since the A. S. and R. have already embarked on this policy and seem disposed to expand their activities, I believe that it will be to the best interest of all owners of neighboring properties to endeavor to deal with them or with any other large company which may follow a similar policy, and I therefore put this in the form of a recommendation.

Yours very respectfully,

COMPARISON OF ESSENTIAL TERMS FOR PURCHASE OF LEAD-SILVER ORES  
FROM PATAGONIA DISTRICT

EL PASO SCHEDULE

Silver, deduct 0.5 oz. per ton and pay for the balance @ 69.125¢ per oz. (based on U.S. Govt. price for silver.

Lead, deduct 1.5# per ton and pay for 90% of the balance @ N. Y. market less 1.56¢ per pound.

Charges.

Treatment charge	\$3.50
Insoluble and sulphur penalties	.76 (about)
Freight	<u>2.00</u>
Total	\$ 6.26

TRENCH MILL SCHEDULE ON FLUX MINE ORE

Silver, pay for all silver @ 50¢ per oz.

Lead, when market is 5.50¢ per pound, pay for all lead @ 2.39¢ per pound

Zinc, when market price of zinc is 5¢ per pound, pay for all zinc @ 0.9¢ per pound.

Treatment charge \$3.00 per ton with increase of 10% of the excess net value of the ore above \$7.00 per ton up to a maximum charge of \$5.00.

Trucking charge should be the same to the railroad or to the Trench Mill.

GEORGE M. COLVOCORESSES  
MINING AND METALLURGICAL ENGINEER  
1102 LUHRS TOWER  
PHOENIX, ARIZONA

August 23, 1940

REPORT ON ALLIS GROUP OF MINING CLAIMS

CALIFORNIA Lot #41, pat survey #351  
GARFIELD Lot #42, pat survey #352  
ALLIS Lot #43, pat survey #353

The Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Gentlemen:

Persuant to your request I have completed an examination of the above named mining claims, which I shall term the "Allis Group", and beg to submit the following report with Exhibit A, B, C, D, E, and F. I was guided over this property by Joe Benitez, Harris having moved away from Patagonia.

LOCATION AND GENERAL DESCRIPTION.

The three patented lode mining claims named above are recorded in the name of E. P. Allis and James McC. Elliot and are located on the western edge of Sect. 19 and 30, Township #22 South, Range 16 East, Gila and Salt River Base and Meridian. The Allis and California Claims extend over the west line of this township and into Township #22 South, Range 15 East. The limits of the claims are shown on Ex. A, which is enlarged from the official survey map of Township 22 in the U. S. Land Office. Further details of the individual claims are shown on Ex. B, C, and D, which are photostats of the original survey plats and show the location of all of the

Allis Group of Mining Claims.

workings made prior to 1882.

These claims have a combined area of 60 acres and they are distant by good mountain road five miles from the town of Patagonia, Santa Cruz County, Arizona. Patagonia is on the Tucson-Nogales branch of the Southern Pacific R. R. and is connected by road with Nogales, which is 23 miles distant and Tucson, 63 miles distant. The elevation of various portions of the claims varies from 4200 to 4800 feet and the climate is mild and suitable for work at all times of the year. There is always ample water flowing in or under the bed of Sonoita Creek, which runs through Patagonia, while two of its tributaries, Alum Creek and Mill Creek, drain a portion of the slopes of Red Mountain and flow respectively through the Eastern and Western section of your claims, as shown on the maps.

#### HISTORY.

Some of the veins in the Harshaw District were worked by Indians and later by Mexicans over 100 years ago. The first American locations -- subsequent to the Gadsden Purchase in 1853 -- were made prior to 1860, but difficulties of operation and transportation retarded activity until about 1880 when many claims were relocated including probably the Allis Group as these were surveyed for patent in 1882.

I could learn but little of the history of the Allis Group, but some work was evidently done prior to 1880 and such of these old openings as I could find (with the exceptions of those where later work had also been done) were now caved and practically inaccessible. Most of the subsequent development, according to Joe Benitez, was carried out by a certain Wilson

## Allis Group of Mining Claims.

around 1920 and later by a man named Gartney, while the most recent work -- all in the California Claim -- was done by Benitez and Levi Harris, and in late '39 by Harris alone. The shipments made by these recent lessees appear to have amounted to 70 tons of ore with an average content of 6 oz. silver and 16% lead, also very small amounts of copper and zinc.

## TOPOGRAPHY AND GEOLOGY.

The country is mountainous<sup>s</sup> and some of the slopes are steep and rocky, elsewhere there is a fine stand of grass and native shrubs and numerous live-oaks with cottonwoods and willows growing near the creeks.

The original survey stakes were doubtless of wood, as was customary in those days, and they have long since rotted away or been removed. The rock piles which were placed around these stakes are still to be found and with the help of the survey maps and working from the shafts which were noted thereon, I was able to locate pretty accurately the lines of the California Claim, but at the Allis and Garfield I could not do so well. Benitez had no idea where any of the corners of these two claims actually lay and so it was necessary to obtain an approximate idea from the openings on the Allis Claim and the position of Alum Creek and Mill Creek between which the bulk of these two claims lies across a very steep and rugged ridge that has an elevation above the creeks of 400 to 600 feet.

Strange to say the relative location of these two creeks

## Allis Group of Mining Claims.

is differently shown on the Township map, the U. S. Geological Survey map and the Mineral Surveyors Map of the claims. I have used the latter in conducting my field work and preparing this report.

According to the U. S. G. S. Bulletin #582 by Frank C. Schrader the oldest rocks in this district and vicinity are Cambrian granite, shale, and quartzite, which are overlain by Paleozoic sediments mainly limestone and conglomerates that were later intruded by various igneous eruptives. In the immediate vicinity of the Allis Group the prevailing rock is a Tertiary Rhyolite, but further south at the Flux Mine limestone is noted, and <sup>also</sup> further to the south and west there are masses of granite porphyry. The rocks which I noted on your claims were rhyolite, quartzite and quartz diorite, the ore occurrences were entirely in rhyolite as far as I was able to observe them. The metallic minerals occur in fissure veins mainly filled with quartz and hematite with which are associated silver, lead, and zinc, and in places a little copper.

The veins of the Allis Group belong to the later period of mineralization, the metallic minerals having been deposited as sulphides from solutions which accompanied the Tertiary intrusion of rhyolite and these sulphides were oxidized near the surface where the zinc has been leached out and iron oxide and lead carbonate predominate.

**ALLIS CLAIM:** Mill Creek crosses this claim as shown on the map and both slopes rise abruptly. The formation is all rhyolite. On the west slope of the canyon no workings are shown on the map. Benitez claimed that there were none and none could be found.

## Allis Group of Mining Claims.

There would appear to be a chance that the Flux vein crosses this claim near its western end, but if so the outcrop is covered with overburden and it does not appear that it has ever been traced so far to the north.

On the eastern slope, about two-thirds up the ridge, two adit tunnels were visited apparently representing the shafts shown on the survey map and now converted into tunnels. (See Ex. F.)

Some 50 feet higher and 100 feet further east a shallow cut has been put in the hill but no vein was noted here. The two lower adits enter a very flat vein or blanket which strikes in a northerly direction and dips toward the east about  $15^{\circ}$ . The average width of the vein is over three feet near the portals but it seems to pinch as depth is gained and at the ends of the tunnels is not over a foot wide. Quartz and iron-oxide were noted and my sample taken from the vein in the north drift over a width of  $2\frac{1}{2}$  feet carried 5.4 oz. silver per ton and only a trace of lead. A second sample taken from a small pile of ore near the portal of the south tunnel carried 0.6 oz. silver per ton and again only a trace of lead.

This vein, like some others which I observed in the district, appears to have very little depth, and in my opinion holds no promise of producing pay ore in any quantity.

## GARFIELD CLAIM.

The upper opencut on the Allis is close to the west end of the Garfield Claim which extends over the top of the ridge and northeastward down the west slope of Alum Creek, which is very precipitous and in places almost a series of sheer rock walls often over 100 feet in height with narrow ledges between.

Apparently there have been no recent workings in the upper part of the Garfield

## Allis Group of Mining Claims.

part of the Garfield Claim and the old shafts have been largely filled in and could not be accurately located. No evidence of veins or ore were noted here, but down along the lower walls of the canyon many small veins were seen striking to the South West and nearly vertical. None of those which I examined within what appeared to be the limits of the Garfield looked at all promising. They were all tight and barren, and whoever may have started drifting on them evidently soon became discouraged and quit without having produced any pay ore as far as could be judged from appearances.

More extensive work along Alum Creek was done on the Blue Eagle or Black Eagle Mine to the north of the Garfield and on another claim to the south but these mines were abandoned many years ago.

In my opinion all the showings on both the Allis and Garfield should be classed as rather unpromising prospects and for the present I could not recommend any further development. Later it may be possible to locate the extension of the Flux vein, which should cross through the western part of the Allis.

## CALIFORNIA CLAIM.

By far the best showing in your property is on the California Claim, where most of the old and all of the more recent work has been done and to which I devoted the greater part of my time and attention.

The maps of the old and new workings on this claim (EX. E) ~~and F~~) have been prepared from the survey map and my own rough

## Allis Group of Mining Claims.

survey with a Brunton Transit on which I plotted in the tunnels and stopes worked by the lessees. Nearly all of this work, being close to the surface, developed and yielded oxidized ore which was hand sorted to yield the shipping product previously mentioned. Lead-carbonates with iron-oxide occurred in pockets and sulphides were noted in one place in C tunnel, from which I took a sample which carried 3.00 oz. silver per ton, 11.2% lead and an appreciable quantity of zinc. The width of vein matter at this point was only six inches. Another sample of carbonate ore from B tunnel carried 2.2 oz. silver per ton and 7.4% lead. The great irregularity of these workings is best shown on Ex. E and they are typical of the work of lessees who naturally gouge out or "gopher" all of the best ore that can be cheaply mined with no thought for the proper development or future condition of the property.

In this particular case the situation was worse than usual because they had back-filled most of the stopes with waste so that most of the vein exposures could not be examined or sampled.

Taken as a whole the visible showings were unpromising but entirely inconclusive, and I should not care to express any definite opinion as to the future value of your property until this Flux vein has been opened up in depth and its character and value can be determined in the zone of primary sulphides which would probably lie over one hundred feet (on the incline) below the outcrop. As compared to the vein at the Flux Mine its width of about two feet on the California seems to be less and the dip of about 20° to the west is flatter.

## Allis Group of Mining Claims.

It is possible that the more extensive mineralization at the Flux is due to the intersection of cross veins, several of which seem to converge near the Flux Mine. At least one cross vein is noted on the California east of the Flux vein and nearly vertical and the old shafts #1 and #2 seem to have been sunk on the vein, but I could not descend them nor learn if they had produced any ore.

The breast of the lower adit tunnel should now be very close to this last mentioned vein, and it has already cut one parallel vein from which my sample carried only traces of silver and lead. However, this tunnel would have to be advanced for at least an additional 200 feet before it could be expected to cut the Flux vein as may be noted from Exhibit E.

None the less the main importance of this claim seems to lie in the reasonably certainty that these surface workings are actually in the strong Flux vein which extends north from the Flux Mine where it is now being worked and in the chance that the pay ore which occurs in pockets and lenses near the surface (such as those which have been mined out by the lessees) will make in more continuous and larger shoots at greater depth as has proved and be the case at the Flux, which is now working at a depth of 400 feet below the outcrop. From my visit to the Flux and investigation of what could now be seen of the upper workings, I was impressed with the similarity of conditions here and at the California.

Against the expectation that similar conditions might likewise be found to exist at greater depths one must face the fact that the actual showings in the California workings are in themselves disappointing for everywhere the vein appears

## Allis Group of Mining Claims.

to pinch within less than 60 feet from the outcrop, measured on the incline of the vein, and in the lower drifts I could not find any place where a width of over six inches could be measured for any substantial length.

The contour of the ground is unfavorable for development since the vein dips to the west and whereas on the Flux ground it is easily reached by tunnels from Flux Gulch; this gulch swings away from the vein in going north and lies far to the west of the ridge on which the vein crosses the California claim. While this vein cannot be positively traced from the Flux to the California workings, since much of the intervening surface is covered with overburden, yet its general character, strike and dip all tend to confirm the belief that this same vein extends from the Flux Mine to the tunnels and stopes on the California and at one point just south of or along the California line I found a shallow pit on the outcrop from which a sample carried 3.0 oz. silver per ton and 0.2% lead.

A composite of all of my samples from the different workings carried 3.4% zinc but it is quite certain that the relative percentage of the zinc will increase with depth and the ore from the 400 foot level in the Flux Mine shows rather more zinc than lead.

### CONCLUSION AND RECOMMENDATION.

It is my opinion that the future value of your property rests upon the development of the Flux vein as its extension crosses the California and possibly the Ellis Claim.

The Flux Mine was idle for many years but is now being worked by the owner, A. R. Byrd, of Tucson, who is making

Allis Group of Mining Claims.

regular and profitable shipments of sulphide ore to the Trench Mill.

The American Smelting and Refining Company, who own and operate the Trench Mine and Mill three miles further south, have been very favorably impressed with the development and possibilities at the Flux and have recently taken an option on this property by virtue of which they are now making a thorough investigation. From conversation with their local management and engineers I was given to understand the result of this investigation has so far been favorable and that in the event that they should exercise this option on the Flux Claims they would be disposed to option and develop other adjacent areas including all three of your claims which are nearly or quite surrounded by the ground which they now hold under option.

Under the above circumstances I believe that it will be advisable to postpone any further work on your property until the decision of the A. S. and R. can be known, and I shall be glad to keep in touch with them, if you so desire, and to advise you further as any progress is made.

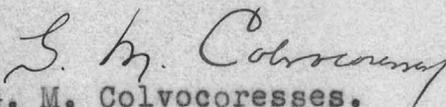
Should the A. S. and R. take over the Flux Claims they will certainly need and desire to acquire your holdings and they will be far better placed to operate all the mines in this district than any individual owner of what must at best be considered as a small property of questionable merit. Any further work by lessees would almost certainly be of no real benefit to your holdings and merely result as in the past in the production of a very small tonnage of picked material from which only a trivial royalty would accrue to the owners. Past shipments sent to El Paso have had to stand heavy transportation

Allis Group of Mining Claims.

charges and penalties, as may be noted from the attached schedule, and although somewhat better terms are now being offered by the Trench Mill, it is probable that the only substantial profit that will be derived from mining in this particular district will be obtained by operators who are in a position to develop and work several properties on an extensive scale and to treat the output in their own mills.

Since the A. S. and R. have already embarked on this policy and seem disposed to expand their activities, I believe that it will be to the best interest of all owners of neighboring properties to endeavor to deal with them or with any other large company which may follow a similar policy, and I therefore put this in the form of a recommendation.

Yours very respectfully,

  
G. M. Colvocoresses.

COMPARISON OF ESSENTIAL TERMS FOR PURCHASE OF LEAD-SILVER ORES  
FROM PATAGONIA DISTRICT.

EL PASO SCHEDULE

Silver, deduct 0.5 oz. per ton and pay for the balance  
@ 69.125¢ per oz. (based on U.S. Govt. price  
for silver

Lead, deduct 1.5# per ton and pay for 90% of the  
balance @ N. Y. market less 1.56¢ per pound

Charges.

Treatment charge	\$ 3.50
Insoluble and sulphur penalties	.76 (about)
Freight	<u>2.00</u>
Total	\$ 6.26

TRENCH MILL SCHEDULE ON FLUX MINE ORE

Silver, pay for all silver @ 50¢ per oz.

Lead, when market is 5.50¢ per pound, pay for all  
lead @ 2.39¢ per pound

Zinc, when market price of zinc is 5¢ per pound,  
pay for all zinc @ 0.9¢ per pound

Treatment charge \$3.00 per ton with increase of  
10% of the excess net value of the ore above  
\$7.00 per ton up to a maximum charge of \$5.00.  
Trucking charge should be the same to the railroad  
or the Trench Mill.

? probably about 1.50 per ton

**AMERICAN SMELTING AND REFINING COMPANY  
EL PASO SMELTING WORKS  
ORE SETTLEMENT**

BOUGHT OF R.C. Blabon, EL PASO, TEXAS, 11-27-39  
 ADDRESS Patagonia, Ariz. SHIPPING POINT Patagonia, Ariz. SMELTER LOT 3199  
 CLASSIFICATION Ore SHIPPER'S LOT \_\_\_\_\_

CAR		WEIGHT IN AVOIRDUPOIS POUNDS					N. Y. METAL QUOTATIONS							
No.	Initial	Gross	SACKS		Net Weight	Moisture %	Dry Weight	Settlement Date	B/L Date	Silver	Foreign Silver	Lead	E. & M. J.	Copper
			No.	Weight										
93812	SP				74800	8.9	68143	11-14-39	11-9-39	70625	3475	\$ 5.50		
										Cts. per Oz.		Per 100 Lbs.		
										12150				Cts. per Lb.
										LONDON LEAD PER 2240 LBS.				
										£	s	d		

PAYMENTS FOR METALS								VALUE	
ELEMENTS	Assay per Ton 2000 Lbs.	Deducted	Net Assay	Equivalent in Lbs.	Per Cent Paid For	Net Paid For	Rate	Amount Per Ton	Amount Total
GOLD	.01 oz.								
SILVER	5.1 oz.	.5	4.6				69125	3.18	
LEAD	15.7 %	1.5	14.2	284.0	90	255.6	0394	10.07	
COPPER	.16 %	.4	-						
<b>TOTAL PAYMENTS FOR METALS</b>									<b>13.25</b>

DEDUCTIONS						DEBITS	CREDITS
BASE CHARGE: F. O. B. El Paso, for Metal Payments, not exceeding \$ 15.00 per ton						3.50	
.....% of \$..... excess over \$..... per ton							
Handling Sacks							
Copper Deficiency							
ANALYSIS		Deduction	Net	Rate			
Insoluble	44.4 %	40.0	4.4	@	.05 Cts.	.22	
Silica	41.2 %			@	Cts.		
Iron	12.9 %			@	Cts.		
Mn	- %			@	Cts.		
Lime	.1 %			@	Cts.		
Zinc	.2 %			@	Cts.		
Sulphur	4.7 %	2.0	2.7	@	.20 Cts.	.54	
Alumina	3.0 %			@	Cts.		
As	%			@	Cts.		
Sb	%			@	Cts.		
Bi	%			@	Cts.		
<b>TOTAL DEDUCTIONS</b>						<b>4.26</b>	<b>4.26</b>
<b>NET VALUE PER TON</b>							<b>8.99</b>

				DEBITS	CREDITS
Total Value on	34.0715	Dry Tons @	8.99 Per Ton		306.30
Less Freight on	37.400	Wet Tons @	2.00 Per Ton	74.80	
Less Freight on Sacks Returned		Hauling Charge		2.48	
Less Demurrage		Switching			
Less Representation		Umpires			
Less Duty and Brokerage					
Amount withheld pending receipt of Silver Affidavit				56.22	
Royalty					
<b>BALANCE DUE SHIPPER</b>				<b>172.80</b>	
				<b>306.30</b>	<b>306.30</b>

**AMERICAN SMELTING AND REFINING COMPANY  
EL PASO SMELTING WORKS  
ORE SETTLEMENT**

BOUGHT OF Richardson R.E.M.&Co. Corp. EL PASO, TEXAS, 6-6-39  
 ADDRESS Patagonia, Arizona SHIPPING POINT Patagonia, Arizona SMELTER LOT 1514  
 CLASSIFICATION Ore SHIPPER'S LOT 1

CAR		WEIGHT IN AVOIRDUPOIS POUNDS					N. Y. METAL QUOTATIONS						
No.	Initial	Gross	SACKS		Net Weight	Moisture %	Dry Weight	Settlement Date	B/L Date	Silver	Foreign Silver	Lead	E. & M. J. Copper
			No.	Weight									
91674	SP				14540	1.9	14264	5-22-39	5-18-39	.64125			
										Cts. per Oz.			
											.4275		
												\$ .0965	Per 100 Lbs.
													Cts. per Lb.
										LONDON LEAD PER 2240 LBS.			
										£	s	d	
										Exchange N. Y.			

PAYMENTS FOR METALS								VALUE			
ELEMENTS	Assay per Ton 2000 Lbs.		Deducted	Net Assay	Equivalent in Lbs.	Per Cent Paid For	Net Paid For		Rate	Amount Per Ton	Amount Total
GOLD		oz.						oz.			
SILVER	10.5	oz.				95	9.975	oz.	.62625	6.25	
LEAD	26.4	%	1.5	24.9	498.0	90	448.2	Lbs.	.0319	14.30	
COPPER	.14	%	.4					Lbs.			

**TOTAL PAYMENTS FOR METALS**

20.55

DEDUCTIONS						DEBITS		CREDITS	
BASE CHARGE: F. O. B. El Paso, for Metal Payments, not exceeding \$ 15.00 per ton							3.50		
10 % of \$ 5.55 excess over \$ 15.00 per ton							.56		
Handling Sacks									
Copper Deficiency									
ANALYSIS			Deduction	Net	Rate				
Insoluble	41.8	%	40.0	1.8	%	@ 5 Cts.	.09		
Silica	36.4	%			%	@ Cts.			
Iron	7.1	%			%	@ Cts.			
Mn		%			%	@ Cts.			
Lime	.1	%			%	@ Cts.			
Zinc	.1	%			%	@ Cts.			
Sulphur	5.6	%	2.0	3.6	%	@ 20 Cts.	.72		
Alumina	1.4	%			%	@ Cts.			
As	.12	%			%	@ Cts.			
Sb		%			%	@ Cts.			
Bi	.02	%			%	@ Cts.			
<b>TOTAL DEDUCTIONS</b>							4.87		4.87
<b>NET VALUE PER TON</b>									15.68

			DEBITS		CREDITS	
Total Value on	7.132		Dry Tons @	15.68	Per Ton	111.83
Less Freight on	7.270		Wet Tons @	2.50	Per Ton	18.18
Less Freight on Sacks Returned			Hauling Charge		Reweight	3.47
Less Demurrage			Switching			
Less Umpires						
Less Duty and Brokerage						44.58
Amount withheld pending receipt of Silver Affidavit						45.60
Royalty						111.83
<b>AIR MAIL</b>			<b>BALANCE DUE SHIPPER</b>			111.83

A.M. JUL 10 1939

MADE BY

CHECKED

CORRECT

APPROVED

AMERICAN SMELTING AND REFINING COMPANY  
EL PASO SMELTING WORKS  
ORE SETTLEMENT

10-20-39

BOUGHT OF **R. C. Blabon**  
ADDRESS **Patagonia, Arizona**  
CLASSIFICATION **Ore**

EL PASO, TEXAS,

SHIPPING POINT **Patagonia, Arizona**

SMELTER LOT **2849**

SHIPPER'S LOT

CAR		WEIGHT IN AVOIRDUPOIS POUNDS					
No.	Initial	Gross	SACKS		Net Weight	Moisture %	Dry Weight
			No.	Weight			
92425	SP				60980	8.4	55858
PROVISIONAL SETTLEMENT							

N. Y. METAL QUOTATIONS		
Settlement Date	10-9-39	
B/L Date	10-5-39	
Silver	70625	Cts. per Oz.
Foreign Silver	3659375	
Lead	\$ 5.50	Per 100 Lbs.
E. & M. J. Copper	12150	Cts. per Lb.
LONDON LEAD PER 2240 LBS.		
£	s	d
Exchange N. Y.		

PAYMENTS FOR METALS								
ELEMENTS	Assay per Ton 2000 Lbs.		Deducted	Net Assoy	Equivalent in Lbs.	Per Cent Paid For	Net Paid For	Rate
GOLD	.015	oz.						
SILVER	4.6	oz.	.5	4.1			4.1	.69125
LEAD	13.5	%	1.5	12.0	240.0	90	216.0	.0394
COPPER	.16	%	.4					

VALUE	
Amount Per Ton	Amount Total
2.83	
8.61	
	11.34

TOTAL PAYMENTS FOR METALS

DEDUCTIONS						DEBITS	CREDITS
BASE CHARGE: F. O. B. El Paso, for Metal Payments, not exceeding \$ 15.00 per ton						3.50	
.....% of \$..... excess over \$..... per ton							
Handling Sacks							
Copper Deficiency							
ANALYSIS			Deduction	Net		Rate	
Insoluble	49.2	%	40.0	9.2		5	.46
Silica	42.6	%					
Iron	13.3	%					
Mn		%					
Linse	.1	%					
Zinc	1.0	%					
Sulphur	3.6	%	2.0	1.6		20	.32
Alumina	3.0	%					
As		%					
Sb		%					
Bi		%					
TOTAL DEDUCTIONS						4.28	
NET VALUE PER TON							

				DEBITS	
Total Value on	27,929	Dry Tons @	7.06	Per Ton	
Less Freight on	30,490	Wet Tons @	2.00	Per Ton	60.98
Less Freight on Sacks Returned		Handling Charge			2.48
Less Demurrage		Switching			
Less Representation		Umpires			
Less Duty and Brokerage					
Amount withheld pending receipt of Silver Affidavit					38.82
Royalty					

BALANCE DUE SHIPPER

94.90  
197.18

August 7, 1942

NOTE FOR ALLIS CLAIM FILE

A. S. & R. now treating about 220 tons of ore per day in the Trench Mill of which about 150 tons comes from the Trench or other mines in its immediate vicinity and 70 tons from the Flux which produces a better grade of ore.

At the Trench 140 men are employed so that it takes practically one man to produce one ton of ore per day. Above the 700' level the mine has been pretty well worked out and the 700' level is not very good. There is good ore in the 800' level but the 900' has been disappointing and they have gone down with a winze to the 1000' level where the showing to date is not promising.

(Information from W. P. Goss of the <sup>Harmond</sup>~~Vermont~~ Company)

Shipment. Feb. 13 - 17% in *Shipment*

Leads	Qty	Pl.	Gr.	Pulver.	Suppl.	Total	
43	kg wt	kg	%	kg	kg	kg	
#1. 6/16	342,041	2.08	5.80	5.95	63.13	90.01	153.14
2. 9/30.	319,957	2.62	6.40	7.50	85.15	99.24	184.39
3. 10/6	243,175	2.60	6.05	6.95	57.28	201.65	370.00
4. 10/28	391,597	2.32	6.90	8.10	111.07		
<i>Alumina</i>	1,296,770						
<i>Iron</i>	648,385						
5. 11/1	351,124	2.64	7.65 Cu 0.30	9.90	126.43	141.72	268.15
6. 12/1	274,229	2.00	6.85 Cu 0.15	7.70	72.44	89.14	161.58
	625,353						
	312,677						
	648,385						
<i>Total 43. Inj. (ton)</i>	961,062						
							<i>Total Repts = 1137.26</i>

*Silver* pyromet @ 0.50 per g.  
*Copper* has pay of assay is less than 0.25%, but about this pay from 0.05 to 0.8% of content  
*Pb* Base pay of 0.305 based on 6.50¢ plus. 2.75¢ of base @ 86%  
*Zn* " " " 0.2525 " " 8.25¢ " 2.75 " " @ 77%

AMERICAN SMELTING AND REFINING COMPANY  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

*W. H. Loerpabel*  
February 29, 1944

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona

TRENCH UNIT  
Allis Lease

Dear Sir:

Acknowledging your letter to Mr. Loerpabel of February 28th, we were obliged to await the actual notice of transfer of funds by Metals Reserve to our New York Office before making final settlement for royalty on premiums on Lot No. 6.

There is enclosed herewith check to Edward P. Allis Company for \$89.14 with statement attached giving premium data on Lot No. 6. This, I believe, closes the account.

Regretting that our decision in regard to the lease must stand, and with best personal regards,

I remain,

Very truly yours,

*A. E. Ring*  
A. E. RING  
Assistant Manager

Enclosures.

AER/ep

R o y a l t y    O n    P r e m i u m    M e t a l  
P a y m e n t s   O n    A l l i s    O r e . - L o t . N o . 6

	<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>
Pounds of Metal Produced	411	18785	21116
Percentages Applicable	*	86	77
Production For Premium Purposes	-	16155	16259
Monthly Quotas	0	0	0
Excess Production Eligible for Premiums	-	16155	16259
Premium Rate Per Pounds	\$.05	\$.0275	\$.0275
Premium Amount Received	-	444.26	447.12
10% Royalty Due Edward P. Allis Co.	-	44.43	44.71

\* No Premium Payment on Copper - assay of 0.15% was below Required Minimum of 0.25%.

*OK  
 I he e.  
 Copy send Allis Co*

January 11th, 1944

Edward P. Allis Company  
427 Stewart Street  
Milwaukee, Wisconsin

Re: Allis Group of Claims

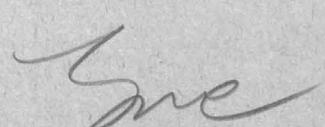
Gentlemen:

I enclose herewith a copy of a letter received this morning from the American Smelting and Refining Company with statement of supplemental royalty payments due on account of Lot No. 5 shipped from the California Claim. I also enclose the custom ore settlement for Lot No. 6 and check for \$214.16 drawn in your favor and representing the amount due for settlements as above.

You will note that for the first time a small payment is being made on account of the copper in the ore and I think it possible that the content of copper may increase with depth, although it does not seem to have been so good in Lot No. 6 as it was in Lot No. 5 and also the percentage of both lead and zinc has somewhat decreased in this last shipment.

I have every reason to believe that the ore represented by both Lots No. 5 and No. 6 must have been mined below the adit level, but I shall make certain of this point when I visit the property as I am planning to do on the 14th of this month. At that time I also hope to obtain the quarterly report of the operations of the American Smelting and Refining Company with revised maps so that these can all be sent to you along with my own report some time next week. I earnestly hope that the outlook at that time will appear to be favorable.

Yours very truly,



GMC/b  
Enclosures 3

126.43  
7361  
00.04

AMERICAN SMELTING AND REFINING COMPANY  
MINING DEPARTMENT OF THE SOUTHWEST  
P. O. BOX 2229  
TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

January 10, 1944

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona.

Dear Sir:

Enclosed herewith our Check No. 691 for \$214.16 payable to the Edward P. Allis Company covering royalty on sale of ore per enclosed settlement sheet as well as royalty on Premium Metal Payments as calculated in the following statement:

	<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>
Pounds of metal produced .....	1053	26861	34761
Percentages applicable .....	87	86	77
Production for premium purposes	916	23100	26766
Monthly quotas .....	0	0	0
Excess production eligible for premiums .....	916	23100	26766
Premium rate per pound .....	.05	.0275	.0275
Premium amount received	\$45.80	\$635.25	\$736.07
10% royalty due Edw.P.Allis Co.	\$ 4.58	63.53	73.61

Very truly yours,

C. D. GRABERT  
Chief Clerk

Enclosures.  
CDG/ep

Premium payments  
Lrd #5

✓ V rec'd Prem on Lrd #6  
Lm after

AMERICAN SMELTING & REFINING CO.

# CUSTOM ORE SETTLEMENT

SHIPPER American Smelting and Refining Company,  
Lessee of the Edward P. Allis Company  
427 East Stewart St., Milwaukee, Wis.

LOT No. A-6  
 DATE DELIVERED 12-1-31-43  
 DATE SAMPLED 12-31-43

ORE FROM California Mine (Allis Group)

WEIGHTS					METAL PRICES				
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.	AU:	AG:	PB:	CU:	ZN:
		%	LBS.						
<del>12-31-</del> 12-31-43	279256	1.8	5027	274229					
					Fe 17.1%				

ASSAYS						CONTENTS				
BY	AU-OZ	AG-OZ	PB %	CU %	ZN %	AU-OZ	AG-OZ	PB. LBS	CU LBS.	ZN LBS
SETTLEMENT		2.00	6.85	.15	7.70		274.23	18785	411	21116

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			
AG: 2.00 x .50		1.00	137.11
PB: 137 x .0305		4.18	573.14
CU:			
ZN: 154 x .02525		3.89	533.38
TOTAL PAYMENTS		9.07	1243.63
DEDUCTIONS			
TREATMENT: 137.1145 dry tons		3.00	411.34
Hauling: 139.6280 wet tons @ .75¢			104.72
3% Federal Tax on \$104.72			3.14
Royalty: 10% of \$724.43			72.44
TOTAL DEDUCTIONS			591.64
BALANCE DUE SHIPPER			651.99

MADE BY A.B.White and C.D.Grabert.

APPROVED \_\_\_\_\_

AMERICAN SMELTING AND REFINING CO.

MINING DEPARTMENT OF THE SOUTHWEST

P. O. BOX 2229

TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

*Copy letter*

December 10, 1943

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona.

Dear Sir:

Enclosed herewith our Check No. 696 in the amount of \$328.08 payable to the Edward P. Allis Company covering royalty on sale of ore per enclosed settlement sheets as well as royalty on Premium Metal Payments as shown in the following statement:

	<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>
Pounds of metal produced	1269*	41732 ✓	48620 ✓
Percentages applicable	-	86 ✓	77 ✓
Production for premium purposes	0	35890 ✓	37437 ✓
Monthly Quota	0	0	0
Excess Production eligible			
For premiums .....	0	35890 ✓	37437 ✓
Premium rate per pound	.05	.0275 ✓	.0275 ✓
Premium amount received	0	\$986.98	\$1029.52
10% Royalty due Edward P. Allis Co. ....	-	\$ 98.70	\$ 102.95

\* No Premium for copper as assay of .20 is below minimum of .25%.

Very truly yours,

C. D. GRABERT  
Chief Clerk

By

*Karl A. von den Steinen*  
KARL A. von den STEINEN

*Y*  
*Lots 3 & 4 enclosed*  
*Premium payments*

Enclosures.

KvdS/ep

98.70  
102.95  
126.43  

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328.08 *06*

AMERICAN SMELTING & REFINING CO.

CUSTOM ORE SETTLEMENT

*Checked OK*

SHIPPER American Smelting and Refining Company,  
 Lessee of the Edward P. Allis Company  
 427 East Stewart St., Milwaukee, Wis.  
 ORE FROM California Mine (Allis Group)

LOT No. A-5  
 DATE DELIVERED Nov. 1-29  
 DATE SAMPLED Nov. 1-29

WEIGHTS					METAL PRICES	
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.	AU:	AG: .70625
		%	LBS.			
11-29-43	358290	2.00	7166	351124	Fe - 14.65%	CZ: 8.25

ASSAYS						CONTENTS				
BY	AU-OZ	AG-OZ	PB %	CU %	ZN %	AU-OZ	AG-OZ	PB. LBS	CU LBS.	ZN LBS
A. S. & R. Co.										
SETTLEMENT	-	2.64	7.65	0.30	9.90		463.48	26861	1053	34761

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			
AG: 2.64 x .50		1.32	231.74
PB: 153 x .0305		4.67	819.87
CU:			
ZN: 198 x .02525		5.00	877.81
TOTAL PAYMENTS		10.99	1929.42
DEDUCTIONS			
TREATMENT:			
175.5620 dry tons			
Hauling: 179.145 wet tons @ .75¢			
3% Federal tax on \$134.36			
Royalty: 10% of \$1264.34			
TOTAL DEDUCTIONS		3.00	526.69
			134.36
			4.03
			126.43
BALANCE DUE SHIPPER		-	1137.91

MADE BY A.B. White and A.E. Ring.

APPROVED *A.E. Ring*

AMERICAN SMELTING AND REFINING CO.  
 MINING DEPARTMENT OF THE SOUTHWEST  
 P. O. BOX 2229  
 TUCSON, ARIZONA

W. H. LOERPABEL  
 MANAGER

November 11, 1943

Mr. George M. Colvocoresses  
 1102 Luhrs Tower  
 Phoenix, Arizona.

A. 11/15/43

Dear Sir:

Enclosed herewith our Check No. 617 in the amount of \$267.59 payable to the Edward P. Allis Company covering royalty on sale of ore per enclosed settlement sheets as well as royalty on Premium Metal Payments as shown in the following statement:

	<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>
Pounds of Metal Produced ..... *	640	20477	23997
Percentages Applicable .....	-	86%	77%
Production for Premium Purposes	0	17610	18478
Monthly Quota .....	0	0	0
Excess Production eligible for premiums .....	0	17610	18478
Premium rate per pound .....	.05¢	.0275¢	.0275¢
Premium amount received .....	0	\$484.28	\$508.15
10% Royalty due Edward P. Allis Co.	-	48.43	50.81

G# 2

Ma

\*No payment for copper as assay of .20 is below minimum of .25.

Very truly yours,

Enclosures.

C. D. GRABERT  
 Chief Clerk

CDG/ep

48.43  
 50.81  
 -----  
 99.24  
 111.07  
 -----  
 210.31  
 57.28  
 -----  
 267.59

AMERICAN SMELTING & REFINING CO.

# CUSTOM ORE SETTLEMENT

SHIPPER American Smelting and Refining Company,  
 Lessee of the Edward P. Allis Company,  
 427 East Stewart St., Milwaukee, Wis.

LOT No. A-4  
 DATE DELIVERED 10-28-43  
 DATE SAMPLED 10-28-43

ORE FROM California Mine

WEIGHTS					METAL PRICES				
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.	AU:	AG:	PB:	CU:	ZN:
		%	LBS.						
10-28-43	399181	1.90	7584	391597		.70625	6.50		8.25

ASSAYS						CONTENTS				
BY	AU-OZ	AG-OZ	PB %	CU %	ZN %	AU-OZ	AG-OZ	PB. LBS	CU LBS.	ZN LBS
A.S.&R.Co.	-	2.32	6.90	.20	8.10					
SETTLEMENT	-	2.32	6.90	.20	8.10	-	454.25	27020	783	31719

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			✓
AG: 2.32 x .50		1.16	227.13
PB: 138 x .0305		4.21	824.31
CU:			✓
ZN: 162 x .02525		4.09	800.81
TOTAL PAYMENTS		9.46	1852.25
DEDUCTIONS			
TREATMENT: 195.7985 Dry Tons		3.00 ✓	587.40
Hauling: 199.5905 Wet Tons @ .75¢ + (3% Federal Tax)			154.18
Royalty: 10% of \$1110.67 ✓			111.07
TOTAL DEDUCTIONS			852.65
BALANCE DUE SHIPPER			999.60

MADE BY A.B.White and A.E.Ring.

APPROVED *A.E. Ring*

# CUSTOM ORE SETTLEMENT

SHIPPER American Smelting and Refining Company,  
 Lessee of ~~the~~ Edward P. Allis Company  
 427 East Stewart St., Milwaukee, Wis.  
 ORE FROM California Mine

LOT No. A-3  
 DATE DELIVERED 10-6-43  
 DATE SAMPLED 10-6-43

WEIGHTS					METAL PRICES	
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.	AU:	AG: .70625
		%	LBS.			
10-6-43	248340	2.08	5165	243175 121588	Fe - 16.30%	CU: 8.25

ASSAYS						CONTENTS				
BY	AU-OZ	AG-OZ	PB %	CU %	ZN %	AU-OZ	AG-OZ	PB. LBS	CU LBS.	ZN LBS
A.S. & R.Co.	-	2.60	6.05	0.20	6.95					
SETTLEMENT	-	2.60	6.05	0.20	6.95	-	316.13	14712	486	16901

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			
AG: 2.60 x .50		1.30	158.06 ✓
PB: 121 x .0305		3.69	448.66 ✓
CU:			
ZN: 39 x .02525		3.51	426.77 ✓
TOTAL PAYMENTS		8.50	1033.49 ✓
DEDUCTIONS			
TREATMENT: 121.5875 dry tons			
Hauling: 124.1700 wet tons @ .75¢ + (3% federal tax)		3.00	364.76 ✓
Royalty: 10% of \$572.81 ✓			95.92 ✓
			57.28 ✓
TOTAL DEDUCTIONS			517.96
BALANCE DUE SHIPPER			515.53

MADE BY A.B.White and C.D.Grabert.

APPROVED 

October 9th, 1943

Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

*file*

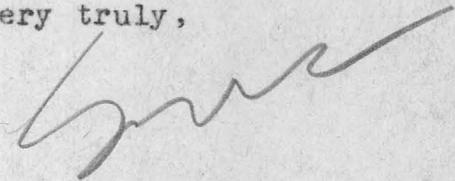
Re: Allis Group of Claims

Gentlemen:

I have this morning received the enclosed check and settlement sheet from the American Smelting and Refining Company which was not accompanied by any letter of transmission. Therefore I am forwarding the check and one copy of the settlement sheet of which I have retained a duplicate, and which I will check over in the near future to determine if payment is made in accordance with the contract.

I am pleased to note that shipments from your property continue and that the grade of same appears to be fairly satisfactory.

Yours very truly,



GMC:b  
Enclosures 2

*Check on + Cash*

	57.28
	99.24
	111.67
	<hr/>
	267.59

*Subs Allis Co*

AMERICAN SMELTING & REFINING CO.

*Yd #2*

# CUSTOM ORE SETTLEMENT

SHIPPER American Smelting and Refining Company  
 Lessee of the Edward P. Allis Company,  
 427 East Stewart St., Milwaukee, Wis.  
 ORE FROM California Mine

LOT No. Allis - 2  
 DATE DELIVERED Sept. 15 - 30 1943  
 DATE SAMPLED Sept. 30, 1943

WEIGHTS				
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.
		%	LBS.	
9-30-43	326820	2.10	6863	319957

METAL PRICES	
AU:	
AG:	.70625
PB:	6.50 ✓
CU:	✓
ZN:	8.25
Fe. - 16.35%	

ASSAYS					
BY	AU.OZ	AG.OZ	PB %	CU %	ZN %
A.S.&R.Co.	-	2.62	6.40	.20	7.50
SETTLEMENT	-	2.62	6.40	.20	7.50

CONTENTS				
AU.OZ	AG.OZ	PB. LBS	CU LBS.	ZN LBS
-	419.14	20477	640	23997

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			
AG: 2.62 x .50 ✓		1.31	209.57
PB: 128 x .0305		3.90	623.92
CU: - - ✓		-	
ZN: 150 x .02525		3.79	606.32
TOTAL PAYMENTS		9.00	1439.81
DEDUCTIONS			
TREATMENT: 159.9785 Dry tons		3.00	479.94
Hauling - 163.4100 Wet Tons @ .75¢ + (3% Federal Tax)			126.24
Hauling adjustment Allis Lot No. 1 - 173.6250 Wet tons @ .85¢ + (3% Fed. Tax.) - \$152.01 - should have been @ .75¢ + (3% Fed. Tax) or \$134.13			17.88 ✓
Royalty - 10% of \$851.51			85.15
TOTAL DEDUCTIONS		-	673.45
BALANCE DUE SHIPPER		-	766.36

MADE BY A.B. White and A.E. Ring.

APPROVED *A.E. Ring*

July 13, 1943

Mr. A. E. Ring  
c/o American Smelting & Refining Co.  
P. O. Box 2229  
Tucson, Arizona

Re: Allis Group of Claims

Dear Mr. Ring:

I acknowledge your settlement sheets for the first lot of ore shipped from the Allis Claims sampled on June 16th, also your royalty check No. 556, dated July 9th, and for the amount of \$63.13, payable to the Allis Company in Milwaukee to whom I will forward the said check and copy of the settlement sheet.

I note that the settlement has been based upon the base prices for lead and zinc; namely, 6.35<sup>1/2</sup> for lead and 8.25<sup>1/2</sup> for zinc. I presume that in due course of time after you have collected the premium price for this material under the quota which has been granted by the War Production Board, a supplementary royalty will be forwarded to cover the extra payment as provided for in Clause B of Article VI. of the leasing contract dated November 1, 1942.

I thank you very much for your attention to this matter.

At your convenience would you be kind enough to send me a brief report covering the work done by your company on the California Claim during the past three months. The same will be of much interest to the owners of the property.

Yours very truly,

GMC:b

AMERICAN SMELTING & REFINING CO.

# CUSTOM ORE SETTLEMENT

SHIPPER American Smelting and Refining Company  
 Lessee of the Edward P. Allis Company  
 427 East Stewart St., Milwaukee, Wis.

LOT No. Allis - 1  
 DATE DELIVERED June 1-16, 1943

ORE FROM California Mine

DATE SAMPLED June 16, 1943

WEIGHTS					METAL PRICES	
DATE	WET WT. LBS.	MOISTURE		DRY WT. LBS.	Fe - 13.40%	AU:
		%	LBS.			AG: .70625
6-16-43	347250	1.50	5209	342041		PB: 6.50
						CU:
						ZN: 8.25

ASSAYS						CONTENTS				
BY	AU-OZ	AG-OZ	Pb %	CU %	ZN %	AU-OZ	AG-OZ	Pb. LBS	CU LBS.	ZN LBS
A.S.&R.Co.	-	2.08	5.80	0.20	5.95					
SETTLEMENT	-	2.08	5.80	0.20	5.95	-	355.72	19838	684	20351

PAYMENT FOR METALS		PER DRY TON	TOTAL
LIQUIDATION			
AU:			
AG: 2.08 x .50		1.04	177.86
PB: 116 x .0305		3.54	605.41
CU:		-	-
ZN: 119 x .02525		3.00	513.06
TOTAL PAYMENTS		7.58	1296.33
DEDUCTIONS			
TREATMENT:			
- 171.0205 Dry Tons			
Hauling - 173.6250 Wet Tons @ .85 + (3% Fed. Tax)		3.00	513.06
			152.01
Royalty 10% of \$631.26			63.13
TOTAL DEDUCTIONS			728.20
BALANCE DUE SHIPPER			568.13

MADE BY A.B. White and A.E. Ring

APPROVED *A.E. Ring*

AMERICAN SMELTING AND REFINING CO.

MINING DEPARTMENT OF THE SOUTHWEST

P. O. BOX 2229

TUCSON, ARIZONA

W. H. LOERPABEL  
MANAGER

*C. D. Grabert*

September 8, 1943

Mr. George M. Colvocoresses  
1102 Luhrs Tower  
Phoenix, Arizona.

Dear Sir:

Enclosed herewith our Check No. 8515 in the amount of \$90.01 payable to the Edward P. Allis Company covering royalty on Premium Metal Payments for California Lot No. 1.

The following tabulation will show how premium metal payments are calculated.

Please note that there is no payment for copper since the assay of .20 is below the minimum of .25 as set by the Metals Reserve Company.

	<u>Copper</u>	<u>Lead</u>	<u>Zinc</u>
Pounds of Metal Produced.....	*684	19838	20351
Percentages applicable .....	-	86%	77%
Production for Premium purposes	0	17061	15670
Monthly Quota.....	0	0	0
Excess Production eligible for premiums.....	0	17061	15670
Premium rate per pound.....	.05¢	.0275¢	.0275¢
Premium amount received.....	-	\$469.18	\$430.93
10% royalty due Edward P. Allis Company.....	-	\$ 46.92	\$ 43.09

\*No payment for copper as assay of .20 is below minimum of .25.

Very truly yours,

*C. D. Grabert*

C. D. GRABERT  
Chief Clerk

Enclosure.

CDG/ep

September 14, 1943

Edward P. Allis Company  
427 East Stewart Street  
Milwaukee, Wisconsin

Attention Mr. P. M. Haack, Sec. - Treas.

Re: Allis Group of Claims

Gentlemen:

Returning today from a mining trip I found a letter from the American Smelting and Refining Company dated September 8th, of which a copy is herewith enclosed, also their check for \$90.01 which I am forwarding herewith.

I have not yet had time to check over the calculations with the terms set forth in the contract, but I will do this somewhat later.

I presume that another report on their operations will be coming in shortly since I requested this a few days ago.

During my absence I was sorry to have missed a call from Lt. Gilbert Allis who left town before I returned. Should he again be in Phoenix I hope I may have the pleasure of seeing him.

Yours very truly,

GMC:b  
Enclosures 2