60001960

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud petrographic reports
AUTHOR	Clark J. ; Allen K.
DATE OF DOC(S)	2000
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7½'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine ; Rosebud Mining Co LLC Applied Petrographics
COMMODITY If not obvious	gold, silver
NOTES	Petrographic reports; correspondence ; invoices hand written notes ; scanning electron microscope reports 24 p.

Keep docs at about 250 pages if no oversized maps attached
(for every 1 oversized page (>11x17) with text reduce
the amount of pages by ~25)

SS: DD 9/11/08
Initials Date

DB: _____
Initials Date

SCANNED: _____
Initials Date

Revised: 1/22/08

APPLIED PETROGRAPHICS - 2000

60001960 4016

Michael N. Spilde
Electron Microscopy Consultant
2114 Oxford Avenue SE
Albuquerque, NM 87106
(505) 277-5430 cell: (505)379-3980

Analysis Report

DATE: April 22, 2000
TO: James Clark, Applied Petrographics
SAMPLES: Rosebud Unknown #1

METHOD

Several small fragments of metallic mineral were received on April 21, 2000. A small splinter was mounted to a carbon stub with carbon paint and mounted in the SEM. Since the mineral was electrically conductive, no carbon coat was applied.

Examination of the sample was conducted on a JEOL 5800 scanning electron microscope (SEM) with an Oxford Isis analytical system and energy dispersive spectrometer (EDS). Analysis was performed at 20 kV, approximately 0.5 nA sample current and 60 seconds of spectral acquisition time. The spectra were quantitatively analyzed using standard profiles, either previously collected or supplied by the manufacturer. Analysis results were normalized to 100%

SUMMARY OF OBSERVATIONS

Two spectra were collected at different points on the sample. An X-ray spectrum is shown Figure 1.

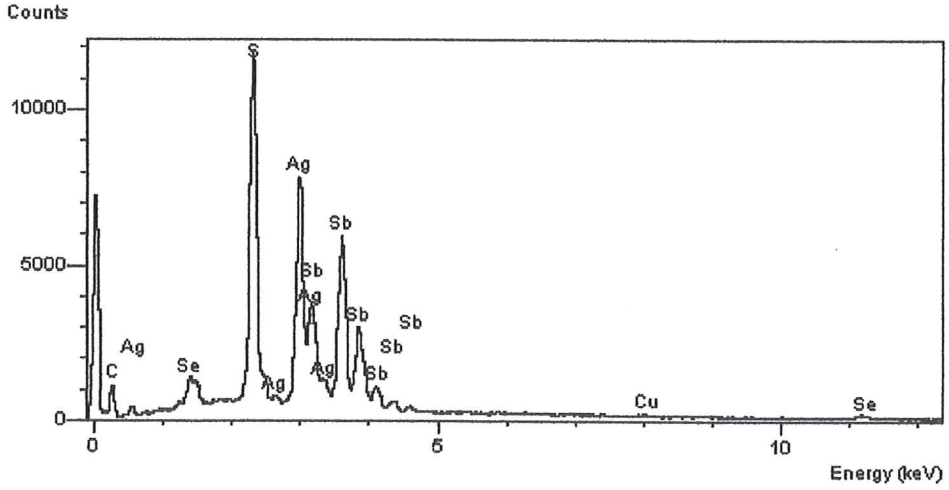


Figure 1. Energy dispersive X-ray spectrum of the unknown mineral. There are major peaks visible for Ag, Sb and S, with a minor peak for Se and a barely-detectable peak of Cu.

The mineral contains major Ag, Sb, and S with minor Se and a trace of Cu. A check for Pb was done after analysis by observing the residual spectral fit around S, but the residual spectrum indicated a good fit and no unidentified or overlapping peaks for Pb. In addition, there are no Bi or As peaks that can be observed in the spectrum.. The mineral is a Ag-Sb sulfosalt. Analysis results are reported in Table 1. Due to the fact that the analyses results were normalized to 100% (standard procedure for analysis on unpolished surfaces), the results should be considered semiquantitative. Nevertheless, the atomic proportions indicate that the Ag:Sb ratio is 1:1. Even with some degree of uncertainty, the ratio of Ag:Sb is so close to 1:1 that the semiquantitative analysis is sufficient to identify the mineral, since most Ag-Sb sulfosalts have much higher Ag to Sb ratio. Table 1 also indicates that S + Se is

approximately twice the Ag or Sb, giving a mineral composition of ABX_2. Two minerals fit that description: miargyrite [$AgSbS_2$] and aramayoite [$Ag(Sb,Bi)S_2$]. Since there is no Bi in the structure, miargyrite gives a good match, especially when compared to published chemistry in Table 2, assuming Se substitution for S.

Table 1. Semiquantitative analysis of Rosebud unknown mineral.

Point	Ag	Sb	Cu	S	Se
Elemen %					
Spect #1	37.85	43.46	0.00*	16.38	2.31
Spect #2	36.92	41.07	0.23*	18.23	3.55
Stoichiometry					
Spect #2	1.01	1.00	0.00	1.68	0.12

* below 2-sigma detection limit.

Table 2. Rosebud unknown mineral compared to miargyrite.

Point	Ag	Sb	Cu	S	Se
Elemen %					
Spect #2	36.92	41.07	0.23*	18.23	3.55
Miargyrite(1)	36.72	41.45	-	21.38	-

(1) Dana's System of Mineralogy, Vol 1 7th ed. p. 426 (1944).

Conclusion

The Rosebud unknown sulfosalt is identified as miargyrite $AgSb(S,Se)_2$.

Michael N. Spilde
Electron Microscopy Consultant
2114 Oxford Avenue SE
Albuquerque, NM 87106
(505) 277-5430 cell: (505)379-3980

Analysis Report

DATE: May 29, 2000
TO: James Clark, Applied Petrographics
SAMPLES: Rosebud Unknown #2

METHOD

A small fragment of metallic mineral was received on May 8, 2000. A small splinter was mounted to a carbon stub with carbon paint and mounted in the SEM. Since the mineral was electrically conductive, no carbon coat was applied.

Examination of the sample was conducted on a JEOL 5800 scanning electron microscope (SEM) with an Oxford Isis analytical system and energy dispersive spectrometer (EDS). Analysis was performed at 20 kV, approximately 0.5 nA sample current and 60 seconds of spectral acquisition time. The spectra were quantitatively analyzed using standard profiles, either previously collected or supplied by the manufacturer. Analysis results were normalized to 100%

SUMMARY OF OBSERVATIONS

The mineral contains major Ag, Sb, and S with minor Se. No other elements are present in detectable concentrations. Analysis results are reported in Table 1. Due to the fact that the analyses results were normalized to 100% (standard procedure for analysis on unpolished surfaces), the results should be considered semiquantitative.

If Se is included in the sulfide site with S, the atomic proportions of Ag:Sb:S are approximately 10:4:11. If Se is considered to be in substitution for Sb, then the ratio of Ag:Sb:S is 9:5:9. Neither of these ratios closely fit sulfosalts that I have information on. The raw concentrations of Ag, Sb and S are similar to pyrostilpnite or pyragerite (Ag_3SbS_3). The mineral is a Ag-Sb sulfosalt, but exactly which one, I'm not certain.

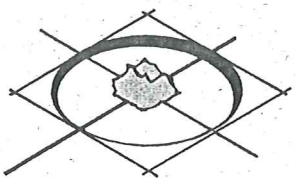
Table 1. Semiquantitative analysis of Rosebud unknown mineral.

Point	Ag	Sb	S	Se
Elemen %				
Spect #1	53.47	24.81	16.11	5.61
Stoichiometry (mol)				
Spect #1	0.5	0.2	0.5	0.07

Table 2. Rosebud unknown mineral compared to pyrostilpnite.

Point	Ag	Sb	S	Se
Elemen %				
Spect #1	53.47	24.81	16.11	5.61
Pyrostipnite(1)	59.76	22.48	17.76	-

(1) Dana's System of Mineralogy, Vol 1 7th ed. p. 370 (1944).



APPLIED PETROGRAPHICS

7 July 2000

Kurt D. Allen
Chief Geologist
Rosebud Mining Company, LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

As requested in your email to me of 11 July 2000, this invoice will bring you up to date for work conducted by APPLIED PETROGRAPHICS for Rosebud Mining Company LLC. Current charges are itemized as follows:

Petrographic examination of selected samples from the Rosebud Mine area, (Rosebud petrographic report #7)

Petrographic/CL examination and report preparation (1.2 days @ $500/day)	$ 600.00
Photomicrographs 14 photos @ $3/photo	$ 42.00
Copying, binding, and postage	$ 33.34
Subtotal	$ 675.34
SEM/EDAX work by Mike Spilde on Rosebud samples (copoy of Spilde invoice provided)	$ 420.00
TOTAL	$1095.34

Please have the check made out to: APPLIED PETROGRAPHICS. The taxpayer identification number is 273-44-3430.

Thank you for your continuing support of APPLIED PETROGRAPHICS. I hope to be out your way sometime during the next two weeks. I'm in the process of putting together a marketing presentation. I'm looking forward to seeing you again. Regards to Rebecca and the kids.

Sincerely,

Jim

James G. Clark

86-5002-542

KDA

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

(520) 577-8679
jgc.ap@worldnet.att.net

Michael N. Spilde
Electron Microscopy Consultant
2114 Oxford Avenue SE
Albuquerque, NM 87106
(505) 277-5430 cell: (505) 263-4559

ANALYSIS REPORT

DATE: May 29, 2000

TO: James Clark
Applied Petrographics
4501 N. Paseo Pitiquito
Tucson, AZ 85750

SAMPLES: 2 Petrographic thin sections: S4/1 and S4/7

METHOD

Two polished petrographic thin sections were received on April 7, 2000. The sections were cleaned in successive steps of low residue detergent, de-ionized water rinse, acetone, and isopropol alcohol. The sections were then coated with a layer of evaporated carbon to prevent charging in the scanning electron microscope.

Examination of the samples was conducted on a JEOL 5800 scanning electron microscope (SEM) utilizing an Oxford energy dispersive x-ray spectrometer (EDS) and an Oxford Isis analytical system. Sspectra were acquired at 20 kV accelerating voltage at 0.6 nA beam current. Semiquantitative analyses were completed using stored reference profiles. Analytical totals are normalized to 100%.

SUMMARY OF OBSERVATIONS

The samples consist of a large amount of metallic minerals in a porous, fine-grained matrix. The matrix is predominately euhedral and subhedral quartz with micron-sized framboidal sulfide minerals interstitial to the quartz. Figure 1 shows the distribution of sulfide minerals within the quartz grains. A higher magnification image of several individual sulfide grains is in Figure 2. Note that the minerals are quite spherical in overall shape but are fibrous and indistinct at high magnification. Analyses of the minerals are given in Table 1. The framboidal mineral is essentially a Mo-Ag-sulfide. The rim (analysis #2) appears to be higher in Ag than the core (analysis #1) of the framboids, hence the brighter ring around each grain. The fibrous nature and small size of the minerals makes analysis difficult. The results may actually represent an average of several small phases present under the electron beam.

In some cases, the sulfides form masses of framboidal aggregates, shown in Figure 3. Elemental x-ray maps indicate that both Mo and Ag are inhomogeneously distributed within the masses (Figure 3). Aslo disseminated through the matrix is pyrite, and in S4/7, stringers of fine-grained Cu-sulfosalt (Figure 4). The mineral is either polybasite or tetrahedrite (Table 1, analysis #3).

Two phases make up the larger metallic minerals: a Ag-selenide and a Ag-sulfosalt. Analyses for both are in Table 1. An example of the spatial relationship of the two minerals is found in Figure 5. The Ag-selenide is most likely naumannite, Ag_2Se. See Table 1, analysis #4. In Fig 5, the

naumannite can be observed to have gold stringers throughout the mineral. The other major metallic mineral has a chemical composition that closely matches pyrargerite, a Ag-sulfosalt Ag_3SbS_3 (Table 1, analysis #5).

Table 1. EDS semiquantitative analyses of minerals.

		Weight %						
No.	Label	S	Fe	Cu	Se	Mo	Ag	Sb
1	S4/1 matrix core	22.93	6.51	0.37	1.99	35.56	27.82	4.82
2	S4/1 matrix rim	24.58	4.83	-	4.86	27.49	34.04	4.21
3	S4/7 tetrahedrite	22.68	3.99	13.85	1.20	-	28.22	30.07
4	S4/1 naumannite	0.38	-	-	25.80	-	73.84	0.0
5	S4/1 pyrargyrite	16.21	-	-	1.92	-	58.99	22.88
		Atomic%						
1	S4/1 matrix core	46.71	7.61	0.38	1.65	24.21	16.85	2.59
2	S4/1 matrix rim	49.42	5.57	-	3.97	18.47	20.34	2.23
3	S4/7 tetrahedrite	46.52	4.70	14.34	1.00	-	17.21	16.24
4	S4/1 naumannite	1.17	-	-	31.94	-	66.91	0.0
5	S4/1 pyrargyrite	39.98	-	-	1.92	-	43.24	14.86

Note: - denotes that element was not observed in EDS spectrum and therefore was not analyzed.

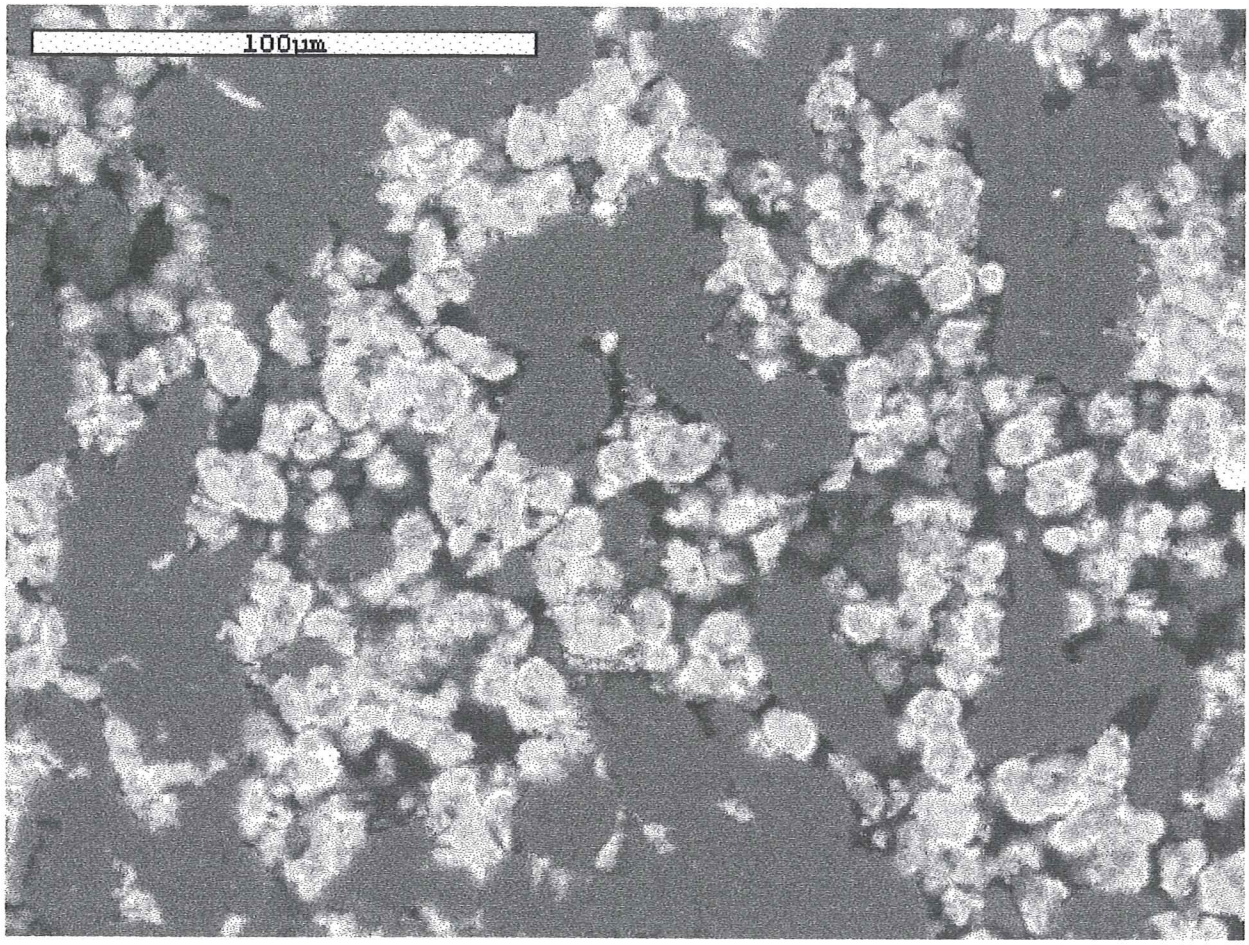


Figure 1. A backscattered electron (BSE) image of sample S4/7 at 500X. The dark gray matrix is quartz and the light circular features are Mo-Ag sulfide minerals. Scale bar is 100 mm.

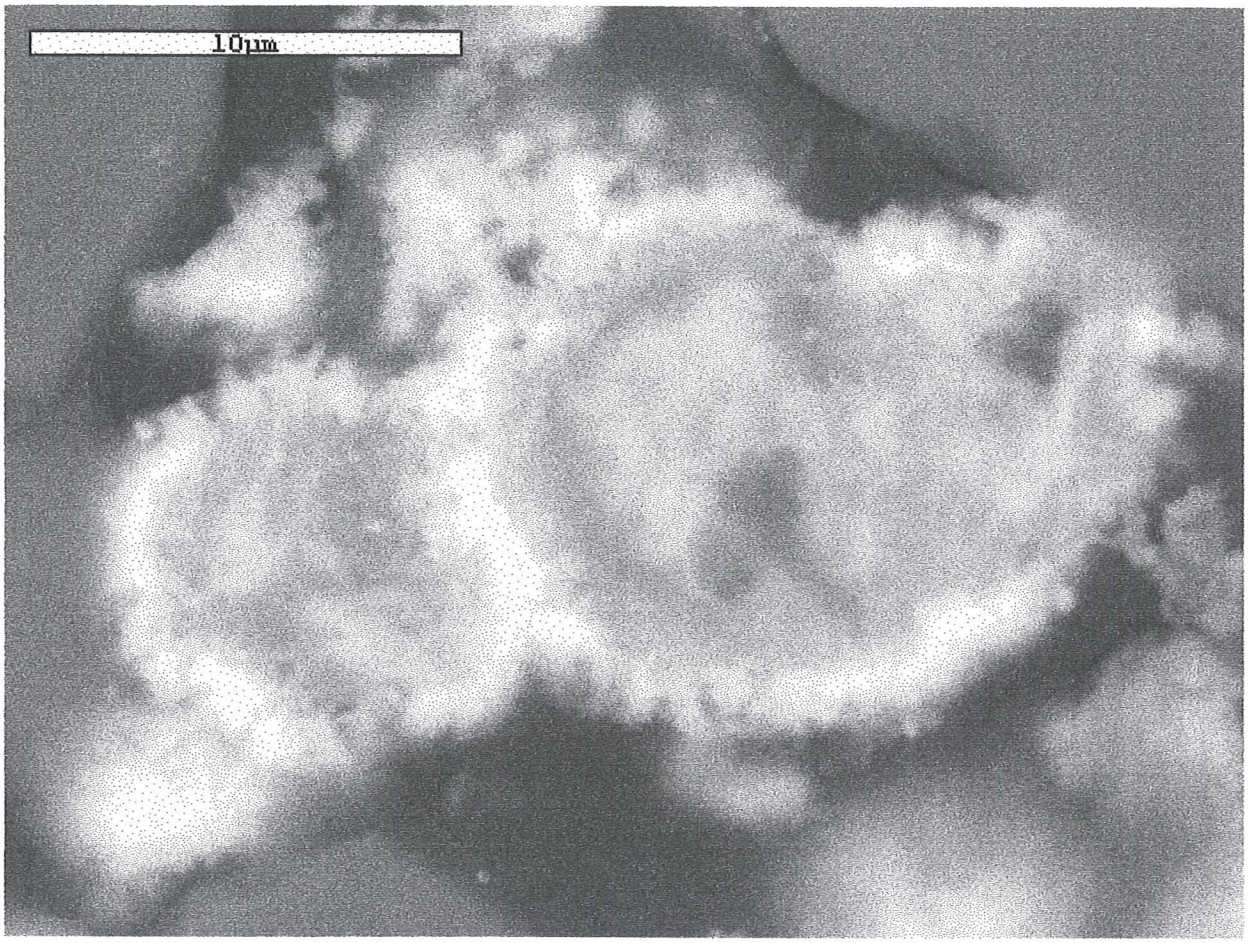


Figure 2. Higher magnification (4300X) BSE image of sulfide minerals in the center of Fig. 1.

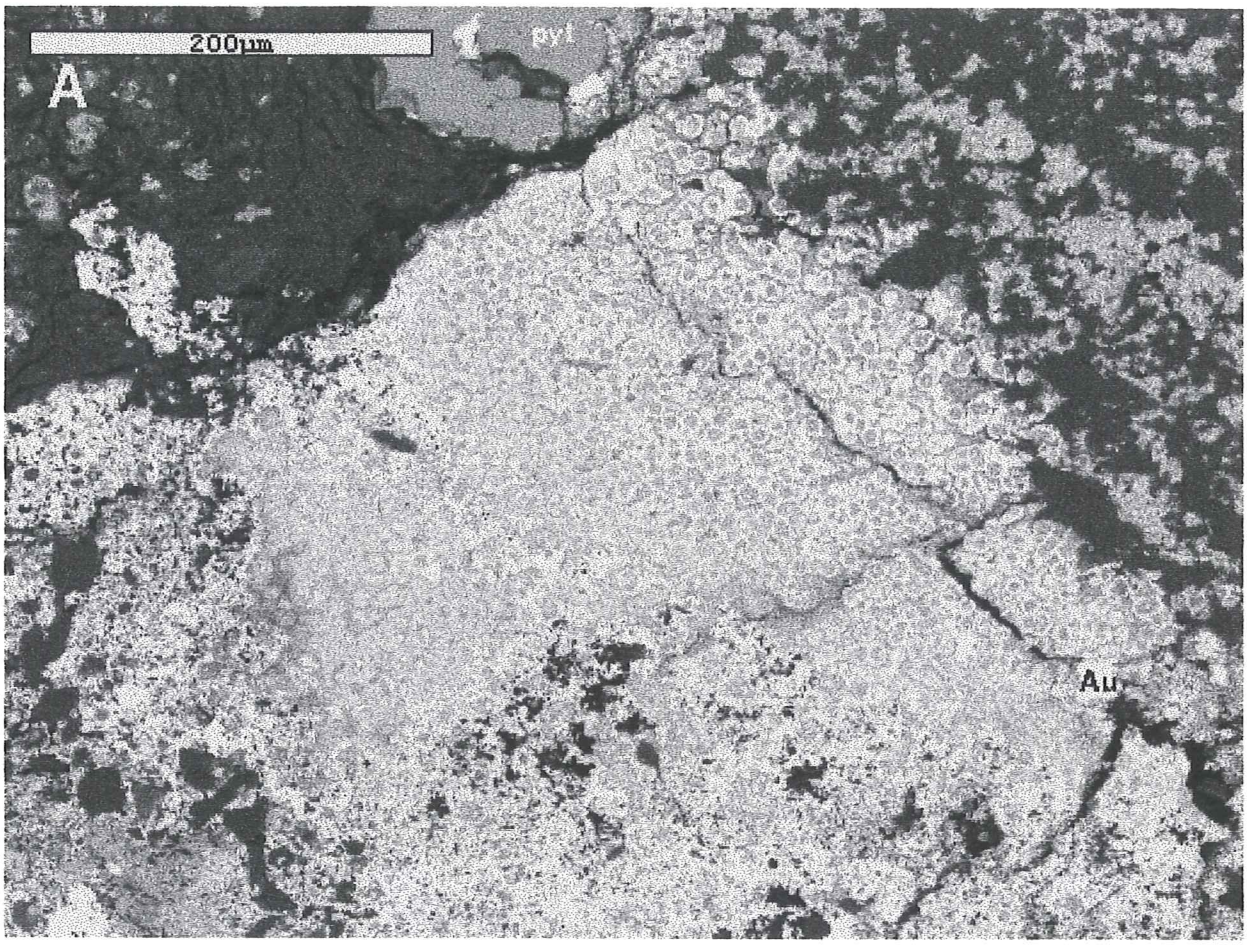


Figure 3A. BSE image of a mass of framboidal sulfides in S4/1. Pyt = pyrite.

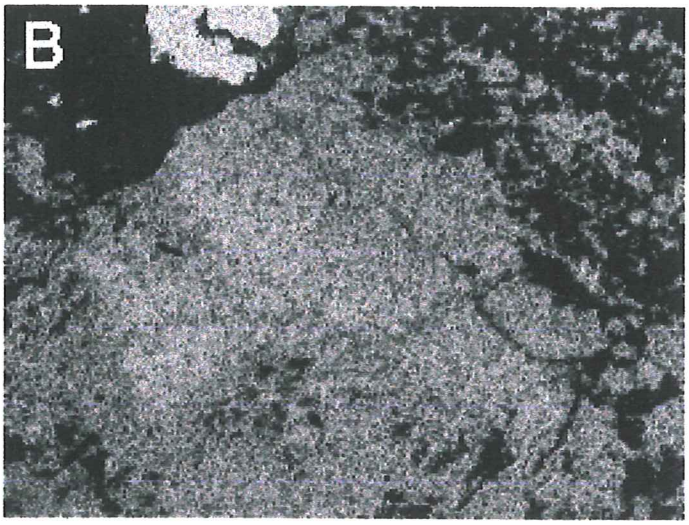


Figure 3B. Mo X-ray maps from the same area as Fig. 3A.

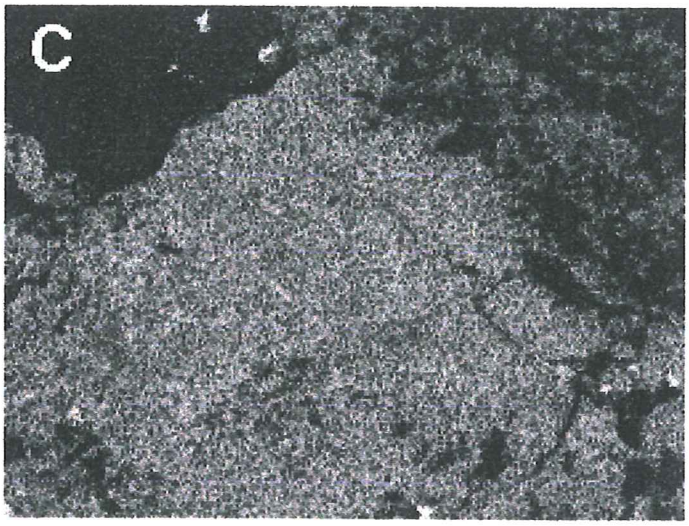


Fig 3C. Ag X-ray map.

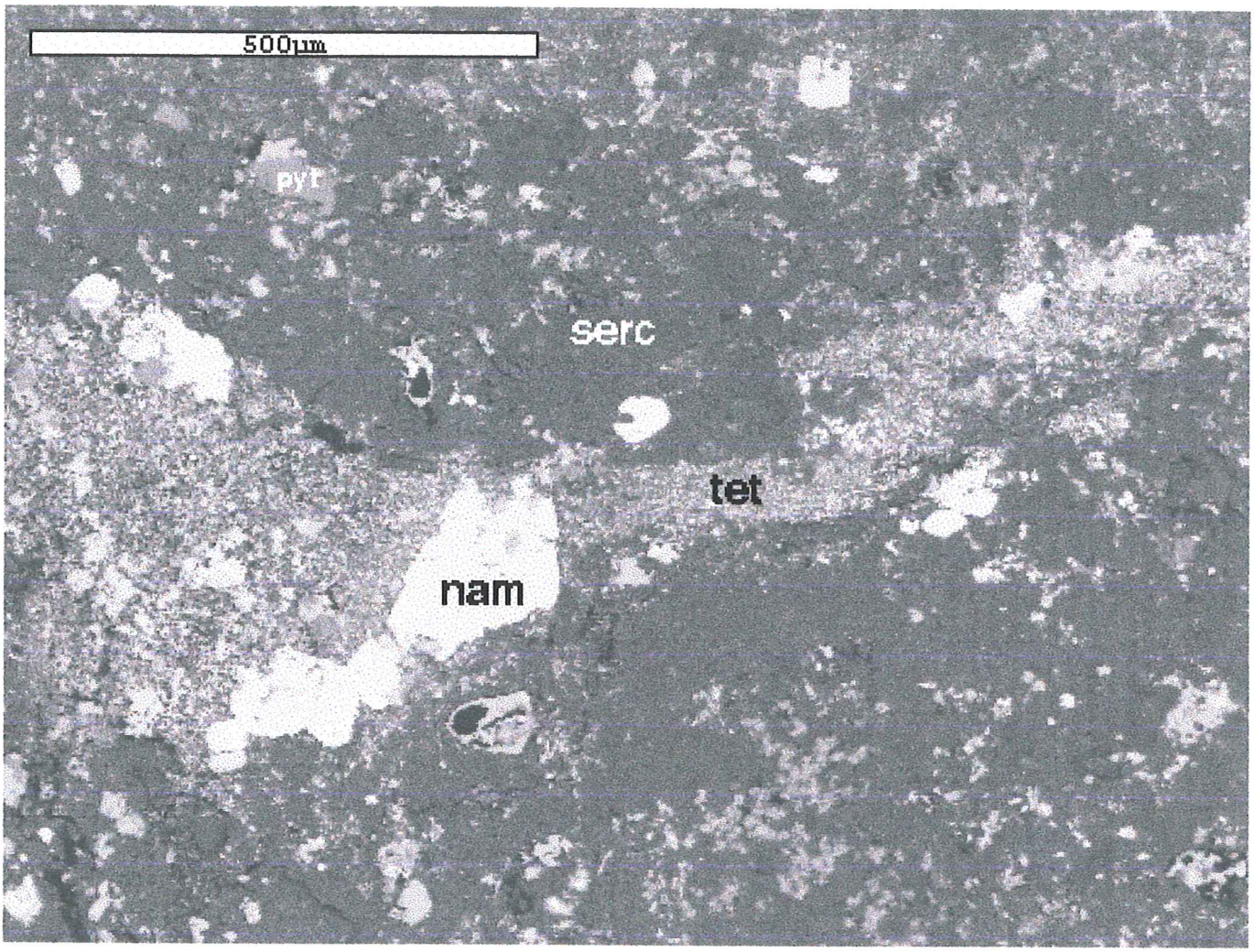


Figure 4. BSE image of sulfosalt stringer in sample S4/7. Serc = sericite, nam = naumannite, tet = tetrahedrite.

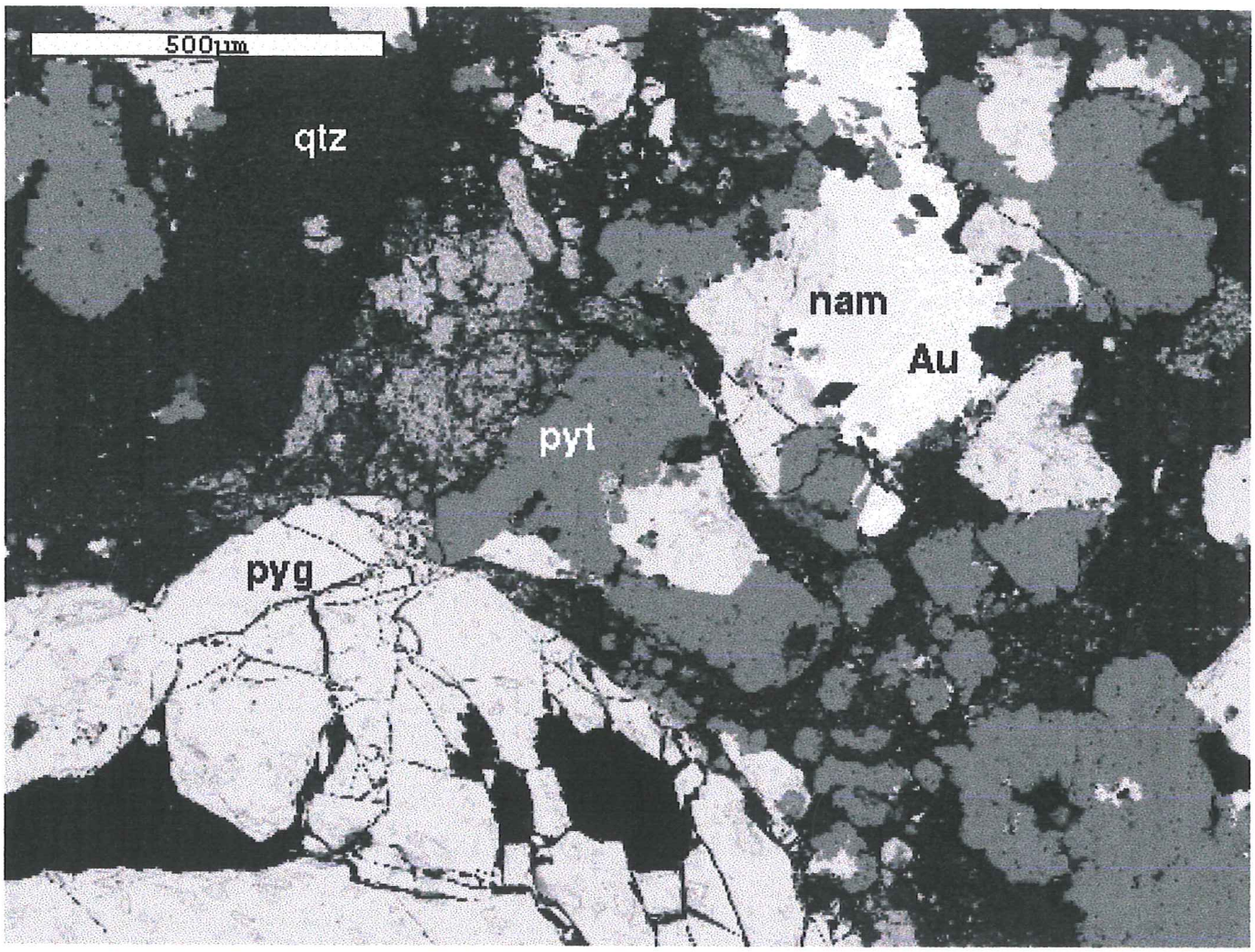


Figure 5. BSE image of sample S4/1. The metallic minerals are identified as pyrite (pyt), naumannite (nam), pyrargyrite (pyg) and gold.

APPLIED PETROGRAPHICS

27 April 2000

Kurt D. Allen
Chief Geologist
Rosebud Mining Company, LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

This letter serves as my invoice for the petrographic report done at your request by Applied Petrographics. The charges are itemized as follows:

Petrography of selected samples from the Rosebud Mine area, Nevada (Rosebud petrographic report #6)

Petrographic/CL examination and report preparation (2.5 days @ $500/day)	$1,250.00
Photomicrographs 40 photos @ $3/photo	$ 120.00
Copying, binding, and postage	$ 81.21
Postage for return of samples	$ 12.29
TOTAL	$ 1,463.40

Please have the check made out to: APPLIED PETROGRAPHICS. The taxpayer identification number is 273-44-3430.

I'm still waiting for the estimate on the SEM/EDAX work for sample 13-4904-S4. I'll email it to you when I get it. Thanks again for the work.

Sincerely,

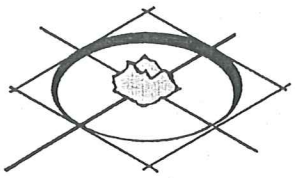
James G. Clark

86-2526-542

KDA

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

(520) 577-8679
jgc.ap@worldnet.att.net



APPLIED PETROGRAPHICS

8 March 2000

Kurt D. Allen
Chief Geologist
Rosebud Mining Company, LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

I enjoyed talking with you last week. The tin geochemistry sounds promising. That sample was a real bear, but enjoyable to work on in any case. This letter serves as my invoice for the petrographic report done at your request by Applied Petrographics. The charges are itemized as follows:

Petrography of an unusual high-grade sample from the Rosebud Mine, Nevada (Sample 13-4904-S4):

Petrographic examination and report preparation (2.2 days @ $500/day)	$1,100.00
Photomicrographs 27 photos @ $3/photo	$ 81.00
Copying, binding, and postage	$ 58.45
TOTAL	$1,239.45

Please have the check made out to: APPLIED PETROGRAPHICS. The taxpayer identification number is 273-44-3430.

I'm looking forward to receiving your next batch of samples. Thanks again for the work. I really appreciate your patronage. Best regards to your family.

Sincerely,

James G. Clark

86-5010-542

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

(520) 577-8679
jgc.ap@worldnet.att.net

Kurt Allen

From: James Clark [jgc.ap@worldnet.att.net]
Sent: Monday, April 24, 2000 9:27 AM
To: Kurt Allen
Subject: Unknown silver sulfosalt


ATT00000.html

Kurt,

Below is a partial copy of Mike Spilde's analysis of your unknown Ag sulphosalt mineral. He thinks it is miargyrite based on the analysis, and the confidence level is high. Chalcopyrite is present also. The tables and figures came through garbled, so I will have him send a hard copy.

I will complete some photomicrographs on your RVC chip samples today, based on CL data. I found no adularia in any of the samples, but several of the chips have unusual red and blue CL patterns. It is likely that the zones of blue CL represent areas of devitrification with a high alkali feldspar content, while the red areas have a higher quartz/alkali feldspar ratio. The relationship is unusual, however, and, alternatively, may be related to alteration associated with the quartz vein/bx.

I need some help with the sample numbers. Both core samples were given the same sample designation on the thin sections:

RSD344-99 One is a white felsitic appearing sample, and the other is a carbonaceous, epiclastic volcanic silty sandstone. What are your designations?

The sample numbers for the chips are: 494-810; RS4948/1585; and Green. Are these the sample designations you want to use, or did Ray leave something out. He sometimes does if the sample numbers are long; usually it is something critical, such as the footage.

Call or email me about this as soon as you can. I should have the report done by Wednesday, if they can get the developing done by tomorrow. Talk to you soon.

Jim

Spilde report follows:

Michael N. Spilde
Electron Microscopy Consultant
2114 Oxford Avenue SE
Albuquerque, NM 87106
(505) 277-5430 cell: (505)379-3980

Analysis Report
Date: April 22, 2000
To: James Clark
Samples: Rosebud Unkown #1

Method
Several small fragments of metallic mineral was received on April 21, 2000. A small splinter was mounted to a carbon stub with carbon paint and mounted in the SEM. Since the mineral was electrically conductive, no carbon coating was applied.

Examination of the sample was conducted on a JEOL 5800 scanning electron microscope (SEM) with an Oxford Isis analytical system and energy dispersive spectrometer (EDS). Analysis was performed at 20 kV, approximately 0.5 nA sample current and 60 seconds of spectral acquistion time. The collected spectra was quantitatively analyzed using standard profiles colled by the manufacturer. Analysis results were normallized to 100%.

Summary of Observations

Two spectra were collected at different points on the sample The X-ray spectrum is shown Figure 1.
EMBED Word.Picture.8

Figure 1. Energy dispersive X-ray spectrum of the target grain outlined in the optical photomicrographs. The major peaks for Cu, Fe and S indicate that the grain is chalcopyrite.

The mineral contains major Ag, Sb, and S with minor Se and a trace of Cu. A check for Pb was done after analysis by observing the residual spectral fit around S, but the residual spectrum indicated a good fit and no unidentified or overlapping peaks for Pb. In addition, there are no Bi or As peaks that can be observed in the sepctrum. The mineral is a Ag-Sb sulfosalt. Analysis results are reported in Table 1. Due to the fact that the analyses results were normalized to 100% (standard proceedure for analysis on unpolished surfaces), the results should be considered semiquantitative. Nevertheless, the atomic proportions indicate that the Ag:Sb ratio is 1:1. Even with some degree of uncertainty, the ratio of Ag:Sb is so close to 1:1 that the semiquantitative analysis is sufficient to identify the mineral, since most Ag-Sb sulfosalts have much higher Ag to Sb ratio. Table 1 also indicates that that S + Se is approximately twice the Ag or Sb, giving a mineral composition of ABX2. Two minerals fit that description: miargyrite [AgSbS2] and aramayoite [Ag(Sb,Bi)S2]. Since there is no Bi in the stucture, miargyrite gives a good match, especially when compared to published chemistry in Table 1, assuming Se substitution for S.

Table 1. Semiquantitative analysis of Rosebud unknown mineral.
PointAgSbCuSSeElemen %Spect #137.8543.46nd16.382.31Spect #236.9241.070.23*18.233.55Miargyrite(1)36.7241.45-21.38-StoichiometrySpect #21.011.000.001.680.12Notes: * below 2-sigma detection limit.
(1) Danaís System of Mineralogy, Vol 1 7th ed. p. 426 (1944).

Conclusion
The Rosebud unknown sulfosalt is identified as miargyrite AgSb(S,Se)2.

APPLIED PETROGRAPHICS

10 February 2000

Kurt D. Allen
Chief Geologist
Rosebud Mining Company, LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

It was great to talk with you last night. I spoke with Ray Lund at QTS, and he should have your samples done by Saturday (12 February). He said they look real interesting, but are difficult to prepare. I'm looking forward to getting your next batch of samples, as well.

This letter serves as my invoice for the selection, preparation, and labelling of 88 slides from negatives of photomicrographs used in the following reports:

Petrography of vein, breccia, and lithology samples from the Rosebud mine area, Nevada, and

Petrography of a high-grade vein sample from the Rosebud Mine, Nevada (Sample 24-4532).

Initially I had to match the all the figures in both reports with the proper negatives from 12 rolls of film and organize them for the photo lab. When that number of slides from negatives (177) proved to be overly expensive, I went back at your request and selected roughly half of the figures for slides. Upon receiving the slides, I labelled each one with the sample number and figure number.

The charges are itemized as follows:

Matching figures with negatives, slide selection, and labelling (7 hours at $50/hour)	$ 350.00
Preparation of slides from negatives (88 @ $8 ea. plus 7% sales tax)	$ 753.28
Plastic binder sheets for slides (5 @ $0.49 ea. plus 7% sales tax)	$ 2.62
Postage and insurance	$ 11.75
TOTAL	$1117.65

Please have the check made out to: APPLIED PETROGRAPHICS. The taxpayer identification number is 273-44-3430.

86-3026-542

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

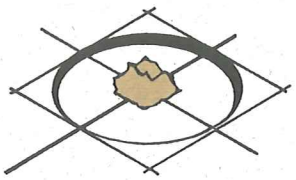
(520) 577-8679
jgc.ap@worldnet.att.net

Thank you again for the opportunity to work on your samples. Regards to your family and best wishes to Rebecca for a speedy recovery. I'll be talking with you soon.

Sincerely,

Jim

James G. Clark



APPLIED PETROGRAPHICS

8 February 2000

Kurt Allen
Chief Geologist
The Rosebud Mining Company LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

Enclosed are the slides I had made from the negatives of photos in the big report and the report on the high-grade sample. The slides are labelled with the sample number and the figure number. They look pretty good, as they should for the price. The invoice will follow.

Ray Lund has your samples, and they may be done this weekend. I'm meeting Lamar, Mark Grosocz, and Mario Mansilla in Dallas this weekend to discuss some collaborative consulting ideas. I got a phone call from Mark Malkoski today inquiring as to Craig Wineteer's whereabouts. Mark said that Craig's Oregon phone was disconnected. Mark told me that Phelps dodge was interested in hiring him at Morenci. I put a call in to Craig's inlaws but haven't heard back yet.

I hope everything else is going well for you. I really appreciate the work and hope I can return the favor in the future. Regards to the family.

Sincerely,

James G. Clark

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

(520) 577-8679
jgc.ap@worldnet.att.net

APPLIED PETROGRAPHICS

26 June 2000

Kurt D. Allen
Chief Geologist
Rosebud Mining Company, LLC
P.O. Box 2610
Winnemucca, NV 89446

Dear Kurt:

This letter serves as my invoice for services relating to SEM microbeam analyses performed on samples from the Rosebud mine. Mike Spilde has not yet billed me for the actual SEM work, and I will bill you for those charges when I receive his invoice. I believe his charges will be about $420. total, $85 each for the two silver sulphosalt unknowns and $250. for the Mo-bearing samples. The current charges are itemized as follows:

Sample preparation, point selection and mapping, and hard copy preparation from electronic files	3 hours @ $65/hr.	$ 195.00
TOTAL		$ 195.00

Please have the check made out to: APPLIED PETROGRAPHICS. The taxpayer identification number is 273-44-3430.

I hope by now you've drilled into the mother lode and can continue mining for a while longer. Have you sent the sample to Ray Lund at QTS yet? Just checking. Regards to the family.

Sincerely,

James G. Clark

86-5002-542

KDA

James G. Clark, Ph.D.
4501 North Paseo Pitiquito
Tucson, Arizona 85750

(520) 577-8679
jgc.ap@worldnet.att.net

Invoice

Quality Thin Sections
9835 East Celeste Dr.
Tucson , Az 85730
USA

Voice: 520 884 9935
Fax:

Invoice Number: 094
Invoice Date: Apr 21, 2000
Page: 1

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Customer ID	Customer PO	Payment Terms	
ROSEBUD		0.02% 10, Net 30 Days	
Sales Rep ID	Shipping Method	Ship Date	Due Date
	UPS BLUE	4/21/00	5/21/00

Quantity	Item	Description	Unit Price	Extension
5.00	POL	POLISHED THIN SECTIONS	15.00	75.00
3.00	GRMT	GRAIN MOUNTS	2.00	6.00
1.00	BOX	SLIDE BOXES	3.50	3.50

Subtotal	84.50
Sales Tax	
Freight	
Total Invoice Amount	84.50
Payment Received	
TOTAL	84.50

Check No:

86-5002-542
CM

Quality Thin Sections
9835 East Celeste Dr.
Tucson , Az 85730
USA

Voice: 520 884 9935
Fax:

Invoice

Invoice Number:
019
Invoice Date:
Feb 14, 2000
Page:
1

Sold To:
HECLA MINING
ACCOUNTS PAYABLE
PO BOX 2610
WINNEMUCCA, NV 89446

Ship to:
JIM CLARK

Customer ID	Customer PO	Payment Terms	
HECLA		2% 10, Net 30 Days	
Sales Rep ID	Shipping Method	Ship Date	Due Date
	UPS BLUE	2/14/00	3/15/00

Quantity	Item	Description	Unit Price	Extension
6.00	POL	POLISHED THIN SECTIONS	15.00	90.00
1.00	BOX	SLIDE BOXES	3.50	3.50

86-5010-542
GA

Subtotal	93.50
Sales Tax	
Freight	
Total Invoice Amount	93.50
Payment Received	
TOTAL	93.50

Check No:

Michael N. Spilde

Electron Microscopy Consultant
2114 Oxford Avenue SE
Albuquerque, NM 87106

INVOICE

Customer

Name	James Clark				
Address	Applied Petrographics				
	4501 North Paseo Pitiquito				
City	Tucson	**State**	AZ	**Zip**	85750

Invoice #	20004
Date	7/5/00
Project	Rosebud
Terms	30 days net

Date	Description	Units	Rate/Unit	Amount
4/22/00	EDX analysis of Rosebud #1 sample			$ 85.00
5/29/00	EDX analysis of Rosebud #2 sample			$ 85.00
5/30/00	EDX analysis and SEM imaging of Au-Ag minerals			$ 250.00

Subtotal	$ 420.00
Tax	
Total	$ 420.00