

# THE USE OF THE VREELAND SPECTROSCOPE FOR PLATINUM METAL S VS 15

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J&J MATERIALS, INCORPORATED  
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Box 128 (201)988-3300

Spectrex Corporation August 4, 1980  
3580 Haven Avenue  
Redwood City, California 94063

Attention: John Hoyte

Dear Mr. Hoyte:

The Vreeland Spectroscope now in our possession was purchased in 1974. Its average usage in our laboratory is about six hours per week. These six hours of relatively rugged use are invaluable to our precious metal evaluation (assay) operations.

The uncomplicated operation of this equipment was (and still is) what initially attracted us; it is, in our experience, unique in its simplicity. Without the need of special attachments, we regularly use this Spectroscope for precious metal qualitative and quantitative analyses. Platinum family metals -- i.e., Platinum, Rhodium, Iridium, Osmium, Palladium and Ruthenium, respond beautifully!

The work we do must be done on "high heat" and this occasionally causes greater "flash—off" than we would like, but the character of the Platinum family elements comes through very nicely and "holds

We use the equipment to perform rudimentary semi—quantitative analysis. Our testing proves that these analyses compare favorably (and are done almost infinitely faster) with "wet analyses"; especially, with reference to the Platinum and Rhodium elements.

We must mention that some of the gold lines are weak and difficult to interpret, but we have not been too concerned about this shortcoming because gold readily yields to other assaying techniques.

We have watched other technicians use the equipment, and it is clear that the problems they encounter are procedural rather than equipment-oriented.

Most often, we use the hearth method rather than the hollow electrode; we have found this approach most reliable and our samples require little, if any, preparation.

We do look forward to purchasing your updated equipment, but only because of the greater optical clarity of the lines and the increase in your electrode diameter.

We purchased the equipment to use in precious metal assaying and evaluation (especially Platinum family), and to control refining operations; that's how we use it! It works, and the equipment paid for itself years ago!

As our cover letter indicates, we are presently considering ordering your latest model. If the new equipment were capable of handling low grade ore analysis, i.e., looking for gold in the .01 to .001% range, we would almost certainly submit our purchase order immediately.

Please reference our earliest comments on gold lines, above.

Very truly yours,

J & J MATERIALS, INC.

Susan C. Tyminski  
Technician