

Analysis of  
specimen of  
native  
platinum from  
Granite Creek,  
British  
Columbia, cont.

The platinum was in the form of grains and pellets varying in size from half a millimetre to eight millimetres in diameter, and in weight from three milligrams to eight decigrams. The grains measuring less than one millimetre constituted but a very small proportion of the whole, there were only a few pellets measuring five millimetres, and but two measuring eight millimetres, the bulk of the material being made up of grains varying in size from one to four millimetres in diameter. The grains, which were all very much rounded off as though from attrition, had a lead-grey color and sub-metallic lustre, they were all more or less tarnished, and the greater number contained inclusions of chromite. A certain proportion of the same proved to be readily attracted by the magnet, and of these all such as were tried were found to possess polarity. After treatment with dilute hydrochloric acid, which removed a little iron, the grains had a steel-grey color and metallic lustre. The particles of foreign matter having been carefully eliminated, the material, as a whole, was found to have a specific gravity (temp. 15.5° C.) of 16.656.

The ore was separated by means of the magnet into two distinct portions, a non-magnetic and a magnetic; the latter constituted 37.88 per cent., by weight, of the whole.

*Portion I.—Non-Magnetic.*

This weighed 11.115 grams and had a specific gravity (temp. 15.5° C.) of 17.017. The grains and pellets composing it were of very irregular shape: about one-third, by weight, of the same had comparatively smooth surfaces, and were apparently quite free from any foreign inclusions, the remainder were all more or less pitted, and in most instances contained a little imbedded chromite. For the purpose of analysis, this material was divided into several sub-portions. Adding together the weights of the material constituting each sub-portion, as likewise those of each of the various constituents found, calculation showed the composition of this portion of the ore, as a whole, to be as follows:—

Platinum .....	68.19
Palladium .....	0.26
Rhodium .....	3.10
Iridium .....	1.21
Osmium .....	—
Copper .....	3.09
Iron .....	7.87
Osmiridium .....	14.62
Gangue (imbedded chromite) .....	1.95
	<hr/> 100.29

HOFFMANN.]

The ore  
scales of  
colored p  
aggregati  
copic, tin  
nodules v  
The grain  
of the wh

Weigh  
16.095, a  
pellets co  
gular sha  
greater n  
chromite.  
two sub-p  
prising th  
several c  
whole, to

The os  
form of m  
On cor  
magnetic  
palladium  
dium, bu  
more iron  
former.  
upon the  
view of t  
tion, and  
8.90 per