UNITED STATES DEPARTMENT OF THE INTERIOR

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INTRODUCTION

Platinum belongs to a group of metals that includes osmium, iridium, palladium rhodium, and ruthenium. The metals commonly occur together and are generally alloyed. The "platinum metals" are heavy, have high melting temperatures (1,549° to 2,700° C), and are insoluble in most acids (Bateman, 1959). Platinum group elements (PGE) are commonly found in mafic and ultramafic rocks and most commonly in cumulate layers in large stratiform mafic-ultramafic bodies. However, most of the World's production

comes from placer deposits downstream from "alpine ultramafic" bodies in the Ural Mountains, Russia.

The purpose of this report is to present a preliminary geologic and geochemical evaluation of the potential for economic deposits of platinum group elements in the crystalline rocks of Georgia based on our geologic mapping, selected published geologic maps, and our geochemical sampling. This open-file report is preliminary because the project was cut short by cuts in funding.

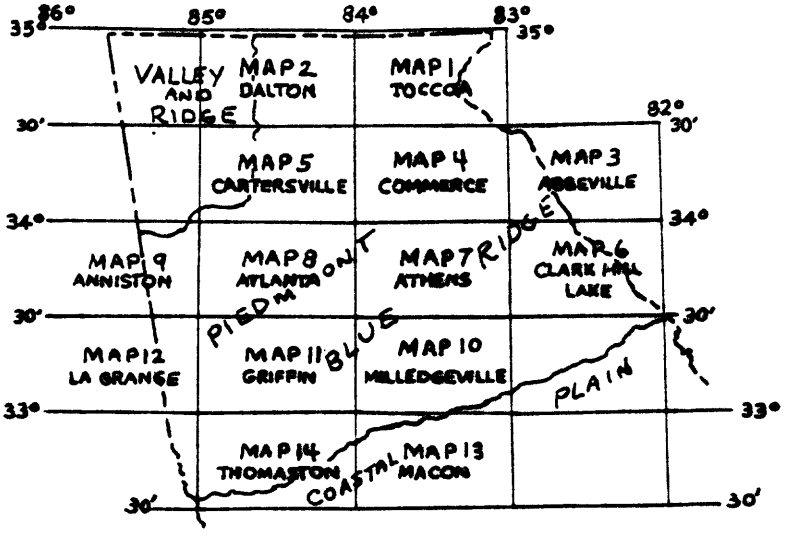

Figure 1. Index showing 1° x 30' quadrangles in Georgia and three main geologic provinces in the State.

The initial joint agreement between the Georgia Geologic Survey and the U.S. Geological Survey limited the investigation to mafic and ultramafic rocks. Therefore, this

study concentrated on the crystalline area, the *Piedmont* and *Blue Ridge* provinces (fig. 1). Within the crystalline area the most promising groups of rocks for Platinum group mineral evaluation are metamorphosed mafic volcanic rocks, mostly metabasalts (now amphibolites), which have geochemical characteristics of seafloor basalts (Stow and others, 1984; Shaw and Wasserburg, 1984; Higgins and others, 1988; Spell and Norrell, 1990), or(and) basalts from back-arc basins (Nelson, 1992), metamorphosed mafic plutonic rocks (metagabbros, metanorites, etc.), which in the Little River-assemblage show characteristics (Stumpfl and Ballhaus, 1986; Macdonald, 1987) of layered complexes (e.g. Matthews, 1967), and metamorphosed ultramafic rocks (metaperidotites, metadunites, and metapyroxenites), that mostly have characteristics of "alpine ultramafic" bodies, being generally small pods that have been altered by hydration during metamorphism and during migration or faulting into their present position in pelitic and pelite-metagraywacke sequences. Another group of rocks with possible potential for platinum deposits is Mesozoic diabase (e.g., Gottfried and others, 1990). However, in Georgia, Mesozoic diabase at or near the surface is confined to dikes, which are at most a few hundreds of meters wide. Our geochemical study included a suite of Mesozoic diabase dike samples, but these samples are still in the analysis process and not yet available for use in this report - only major element and trace element data are included.

METHODS OF EVALUATION

The 1:100,000-scale geologic maps that form the basis for evaluation of potential for platinum deposits were compiled and generalized to show mafic and ultramafic rocks

and other sampled units and a few major faults from our geologic maps and from published and unpublished geologic maps credited in *MAP REFERENCES*. Our own geologic mapping was done between 1963 and 1992. Samples for this study were analyzed for major elements, trace-elements, rare-earth elements, and platinum-group elements in the laboratories of the U.S. Geological Survey in Reston, Virginia and Denver, Colorado. Methods of analysis are with the tables at the end of the paper.

GEOLOGIC SETTING

Georgia is divided into 3 major *geologic* provinces; 1) the Valley and Ridge province in the northwestern corner of the State; 2) the Piedmont-Blue Ridge province, which includes all of the terrane east and south of the Valley and Ridge province and north of the Coastal Plain; and 3) the Atlantic-Gulf Coastal Plain (fig. 1) - the Piedmont and Blue Ridge are separate *physiographic* provinces in Georgia, but are not separable as *geologic* provinces because many of the same rocks are found in both. This report considers only the Piedmont-Blue Ridge province, also called the *crystalline terrane*, which is divided into three geologic entities, the *continental margin*, *ocean*, and *Little River assemblages*, stacked vertically, so that they are separated by what were once nearly horizontal thrust-fault boundaries, that were in turn separated starting in the Devonian by a dextral strike-slip system like the San Andreas dextral system in California (Crowell, 1962, 1974; Dibblee, 1977) and other great wrench-fault systems in the World (e.g., Wilcox and others, 1973). In many places the strike-slip faulting was accompanied by

thrust faulting that cut through the Ordovician to Devonian thrust system in the continental-margin and ocean-assemblage rocks. The structurally lowest entity is the parautochthonous assemblage of Laurentian continental-margin rocks, the *continental-margin* assemblage, which includes Middle Proterozoic (Grenvillian - 1.0-1.2 G.a.) orthogneisses of the Appalachian basement, Middle Proterozoic or(and) older metasedimentary rocks intruded by the Middle Proterozoic orthogneisses, and Late Proterozoic to Middle Ordovician(?) "Ocoee" metasedimentary rocks derived from and deposited unconformably upon the basement rocks. Next up is the allochthonous *ocean-assemblage*, of Late Proterozoic to Middle Ordovician ocean-floor, slope-rise, and island-arc rocks that originated in an ancient ocean between the Laurentian margin and Proto-Africa (Higgins and others, 1988) and were obducted and thrust upon the Laurentian continental-margin assemblage starting in the Middle Ordovician and ending probably in the Devonian when the tectonic regime that powered the thrust-faulting changed because of oblique collision (Secor and others, 1986; Secor, 1987; Sacks and others, 1987) during Devonian to Permian time with terranes marginal to proto-Africa. These marginal terranes, preserved in the Late Proterozoic to Middle Cambrian *Little River assemblage*, included a large accretionary prism, the Macon Complex (Higgins and others, 1989), probably similar to the ~7,000 km long 120-150km wide prism off Java and Sumatra today (Hamilton, 1979), and the accompanying volcanic island-arc, including its basal portions which included intrusion complexes. All of these terranes are now tectonically shuffled, so that the volcanic terrane and locally its intrusion complexes as well are structurally above the melange and intrusion complexes of the accretionary prism.

The island-arc and accretionary complex have been thrust upon the continental-margin and ocean assemblages. All three groups of rocks are intruded by Middle Ordovician to Devonian granitic plutons and by Carboniferous to Permian granitic plutons, and metamorphosed together during Ordovician to Devonian and Devonian to Permian collisional events. The contacts between the three assemblages of rocks are faults that are interpreted to be, or to have been originally, thrust faults that are *sutures* between major "blocks" of the Earth's crust and are designated *suture-faults* or(and) *suture-thrusts* in this paper, though in many places the sutures are complicated zones of faulting in which the thrusts are overprinted by strike-slip faults.

DISCUSSION OF RESULTS

The geochemical data obtained in this study are given in tables 1 and 2. Table 1 is organized by 1° x 30', 1:100,000-scale quadrangles and by lithology within the quadrangles; table 2 gives the same data organized by lithology; within the lithologic groupings in both tables samples are ranked by silica content. Lithologies cited are the field names indicated by the submitter rather than by chemical composition, so, for example, some *amphibolites* have chemical compositions more consistent with *ultramafic rocks* than metabasalts and *vice versa*.

Amphibolites - Ocean-assemblage

Amphibolites analyzed for this study belong to the Ropes Creek Metabasalt and its northeastern equivalents the amphibolites of the Helen Group (Nelson and Gillon,

1985). Amphibolites were also analyzed from mafic-ultramafic complexes, including Buzzards Knob and Laurel Creek complexes, and from layers, lenses, and pods of amphibolite in pelitic units of the Ocean assemblage. Amphibolites from the Richard Russell Gneiss, which is part of the basement complex in northern Georgia, were also analyzed.

Ropes Creek Metabasalt and Helen Group

The thickest and most widespread mafic rocks in the Ocean assemblage in Georgia have previously been assigned to the Ropes Creek Metabasalt of Bentley and Neathery (1970) by Higgins and others (1984, 1988). Despite the fact that Bentley and Neathery had already named the rocks *Ropes Creek*, and Higgins and others (1984, p. 26) had accepted their name (with only the modification from Ropes Creek Amphibolite to Ropes Creek Metabasalt) and type locality in a paper published in early October, rocks in the Ropes Creek were assigned to various formations within the New Georgia Group by McConnell and Abrams in a paper published later in 1984. McConnell and Abrams (1984) interpreted metatrondhjemites that have intruded the metabasalts to be metavolcanic rocks in order to fit them into the mafic-felsic framework of Canadian massive sulfide deposits proposed by Allard (Allard and others, 1985); McConnell and Abrams stratigraphic scheme and nomenclature were followed by German (1985, 1988). Amphibolites and metagabbros in the Ocean assemblage in northeastern Georgia that have been mapped as part of the Helen Group by Gillon (1982), Nelson and Gillon (1985), Nelson (1991), and Nelson and others (1989) are here interpreted to be equivalents of the

Ropes Creek Metabasalt. Amphibolites and small bodies of metaultramafic rocks are also present in all metasedimentary units in the Ocean assemblage and 12 of these were analyzed (tables 1C, 1H, 1J).

Lithology, petrography, petrology

Following the original description by Bentley and Neathery (1970, p. 29-30), Higgins and others (1988, p. 52) described the Ropes Creek Metabasalt as follows:

"The Ropes Creek Metabasalt is composed of ocher-weathering, massive to finely layered, locally laminated, locally pillowed, locally chloritic, commonly garnetiferous, locally magnetite-bearing, generally pyrite-bearing, green to greenish-black hornblende-plagioclase and plagioclase-hornblende amphibolites with insignificant amounts (generally less than a very small fraction of a percent) of fine- to medium-grained, generally amphibole-bearing granofels. The final weathering product of the amphibolites is a very characteristic dark-red clayey soil. The mafic rocks.... are at least partially chloritized and epidotized; few areas larger than a few kilometers have escaped some chloritization, epidotization, or uralitization. Many of the rocks in the Ropes Creek sheet contain disseminated pyrite, and locally, highly pyritiferous zones as much as 20 m wide can be followed for as much as 100 m along strike."

Nelson (1992) gave a similar description of the Helen Group, but his description indicates that the Helen contains more metasedimentary rocks than the Ropes Creek, and he interpreted the Helen Group to have originated in a marginal basin.

Geochemistry

Geochemical data from 51 samples of amphibolite from the Ropes Creek Metabasalt and Helen Group are given in tables 1 and 2. The major-, trace-, and rare-earth-element data from the Ropes Creek support the conclusions of Stow and others (1984), Shaw and Wasserburg (1984), Higgins and others (1984, 1988), and Spell and Norrell (1990) that the amphibolites in the Ropes Creek Metabasalt are metamorphosed seafloor basalts, a conclusion also supported by their petrography and petrology, by the scattered presence of metamorphosed pillow-basalt within them (Hurst and Jones, 1973; Higgins and others, 1984, 1988), and by the fact that they contain massive sulfide deposits that were probably originally "black-smoker" deposits, and metalliferous quartzites that are probably metacherts (Higgins and others, 1984, 1988; McConnell and Abrams, 1984). Many of the sulfide deposits have probably migrated or been moved during faulting from their place of origin during metamorphic and deformational events. In addition, the metabasalts are associated with scattered metatrondhjemite and metatonalite plutons (Pate, 1980; Sanders, 1983, 1990; Higgins and others, 1988), are generally interstratified and overlain by manganiferous schists in sequences that contain manganiferous quartzites (coticules - metacherts) interpreted to be metamorphosed seafloor sediments, and isotopic compositions indicate the Ropes Creek amphibolites and

metagabbros were ancient ocean crust (Jones and others, 1973; Shaw and Wasserburg, 1984). Coarse-grained metagabbroic rocks are also found locally within the lower(?) part of the thick amphibolite sections within the Ropes Creek Metabasalt and amphibolites in the Helen Group. Geochemical data from amphibolites in the Helen Group show considerable scatter on plots used to discriminate tectono-magmatic environments (Nelson, 1992) and Nelson postulated that their protoliths may have originated in a marginal basin. However, the Helen Group is confined to the major Dahlonega fault zone, so it is possible that the Helen Group includes metabasaltic rocks from more than one tectonomagmatic environment; one sequence containing the metalliferous quartzites, sulfide deposits, and having ocean-floor-basalt chemical compositions, including nearly flat REE/Chrondrite plots (Nelson, 1992) is identical to Ropes Creek Metabasalt, whereas the other, without the metalliferous quartzites and sulfide deposits, and having chemical compositions of calc-alkaline basalts, island-arc basalts, and andesites, and slightly light-rare-earth element enriched REE/Chrondrite patterns (Nelson, in press), may be from an entirely different environment. Alternatively, Nelson's (1992) data, suggesting that the Helen Group is a diverse group of rocks with both island-arc and ocean-floor affinities, may indicate that the pre-obduction position of the Helen Group was closer to the continental margin than the more oceanic (Higgins and others, 1988) Ropes Creek Metabasalt.

Platinum-group-element contents in the analyzed samples of amphibolite in the Ropes Creek Metabasalt and in amphibolites from the Helen Group are low (tables 1 and 2), and are considered to indicate that most of the Ropes Creek Metabasalt and Helen

Group amphibolites have low potential for economic deposits of PGE - this is also true of the analyzed metagabbros from the two groups.

Geochemical data from amphibolites and metagabbros in the "Brasstown ring," a layer of mafic and ultramafic rocks that forms an oval-shaped outcrop-belt around Brasstown Bald in northern Georgia (Map 1), that has been interpreted by previous workers to be in a window, the "Brasstown window," in a similar partial "ring" to the north of the Brasstown structure that has been called the "Shooting Creek window," and in the Buzzard Knob and Laurel Creek mafic-ultramafic complexes are given in tables 1 and 2. Platinum-group-element contents in amphibolites from the mafic-ultramafic complexes are low, and are considered to indicate the probability of low potential for economic deposits of PGE in these rocks.

Metaultramafic rocks - Ocean-assemblage

Metamorphosed ultramafic rocks, now chlorite-actinolite schist, serpentinite, soapstone, and combinations of the three, with relict textures, mineral compositions, and chemical compositions indicating that their premetamorphic protoliths were chiefly pyroxenites, peridotites, and dunites, are found as relatively rare small pods within the amphibolites of the Ropes Creek Metabasalt and Helen Group, as fairly common, but also scattered, small pods and lenses and in metapelitic rocks of the ocean assemblage, and as mafic-ultramafic complexes from a few hundred m^2 to a about a km^2, that are either slabs within metapelitic units or(and) rest structurally upon them. Metaultramafic rocks

are also found along faults where they have migrated or been moved away from their original host rocks.

Geochemical data from metaultramafic rocks in Ropes Creek Metabasalt, Helen Group, small pods, and Buzzard Knob and Laurel Creek mafic-ultramafic complexes are given in tables 1 and 2. Platinum-group-element contents in the metaultramafic samples are considered to indicate the probability of low potential for economic deposits of PGE in these rocks.

Soapstone Ridge Complex

The Soapstone Ridge Complex is the largest mafic-ultramafic complex in the Southern Appalachians underlying an area a little larger than 46 km^2. Higgins and others (1980; Atlanta 1° x 30' quadrangle, in review) divided the complex into 4 major parts; 1) a lower part, only about a meter to a few meters thick, composed entirely of ultramafic schist derived from shearing of ultramafic rocks; overlain by 2) a mixed unit, tens of meters thick and probably repeated at least once within its narrow outcrop belt, containing interlayered mafic and ultramafic rocks that may have been rhythmically interlayered but are probably structurally disrupted; overlain by 3) massive metapyroxenite with megacrysts of pyroxene as large as 8 cm long that are now replaced by serpentine-minerals and chlorite, making up more than 90 percent of the complex; 4) dark, massive, plagioclase-hornblende amphibolite makes up the rest of the complex, but its structural position is uncertain. Small sheeted-dike swarms have been found in the complex (Higgins and others, 1980, 1988; H.E. Cofer, oral commun., 1984). The

thrust-fault at the base of the Soapstone Ridge Complex, beneath the ultramafic schist, is locally exposed and seen to be sharp and to cut off structural features and quartz-veins in the underlying rocks (Higgins and others, 1988, p. 55-57).

Geochemical data from the Soapstone Ridge Complex (table 1) are consistent with the interpretation of Higgins and others (1988) that it is ophiolitic. Platinum-group-element contents of all samples from the Soapstone Ridge Complex are considered to indicate the probability of low potential for economic deposits of PGE.

Little River assemblage

The Little River assemblage (Little River thrust stack of Higgins and others, 1984, 1988) is composed of the Macon Complex and the structurally overlying metavolcanic sequence.

Macon Complex

The Macon Complex is a terrane composed of melange that has been intruded by numerous plutons of mafic to intermediate composition. The terrane is divisible into three tectonostratigraphic units, from structurally lowest to structurally highest, the Potato Creek, Juliette, and Po Biddy slices (Higgins and others, 1984, 1988), thought to be large thrust slices. Melange is common in all three terranes and generally contains pods of mafic and ultramafic rocks ranging from a few cm to hundreds of m^2. The Juliette slice also contains large mafic bodies. The largest of these was named the *Gladesville norite* by Matthews (1967) and the smaller bodies (Map 9) were named by Matthews (1967) and

Prather (1971). Sampling of the mafic bodies is difficult because of deep weathering, but a geochemical soil and stream sampling study done by Cook suggests there is little PGE potential. During the early-1970's a 3,000 ft drill-core was obtained from the Gladesville body by the Georgia Geological Survey, but that core was lost before the present study began and it is not feasible with present funding to drill deep enough in any of the bodies to obtain enough core to evaluate PGE potential in a large mafic-ultramafic layered complex. Despite the lack of geochemical data, the Gladesville and some of the other named bodies in the Juliette slice of the Macon Complex are considered to be favorable sites for future geochemical prospecting for PGE in Georgia *if* core-drilling is a major part of the project.

Geochemistry of some of the smaller pods in melange-matrix in the Abbeville, South Carolina-Georgia quadrangle (Map 3) are given in tables 1 and 2, and indicate a low probability of economic deposits of PGE.

Metaultramafic bodies in eastern Georgia

Several large bodies of metaultramafic rock occur in the Macon Complex in the Pollards Corner area in eastern Georgia (Worthington, 1964; McLemore, 1965). The largest of these bodies has recently been studied and drilled by the Georgia Geologic Survey (W.H. McLemore, oral commun., 1988). Because of their size, geologic setting, high nickel and chrome contents, and trace amounts of platinum, the eastern Georgia bodies are attractive prospects for platinum deposits. Termination of funding prevented inclusion of the eastern Georgia ultramafic bodies in this study.

Metavolcanic sequence

The metavolcanic sequence is the southwestern continuation of the "Carolina Slate belt," a terrane composed mostly of felsic metavolcanic rocks at low to medium metamorphic grade. Metamorphosed mafic rocks are relatively rare in the Little River sequence, and most dark rocks are of intermediate composition. Therefore the only attractive rocks for possible high PGE contents are rare, scattered ultramafic rocks. However all of the bodies mapped by the authors in Georgia are too small to represent any potential for mining of PGE.

CONCLUSIONS

Geologic evaluation and geochemical sampling of representative metamorphosed mafic metavolcanic and metaplutonic rocks and metamorphosed ultramafic rocks in the crystalline terrane of Georgia indicates that there is probably low potential for economic deposits of PGE in these rocks. The most promising geologic units for future PGE are the Gladesville and similar mafic bodies (Matthews, 1967; Prather, 1971) in the Milledgeville 1° x 30' quadrangle (Map 10), and Pleistocene to modern sand and conglomerates along rivers draining metavolcanic and metasedimentary terranes containing "alpine ultramafic" bodies, such as the ocean assemblage.

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Hightower-Buzzard Knob area, nor have we checked contacts farther east in the Rabun County area.

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United States Department of the Interior
GEOLOGICAL SURVEY

Branch of Geochemistry, Reston, Virginia

Summary of Analytical Methods for PGE

Submitted by *Mike Higgins*

The following paragraphs are brief descriptions of the procedures used by the Branch of Geochemistry to analyze samples for PGE. Descriptions of analytical procedures include up-to-date literature citations covering the details of the methods which would be beyond the scope of the "Methods" section in a typical geochemistry manuscript.

Analysis of Platinum Group Elements by Fire Assay/GFAA (Unknown Analyst)

A 15-gram sample and 2 mg of gold wire are fused with a PbO/Na_2O_3/Borax-glass/flour flux for 45 min. at 1000°C. The lead button is separated from the fusion slag. Bone-ash cupels are preheated at 1000°C, and the lead buttons are added. After the buttons have melted the temperature is reduced to 850°C and air is passed over the cupels. The lead is oxidized to PbO and is absorbed into the bone ash, leaving a gold bead which is dissolved in aqua regia and evaporated to dryness. The residue is taken up in 6M HCl, and analyzed for Pd, Pt and Rh by graphite furnace atomic absorption (GFAA) (Aruscavage *et al.*, 1984). [For the analyses done at Reston center.]

Analysis of Platinum Group Elements by ICP-MS (Unknown Analyst)

A 10-g sample is fused with a $Ni/S/SiO_2/Na_3CO_2$/borax-glass flux for 2 hours at 1050°C. The resulting NiS button is removed, broken into pieces, and placed into a test tube. 1 mL of 20% $SnCl_2$, 0.1 mL of 1% tellurium solution, and 50-70 mL of concentrated HCl are added to the tube to dissolve the NiS button. The solution is filtered and the residue is collected on polycarbonate filter paper. The filter paper is dissolved in HCl and HNO_3, diluted to 10 mL with 1% HCl and the solution is analyzed for Pd, Pt, Rh, Ru and Ir by inductively coupled plasma mass spectrometry (ICP-MS). There are no published references for this method. [For the analyses done at Denver center.]

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Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. **MAP 1**

A. Amphibolites in the Helen Group.

	1	2	3	4	5	6	7	8	9	10
Lat.	34°38'N	34°32'N	34°50'N	34°44'N	34°42'N	34°48'N	34°39'N	34°47'N	34°48'N	34°54'N
Long.	83°47'W	83°53'W	83°19'W	83°41'W	83°41'W	83°33'W	83°45'W	83°46'W	83°33'W	83°37'W
SiO_2 (%)	41.60	44.50	45.60	46.10	46.30	46.20	47.00	47.10	47.60	47.70
TiO_2	3.15	1.17	1.77	1.46	1.28	0.36	1.40	1.49	1.15	1.26
Al_2O_3	17.40	15.60	16.60	15.40	14.80	15.80	15.00	14.60	18.10	17.00
$Fe_2O_3^*$	11.50	17.10	14.40	12.30	13.10	10.50	12.80	13.60	15.90	13.90
Fe_2O_3	—	—	—	2.08	—	—	—	—	—	—
FeO	4.90	9.60	3.20	9.20	8.50	7.70	8.00	7.60	10.20	5.40
MnO	0.18	0.21	0.23	0.21	0.25	0.16	0.24	0.17	0.22	0.20
MgO	5.62	7.46	7.35	8.32	8.27	11.30	7.97	7.16	4.46	5.41
CaO	18.80	11.70	9.46	11.00	11.40	12.90	10.80	12.00	10.20	9.72
Na_2O	0.50	1.57	2.16	1.78	2.31	1.27	2.43	2.05	0.86	3.09
K_2O	0.08	0.17	0.53	0.38	0.09	0.06	0.08	0.13	0.20	0.27
P_2O_5	0.28	<0.05	0.22	0.10	0.17	<0.05	0.11	0.10	0.24	0.09
S	—	—	0.02	—	—	—	—	—	—	—
H_2O^+	1.10	0.75	1.30	1.40	1.40	0.75	1.50	0.97	1.40	1.20
H_2O^-	0.10	0.01	0.94	0.98	0.75	0.07	0.88	0.43	0.05	0.39
CO_2	0.02	<0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01
Li (ppm)	—	—	14.0	—	—	—	—	—	—	—
Be	—	—	1.00	—	—	—	—	—	—	—
Sc	44	62	31	50	46	34	49	50	79	50
V	—	—	210	—	—	—	—	—	—	—
Cr	17.0	28.0	86	265	274	760	320	210	20.0	150
Co	60	62	52	50	52	60	50	52	37	54
Ni	110	72	43	110	81	280	78	84	29.0	75
Cu	700	92	4.0	54	82	170	67	2.50	140	200
Zn	85	83	130	100	110	65	550	73	170	110
Ga	—	—	21.0	—	—	—	—	—	—	—
As	<1.90	<7.0	<2.30	<1.80	<1.90	<3.0	<2.00	<4.0	<5.0	<3.0
Rb	7.0	7.0	18.0	4.0	<2.00	4.0	3.0	7.0	<2.00	<2.00
Sr	550	148	280	243	161	154	133	251	149	37
Y	81	9.0	26.0	35	23.0	11.0	36	30	45	28.0
Zr	189	19.0	<70	89	73	17.0	88	94	161	62
Nb	4.3	<1.00	6.6	1.30	3.6	1.50	4.1	5.3	8.9	1.50
Mo	—	—	<2.00	—	—	—	—	—	—	—
Ag	—	—	<2.00	—	—	—	—	—	—	—
Cd	—	—	<2.00	—	—	—	—	—	—	—
Sn	—	—	<10.0	—	—	—	—	—	—	—
Sb	<0.70	<0.80	<0.140	<0.60	<0.80	<0.60	<0.70	0.35	<0.90	<0.60
Cs	<0.90	<1.20	<0.280	<1.00	<1.00	<1.00	<1.00	<1.10	<1.40	<1.20
Ba	16.0	16.0	71	176	20.0	8.0	10.0	17.0	44	28.0
La	12.1	0.92	9.3	3.0	4.2	0.57	6.1	5.7	13.0	1.70
Ce	21.0	20.0	21.0	8.1	11.0	19.0	11.0	14.0	30	4.1
Nd	25.0	<60	16.0	9.2	12.0	<17.0	10.0	<50	<25.0	<21.0
Sm	8.6	0.53	4.1	3.4	3.0	0.63	3.6	3.9	10.2	2.40
Eu	2.70	0.220	1.50	1.20	1.03	0.36	1.33	1.40	1.30	0.84
Tb	2.00	0.110	0.76	0.80	0.71	0.160	0.90	0.85	1.40	0.61
Yb	7.5	0.83	2.90	3.3	2.80	0.54	3.5	3.7	4.2	3.5
Lu	1.07	0.120	0.47	0.52	0.42	0.130	0.49	0.52	0.63	0.51
Hf	4.7	<0.60	2.60	2.40	1.97	0.42	2.20	2.50	3.6	1.80
Ta	0.210	<0.050	0.45	0.075	0.260	<0.040	0.270	0.38	0.210	0.049
Pb	—	—	<4.0	—	—	—	—	—	—	—
Bi	—	—	<10.0	—	—	—	—	—	—	—
Th	<0.90	<0.70	1.40	<0.60	0.290	<0.60	<0.70	0.32	0.57	<0.70
U	<0.70	<1.80	0.67	<0.40	<0.50	<1.20	<0.40	<1.40	<1.70	<1.30
Ru (ppb)	—	<0.50	—	—	—	0.60	—	<0.50	<0.50	<0.50
Rh	<0.50	<0.50	—	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Pd	0.60	<0.80	<0.50	0.70	1.50	3.6	1.30	<0.80	<0.80	1.00
Ir	—	<0.50	—	—	—	<0.50	—	<0.50	<0.50	<0.50
Pt	<1.00	0.70	<1.00	<1.00	1.00	4.0	<1.00	<0.50	3.7	2.60
Au	<6.0	<24.0	<2.20	<12.0	7.7	<16.0	9.3	<14.0	<18.0	<18.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
A. Amphibolites in the Helen group.

MAP 1

	11	12	13	14	15	16	17	18	19	20
Lat.	34°33'N	34°53'N	34°37'N	34°54'N	34°47'N	34°52'N	34°45'N	34°44'N	34°40'N	34°31'N
Long.	83°52'W	83°33'W	83°49'W	83°32'W	83°34'W	83°33'W	83°40'W	83°37'W	83°43'W	83°54'W
SiO_2 (%)	47.70	48.00	48.10	48.30	48.70	48.80	50.20	50.20	51.00	51.40
TiO_2	0.96	0.25	1.32	0.21	0.93	1.34	1.62	0.44	0.78	1.14
Al_2O_3	17.20	16.60	16.80	16.10	14.90	14.10	15.80	16.80	16.00	16.90
$Fe_2O_3^*$	13.30	7.34	10.90	8.25	11.70	12.90	11.00	11.80	13.10	11.60
FeO	6.40	5.20	8.20	5.80	7.30	3.30	8.60	7.10	8.60	7.00
MnO	0.29	0.12	0.25	0.14	0.19	0.19	0.18	0.19	0.22	0.17
MgO	5.05	11.00	7.88	10.90	8.41	8.44	6.82	7.21	6.57	4.61
CaO	11.00	13.80	10.60	13.00	12.70	11.10	12.40	12.40	9.05	8.23
Na_2O	3.71	0.97	3.35	1.54	1.63	2.75	1.99	1.01	2.58	1.64
K_2O	0.27	0.15	0.42	0.17	0.09	0.17	0.08	0.08	0.13	0.07
P_2O_5	0.08	<0.05	0.19	<0.05	<0.05	<0.01	0.14	<0.05	0.08	0.09
S	—	—	0.24	—	—	0.05	—	—	—	—
H_2O^+	0.69	0.76	0.60	0.65	0.62	0.63	0.21	0.38	1.10	2.60
H_2O^-	0.03	0.04	0.29	0.04	0.16	0.15	0.02	0.16	0.13	2.40
CO_2	0.44	0.02	0.06	0.01	0.01	0.01	0.02	0.01	<0.01	0.04
Li (ppm)	—	—	—	—	—	8.0	—	—	—	—
Be	—	—	—	—	—	<1.00	—	—	—	—
B	—	—	2.00	—	—	—	—	—	—	—
Sc	55	41	36	40	51	52	46	47	39	39
V	—	—	—	—	—	410	—	—	—	—
Cr	310	970	159	480	250	164	260	16.0	68	54
Co	55	45	46	53	46	50	45	46	38	33
Ni	120	220	130	190	100	81	84	43	39	46
Cu	220	68	18.0	130	130	26.0	140	82	11.0	17.0
Zn	120	60	132	60	100	82	83	96	74	68
Ga	—	—	—	—	—	16.0	—	—	—	—
As	<6.0	<2.90	<5.0	<3.1	<4.0	<2.00	<4.0	<5.0	<1.80	<5.0
Rb	11.0	2.00	14.0	<2.00	7.0	<9.0	4.0	5.0	19.0	<2.00
Sr	108	132	292	124	152	170	220	108	210	68
Y	33	8.0	34	9.0	22.0	10.0	37	16.0	20.0	23.0
Zr	62	20.0	109	17.0	24.0	<180	111	38	46	54
Nb	1.30	<1.00	2.00	<1.00	10.0	<1.00	2.40	1.80	1.40	1.40
Mo	—	—	—	—	—	<2.00	—	—	—	—
Ag	—	—	—	—	—	<2.00	—	—	—	—
Cd	—	—	—	—	—	<2.00	—	—	—	—
Sn	—	—	—	—	—	<10.0	—	—	—	—
Sb	<0.80	<0.70	0.83	<0.60	<0.80	<0.160	<0.70	<0.70	0.290	<0.60
Cs	<1.20	<1.00	0.65	<1.00	<1.10	<0.30	<1.10	<1.10	<0.90	<1.00
Ba	67	10.0	89	23.0	16.0	32	10.0	9.0	32	14.0
La	1.60	1.30	3.3	0.230	2.10	0.93	4.6	3.4	4.7	4.5
Ce	4.7	6.0	10.0	12.0	4.2	2.30	13.0	8.8	9.5	9.1
Nd	<21.0	<17.0	<70	<17.0	<19.0	<3.0	12.0	<20.0	<10.0	<20.0
Sm	2.36	0.73	4.0	0.48	1.39	1.14	4.2	1.58	1.94	3.2
Eu	0.83	0.30	1.22	0.34	0.65	0.73	1.40	0.45	0.73	1.11
Tb	0.58	0.150	0.90	0.140	0.34	0.36	0.91	0.290	0.46	0.70
Yb	3.5	0.78	3.9	<0.90	1.40	1.50	4.0	1.50	1.90	3.6
Lu	0.50	0.120	0.57	0.094	0.230	0.200	0.59	0.240	0.290	0.51
Hf	1.50	<0.50	2.80	0.290	0.80	<0.60	2.70	0.84	0.85	1.40
Ta	<0.070	<0.040	0.170	<0.040	0.036	<0.130	0.120	0.097	0.081	0.094
Pb	—	—	—	—	—	<4.0	—	—	—	—
Bi	—	—	—	—	—	<10.0	—	—	—	—
Th	<0.70	<0.60	<0.70	<0.60	<0.60	<0.260	<0.90	0.66	<0.80	0.85
U	<1.70	<1.20	<0.70	<1.20	<1.40	<0.40	<1.50	<1.50	0.200	<1.50
Ru (ppb)	0.70	<0.50	—	<0.50	<0.50	—	<0.50	<0.50	—	<0.50
Rh	<0.50	<0.50	—	<0.50	<0.50	—	<0.50	<0.50	<0.50	<0.50
Pd	2.10	4.5	<0.50	<0.80	<0.80	<0.50	<0.80	<0.80	0.70	<0.80
Ir	<0.50	<0.50	—	<0.50	<0.50	—	<0.50	<0.50	—	<0.50
Pt	3.8	7.2	<1.00	<0.50	<0.50	<1.00	<0.50	0.70	<1.00	<0.50
Au	<23.0	<15.0	<26.0	<16.0	<18.0	<3.0	<16.0	<19.0	<12.0	<19.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
A. Amphibolites in the Helen group.

MAP 1

	21	22	23	24	25	26	27
Lat.	34°37'N	34°42'N	34°35'N	34°50'N	34°52'N	34°53'N	34°53'N
Long.	83°46'W	83°41'W	83°46'W	83°35'W	83°33'W	83°32'W	83°32'W
SiO_2 (%)	51.80	51.90	52.30	53.80	61.00	61.70	68.20
TiO_2	1.12	1.31	1.52	0.58	0.34	0.43	0.44
Al_2O_3	16.70	15.70	13.40	17.10	14.50	15.50	14.90
$Fe_2O_3^*$	11.40	12.00	15.00	11.00	8.99	8.39	5.36
FeO	6.90	5.00	8.70	7.00	5.60	5.70	3.40
MnO	0.25	0.27	0.30	0.15	0.12	0.15	0.10
MgO	6.10	4.81	5.18	4.24	4.14	3.00	1.44
CaO	6.87	9.76	6.82	11.30	9.17	7.46	5.75
Na_2O	4.18	0.99	3.34	0.85	1.20	1.95	2.69
K_2O	0.08	0.32	0.06	0.12	0.05	0.87	0.76
P_2O_5	0.16	0.13	0.13	0.08	0.08	0.08	0.11
S	—	0.02	1.10	—	—	—	—
H_2O^+	1.60	3.50	1.30	0.46	0.39	0.68	0.76
H_2O^-	0.84	0.99	0.57	0.01	0.01	0.01	0.02
CO_2	0.02	0.02	0.06	0.01	0.01	0.01	0.01
B (ppm)	—	20.0	2.00	—	—	—	—
Sc	37	43	38	49	39	29.0	16.8
Cr	21.0	168	45	9.8	21.0	11.0	11.0
Co	36	39	41	34	28.0	22.0	12.4
Ni	24.0	75	25.0	20.0	9.7	5.1	4.6
Cu	54	73	207	4.0	620	60	18.0
Zn	100	123	1430	71	60	85	54
As	1.10	<5.0	<4.0	<4.0	<4.0	<2.70	<2.10
Rb	7.0	4.0	<2.00	12.0	<2.00	24.0	36
Sr	193	194	111	181	86	115	191
Y	32	38	38	26.0	12.0	18.0	16.0
Zr	70	102	74	51	36	102	166
Nb	2.20	5.1	1.90	5.5	2.20	5.0	6.2
Sb	<0.60	0.54	1.20	<0.60	<0.60	<0.50	<0.40
Cs	<0.90	<0.60	<0.60	<1.10	<1.00	2.20	1.10
Ba	12.0	56	14.0	37	37	146	203
La	6.8	16.4	3.7	12.0	7.0	12.1	10.0
Ce	9.9	30	8.2	27.0	12.0	25.0	25.0
Nd	10.0	19.0	<15.0	<22.0	<19.0	<19.0	8.0
Sm	3.4	5.5	3.1	3.9	1.50	3.0	1.94
Eu	1.17	1.41	0.97	0.80	0.32	0.68	0.66
Tb	0.68	0.97	0.72	0.65	0.31	0.49	0.31
Yb	3.0	4.1	3.6	2.70	1.30	2.00	1.10
Lu	0.45	0.64	0.49	0.39	0.200	0.290	0.190
Hf	1.70	2.70	1.90	1.60	0.74	3.1	4.8
Ta	0.160	0.41	0.190	0.33	0.220	0.35	0.40
Th	0.90	2.00	0.75	2.50	2.00	3.3	4.2
U	0.59	0.84	<0.70	<1.40	1.00	1.10	1.30
Ru (ppb)	—	—	—	<0.50	<0.50	<0.50	<0.50
Rh	<0.50	—	—	<0.50	<0.50	<0.50	<0.50
Pd	0.50	1.20	<0.50	<0.80	0.90	<0.80	<0.80
Ir	—	—	—	<0.50	<0.50	<0.50	<0.50
Pt	<1.00	<1.00	<1.00	2.60	1.10	<0.50	<0.50
Au	<10.0	20.0	<28.0	<18.0	<17.0	<15.0	<13.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
B. Amphibolites in the Ropes Creek Metabasalt, Dahlonega area.

MAP 1

	28	29	30
Lat.	34°31'N	34°31'N	34°32'N
Long.	83°57'W	83°58'W	83°55'W
SiO_2 (%)	49.10	49.40	61.80
TiO_2	1.59	1.09	0.27
Al_2O_3	14.10	14.30	18.30
$Fe_2O_3^*$	13.00	13.10	4.96
FeO	8.20	9.10	3.00
MnO	0.21	0.16	0.08
MgO	7.66	8.10	2.63
CaO	10.70	10.10	6.11
Na_2O	2.38	3.13	3.46
K_2O	0.06	0.12	0.29
P_2O_5	0.14	0.13	0.06
S	—	—	0.02
H_2O^+	0.47	0.26	1.90
H_2O^-	0.03	0.01	1.20
CO_2	<0.01	0.02	0.02
B (ppm)	—	—	24.0
Sc	50	50	18.5
Cr	200	250	43
Co	50	42	13.9
Ni	75	89	14.0
Cu	62	29.0	39
Zn	110	110	45
As	<6.0	<5.0	<3.1
Rb	4.0	<2.00	8.0
Sr	221	148	176
Y	33	29.0	11.0
Zr	102	86	57
Nb	5.3	4.5	2.70
Sb	<0.80	0.58	1.60
Cs	<1.10	<1.10	0.41
Ba	41	10.0	74
La	4.9	4.3	8.2
Ce	12.0	11.0	17.7
Nd	<23.0	<22.0	<12.0
Sm	3.8	3.3	1.96
Eu	1.20	0.95	0.46
Tb	0.78	0.74	0.31
Yb	3.7	3.2	1.10
Lu	0.54	0.50	0.210
Hf	2.50	2.30	2.00
Ta	0.31	0.250	0.250
Th	0.40	<0.70	2.10
U	<1.70	<1.60	<0.90
Ru (ppb)	<0.50	0.50	—
Rh	<0.50	<0.50	—
Pd	<0.80	<0.80	1.30
Ir	<0.50	<0.50	—
Pt	0.90	<0.50	1.30
Au	11.0	<21.0	<24.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. C. Amphibolites southeast of Helen Group.

MAP 1

	31	32	33	34	35	36
Lat.	34°40'N	34°37'N	34°37'N	34°42'N	34°37'N	34°40'N
Long.	83°41'W	83°40'W	83°37'W	83°35'W	83°40'W	83°38'W
SiO_2 (%)	46.00	47.00	48.40	49.70	51.30	54.10
TiO_2	3.75	3.49	2.71	1.43	0.76	0.98
Al_2O_3	14.10	13.50	14.50	14.10	14.70	15.30
$Fe_2O_3^*$	17.30	17.30	15.80	13.50	9.84	11.10
FeO	10.00	7.10	9.20	4.40	6.10	7.20
MnO	0.22	0.24	0.23	0.20	0.18	0.18
MgO	4.25	5.87	5.89	7.53	8.42	5.79
CaO	6.95	6.96	9.34	11.80	10.50	9.50
Na_2O	0.84	0.81	1.08	1.04	0.89	1.13
K_2O	0.58	0.49	0.48	0.46	0.50	0.41
P_2O_5	0.53	0.39	0.32	0.15	0.08	0.16
S	—	—	—	0.13	—	—
H_2O^+	2.70	2.10	1.50	0.50	2.00	1.00
H_2O^-	2.30	1.40	0.64	0.26	1.00	0.56
CO_2	0.03	0.02	0.04	0.02	0.01	0.02
Li (ppm)	—	—	—	15.0	—	—
Be	—	—	—	2.00	—	—
Sc	34	34	44	48	47	39
V	—	—	—	330	—	—
Cr	44	80	87	148	410	41
Co	52	51	48	51	42	46
Ni	62	75	62	63	120	32
Cu	290	1.60	77	63	1.00	40
Zn	180	160	150	140	100	100
Ga	—	—	—	22.0	—	—
As	<1.50	<1.40	0.75	<1.90	<1.50	<1.40
Rb	5.0	9.0	7.0	<9.0	2.00	14.0
Sr	68	263	370	100	132	300
Y	61	50	43	27.0	23.0	26.0
Zr	340	270	183	<110	51	69
Nb	29.0	26.0	12.0	6.0	2.30	3.4
Mo	—	—	—	<2.00	—	—
Ag	—	—	—	<2.00	—	—
Cd	—	—	—	<2.00	—	—
Sn	—	—	—	<10.0	—	—
Sb	<0.50	<0.50	<0.60	<0.150	<0.60	<0.60
Cs	<0.90	<0.90	<1.00	<0.30	<0.90	<0.90
Ba	133	430	38	48	135	43
La	41	27.4	15.0	5.5	3.8	9.1
Ce	87	57	35	13.0	9.2	16.0
Nd	49	34	25.0	9.4	6.1	<27.0
Sm	13.0	10.2	6.9	3.4	2.40	3.0
Eu	3.4	2.90	1.96	1.10	0.72	1.00
Tb	1.90	1.59	1.20	0.76	0.56	0.58
Yb	5.1	4.2	4.2	3.0	2.80	2.50
Lu	0.73	0.60	0.62	0.44	0.45	0.37
Hf	9.0	6.8	4.8	2.20	1.20	1.80
Ta	1.90	1.75	0.92	0.30	0.200	0.31
Pb	—	—	—	<4.0	—	—
Bi	—	—	—	<10.0	—	—
Th	5.3	2.90	0.89	0.46	0.60	1.30
U	1.30	0.87	0.270	<0.40	0.72	1.00
Rh (ppb)	<0.50	<0.50	<0.50	—	<0.50	<0.50
Pd	3.5	4.0	15.0	0.90	0.70	0.60
Pt	3.3	19.0	6.2	1.10	2.90	<1.00
Au	<4.0	9.8	<8.0	<1.70	<4.0	<8.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
D. Amphibolites in Richard Russell Gneiss.

MAP 1

	37	38	39	40	41
Lat.	34°41'N	34°48'N	34°43'N	34°41'N	34°42'N
Long.	83°46'W	83°51'W	83°50'W	83°48'W	83°47'W
SiO_2 (%)	43.30	45.00	45.40	48.00	50.00
TiO_2	1.96	2.20	1.22	1.31	1.74
Al_2O_3	16.40	14.90	14.00	14.70	18.80
$Fe_2O_3^*$	14.60	12.80	9.67	11.70	10.10
Fe_2O_3	—	—	2.45	—	—
FeO	10.80	9.60	6.50	8.80	5.70
MnO	0.22	0.27	0.10	0.23	0.09
MgO	7.30	7.59	9.71	9.41	4.70
CaO	8.58	11.80	12.50	10.90	7.43
Na_2O	1.89	2.18	2.19	2.22	4.10
K_2O	0.27	0.86	1.99	0.78	0.43
P_2O_5	0.21	0.21	1.37	0.09	0.24
H_2O^+	3.70	1.30	1.10	0.75	1.80
H_2O^-	2.60	0.04	0.05	0.14	0.92
CO_2	<0.01	0.56	0.03	0.02	0.02
Sc (ppm)	50	47	44	44	28.4
Cr	360	280	62	340	98
Co	46	52	49	53	27.0
Ni	88	110	88	110	52
Cu	59	84	92	110	67
Zn	130	150	93	130	100
As	<2.20	18.0	<2.30	<2.10	<2.00
Rb	6.0	12.0	104	21.0	15.0
Sr	147	310	2700	189	950
Y	44	38	12.0	32	29.0
Zr	117	131	153	66	280
Nb	2.30	3.0	23.0	1.00	6.5
Sb	<0.60	<0.70	<0.60	<0.60	<0.40
Cs	<1.00	<1.10	0.62	<1.00	<0.80
Ba	75	113	880	61	99
La	4.2	5.9	128	1.90	10.3
Ce	11.0	17.0	269	6.7	26.0
Nd	12.0	<50	140	9.4	23.0
Sm	4.9	5.2	26.8	3.1	7.6
Eu	1.52	1.60	5.9	1.13	1.80
Tb	1.14	1.10	1.50	0.79	1.28
Yb	4.6	4.5	1.90	3.5	3.3
Lu	0.69	0.61	0.260	0.50	0.46
Hf	3.0	3.4	5.4	1.80	7.5
Ta	0.120	0.170	0.76	0.063	0.31
Th	<0.70	0.80	13.0	<0.60	0.94
U	<0.50	<1.50	1.90	0.270	0.39
Ru (ppb)	—	<0.50	—	—	—
Rh	<0.50	<0.50	<0.50	<0.50	<0.50
Pd	<0.50	<0.80	1.10	<0.50	0.90
Ir	—	<0.50	—	—	—
Pt	<1.00	<0.50	<1.00	<1.00	<1.00
Au	<10.0	<16.0	<10.0	<10.0	<9.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. E. Amphibolites in Brasstown ring.

MAP 1

	42	43	44	45
Lat.	34°51'N	34°56'N	34°51'N	34°50'N
Long.	83°46'W	83°47'W	83°46'W	83°48'W
SiO_2 (%)	37.70	41.30	41.50	47.60
TiO_2	0.17	0.02	0.92	1.24
Al_2O_3	6.10	0.74	19.70	17.50
$Fe_2O_3^*$	16.16	9.37	13.47	14.20
Fe_2O_3	5.70	2.80	2.80	—
FeO	8.40	5.30	9.20	8.80
MnO	0.24	0.12	0.22	0.23
MgO	25.20	43.70	7.10	5.08
CaO	6.20	0.75	13.70	10.40
Na_2O	0.29	0.06	1.78	2.80
K_2O	0.05	0.03	0.24	0.10
P_2O_5	0.04	0.03	0.30	0.14
S	0.07	<0.01	0.09	—
H_2O^+	5.10	4.30	1.30	0.63
H_2O^-	0.16	0.22	0.05	0.01
CO_2	3.40	0.35	0.01	0.01
Sc (ppm)	18.5	7.1	22.4	43
Cr	1000	2600	95	13.0
Co	123	119	49	46
Ni	1100	2300	110	26.0
Cu	56	2.00	78	60
Zn	69	40	86	120
As	31	<1.30	7.0	<4.0
Rb	4.0	3.0	13.0	5.0
Sr	45	6.0	600	181
Y	8.0	7.0	24.0	14.0
Zr	16.0	9.0	48	23.0
Nb	<0.50	<0.50	1.00	1.70
Sb	0.38	<0.30	<0.50	<0.60
Cs	<0.70	<0.50	0.82	<1.10
Ba	11.0	12.0	38	29.0
La	0.41	0.087	3.1	2.60
Ce	1.50	<2.10	7.1	5.2
Nd	<60	<40	<60	<19.0
Sm	0.33	0.047	2.93	1.48
Eu	0.130	0.0260	1.53	0.73
Tb	0.077	<0.080	0.65	0.260
Yb	0.43	<0.50	2.30	1.30
Lu	0.083	<0.110	0.34	0.250
Hf	0.250	<0.40	0.75	<0.70
Ta	<0.040	<0.030	0.054	0.068
Th	<0.60	<0.50	<0.60	<0.60
U	<1.70	<1.10	<1.60	<1.40
Ru (ppb)	—	—	—	<0.50
Rh	<0.50	0.50	<0.50	<0.50
Pd	3.2	3.1	<0.50	<0.80
Ir	—	—	—	<0.50
Pt	6.0	4.0	<1.00	0.70
Au	4.1	—	—	<19.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. F. Amphibolites in Shooting Creek structure.

MAP 1

	46	47
Lat.	34°58'N	34°58'N
Long.	83°45'W	83°45'W
SiO_2 (%)	47.10	49.00
TiO_2	0.54	1.30
Al_2O_3	17.00	14.60
$Fe_2O_3^*$	8.29	12.70
Fe_2O_3	2.20	2.90
FeO	5.10	8.40
MnO	0.13	0.20
MgO	9.00	7.30
CaO	14.80	12.80
Na_2O	1.99	2.37
K_2O	0.13	0.10
P_2O_5	0.06	0.14
S	0.05	<0.01
H_2O^+	0.62	0.56
H_2O^-	0.09	0.15
CO_2	0.01	0.01
Σ	99.00	—
B (ppm)	<2.00	—
Sc	49	48
Cr	990	310
Co	41	42
Ni	132	65
Cu	50	97
Zn	65	110
As	<5.0	<2.90
Rb	<2.00	5.0
Sr	155	136
Y	11.0	33
Zr	30	92
Nb	1.00	4.2
Sb	<0.80	<0.60
Cs	<0.70	<0.80
Ba	31	24.0
La	1.40	4.1
Ce	24.0	10.0
Nd	<14.0	<80
Sm	1.35	3.0
Eu	0.53	1.10
Tb	0.36	0.68
Yb	1.20	3.0
Lu	0.200	0.47
Hf	0.66	2.10
Ta	0.070	0.280
Th	<1.10	<0.70
U	<1.00	<2.00
Rh (ppb)	—	<0.50
Pd	<0.50	1.50
Pt	<1.00	3.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. G. Amphibolites in Hightower-Buzzard Knob area.

MAP 1

	48	49	50	51	52	53	54	55	56
Lat.	34°53'N	34°54'N	34°55'N	34°52'N	34°56'N	34°53'N	34°56'N	34°55'N	34°58'N
Long.	83°35'W	83°36'W	83°36'W	83°34'W	83°35'W	83°35'W	83°34'W	83°36'W	83°38'W
SiO_2 (%)	42.60	43.90	44.60	45.00	45.50	45.80	46.70	47.80	48.50
TiO_2	0.93	1.00	0.93	0.91	1.00	0.93	0.96	3.00	0.86
Al_2O_3	18.50	17.40	17.70	17.90	17.00	17.50	16.00	12.60	15.60
$Fe_2O_3^*$	16.30	16.16	15.16	13.70	14.24	15.73	14.06	18.02	10.07
Fe_2O_3	2.40	4.10	3.30	—	6.20	3.10	5.00	4.10	2.30
FeO	11.30	9.90	10.20	7.80	6.60	10.20	7.60	11.60	6.40
MnO	0.20	0.19	0.19	0.21	0.23	0.18	0.20	0.23	0.15
MgO	7.50	7.80	7.90	7.45	5.80	7.70	7.60	6.90	9.40
CaO	8.40	8.90	8.80	11.30	11.80	9.70	11.20	9.30	12.50
Na_2O	1.85	2.08	2.57	0.89	1.87	2.80	2.43	1.67	1.79
K_2O	0.19	0.50	0.19	0.21	0.56	0.08	0.40	0.60	0.80
P_2O_5	0.10	0.11	0.10	0.09	0.14	0.11	0.09	0.30	0.11
S	0.01	<0.01	0.01	0.04	<0.01	0.01	<0.01	<0.01	0.04
H_2O^+	2.80	2.10	1.60	2.30	1.40	0.73	0.94	0.90	0.44
H_2O^-	2.10	0.92	0.84	0.73	0.42	0.17	0.04	0.20	0.12
CO_2	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.01
Σ	99.00	—	99.00	—	—	99.00	—	—	99.00
B (ppm)	2.00	—	3.0	14.0	—	2.00	—	—	—
Sc	30	32	27.7	55	51	29.9	54	40	43
Cr	14.0	47	12.0	130	259	33	168	143	960
Co	66	59	59	46	56	55	58	55	44
Ni	112	100	142	57	86	105	82	82	187
Cu	118	110	127	144	29.0	33	140	170	120
Zn	100	111	97	120	120	92	120	150	120
As	<5.0	<3.2	<5.0	<4.0	<4.0	<5.0	<4.0	<2.30	<0.90
Rb	3.0	2.00	8.0	11.0	5.0	6.0	5.0	10.0	<2.00
Sr	52	50	105	122	191	95	60	176	138
Y	32	38	32	24.0	31	35	32	39	17.0
Zr	51	60	55	27.0	61	56	54	179	54
Nb	<1.00	<0.50	<1.00	2.40	1.30	1.20	<0.50	16.0	4.0
Sb	<0.70	<0.60	<0.60	4.9	<0.70	<0.70	<0.70	<0.60	<0.120
Cs	<0.60	<0.80	<0.60	<0.70	<0.90	<0.60	<0.90	<0.80	<0.290
Ba	58	24.0	73	52	47	27.0	40	145	69
La	1.50	2.00	1.30	7.7	2.60	1.70	1.10	15.3	9.0
Ce	21.0	3.7	12.0	11.0	6.5	3.5	4.1	31	20.5
Nd	<13.0	<70	<12.0	9.3	<70	<12.0	<80	<70	11.0
Sm	2.09	2.46	2.06	2.76	2.51	2.24	2.24	6.9	3.3
Eu	0.85	0.93	0.81	0.82	0.87	0.89	0.84	2.00	0.94
Tb	0.65	0.66	0.65	0.48	0.62	0.77	0.63	1.10	0.65
Yb	3.3	3.5	3.1	1.40	3.4	3.4	3.1	3.3	1.80
Lu	0.48	0.55	0.46	0.30	0.50	0.52	0.47	0.47	0.290
Hf	1.30	1.60	1.30	<0.80	1.40	1.40	1.30	4.9	1.90
Ta	0.048	0.068	0.069	0.210	0.270	0.057	0.0290	1.20	0.30
Th	<0.90	0.43	<0.90	<0.80	<0.70	<0.90	<0.70	1.60	1.00
U	<0.90	<1.90	<0.90	<0.70	<2.10	<0.90	<2.20	0.98	0.270
Rh (ppb)	—	<0.50	—	—	<0.50	—	<0.50	<0.50	—
Pd	<0.50	0.50	<0.50	5.3	1.80	<0.50	1.90	14.0	3.6
Pt	<1.00	<1.00	3.3	4.3	5.0	<1.00	4.0	3.0	15.0
Au	—	—	—	<27.0	—	—	—	—	5.6

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
H. Amphibolites in Blue Ridge northeast of Clayton.

MAP 1

	57	58	59	60
Lat.	34°57'N	34°54'N	34°54'N	34°57'N
Long.	83°16'W	83°19'W	83°18'W	83°11'W
SiO_2 (%)	47.60	48.70	52.20	53.30
TiO_2	2.20	1.00	1.00	0.89
Al_2O_3	14.70	15.60	15.70	15.10
$Fe_2O_3^*$	16.02	13.11	12.11	10.51
Fe_2O_3	3.00	3.70	4.10	2.60
FeO	10.40	7.50	6.70	6.70
MnO	0.23	0.20	0.21	0.17
MgO	6.20	7.80	6.00	7.00
CaO	11.10	9.60	8.70	11.10
Na_2O	1.89	1.89	1.35	1.62
K_2O	0.38	0.75	0.54	0.42
P_2O_5	0.25	0.11	0.13	0.11
S	0.01	<0.01	<0.01	0.08
H_2O^+	1.10	1.70	1.80	0.73
H_2O^-	0.30	0.86	1.10	0.02
CO_2	<0.01	0.01	<0.01	<0.01
Σ	99.00	99.00	99.00	—
B (ppm)	<2.00	5.0	6.0	—
Sc	42	50	41	40
Cr	124	271	64	153
Co	48	46	38	38
Ni	85	77	26.0	44
Cu	88	7.0	5.0	82
Zn	130	110	120	90
As	<6.0	<7.0	<6.0	<3.1
Rb	9.0	18.0	12.0	2.00
Sr	279	162	278	183
Y	33	31	28.0	24.0
Zr	146	60	65	79
Nb	11.0	2.20	2.80	2.90
Sb	<0.70	<0.80	<0.70	<0.60
Cs	<0.70	<0.70	<0.60	<0.80
Ba	110	138	89	78
La	14.6	4.6	5.2	6.3
Ce	34	12.0	11.0	13.0
Nd	22.0	8.5	8.6	<70
Sm	5.8	2.96	2.60	2.60
Eu	1.85	0.99	0.89	0.85
Tb	1.10	0.65	0.54	0.54
Yb	3.3	2.60	2.20	2.10
Lu	0.46	0.40	0.34	0.30
Hf	3.8	1.70	1.60	1.80
Ta	0.93	0.260	0.230	0.290
Th	1.20	<1.10	1.20	1.10
U	<1.10	<1.20	0.55	<1.50
Rh (ppb)	—	—	—	<0.50
Pd	—	<0.50	<0.50	<0.50
Pt	—	<1.00	<1.00	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. I. Amphibolites in Laurel Creek complex.

MAP 1

	61	62	63	64	65	66	67
Lat.	34°55'N	34°56'N	34°55'N	34°55'N	34°56'N	34°55'N	34°56'N
Long.	83°10'W	83°10'W	83°10'W	83°10'W	83°10'W	83°10'W	83°10'W
SiO_2 (%)	45.80	47.00	47.40	48.20	49.50	49.60	51.80
TiO_2	1.80	1.50	0.96	2.40	0.24	0.71	1.40
Al_2O_3	15.80	15.90	15.70	15.50	9.30	16.60	13.90
$Fe_2O_3^*$	15.87	16.59	13.57	16.30	17.02	11.53	14.30
Fe_2O_3	4.10	4.70	3.40	5.50	2.30	3.20	6.70
FeO	10.00	9.60	8.90	9.40	13.20	7.20	7.00
MnO	0.23	0.19	0.21	0.25	0.34	0.19	0.25
MgO	11.20	7.50	12.30	7.10	17.20	9.30	6.20
CaO	10.00	10.00	9.00	9.30	4.70	12.40	9.10
Na_2O	0.80	1.19	0.76	1.32	0.75	0.69	1.17
K_2O	0.16	0.35	0.16	0.37	0.08	0.45	0.29
P_2O_5	0.04	0.11	0.05	0.40	0.26	0.03	0.14
S	0.17	0.14	0.12	0.14	0.01	0.21	0.01
H_2O^+	0.70	1.10	0.68	1.10	0.82	0.50	1.50
H_2O^-	0.08	0.18	0.07	0.27	0.12	0.09	0.51
CO_2	<0.01	<0.01	<0.01	<0.01	0.02	0.01	<0.01
Σ	101.00	99.00	100.00	101.00	99.00	101.00	100.00
B (ppm)	3.0	2.00	3.0	4.0	2.00	4.0	4.0
Sc	47	51	39	43	47	54	48
Cr	520	94	620	156	1600	185	50
Co	58	59	61	46	68	46	48
Ni	149	66	206	76	470	72	72
Cu	57	134	67	73	13.0	52	87
Zn	120	120	92	130	190	92	130
As	<4.0	<5.0	<3.0	<4.0	<5.0	<4.0	<5.0
Rb	5.0	16.0	5.0	13.0	4.0	8.0	13.0
Sr	112	162	157	292	53	281	215
Y	12.0	15.0	15.0	37	13.0	20.0	35
Zr	26.0	69	37	115	126	26.0	97
Nb	<1.00	4.3	<1.00	10.0	<1.00	10.0	4.1
Sb	<0.70	<0.60	<0.60	<0.60	<0.60	<0.70	<0.60
Cs	<1.00	<1.10	<0.80	<1.00	<0.90	<0.90	<0.90
Ba	35	71	47	53	24.0	29.0	160
La	2.20	10.0	3.5	18.8	7.9	2.20	9.1
Ce	4.8	18.0	9.0	41	15.0	4.9	19.0
Nd	<11.0	9.0	6.9	26.0	9.4	<11.0	15.0
Sm	1.10	2.49	1.97	6.5	1.94	1.36	4.0
Eu	0.49	0.62	0.66	2.10	0.68	0.64	1.20
Tb	0.180	0.40	0.34	0.99	0.270	0.31	0.79
Yb	<1.20	1.30	1.50	3.4	2.00	1.20	3.7
Lu	0.160	0.220	0.230	0.48	0.32	0.200	0.57
Hf	0.49	1.50	0.83	3.0	2.80	0.48	2.60
Ta	0.290	0.39	0.200	1.10	<0.40	<0.40	0.38
Th	<0.60	2.20	<0.60	0.79	<0.70	<0.70	1.80
U	<1.30	<1.50	<1.20	<1.30	<1.50	<1.30	<1.60
Pd (ppb)	1.40	2.10	2.40	1.00	6.7	1.10	<0.50
Pt	3.2	2.50	3.5	1.90	8.2	1.00	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
J. Amphibolites northeast of Toccoa.

MAP 1

	68	69
Lat.	34°39'N	34°39'N
Long.	83°18'W	83°18'W
SiO_2 (%)	48.30	49.90
TiO_2	1.14	0.41
Al_2O_3	14.90	15.60
$Fe_2O_3^*$	11.20	9.53
FeO	6.80	5.30
MnO	0.17	0.20
MgO	8.11	8.64
CaO	11.70	12.70
Na_2O	2.45	2.21
K_2O	0.05	0.10
P_2O_5	0.09	<0.05
H_2O^+	2.30	0.48
H_2O^-	0.22	0.03
CO_2	0.01	0.01
Sc (ppm)	41	49
Cr	340	450
Co	45	35
Ni	120	110
Cu	80	17.0
Zn	68	92
As	<5.0	<5.0
Rb	3.0	<2.00
Sr	93	177
Y	36	13.0
Zr	82	20.0
Nb	1.70	<1.00
Sb	<0.70	0.41
Cs	<1.00	<1.10
Ba	25.0	29.0
La	3.0	0.74
Ce	19.0	9.0
Nd	<21.0	<19.0
Sm	3.1	1.21
Eu	0.96	0.72
Tb	0.70	0.36
Yb	3.6	1.60
Lu	0.51	0.280
Hf	2.10	0.38
Ta	0.110	<0.050
Th	<0.70	<0.60
U	<1.40	<1.60
Ru (ppb)	0.70	0.80
Rh	<0.50	<0.50
Pd	<0.80	<0.80
Ir	<0.50	<0.50
Pt	0.60	<0.50
Au	<19.0	<20.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. K. Amphibolite Saprolites.

MAP 1

	70	71
Lat.	34°50'N	34°52'N
Long.	83°19'W	83°33'W
SiO_2 (%)	30.70	41.90
TiO_2	2.18	1.79
Al_2O_3	24.30	17.30
$Fe_2O_3^*$	19.40	18.00
FeO	3.70	5.80
MnO	0.24	0.21
MgO	5.22	5.92
CaO	4.13	7.10
Na_2O	0.63	1.59
K_2O	1.14	0.25
P_2O_5	0.24	0.02
S	0.05	0.02
H_2O^+	9.90	5.00
H_2O^-	1.60	1.40
CO_2	0.02	0.01
Li (ppm)	31	11.0
Be	2.00	<1.00
Sc	45	66
V	260	520
Cr	125	205
Co	101	69
Ni	67	90
Cu	14.0	46
Zn	160	76
Ga	28.0	23.0
As	<4.0	<2.40
Rb	54	12.0
Sr	30	83
Y	35	8.0
Zr	220	<200
Nb	10.0	<1.00
Mo	<2.00	<2.00
Ag	<2.00	<2.00
Cd	<2.00	<2.00
Sn	<10.0	<10.0
Sb	<0.130	<0.180
Cs	1.30	<0.40
Ba	390	140
La	18.0	3.2
Ce	32	15.0
Nd	24.0	<8.0
Sm	7.2	1.80
Eu	2.41	0.69
Tb	1.20	0.48
Yb	4.7	1.80
Lu	0.67	0.270
Hf	3.7	0.62
Ta	0.61	<0.160
Pb	<4.0	<4.0
Bi	10.0	<10.0
Th	2.50	0.52
U	0.64	<0.40
Pd (ppb)	<0.50	<0.50
Pt	<1.00	<1.00
Au	<8.0	<5.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. L. Metagabbros in Brasstown ring.

MAP 1

	72	73
Lat.	34°53'N	34°57'N
Long.	83°46'W	83°46'W
SiO_2 (%)	42.10	51.20
TiO_2	0.13	1.40
Al_2O_3	8.00	14.40
$Fe_2O_3^*$	12.61	15.87
Fe_2O_3	1.50	2.00
FeO	9.30	11.80
MnO	0.16	0.24
MgO	30.80	5.80
CaO	6.30	9.10
Na_2O	0.51	0.71
K_2O	0.04	0.32
P_2O_5	0.04	0.16
S	<0.01	0.06
H_2O^+	0.54	1.10
H_2O^-	0.04	0.41
CO_2	0.01	0.03
Σ	—	99.00
B (ppm)	—	5.0
Sc	18.5	50
Cr	1580	31
Co	114	48
Ni	1100	33
Cu	53	11.0
Zn	58	150
As	<2.90	<6.0
Rb	<2.00	3.0
Sr	74	102
Y	7.0	61
Zr	12.0	105
Nb	<0.50	4.9
Sb	<0.50	<0.70
Cs	<0.70	<0.70
Ba	17.0	113
La	0.40	31
Ce	1.90	18.0
Nd	<60	35
Sm	0.250	9.8
Eu	0.140	2.76
Tb	0.077	1.70
Yb	0.33	7.1
Lu	<0.130	1.00
Hf	<0.40	2.90
Ta	<0.040	0.35
Th	<0.60	1.70
U	<1.60	<0.70
Rh (ppb)	<0.50	—
Pd	4.4	2.10
Pt	5.0	2.20
Au	—	<7.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. M. Metagabbros in Shooting Creek structure.

MAP 1

	74	75
Lat.	34° 0'N	34°57'N
Long.	83°45'W	83°47'W
SiO_2 (%)	46.40	47.60
TiO_2	0.19	0.80
Al_2O_3	21.70	16.00
$Fe_2O_3^*$	5.48	11.61
Fe_2O_3	1.00	3.50
FeO	4.00	6.50
MnO	0.09	0.18
MgO	9.00	8.40
CaO	14.40	14.00
Na_2O	1.50	1.16
K_2O	0.08	0.14
P_2O_5	0.02	0.07
S	0.03	0.14
H_2O^+	0.57	0.52
H_2O^-	0.10	0.10
CO_2	0.01	0.01
Σ	99.00	99.00
B (ppm)	<2.00	2.00
Sc	25.0	53
Cr	630	330
Co	38	47
Ni	192	64
Cu	124	56
Zn	31	92
As	<4.0	<8.0
Rb	5.0	2.00
Sr	144	121
Y	8.0	15.0
Zr	21.0	36
Nb	<1.00	<1.00
Sb	<0.50	<0.80
Cs	<0.50	<0.70
Ba	31	45
La	0.58	3.0
Ce	11.0	6.7
Nd	<10.0	<15.0
Sm	0.48	2.01
Eu	0.270	0.75
Tb	0.130	0.39
Yb	0.40	1.90
Lu	0.064	0.32
Hf	<0.50	1.20
Ta	<0.050	0.096
Th	<0.80	<1.10
U	<0.70	<1.30
Pd (ppb)	<0.50	<0.50
Pt	<1.00	<1.00
Au	18.0	—

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
N. Metagabbros in the Helen Group.

MAP 1

	76
Lat.	34°53'N
Long.	83°32'W
SiO_2 (%)	43.40
TiO_2	5.03
Al_2O_3	14.20
$Fe_2O_3^*$	15.90
FeO	10.30
MnO	0.20
MgO	7.23
CaO	10.60
Na_2O	2.17
K_2O	0.14
P_2O_5	<0.05
H_2O^+	0.65
H_2O^-	0.06
CO_2	0.01
Sc (ppm)	48
Cr	90
Co	66
Ni	58
Cu	120
Zn	90
As	<3.0
Rb	<2.00
Sr	199
Y	11.0
Zr	40
Nb	7.4
Sb	<0.60
Cs	<1.20
Ba	25.0
La	2.20
Ce	4.6
Nd	<20.0
Sm	1.43
Eu	0.58
Tb	0.280
Yb	1.20
Lu	0.200
Hf	0.97
Ta	0.280
Th	<0.80
U	<1.30
Ru (ppb)	<0.50
Rh	<0.50
Pd	<0.80
Ir	<0.50
Pt	<0.50
Au	<18.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. O. Ultramafic rocks in Buzzard Knob complex.

MAP 1

	77	78	79	80	81
Lat.	34°53'N	34°55'N	34°53'N	34°56'N	34°58'N
Long.	83°37'W	83°36'W	83°35'W	83°37'W	83°38'W
SiO_2 (%)	39.60	47.80	43.20	44.00	46.40
TiO_2	0.34	3.00	0.56	0.52	0.66
Al_2O_3	6.70	12.60	6.70	6.00	6.90
$Fe_2O_3^*$	12.81	18.02	14.87	15.44	15.73
Fe_2O_3	5.70	4.10	5.00	6.70	6.70
FeO	6.00	11.60	8.00	7.50	7.20
MnO	0.18	0.23	0.21	0.21	0.23
MgO	27.90	6.90	24.60	26.40	26.00
CaO	3.30	9.30	4.20	0.69	5.00
Na_2O	0.19	1.67	0.25	0.04	0.61
K_2O	0.03	0.60	0.05	0.24	0.24
P_2O_5	0.06	0.30	0.07	0.08	0.13
S	<0.01	<0.01	<0.01	<0.01	0.19
H_2O^+	3.00	0.90	4.80	5.90	0.23
H_2O^-	2.00	0.20	0.02	0.04	0.04
CO_2	4.70	0.01	1.20	0.71	0.07
Σ	—	—	—	—	100.00
Sc (ppm)	14.4	40	20.1	18.7	22.3
Cr	2140	143	1750	2200	1740
Co	116	55	116	123	119
Ni	1500	82	970	1100	830
Cu	51	170	42	18.0	38
Zn	68	150	115	110	119
As	<1.80	<2.30	<3.1	<1.50	<1.10
Rb	3.0	10.0	<2.00	<2.00	9.0
Sr	22.0	176	22.0	7.0	103
Y	13.0	39	16.0	18.0	20.0
Zr	27.0	179	51	49	71
Nb	<0.50	16.0	2.60	2.30	4.2
Sb	<0.40	<0.60	0.260	<0.40	<0.080
Cs	<0.60	<0.80	<0.70	<0.70	<0.30
Ba	11.0	145	20.0	71	26.0
La	0.70	15.3	6.7	6.1	6.6
Ce	2.60	31	15.0	13.0	16.1
Nd	<50	<70	<60	<50	8.5
Sm	0.66	6.9	2.02	1.78	2.18
Eu	0.270	2.00	0.46	0.31	0.57
Tb	0.150	1.10	0.35	0.33	0.37
Yb	0.66	3.3	1.10	1.20	1.22
Lu	0.098	0.47	0.190	0.190	0.170
Hf	0.48	4.9	1.30	1.20	1.70
Ta	0.0290	1.20	0.180	0.250	0.250
Th	<0.60	1.60	1.30	1.20	1.40
U	<1.30	0.98	<1.70	<1.20	0.41
Rh (ppb)	<0.50	<0.50	0.80	1.00	—
Pd	2.70	14.0	12.0	6.8	3.7
Pt	5.0	3.0	32	32	3.6
Au	—	—	—	—	<4.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
P. Ultramafic rocks in the Helen Group.

MAP 1

	82
Lat.	34°52'N
Long.	83°34'W
SiO_2 (%)	38.70
TiO_2	0.01
Al_2O_3	0.29
$Fe_2O_3^*$	14.14
Fe_2O_3	3.90
FeO	8.30
MnO	0.20
MgO	44.00
CaO	0.08
Na_2O	0.03
K_2O	0.02
P_2O_5	0.04
S	<0.01
H_2O^+	3.40
H_2O^-	0.27
CO_2	0.05
Sc (ppm)	5.9
Cr	4000
Co	146
Ni	1500
Cu	1.40
Zn	67
As	<1.30
Rb	<2.00
Sr	4.0
Y	5.0
Zr	6.0
Nb	<0.50
Sb	<0.40
Cs	<0.60
Ba	11.0
La	0.100
Ce	<2.30
Nd	<40
Sm	<0.050
Eu	<0.050
Tb	<0.090
Yb	<0.50
Lu	<0.100
Hf	<0.40
Ta	<0.040
Th	<0.50
U	<1.20
Rh (ppb)	0.60
Pd	1.40
Pt	9.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. Q. Ultramafic rocks in the Laurel Creek complex.

MAP 1

	83	84
Lat.	34°56'N	34°56'N
Long.	83°10'W	83°10'W
SiO_2 (%)	42.00	42.70
TiO_2	<0.01	0.01
Al_2O_3	0.61	0.60
$Fe_2O_3^*$	7.61	8.58
Fe_2O_3	3.50	3.00
FeO	3.60	4.60
MnO	0.10	0.12
MgO	43.10	43.40
CaO	0.16	0.15
Na_2O	0.02	0.02
K_2O	0.19	<0.01
P_2O_5	0.03	0.02
S	0.01	0.01
H_2O^+	6.00	4.20
H_2O^-	0.53	1.30
CO_2	1.20	0.10
Σ	101.00	100.00
B (ppm)	3.0	2.00
Sc	5.7	6.5
Cr	4200	2900
Co	115	114
Ni	3900	4900
Cu	4.0	3.0
Zn	60	26.0
As	<2.80	<2.30
Rb	2.00	4.0
Sr	4.0	5.0
Y	<2.00	9.0
Zr	<2.00	17.0
Nb	<1.00	<1.00
Sb	<0.280	<0.30
Cs	<0.50	<0.50
Ba	22.0	29.0
La	0.075	<0.040
Ce	11.0	13.0
Nd	<9.0	<8.0
Sm	<0.070	<0.060
Eu	<0.070	<0.040
Tb	<0.110	<0.100
Yb	<0.40	<0.40
Lu	<0.080	<0.070
Hf	<0.40	<0.40
Ta	<0.240	<0.240
Th	<0.40	<0.40
U	<1.00	<0.90
Pd (ppb)	5.4	<0.50
Pt	6.5	2.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. R. Other ultramafic rocks.

MAP 1

	85	86	87
Lat.	34°55'N	34°54'N	34°57'N
Long.	83°36'W	83°18'W	83°16'W
SiO_2 (%)	44.60	52.20	47.60
TiO_2	0.93	1.00	2.20
Al_2O_3	17.70	15.70	14.70
$Fe_2O_3^*$	15.16	12.11	16.02
Fe_2O_3	3.30	4.10	3.00
FeO	10.20	6.70	10.40
MnO	0.19	0.21	0.23
MgO	7.90	6.00	6.20
CaO	8.80	8.70	11.10
Na_2O	2.57	1.35	1.89
K_2O	0.19	0.54	0.38
P_2O_5	0.10	0.13	0.25
S	0.01	<0.01	0.01
H_2O^+	1.60	1.80	1.10
H_2O^-	0.84	1.10	0.30
CO_2	0.02	<0.01	<0.01
Σ	99.00	99.00	99.00
B (ppm)	3.0	6.0	<2.00
Sc	27.7	41	42
Cr	12.0	64	124
Co	59	38	48
Ni	142	26.0	85
Cu	127	5.0	88
Zn	97	120	130
As	<5.0	<6.0	<6.0
Rb	8.0	12.0	9.0
Sr	105	278	279
Y	32	28.0	33
Zr	55	65	146
Nb	<1.00	2.80	11.0
Sb	<0.60	<0.70	<0.70
Cs	<0.60	<0.60	<0.70
Ba	73	89	110
La	1.30	5.2	14.6
Ce	12.0	11.0	34
Nd	<12.0	8.6	22.0
Sm	2.06	2.60	5.8
Eu	0.81	0.89	1.85
Tb	0.65	0.54	1.10
Yb	3.1	2.20	3.3
Lu	0.46	0.34	0.46
Hf	1.30	1.60	3.8
Ta	0.069	0.230	0.93
Th	<0.90	1.20	1.20
U	<0.90	0.55	<1.10
Pd (ppb)	<0.50	<0.50	—
Pt	3.3	<1.00	—

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. S. Amphibolite in Ropes Creek Metabasalt in Dahlonga area.

MAP 2

	88	89	90	91	92
Lat.	34°31'N	34°33'N	34°32'N	34°33'N	34°33'N
Long.	84° 0'W	84° 3'W	84° 3'W	84° 4'W	84° 4'W
SiO_2 (%)	43.80	46.70	48.90	49.80	54.60
TiO_2	0.99	0.23	1.26	0.47	0.81
Al_2O_3	13.30	16.80	14.10	15.50	17.70
$Fe_2O_3^*$	9.75	7.03	12.80	9.48	9.68
FeO	6.80	5.20	8.60	5.60	6.40
MnO	0.16	0.11	0.18	0.18	0.15
MgO	7.08	12.40	7.96	8.49	4.47
CaO	12.40	13.90	12.30	12.50	7.83
Na_2O	2.79	1.21	1.95	1.37	1.54
K_2O	0.19	0.13	0.09	0.12	0.16
P_2O_5	0.09	<0.05	<0.05	<0.05	0.08
H_2O^+	1.90	0.56	0.34	1.30	1.90
H_2O^-	<0.01	0.11	0.04	0.50	1.10
CO_2	8.20	0.01	0.01	0.01	0.02
Sc (ppm)	41	34	51	55	46
Cr	340	710	84	210	23.0
Co	43	51	57	42	30
Ni	100	270	75	87	23.0
Cu	130	84	27.0	52	14.0
Zn	84	46	67	74	58
As	<2.50	<2.30	<2.70	<2.80	<2.60
Rb	4.0	<2.00	7.0	8.0	<2.00
Sr	145	132	162	137	169
Y	22.0	6.0	20.0	15.0	50
Zr	58	18.0	21.0	23.0	31
Nb	3.4	<1.00	10.0	<1.00	8.9
Sb	0.34	<0.60	<0.70	<0.70	<0.70
Cs	0.67	<0.90	<1.20	<1.20	<1.10
Ba	8.0	29.0	20.0	25.0	33
La	2.70	0.66	0.71	1.80	14.2
Ce	7.6	2.10	2.70	4.6	37
Nd	<19.0	<17.0	<18.0	<18.0	33
Sm	2.13	0.56	0.99	1.11	10.3
Eu	0.73	0.250	0.64	0.49	1.40
Tb	0.48	0.180	0.30	0.290	1.50
Yb	2.30	0.68	1.20	1.30	4.4
Lu	0.290	0.092	0.220	0.220	0.60
Hf	1.50	0.37	0.49	0.48	1.20
Ta	0.170	<0.040	<0.050	<0.050	0.58
Th	<0.60	<0.50	<0.70	0.49	3.4
U	<1.10	<1.00	<1.20	<1.20	1.60
Ru (ppb)	<0.50	<0.50	<1.00	<1.00	<0.50
Rh	<0.50	<0.50	<1.00	<1.00	<0.50
Pd	<0.80	6.3	<2.00	<2.00	<0.80
Ir	<0.50	<0.50	<1.00	<1.00	<0.50
Pt	<0.50	20.0	<1.00	<1.00	<0.50
Au	<15.0	<14.0	<17.0	<16.0	<16.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. T. Gabbros.

MAP 3

	93	94	95	96	97	98	99
Lat.	34° 1'N	34° 2'N	34° 4'N	34° 1'N	34° 1'N	34° 4'N	34° 4'N
Long.	83°40'W	83°40'W	83°48'W	83°46'W	82°46'W	82°47'W	83°46'W
SiO_2 (%)	42.70	44.90	45.60	47.40	48.20	49.10	50.10
TiO_2	2.96	0.27	0.35	1.17	1.00	1.23	0.67
Al_2O_3	13.40	5.42	8.47	14.50	19.50	8.45	18.80
$Fe_2O_3^*$	15.50	15.80	10.90	12.40	8.64	9.60	7.73
FeO	10.30	8.16	6.10	7.45	5.07	1.60	4.77
MnO	0.19	0.19	0.17	0.24	0.14	0.20	0.13
MgO	8.67	19.40	24.20	9.21	6.66	13.90	6.94
CaO	12.80	8.83	3.12	11.10	10.30	15.20	11.50
Na_2O	1.57	0.18	0.34	2.29	2.96	0.48	2.80
K_2O	0.32	<0.02	<0.02	0.23	0.12	0.10	0.32
P_2O_5	0.07	<0.05	0.05	0.17	0.12	0.10	0.12
S	—	—	—	—	—	0.03	—
H_2O^+	2.42	4.41	0.57	2.12	2.31	0.47	1.56
H_2O^-	<0.05	0.06	6.21	<0.05	0.54	0.29	0.11
CO_2	0.48	<0.01	<0.01	0.19	<0.01	0.01	<0.01
Li (ppm)	—	—	—	—	—	<2.00	—
Be	—	—	—	—	—	<1.00	—
Sc	44	27.0	12.8	46	29.5	79	29.1
V	—	—	—	—	—	250	—
Cr	135	5100	1300	79	37	890	43
Co	68	120	90	41	31	54	31
Ni	99	660	1330	77	36	250	54
Cu	50	191	10.0	93	110	2.00	120
Zn	120	130	94	110	81	110	74
Ga	—	—	—	—	—	15.0	—
As	1.40	2.80	<0.70	<0.90	<0.90	<1.70	<0.60
Rb	15.0	<2.00	<2.00	<2.00	4.0	<15.0	7.0
Sr	630	12.0	22.0	287	410	260	530
Y	12.0	5.0	20.0	39	23.0	31	13.0
Zr	65	15.0	50	180	75	<100	49
Nb	7.9	<1.00	<1.00	2.70	1.80	1.90	1.20
Mo	—	—	—	—	—	<2.00	—
Ag	0.0290	0.31	<0.0100	0.046	<0.0100	<2.00	0.065
Cd	—	—	—	—	—	<2.00	—
Sn	—	—	—	—	—	<10.0	—
Sb	<0.60	<0.50	<0.40	<0.50	<0.40	<0.190	<0.50
Cs	<0.40	<0.40	<0.290	<0.30	<0.280	<0.40	<0.31
Ba	<90	240	<60	<70	160	71	<70
La	6.0	2.30	13.4	10.3	8.1	16.1	11.4
Ce	16.0	<1.50	20.0	32	21.0	40	26.5
Nd	11.0	<6.0	11.0	25.0	17.0	31	16.0
Sm	3.4	0.47	2.69	7.7	4.4	8.6	3.9
Eu	1.30	0.110	0.72	1.82	1.40	2.30	1.20
Tb	0.51	<0.120	0.43	1.10	0.64	1.10	0.42
Yb	1.10	0.33	1.40	3.9	2.40	2.70	1.50
Lu	0.180	0.052	0.190	0.56	0.32	0.35	0.200
Hf	2.00	<0.230	0.99	4.2	2.10	1.70	1.40
Ta	0.58	<0.270	0.57	0.240	0.200	<0.170	0.150
Pb	—	—	—	—	—	<4.0	—
Bi	—	—	—	—	—	<10.0	—
Th	<0.40	<0.260	0.88	0.35	<0.160	0.62	0.80
U	<0.50	<0.40	<0.30	<0.50	<0.50	0.260	<0.30
Pd (ppb)	<0.50	18.0	2.80	<0.50	<0.50	1.90	<0.50
Pt	<1.00	9.5	4.5	1.00	1.00	1.30	3.2
Au	<2.40	20.0	4.3	<0.80	<8.0	<5.0	<3.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
U. Ultramafic rocks.

MAP 3

	100	101	102	103	104	105	106	107	108	109
Lat.	34° 1'N	34° 1'N	34° 1'N	34° 2'N	34° 2'N	34° 2'N	34° 1'N	34° 4'N	34° 4'N	34° 1'N
Long.	83°46'W	82°46'W	83°46'W	83°41'W	83°41'W	83°46'W	83°40'W	83°48'W	82°47'W	82°49'W
SiO_2 (%)	36.90	37.80	38.20	42.10	42.40	42.50	44.80	45.10	45.30	45.40
TiO_2	<0.02	0.05	<0.02	0.08	0.10	0.24	3.05	0.32	0.30	0.25
Al_2O_3	9.13	4.99	12.80	13.50	10.70	7.66	6.64	7.41	7.22	5.88
$Fe_2O_3^*$	14.70	16.50	15.10	10.70	10.00	13.70	14.70	10.50	11.00	9.58
FeO	4.87	7.42	10.40	7.30	6.96	6.46	9.12	4.63	9.40	4.10
MnO	0.19	0.15	0.13	0.15	0.14	0.14	0.22	0.18	0.15	0.12
MgO	25.50	29.70	21.80	18.90	22.40	25.70	12.30	25.70	25.90	21.40
CaO	4.89	0.67	5.24	8.70	7.32	2.83	17.20	3.92	3.37	12.50
Na_2O	0.26	0.01	0.16	0.65	0.22	0.01	0.68	0.25	0.21	0.25
K_2O	<0.02	<0.02	<0.02	0.18	<0.02	<0.02	0.12	<0.02	<0.02	<0.02
P_2O_5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.05	<0.05
S	—	—	—	—	—	—	—	—	0.03	—
H_2O^+	8.66	10.50	7.97	5.80	6.64	7.12	1.33	6.21	5.40	4.01
H_2O^-	0.48	0.44	0.20	0.14	0.16	0.12	0.06	0.09	0.48	0.06
CO_2	0.20	0.02	<0.01	0.01	0.04	<0.01	0.07	<0.01	<0.01	0.76
Li (ppm)	—	—	—	—	—	—	—	—	<2.00	—
Be	—	—	—	—	—	—	—	—	<1.00	—
Sc	5.1	8.3	5.6	23.7	29.6	15.4	78	13.3	13.3	63
V	—	—	—	—	—	—	—	—	83	—
Cr	45	68	95	700	1070	1180	510	2270	2760	2050
Co	145	138	160	85	97	104	48	89	92	70
Ni	292	630	255	420	570	800	101	1060	1000	420
Cu	11.0	4.0	10.0	152	87	40	72	16.0	30	98
Zn	55	55	43	74	73	56	130	86	67	50
Ga	—	—	—	—	—	—	—	—	9.0	—
As	<0.50	13.0	1.50	<0.50	<0.50	<0.70	<0.80	<0.40	<1.00	<0.90
Rb	5.0	<2.00	4.0	4.0	4.0	<2.00	2.00	<2.00	<9.0	4.0
Sr	157	11.0	29.0	39	23.0	21.0	153	38	39	47
Y	6.0	5.0	7.0	8.0	8.0	11.0	21.0	37	18.0	16.0
Zr	18.0	17.0	21.0	19.0	17.0	28.0	90	45	<70	26.0
Nb	<1.00	<1.00	11.0	<1.00	11.0	<1.00	4.9	1.10	1.00	13.0
Mo	—	—	—	—	—	—	—	—	<2.00	—
Ag	<0.0100	<0.0100	<0.0100	<0.0100	0.0210	<0.0100	0.040	<0.0100	<2.00	0.044
Cd	—	—	—	—	—	—	—	—	<2.00	—
Sn	—	—	—	—	—	—	—	—	<10.0	—
Sb	<0.30	<0.40	<0.40	<0.50	<0.50	<0.40	<0.80	<0.40	<0.100	<0.60
Cs	<0.240	<0.260	<0.260	<0.30	<0.30	<0.260	<0.50	<0.280	<0.230	<0.40
Ba	<40	<50	<110	<70	<70	<60	<110	<60	21.0	<90
La	0.190	0.31	0.190	3.3	1.10	6.0	5.8	31	16.1	3.6
Ce	<1.80	<1.60	<2.00	4.5	1.50	9.0	18.0	44	27.0	6.8
Nd	<1.20	<1.60	<1.20	3.9	<3.0	5.1	16.0	21.0	13.0	4.3
Sm	0.039	0.190	0.065	0.77	0.39	1.35	5.2	4.1	2.93	1.01
Eu	0.062	0.034	0.031	0.30	0.150	0.220	1.50	1.30	0.84	0.270
Tb	<0.070	<0.080	<0.070	<0.100	<0.190	0.260	0.92	0.69	0.46	0.190
Yb	<0.110	0.160	<0.100	0.33	0.220	0.79	1.80	1.80	1.40	0.50
Lu	<0.0140	0.0280	<0.0190	0.054	0.039	0.110	0.250	0.270	0.180	0.093
Hf	<0.100	<0.120	<0.110	<0.160	<0.170	0.55	3.4	0.86	0.92	0.59
Ta	<0.230	<0.200	<0.240	<0.190	<0.210	<0.210	0.45	<0.260	0.150	<0.180
Pb	—	—	—	—	—	—	—	—	<4.0	—
Bi	—	—	—	—	—	—	—	—	<10.0	—
Th	<0.200	<0.30	<0.31	<0.31	<0.190	<0.150	<0.270	<0.170	0.66	<0.230
U	<0.270	<0.270	<0.280	<0.260	<0.40	<0.40	<0.40	<0.30	<0.30	<0.50
Pd (ppb)	<0.50	8.2	<0.50	40	61	1.70	<0.50	2.50	3.3	3.1
Pt	<1.00	1.20	<1.00	33	22.0	2.20	<1.00	1.80	2.20	5.2
Au	<2.90	90	<3.0	<6.0	8.3	<5.0	<2.60	<1.40	<5.0	7.3

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. U. Ultramafic rocks.

MAP 3

	110	111	112	113	114
Lat.	34° 1'N	34° 1'N	34° 2'N	34° 4'N	34° 0'N
Long.	82°49'W	83°40'W	83°46'W	83°46'W	83°40'W
SiO_2 (%)	46.00	46.40	47.40	48.90	49.10
TiO_2	0.40	0.11	0.37	0.21	0.94
Al_2O_3	9.06	8.15	7.12	6.57	13.80
$Fe_2O_3^*$	10.50	12.00	9.95	10.30	12.80
FeO	6.34	8.95	6.06	6.52	3.37
MnO	0.19	0.36	0.21	0.17	0.15
MgO	22.30	19.90	20.40	21.50	5.34
CaO	5.69	8.88	9.49	7.18	15.90
Na_2O	0.46	0.39	0.47	0.39	0.19
K_2O	0.04	0.04	0.05	<0.02	0.03
P_2O_5	0.06	<0.05	0.06	<0.05	<0.05
H_2O^+	6.11	4.97	4.61	4.74	4.89
H_2O^-	0.10	0.07	0.21	0.17	0.05
CO_2	<0.01	<0.01	0.01	<0.01	<0.01
Sc (ppm)	17.9	12.5	22.3	13.6	58
Cr	1090	320	1470	860	80
Co	85	77	78	81	39
Ni	860	660	560	810	41
Cu	31	<1.00	57	17.0	114
Zn	84	120	78	74	81
As	<0.50	<0.50	<0.70	<0.40	1.30
Rb	<2.00	<2.00	2.00	<2.00	<2.00
Sr	31	15.0	52	20.0	274
Y	12.0	17.0	12.0	13.0	8.0
Zr	48	33	38	46	39
Nb	<1.00	<1.00	12.0	<1.00	1.10
Ag	0.0190	0.073	0.0140	<0.0100	<0.0100
Sb	<0.40	<0.40	<0.40	<0.40	<0.70
Cs	<0.260	<0.270	<0.280	<0.40	<0.50
Ba	<50	<60	<60	<70	<110
La	6.0	7.5	2.40	9.7	5.0
Ce	15.0	6.9	8.8	12.0	14.0
Nd	6.1	7.0	5.8	9.9	5.3
Sm	1.50	2.38	1.70	2.37	1.88
Eu	0.48	0.72	0.79	0.69	0.52
Tb	0.270	0.41	0.240	0.240	0.39
Yb	1.00	1.60	0.84	0.90	1.50
Lu	0.140	0.220	0.130	0.150	0.230
Hf	1.00	0.80	0.73	0.66	1.50
Ta	<0.170	<0.180	<0.190	<0.190	<0.220
Th	1.30	<0.150	<0.160	0.60	0.87
U	<0.30	<0.270	0.47	0.220	0.220
Pd (ppb)	4.3	<0.50	2.60	5.7	<0.50
Pt	4.9	<1.00	2.40	1.30	<1.00
Au	<1.70	30.0	<4.0	<2.50	<8.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. V. Diabase Dike.

MAP 4

	115	116	117	118
Lat.	34°12'N	34°28'N	37°10'N	37°10'N
Long.	83°46'W	83°58'W	83°34'W	83°34'W
SiO_2 (%)	44.50	47.40	47.70	48.20
TiO_2	1.32	0.70	1.74	1.67
Al_2O_3	17.60	15.30	14.80	18.20
$Fe_2O_3^*$	11.40	10.90	13.50	7.83
FeO	6.50	6.80	7.56	5.68
MnO	0.17	0.20	0.28	0.14
MgO	7.12	10.20	6.71	4.12
CaO	12.90	11.10	12.30	17.80
Na_2O	1.22	2.62	1.50	0.56
K_2O	0.15	0.20	0.29	0.30
P_2O_5	0.11	0.05	0.15	0.55
H_2O^+	1.90	0.33	2.04	0.84
H_2O^-	1.30	0.05	0.31	0.05
CO_2	0.02	0.09	<0.01	0.11
Sc (ppm)	47	48	51	31
Cr	310	400	79	169
Co	40	56	43	31
Ni	84	170	26.0	49
Cu	52	96	46	23.0
Zn	89	100	160	90
As	<3.0	<2.90	<0.80	<0.70
Rb	<2.00	<2.00	14.0	10.0
Sr	143	87	261	440
Y	33	19.0	45	25.0
Zr	84	43	114	204
Nb	1.50	<1.00	1.40	29.0
Ag	—	—	0.0160	0.035
Sb	<0.60	0.93	<0.50	<0.40
Cs	<1.10	<1.10	<0.40	<0.290
Ba	49	7.0	140	2000
La	2.80	1.20	9.7	39
Ce	8.0	3.6	22.0	76
Nd	<20.0	<20.0	15.0	35
Sm	3.3	1.67	5.0	7.2
Eu	1.10	0.59	1.60	1.77
Tb	0.68	0.45	1.10	0.91
Yb	3.3	2.60	4.1	2.50
Lu	0.47	0.36	0.58	0.34
Hf	2.00	0.96	3.2	5.4
Ta	0.070	0.037	<0.190	2.20
Th	0.57	<0.60	1.20	8.2
U	<1.30	<1.30	0.50	2.30
Ru (ppb)	<0.50	<0.50	—	—
Rh	<0.50	<0.50	—	—
Pd	<0.80	8.2	<0.50	0.70
Ir	<0.50	<0.50	—	—
Pt	<0.50	6.0	<1.00	1.00
Au	<14.0	<17.0	<1.50	40

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. W. Diabase Dike.

MAP 4

	119
Lat.	34° 0'N
Long.	83°15'W
SiO_2 (%)	46.70
TiO_2	1.10
Al_2O_3	17.10
$Fe_2O_3^*$	14.44
Fe_2O_3	2.30
FeO	10.40
MnO	0.18
MgO	7.70
CaO	9.40
Na_2O	3.05
K_2O	0.18
P_2O_5	0.19
H_2O^+	1.10
H_2O^-	0.21
CO_2	0.15
Sc (ppm)	31
Cr	78
Co	58
Ni	130
Cu	140
Zn	116
Rb	<88
Sr	180
Y	<20.0
Zr	40
Nb	<40
Sb	<3.3
Cs	<2.90
Ba	<430
La	5.0
Ce	13.0
Nd	<45
Sm	2.70
Eu	1.06
Tb	<2.03
Yb	3.2
Lu	0.47
Hf	1.40
Ta	0.230
Th	<1.90
U	<0.90

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
X. Amphibolite in Ropes Creek Metabasalt, Dahlonega area.

MAP 5

	120	121
Lat.	34°22'N	34°25'N
Long.	84° 9'W	83° 4'W
SiO_2 (%)	47.90	49.80
TiO_2	1.82	1.23
Al_2O_3	14.20	13.60
$Fe_2O_3^*$	14.70	11.10
FeO	10.70	8.10
MnO	0.20	0.18
MgO	7.24	7.87
CaO	9.32	11.60
Na_2O	3.36	2.51
K_2O	0.11	0.08
P_2O_5	0.19	0.13
H_2O^+	0.63	2.20
H_2O^-	0.03	0.01
CO_2	0.82	0.89
Sc (ppm)	47	43
Cr	60	300
Co	53	46
Ni	63	89
Cu	72	12.0
Zn	120	87
As	<3.0	2.10
Rb	4.0	7.0
Sr	144	139
Y	37	32
Zr	139	89
Nb	6.5	4.1
Sb	<0.70	<0.60
Cs	0.60	<1.00
Ba	16.0	16.0
La	6.4	5.0
Ce	17.0	12.0
Nd	<30	<50
Sm	4.4	3.1
Eu	1.40	1.00
Tb	0.85	0.63
Yb	3.7	2.70
Lu	0.56	0.39
Hf	3.0	2.00
Ta	0.40	0.260
Th	0.70	0.47
U	<1.40	<1.40
Ru (ppb)	<0.50	<0.50
Rh	<0.50	<0.50
Pd	<0.80	1.40
Ir	<0.50	<0.50
Pt	<0.50	2.90
Au	<15.0	<15.0

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. Y. Fe-Mn Quartzite.

MAP 5

	122
Lat.	34°25'N
Long.	84° 5'W
SiO_2 (%)	47.20
TiO_2	0.42
Al_2O_3	17.10
$Fe_2O_3^*$	12.16
Fe_2O_3	4.10
FeO	6.70
MnO	0.21
MgO	7.70
CaO	13.40
Na_2O	0.91
K_2O	0.06
P_2O_5	0.05
S	0.01
H_2O^+	0.64
H_2O^-	0.11
CO_2	0.01
Σ	99.00
Sc (ppm)	64
Cr	15.0
Co	45
Ni	29.0
Cu	34
Zn	110
As	<1.40
Rb	3.0
Sr	99
Y	11.0
Zr	19.0
Nb	<1.00
Sb	0.180
Cs	<0.40
Ba	9.0
La	1.30
Ce	11.0
Nd	<2.20
Sm	0.60
Eu	0.34
Tb	0.30
Yb	0.78
Lu	0.120
Hf	<0.190
Ta	<0.160
Th	<0.220
U	<0.50
Pd (ppb)	12.0
Pt	7.2
Au	<3.0

 (p. 30 follows)

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. Z. Diabase Dike.

MAP 6

	123
Lat.	33°30'N
Long.	82°52'W
SiO_2 (%)	46.20
TiO_2	1.20
Al_2O_3	16.20
$Fe_2O_3^*$	14.87
Fe_2O_3	1.80
FeO	10.80
MnO	0.18
MgO	8.50
CaO	10.00
Na_2O	2.75
K_2O	0.24
P_2O_5	0.14
H_2O^+	1.10
H_2O^-	0.23
CO_2	0.03
Sc (ppm)	37
Cr	340
Co	63
Ni	170
Cu	250
Zn	121
Rb	<90
Sr	150
Y	22.0
Zr	50
Nb	<40
Sb	<3.3
Cs	2.40
Ba	<440
La	3.0
Ce	9.0
Nd	11.0
Sm	3.0
Eu	1.08
Tb	1.13
Yb	3.1
Lu	0.43
Hf	2.00
Ta	<1.32
Th	<2.00
U	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AA. Diabase Dikes.

	124	125	126	127
Lat.	33°52'N	33°52'N	33°45'N	33°30'N
Long.	83°45'W	83°21'W	83°37'W	83° 7'W
SiO_2 (%)	46.70	47.40	48.80	51.70
TiO_2	0.97	0.44	0.91	1.30
Al_2O_3	15.00	12.80	17.90	13.70
$Fe_2O_3^*$	14.44	10.37	12.21	15.30
Fe_2O_3	2.40	1.90	1.10	2.50
FeO	10.60	7.40	9.20	10.90
MnO	0.14	0.09	0.14	0.15
MgO	10.00	15.00	7.10	5.90
CaO	9.60	9.90	10.50	9.70
Na_2O	2.44	1.47	2.76	2.43
K_2O	0.44	0.24	0.60	0.55
P_2O_5	0.13	0.08	0.13	0.14
H_2O^+	1.10	0.96	0.45	0.86
H_2O^-	0.18	0.19	0.26	0.33
CO_2	0.04	1.90	0.05	0.01
Sc (ppm)	41	34	38	45
Cr	286	1460	257	64
Co	69	65	51	51
Ni	210	390	140	56
Cu	310	130	250	210
Zn	121	87	103	124
Rb	<76	<63	<88	<81
Sr	130	57	160	84
Y	22.0	<20.0	<20.0	27.0
Zr	50	<20.0	60	60
Nb	<40	<40	<40	<40
Sb	<2.50	<1.90	<3.4	<2.90
Cs	1.00	<2.50	<3.0	0.70
Ba	245	<370	<440	<450
La	9.0	3.0	9.0	9.0
Ce	18.0	8.0	19.0	20.0
Nd	12.0	<40	<46	15.0
Sm	3.3	1.30	3.2	3.7
Eu	1.02	0.46	1.05	1.15
Tb	<2.05	<1.78	0.82	<2.18
Yb	3.7	1.60	3.4	3.6
Lu	0.50	0.260	0.46	0.53
Hf	2.40	1.00	2.40	2.70
Ta	0.150	<0.88	0.210	0.34
Th	<2.00	<1.80	<2.00	1.40
U	<1.00	<0.90	<0.90	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AB. Amphibolites in Ropes Creek Metabasalt.

MAP 8

	128	129	130	131	132	133	134
Lat.	33°45'N	33°44'N	33°44'N	33°44'N	33°34'N	33°48'N	33°49'N
Long.	84°51'W	84°49'W	84°55'W	84°56'W	84°55'W	84°56'W	84°55'W
$Fe_2O_3^*$ (%)	14.30	9.64	9.67	12.78	12.16	15.73	8.52
Fe_2O_3	4.90	2.80	2.60	4.10	3.60	5.90	3.30
FeO	7.70	5.90	6.20	7.30	7.20	8.20	4.60
MnO	0.21	0.15	0.14	0.15	0.18	0.18	0.14
Na_2O	3.23	3.10	2.56	2.16	2.56	1.48	2.29
P_2O_5	0.10	0.07	<0.02	0.07	0.10	0.08	0.17
H_2O^+	1.20	0.65	0.78	0.71	0.73	0.55	1.30
H_2O^-	0.05	0.15	0.15	0.10	0.14	0.14	0.18
Li (ppm)	15.0	7.9	6.0	8.9	8.4	6.5	38
Be	0.76	<0.50	<0.50	<0.50	0.50	0.61	2.40
Sc	40	45	35	48	47	37	17.8
V	400	190	170	300	310	410	120
Cr	28.0	119	510	350	254	48	77
Co	33	43	43	47	50	40	20.6
Ni	9.0	61	153	77	57	22.0	43
Cu	21.0	53	29.0	18.0	268	33	28.0
Zn	110	74	100	85	82	110	73
Rb	9.0	<2.00	4.0	7.0	3.0	5.0	100
Sr	235	135	123	254	139	285	131
Y	34	20.0	12.0	28.0	33	26.0	42
Zr	70	46	33	61	85	82	255
Nb	1.00	<1.00	<1.00	2.40	3.4	1.30	16.0
Mo	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Cd	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Sn	<2.00	<2.00	<2.00	<2.00	<2.00	2.00	4.0
Sb	<0.70	<0.70	<0.70	<0.80	<0.70	<0.70	<0.40
Cs	<0.70	<0.70	<1.10	<0.70	<0.70	<1.20	3.9
Ba	75	26.0	73	64	39	121	540
La	7.6	2.90	2.90	4.0	2.40	5.8	34
Ce	13.0	6.4	4.7	9.7	6.6	14.0	77
Nd	14.0	6.7	<8.0	9.6	7.3	10.0	34
Sm	4.1	1.91	1.30	2.83	2.75	3.3	7.8
Eu	1.40	0.68	0.47	1.05	0.82	1.20	1.58
Tb	0.79	0.43	0.30	0.67	0.70	0.84	1.20
Yb	3.7	1.80	1.20	2.50	3.0	2.90	3.8
Lu	0.53	0.250	0.180	0.39	0.46	0.45	0.56
Hf	1.60	1.00	0.81	1.50	2.00	2.10	6.6
Ta	<0.160	0.072	0.054	0.190	0.290	0.150	1.40
Pb	9.0	28.0	7.8	6.4	10.0	8.2	16.0
Th	1.10	0.49	<0.70	<0.70	<0.70	1.10	9.7
U	0.280	0.76	<0.280	<0.40	<0.40	<0.40	2.10

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AC. Ultramafic rocks in Soapstone Ridge complex.

MAP 8

	135	136	137	138	139	140	141
Lat.	33°37'N	33°37'N	33°37'N	33°37'N	33°37'N	33°37'N	33°37'N
Long.	84°15'W	84°15'W	84°15'W	84°15'W	84°15'W	84°15'W	84°22'W
SiO_2 (%)	41.10	41.20	45.10	46.50	47.10	49.20	50.40
TiO_2	0.62	0.57	0.30	0.26	0.30	0.57	0.21
Al_2O_3	5.96	6.49	6.36	6.64	5.51	6.83	5.20
$Fe_2O_3^*$	19.80	14.10	12.00	9.72	11.60	10.30	—
Fe_2O_3	—	—	—	—	—	—	7.20
FeO	—	—	—	—	—	—	4.20
MnO	0.26	0.17	0.16	0.24	0.15	0.16	0.17
MgO	25.60	27.20	28.40	23.50	27.80	23.60	27.40
CaO	0.22	1.26	0.34	8.33	0.67	3.55	1.20
Na_2O	0.18	<0.15	<0.15	0.21	0.16	0.33	<0.01
K_2O	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.01
P_2O_5	0.16	0.18	<0.05	<0.05	0.13	0.11	0.06
H_2O^+	—	—	—	—	—	—	2.70
H_2O^-	—	—	—	—	—	—	0.97
CO_2	—	—	—	—	—	—	<0.01
Be (ppm)	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
B	—	<10.0	<10.0	<10.0	<10.0	<10.0	—
Sc	14.4	12.4	11.2	15.4	10.7	23.2	—
V	150	97	65	78	59	82	—
Cr	1960	2130	2900	2400	1940	1740	—
Co	122	141	128	101	74	83	—
Cu	36	38	81	35	200	6.2	—
Zn	106	76	81	67	102	111	—
Rb	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	—
Sr	<15.0	29.0	<15.0	<15.0	<15.0	<15.0	—
Y	19.0	19.0	13.0	25.0	15.0	36	—
Zr	94	72	39	56	48	140	—
Nb	—	<25.0	<25.0	<25.0	<25.0	<25.0	—
Mo	—	<10.0	<10.0	<10.0	<10.0	<10.0	—
Ag	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	—
Cd	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	—
Cs	<0.60	<0.60	<0.70	0.35	<0.50	<0.60	—
Ba	70	52	44	67	<200	<200	—
La	8.9	9.0	3.6	35	15.9	61	—
Ce	19.2	20.3	10.1	61	22.6	54	—
Nd	11.0	5.2	<20.0	38	13.0	53	—
Sm	1.72	1.91	0.72	7.4	1.92	10.1	—
Eu	0.32	0.34	0.220	3.3	0.38	2.67	—
Tb	—	0.280	0.084	1.04	0.230	1.20	—
Yb	0.61	0.64	0.33	1.86	0.65	2.79	—
Lu	0.092	0.110	0.063	0.246	0.098	0.34	—
Hf	1.27	1.41	0.53	0.80	0.79	2.47	—
Ta	0.190	<0.40	0.130	0.36	0.093	0.250	—
Th	0.83	0.83	0.65	0.79	1.02	4.5	—
U	<0.60	<0.60	0.280	<0.60	0.50	0.51	—

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AD. Ultramafic rocks in small bodies.

MAP 8

	142	143	144
Lat.	33°45'N	33°37'N	33°45'N
Long.	84° 7'W	84°37'W	84°22'W
SiO_2 (%)	43.70	53.00	58.30
TiO_2	0.32	0.24	<0.02
Al_2O_3	7.30	4.53	0.91
$Fe_2O_3^*$	12.00	10.10	7.95
MnO	0.15	0.19	0.16
MgO	28.40	24.80	27.30
CaO	0.02	1.96	0.06
Na_2O	<0.15	0.36	<0.15
K_2O	<0.02	<0.02	<0.02
P_2O_5	<0.05	<0.05	0.12
Be (ppm)	<1.00	<1.00	<1.00
B	12.0	15.0	<10.0
Sc	12.2	25.0	3.6
V	73	84	26.0
Cr	2650	2890	3600
Co	103	65	79
Cu	38	19.0	6.9
Zn	71	106	110
Rb	<20.0	<20.0	<20.0
Sr	<15.0	<15.0	<15.0
Y	13.0	59	<10.0
Zr	47	55	<20.0
Nb	<25.0	<25.0	<25.0
Mo	<10.0	<10.0	<10.0
Ag	<1.00	<1.00	<1.00
Cd	<2.00	<2.00	<2.00
Cs	<0.60	<0.60	<0.50
Ba	<200	<200	<90
La	5.3	33	1.08
Ce	12.0	19.3	13.0
Nd	<20.0	36	<7.0
Sm	0.76	8.4	0.266
Eu	0.160	1.34	0.044
Tb	0.099	1.66	<0.30
Yb	0.270	5.3	0.280
Lu	0.052	0.78	0.044
Hf	0.70	0.56	<0.50
Ta	<0.40	0.52	0.190
Th	1.16	0.77	0.50
U	<0.70	<0.80	0.190

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AE. Diabase Dikes.

MAP 8

	145	146	147
Lat.	33°45'N	33°37'N	33°52'N
Long.	84°15'W	84° 0'W	84°15'W
SiO_2 (%)	47.70	53.00	46.70
TiO_2	0.92	0.82	0.92
Al_2O_3	17.70	14.50	17.60
$Fe_2O_3^*$	13.54	11.91	13.86
Fe_2O_3	2.60	2.40	4.10
FeO	9.40	8.30	7.90
MnO	0.12	0.15	0.15
MgO	7.30	6.60	6.60
CaO	9.40	10.80	9.20
Na_2O	2.72	2.20	2.45
K_2O	0.24	0.41	0.28
P_2O_5	0.16	0.11	0.17
H_2O^+	1.40	1.10	3.20
H_2O^-	0.20	0.23	1.30
CO_2	0.03	0.03	0.02
Sc (ppm)	32	45	32
Cr	30	160	27.7
Co	56	46	59
Ni	120	45	87
Cu	150	130	140
Zn	98	103	105
Rb	<66	<66	<71
Sr	150	110	160
Y	23.0	20.0	22.0
Zr	<20.0	60	50
Nb	<40	—	—
Sb	<2.00	<2.20	<2.10
Cs	1.80	1.00	3.5
Ba	<360	<400	212
La	5.0	8.0	4.0
Ce	10.0	16.0	11.0
Nd	8.0	10.0	11.0
Sm	2.40	2.80	2.50
Eu	0.85	0.83	0.88
Tb	<1.75	<1.98	<1.86
Yb	3.0	2.60	2.70
Lu	0.42	0.36	0.40
Hf	1.30	1.70	1.50
Ta	<0.95	0.31	0.160
Th	<1.70	1.90	<1.80
U	<0.90	<1.10	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AF. Amphibolite in Ropes Creek Metabasalt.

MAP 9

	148
Lat.	33°33'N
Long.	85° 8'W
$Fe_2O_3^*$ (%)	11.68
Fe_2O_3	7.60
FeO	3.80
MnO	0.21
Na_2O	0.50
P_2O_5	0.05
H_2O^+	0.81
H_2O^-	0.39
Li (ppm)	<5.0
Be	<0.50
Sc	35
V	200
Cr	570
Co	41
Ni	203
Cu	22.0
Zn	120
Rb	2.00
Sr	440
Y	68
Zr	57
Nb	<1.00
Mo	<1.00
Cd	<0.200
Sn	<2.00
Sb	<0.70
Cs	<1.20
Ba	33
La	40
Ce	13.0
Nd	63
Sm	17.0
Eu	5.0
Tb	2.90
Yb	7.5
Lu	1.02
Hf	1.50
Ta	0.055
Pb	10.0
Th	0.77
U	<0.40

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AG. Diabase Dikes.

	149	150	151
Lat.	33°15'N	33°22'N	34° 7'N
Long.	83°45'W	83°22'W	83°45'W
SiO_2 (%)	46.60	47.70	47.70
TiO_2	0.56	0.74	0.96
Al_2O_3	14.30	18.20	17.70
$Fe_2O_3^*$	12.98	13.34	13.47
Fe_2O_3	2.90	1.70	3.00
FeO	8.80	9.30	8.90
MnO	0.12	0.16	0.15
MgO	12.60	8.40	7.40
CaO	9.40	10.30	9.50
Na_2O	1.77	2.70	2.86
K_2O	0.26	0.25	0.29
P_2O_5	0.11	0.11	0.18
H_2O^+	1.80	0.81	1.60
H_2O^-	0.67	0.18	0.22
CO_2	0.18	0.21	0.02
Sc (ppm)	39	33	31
Cr	640	150	56
Co	70	62	57
Ni	280	160	110
Cu	210	150	120
Zn	113	104	110
Rb	<73	<85	<69
Sr	130	150	160
Y	<20.0	<20.0	<20.0
Zr	40	<20.0	48
Nb	<40	<40	<40
Sb	<2.40	<2.90	<2.20
Cs	1.40	0.70	1.80
Ba	<410	<410	<370
La	7.0	4.0	6.0
Ce	16.0	8.0	13.0
Nd	14.0	<44	13.0
Sm	2.00	1.90	2.70
Eu	0.72	76	0.98
Tb	<2.00	<1.96	0.78
Yb	3.0	2.80	2.80
Lu	0.41	0.42	0.40
Hf	1.80	1.40	1.40
Ta	0.110	0.120	0.210
Th	<1.90	<1.90	<1.70
U	<0.90	<0.90	<1.00

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AH. Amphibolites in Ropes Creek Metabasalt.

MAP 11

	152	153	154	155	156	157
Lat.	33°15'N	33°15'N	33°22'N	33°15'N	33°22'N	33°21'N
Long.	84°22'W	84°22'W	84°22'W	84°22'W	84°22'W	84°29'W
SiO_2 (%)	47.30	51.00	51.60	52.40	54.70	—
TiO_2	1.70	1.00	0.30	0.34	1.50	—
Al_2O_3	14.50	16.70	5.17	4.81	12.90	—
$Fe_2O_3^*$	14.23	11.94	12.20	9.96	11.10	12.44
Fe_2O_3	4.30	8.10	—	—	3.00	4.40
FeO	9.10	3.30	—	—	6.80	6.90
MnO	0.26	0.20	0.31	0.19	0.15	0.26
MgO	7.10	2.90	24.50	25.20	5.50	—
CaO	10.50	13.70	1.05	2.41	9.50	—
Na_2O	2.70	0.45	0.23	0.31	3.00	2.43
K_2O	0.62	0.10	0.02	<0.02	1.70	—
P_2O_5	0.18	0.21	0.07	0.07	0.24	0.07
H_2O^+	1.90	2.00	—	—	1.20	0.65
H_2O^-	0.37	0.63	—	—	0.16	0.12
CO_2	0.15	0.13	—	—	0.08	—
Li (ppm)	24.0	8.0	—	—	6.0	8.9
Be	—	—	<1.00	<1.00	—	<0.50
B	—	—	32	<10.0	—	—
Sc	47	36	26.0	24.6	41	45
V	—	—	77	87	—	480
Cr	194	153	1520	2140	127	310
Co	49	18.4	65	65	43	41
Ni	62	22.0	—	—	44	100
Cu	20.0	20.0	51	15.0	<10.0	39
Zn	119	56	104	86	64	96
Rb	7.0	2.00	<20.0	<20.0	4.0	<2.00
Sr	120	215	<15.0	<15.0	245	261
Y	34	72	14.0	21.0	30	35
Zr	125	75	28.0	33	103	83
Nb	5.8	3.6	<25.0	<25.0	8.6	1.00
Mo	1.20	1.50	<10.0	<10.0	0.70	<1.00
Ag	—	—	<1.00	<1.00	—	—
Cd	—	—	<2.00	<2.00	—	<0.200
Sn	—	—	—	—	—	<2.00
Sb	2.25	0.63	—	—	<10.00	<0.90
Cs	<0.90	<0.80	<0.60	<0.60	1.18	<1.30
Ba	50	48	<200	<200	46	45
La	4.4	9.6	4.5	10.2	4.2	3.7
Ce	11.7	12.2	11.6	23.8	11.4	7.9
Nd	21.9	<40	7.0	16.0	<50	9.1
Sm	3.7	4.6	1.51	2.42	3.7	3.4
Eu	1.27	2.05	0.38	0.51	1.26	1.20
Tb	1.20	1.44	0.240	0.40	1.18	0.92
Yb	4.7	5.6	0.80	1.30	3.8	3.5
Lu	0.62	0.77	0.160	0.180	0.55	0.48
Hf	3.6	2.00	0.37	0.49	2.86	2.30
Ta	<0.60	0.189	<0.40	<0.40	<0.50	0.092
Pb	—	—	—	—	—	7.0
Th	0.48	0.289	0.290	0.210	<0.60	<0.80
U	<0.80	0.51	<0.60	<0.70	<0.80	<0.40

Table 1. **Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.**
AI. Amphibolites in Paulding Volcanic-Plutonic complex.

MAP 11

	158	159	160	161	162
Lat.	33°15'N	33°15'N	33°15'N	33°15'N	33°15'N
Long.	84°22'W	84°22'W	84°22'W	84°22'W	84°22'W
SiO_2 (%)	52.80	57.20	57.90	61.60	62.40
TiO_2	0.57	0.54	0.66	0.56	0.37
Al_2O_3	18.50	16.00	17.00	17.00	16.00
$Fe_2O_3^*$	8.38	7.47	8.54	4.86	6.04
Fe_2O_3	4.90	3.60	3.90	3.10	3.40
FeO	2.50	4.20	3.70	2.10	2.80
MnO	0.21	0.14	0.18	0.11	0.16
MgO	2.80	3.40	2.50	1.60	2.40
CaO	9.20	5.20	7.30	5.30	7.00
Na_2O	4.50	5.30	4.10	5.90	4.30
K_2O	1.00	2.00	1.20	0.79	0.78
P_2O_5	0.19	0.04	0.18	0.18	0.11
H_2O^+	1.60	1.20	1.20	0.72	0.85
H_2O^-	0.89	0.41	0.39	0.23	0.19
CO_2	0.05	0.04	0.05	0.04	0.06
Li (ppm)	7.0	4.0	5.0	2.00	5.0
Sc	28.7	25.9	25.2	17.2	21.5
Cr	55	43	8.9	14.9	48
Co	23.9	19.9	20.9	8.9	14.2
Ni	<10.0	<10.0	<10.0	<10.0	<10.0
Cu	16.0	12.0	72	28.0	64
Zn	87	87	76	47	70
Rb	43	47	31	11.0	19.0
Sr	460	210	183	224	282
Y	19.0	14.0	22.0	21.0	11.0
Zr	95	93	108	128	63
Nb	7.1	6.7	6.1	7.1	9.8
Mo	1.40	0.36	0.82	0.46	0.30
Sb	<0.80	0.78	0.66	0.63	1.15
Cs	0.30	0.50	0.48	<0.60	0.33
Ba	310	400	530	148	135
La	13.2	10.0	12.2	12.8	7.4
Ce	22.7	17.6	29.4	27.2	11.4
Nd	19.9	<40	21.9	20.9	<29.9
Sm	3.2	2.18	3.7	3.6	1.81
Eu	0.92	0.62	1.05	1.07	0.52
Tb	0.59	0.46	0.76	0.75	0.38
Yb	2.37	1.88	2.68	2.84	1.38
Lu	0.34	0.263	0.38	0.38	0.208
Hf	2.66	2.47	3.3	3.7	1.70
Ta	0.45	0.46	0.64	0.59	1.59
Th	4.5	4.1	5.1	6.0	3.7
U	6.2	1.71	2.89	1.77	3.3

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia.
AJ. Ultramafic rocks in Ropes Creek Metabasalt.

MAP 11

	163	164
Lat.	33°15'N	33°21'N
Long.	84°22'W	84°29'W
SiO_2 (%)	44.50	—
TiO_2	0.48	—
Al_2O_3	11.50	—
$Fe_2O_3^*$	11.97	11.67
Fe_2O_3	2.30	2.80
FeO	8.50	8.20
MnO	0.20	0.21
MgO	18.60	—
CaO	6.70	—
Na_2O	1.10	0.71
K_2O	0.14	—
P_2O_5	0.05	0.03
H_2O^+	4.40	4.10
H_2O^-	0.31	0.49
CO_2	0.25	—
Li (ppm)	10.0	7.5
Be	—	<0.50
Sc	28.2	24.4
V	—	170
Cr	1300	1450
Co	88	75
Ni	620	580
Cu	50	30
Zn	70	94
Rb	<2.00	<2.00
Sr	23.0	9.0
Y	15.0	90
Zr	37	23.0
Nb	1.80	<1.00
Mo	0.060	<1.00
Cd	—	<0.200
Sn	—	<2.00
Sb	0.92	<0.70
Cs	<0.80	<1.10
Ba	23.0	44
La	1.93	43
Ce	6.1	9.1
Nd	<40	78
Sm	1.22	24.4
Eu	0.44	6.8
Tb	0.41	4.1
Yb	1.57	11.6
Lu	0.223	1.50
Hf	0.84	0.65
Ta	<0.50	<0.070
Pb	—	7.0
Th	10.000	<0.70
U	<0.60	<0.50

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AK. Diabase Dikes.

	165	166
Lat.	33° 0'N	33° 0'N
Long.	84° 0'W	84°45'W
SiO_2 (%)	47.10	51.60
TiO_2	0.45	1.30
Al_2O_3	16.40	13.70
$Fe_2O_3^*$	11.18	15.59
Fe_2O_3	1.90	2.30
FeO	7.90	11.40
MnO	0.15	0.18
MgO	12.10	6.00
CaO	9.80	10.20
Na_2O	1.90	2.32
K_2O	0.31	0.47
P_2O_5	0.09	0.14
H_2O^+	1.40	0.84
H_2O^-	0.28	0.19
CO_2	0.01	0.02
Sc (ppm)	31	47
Cr	880	71
Co	65	52
Ni	320	58
Cu	130	200
Zn	88	127
Rb	<71	<71
Sr	78	100
Y	<20.0	29.0
Zr	20.0	80
Nb	<40	—
Sb	<2.60	<2.20
Cs	<2.60	0.80
Ba	<370	<420
La	5.0	9.0
Ce	12.0	19.0
Nd	<39	13.0
Sm	1.50	3.6
Eu	0.51	1.12
Tb	<1.75	0.97
Yb	2.20	3.4
Lu	0.31	0.53
Hf	1.00	2.60
Ta	0.100	0.31
Th	0.90	1.80
U	<0.80	<1.10

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AL. Ultramafic rock.

MAP 12

	167
Lat.	33° 0'N
Long.	85° 7'W
SiO_2 (%)	43.70
TiO_2	0.25
Al_2O_3	8.24
$Fe_2O_3^*$	11.70
MnO	0.26
MgO	23.60
CaO	6.24
Na_2O	0.51
K_2O	0.05
P_2O_5	<0.05
Be (ppm)	1.80
B	<10.0
Sc	27.6
V	110
Cr	2220
Co	91
Cu	81
Zn	78
Rb	9.3
Sr	<15.0
Y	22.0
Zr	32
Nb	<25.0
Mo	<10.0
Ag	<1.00
Cd	<2.00
Cs	<0.70
Ba	120
La	7.1
Ce	9.8
Nd	8.5
Sm	2.32
Eu	0.55
Tb	0.48
Yb	2.53
Lu	0.37
Hf	<0.80
Ta	<0.40
Th	0.30
U	0.170

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AM. Diabase Dikes.

	168	169
Lat.	32°52'N	32°45'N
Long.	83°45'W	83°52'W
SiO_2 (%)	47.40	48.00
TiO_2	0.54	0.56
Al_2O_3	14.90	15.00
$Fe_2O_3^*$	13.00	12.26
Fe_2O_3	2.80	2.50
FeO	9.00	8.40
MnO	0.12	0.12
MgO	11.60	10.00
CaO	9.70	10.90
Na_2O	1.98	1.97
K_2O	0.21	0.20
P_2O_5	0.08	0.09
H_2O^+	1.40	1.80
H_2O^-	0.56	0.44
CO_2	0.05	0.01
Sc (ppm)	37	44
Cr	540	470
Co	70	60
Ni	250	290
Cu	240	190
Zn	96	96
Rb	<74	<66
Sr	55	72
Y	<20.0	22.0
Zr	<20.0	<20.0
Nb	<40	<40
Sb	<2.60	<2.10
Cs	4.0	3.2
Ba	<400	<390
La	2.00	3.0
Ce	6.0	7.0
Nd	<43	6.0
Sm	1.20	1.30
Eu	0.48	0.53
Tb	<1.97	<1.92
Yb	2.60	2.80
Lu	0.37	0.41
Hf	1.10	1.00
Ta	<1.04	0.140
Th	0.90	<1.90
U	<0.90	<0.90

Table 1. Chemical Data For Platinum Potential In The Crystalline Rock Of Georgia. AN. Diabase Dikes.

MAP 14

	170
Lat.	32°45'N
Long.	84°37'W
SiO_2 (%)	46.30
TiO_2	0.68
Al_2O_3	15.90
$Fe_2O_3^*$	12.94
Fe_2O_3	2.20
FeO	9.30
MnO	0.13
MgO	11.20
CaO	10.60
Na_2O	1.91
K_2O	0.14
P_2O_5	0.11
H_2O^+	1.30
H_2O^-	0.16
CO_2	0.01
Sc (ppm)	42
Cr	330
Co	67
Ni	270
Cu	230
Zn	106
Rb	<70
Sr	43
Y	21.0
Zr	<20.0
Nb	<40
Sb	<2.30
Cs	1.70
Ba	<390
La	3.0
Ce	5.0
Nd	<43
Sm	1.60
Eu	0.60
Tb	<1.96
Yb	2.70
Lu	0.39
Hf	1.00
Ta	<0.93
Th	<1.90
U	<1.00

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology.
A. Amphibolites.

	42	43	44	1	48	37	88	49	2	115
Lat.	34°51'N	34°56'N	34°51'N	34°38'N	34°53'N	34°41'N	34°31'N	34°54'N	34°32'N	34°12'N
Long.	83°46'W	83°47'W	83°46'W	83°47'W	83°35'W	83°46'W	84° 0'W	83°36'W	83°53'W	83°46'W
SiO_2 (%)	37.70	41.30	41.50	41.60	42.60	43.30	43.80	43.90	44.50	44.50
TiO_2	0.17	0.02	0.92	3.15	0.93	1.96	0.99	1.00	1.17	1.32
Al_2O_3	6.10	0.74	19.70	17.40	18.50	16.40	13.30	17.40	15.60	17.60
$Fe_2O_3^*$	16.16	9.37	13.47	11.50	16.30	14.60	9.75	16.16	17.10	11.40
Fe_2O_3	5.70	2.80	2.80	—	2.40	—	—	4.10	—	—
FeO	8.40	5.30	9.20	4.90	11.30	10.80	6.80	9.90	9.60	6.50
MnO	0.24	0.12	0.22	0.18	0.20	0.22	0.16	0.19	0.21	0.17
MgO	25.20	43.70	7.10	5.62	7.50	7.30	7.08	7.80	7.46	7.12
CaO	6.20	0.75	13.70	18.80	8.40	8.58	12.40	8.90	11.70	12.90
Na_2O	0.29	0.06	1.78	0.50	1.85	1.89	2.79	2.08	1.57	1.22
K_2O	0.05	0.03	0.24	0.08	0.19	0.27	0.19	0.50	0.17	0.15
P_2O_5	0.04	0.03	0.30	0.28	0.10	0.21	0.09	0.11	<0.05	0.11
S	0.07	<0.01	0.09	—	0.01	—	—	<0.01	—	—
H_2O^+	5.10	4.30	1.30	1.10	2.80	3.70	1.90	2.10	0.75	1.90
H_2O^-	0.16	0.22	0.05	0.10	2.10	2.60	<0.01	0.92	0.01	1.30
CO_2	3.40	0.35	0.01	0.02	0.01	<0.01	8.20	0.01	<0.01	0.02
Σ	—	—	—	—	99.00	—	—	—	—	—
B (ppm)	—	—	—	—	2.00	—	—	—	—	—
Sc	18.5	7.1	22.4	44	30	50	41	32	62	47
Cr	1000	2600	95	17.0	14.0	360	340	47	28.0	310
Co	123	119	49	60	66	46	43	59	62	40
Ni	1100	2300	110	110	112	88	100	100	72	84
Cu	56	2.00	78	700	118	59	130	110	92	52
Zn	69	40	86	85	100	130	84	111	83	89
As	31	<1.30	7.0	<1.90	<5.0	<2.20	<2.50	<3.2	<7.0	<3.0
Rb	4.0	3.0	13.0	7.0	3.0	6.0	4.0	2.00	7.0	<2.00
Sr	45	6.0	600	550	52	147	145	50	148	143
Y	8.0	7.0	24.0	81	32	44	22.0	38	9.0	33
Zr	16.0	9.0	48	189	51	117	58	60	19.0	84
Nb	<0.50	<0.50	1.00	4.3	<1.00	2.30	3.4	<0.50	<1.00	1.50
Sb	0.38	<0.30	<0.50	<0.70	<0.70	<0.60	0.34	<0.60	<0.80	<0.60
Cs	<0.70	<0.50	0.82	<0.90	<0.60	<1.00	0.67	<0.80	<1.20	<1.10
Ba	11.0	12.0	38	16.0	58	75	8.0	24.0	16.0	49
La	0.41	0.087	3.1	12.1	1.50	4.2	2.70	2.00	0.92	2.80
Ce	1.50	<2.10	7.1	21.0	21.0	11.0	7.6	3.7	20.0	8.0
Nd	<60	<40	<60	25.0	<13.0	12.0	<19.0	<70	<60	<20.0
Sm	0.33	0.047	2.93	8.6	2.09	4.9	2.13	2.46	0.53	3.3
Eu	0.130	0.0260	1.53	2.70	0.85	1.52	0.73	0.93	0.220	1.10
Tb	0.077	<0.080	0.65	2.00	0.65	1.14	0.48	0.66	0.110	0.68
Yb	0.43	<0.50	2.30	7.5	3.3	4.6	2.30	3.5	0.83	3.3
Lu	0.083	<0.110	0.34	1.07	0.48	0.69	0.290	0.55	0.120	0.47
Hf	0.250	<0.40	0.75	4.7	1.30	3.0	1.50	1.60	<0.60	2.00
Ta	<0.040	<0.030	0.054	0.210	0.048	0.120	0.170	0.068	<0.050	0.070
Th	<0.60	<0.50	<0.60	<0.90	<0.90	<0.70	<0.60	0.43	<0.70	0.57
U	<1.70	<1.10	<1.60	<0.70	<0.90	<0.50	<1.10	<1.90	<1.80	<1.30
Ru (ppb)	—	—	—	—	—	—	<0.50	—	<0.50	<0.50
Rh	<0.50	0.50	<0.50	<0.50	—	<0.50	<0.50	<0.50	<0.50	<0.50
Pd	3.2	3.1	<0.50	0.60	<0.50	<0.50	<0.80	0.50	<0.80	<0.80
Ir	—	—	—	—	—	—	<0.50	—	<0.50	<0.50
Pt	6.0	4.0	<1.00	<1.00	<1.00	<1.00	<0.50	<1.00	0.70	<0.50
Au	4.1	—	—	<6.0	—	<10.0	<15.0	—	<24.0	<14.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
A. Amphibolites.

	50	51	38	39	52	3	61	53	31	4
Lat. Long.	34°55'N 83°36'W	34°52'N 83°34'W	34°48'N 83°51'W	34°43'N 83°50'W	34°56'N 83°35'W	34°50'N 83°19'W	34°55'N 83°10'W	34°53'N 83°35'W	34°40'N 83°41'W	34°44'N 83°41'W
SiO_2 (%)	44.60	45.00	45.00	45.40	45.50	45.60	45.80	45.80	46.00	46.10
TiO_2	0.93	0.91	2.20	1.22	1.00	1.77	1.80	0.93	3.75	1.46
Al_2O_3	17.70	17.90	14.90	14.00	17.00	16.60	15.80	17.50	14.10	15.40
$Fe_2O_3^*$	15.16	13.70	12.80	9.67	14.24	14.40	15.87	15.73	17.30	12.30
Fe_2O_3	3.30	—	—	2.45	6.20	—	4.10	3.10	—	2.08
FeO	10.20	7.80	9.60	6.50	6.60	3.20	10.00	10.20	10.00	9.20
MnO	0.19	0.21	0.27	0.10	0.23	0.23	0.23	0.18	0.22	0.21
MgO	7.90	7.45	7.59	9.71	5.80	7.35	11.20	7.70	4.25	8.32
CaO	8.80	11.30	11.80	12.50	11.80	9.46	10.00	9.70	6.95	11.00
Na_2O	2.57	0.89	2.18	2.19	1.87	2.16	0.80	2.80	0.84	1.78
K_2O	0.19	0.21	0.86	1.99	0.56	0.53	0.16	0.08	0.58	0.38
P_2O_5	0.10	0.09	0.21	1.37	0.14	0.22	0.04	0.11	0.53	0.10
S	0.01	0.04	—	—	<0.01	0.02	0.17	0.01	—	—
H_2O^+	1.60	2.30	1.30	1.10	1.40	1.30	0.70	0.73	2.70	1.40
H_2O^-	0.84	0.73	0.04	0.05	0.42	0.94	0.08	0.17	2.30	0.98
CO_2	0.02	0.01	0.56	0.03	0.02	0.01	<0.01	0.01	0.03	0.01
Σ	99.00	—	—	—	—	—	101.00	99.00	—	—
Li (ppm)	—	—	—	—	—	14.0	—	—	—	—
Be	—	—	—	—	—	1.00	—	—	—	—
B	3.0	14.0	—	—	—	—	3.0	2.00	—	—
Sc	27.7	55	47	44	51	31	47	29.9	34	50
V	—	—	—	—	—	210	—	—	—	—
Cr	12.0	130	280	62	259	86	520	33	44	265
Co	59	46	52	49	56	52	58	55	52	50
Ni	142	57	110	88	86	43	149	105	62	110
Cu	127	144	84	92	29.0	4.0	57	33	290	54
Zn	97	120	150	93	120	130	120	92	180	100
Ga	—	—	—	—	—	21.0	—	—	—	—
As	<5.0	<4.0	18.0	<2.30	<4.0	<2.30	<4.0	<5.0	<1.50	<1.80
Rb	8.0	11.0	12.0	104	5.0	18.0	5.0	6.0	5.0	4.0
Sr	105	122	310	2700	191	280	112	95	68	243
Y	32	24.0	38	12.0	31	26.0	12.0	35	61	35
Zr	55	27.0	131	153	61	<70	26.0	56	340	89
Nb	<1.00	2.40	3.0	23.0	1.30	6.6	<1.00	1.20	29.0	1.30
Mo	—	—	—	—	—	<2.00	—	—	—	—
Ag	—	—	—	—	—	<2.00	—	—	—	—
Cd	—	—	—	—	—	<2.00	—	—	—	—
Sn	—	—	—	—	—	<10.0	—	—	—	—
Sb	<0.60	4.9	<0.70	<0.60	<0.70	<0.140	<0.70	<0.70	<0.50	<0.60
Cs	<0.60	<0.70	<1.10	0.62	<0.90	<0.280	<1.00	<0.60	<0.90	<1.00
Ba	73	52	113	880	47	71	35	27.0	133	176
La	1.30	7.7	5.9	128	2.60	9.3	2.20	1.70	41	3.0
Ce	12.0	11.0	17.0	269	6.5	21.0	4.8	3.5	87	8.1
Nd	<12.0	9.3	<50	140	<70	16.0	<11.0	<12.0	49	9.2
Sm	2.06	2.76	5.2	26.8	2.51	4.1	1.10	2.24	13.0	3.4
Eu	0.81	0.82	1.60	5.9	0.87	1.50	0.49	0.89	3.4	1.20
Tb	0.65	0.48	1.10	1.50	0.62	0.76	0.180	0.77	1.90	0.80
Yb	3.1	1.40	4.5	1.90	3.4	2.90	<1.20	3.4	5.1	3.3
Lu	0.46	0.30	0.61	0.260	0.50	0.47	0.160	0.52	0.73	0.52
Hf	1.30	<0.80	3.4	5.4	1.40	2.60	0.49	1.40	9.0	2.40
Ta	0.069	0.210	0.170	0.76	0.270	0.45	0.290	0.057	1.90	0.075
Pb	—	—	—	—	—	<4.0	—	—	—	—
Bi	—	—	—	—	—	<10.0	—	—	—	—
Th	<0.90	<0.80	0.80	13.0	<0.70	1.40	<0.60	<0.90	5.3	<0.60
U	<0.90	<0.70	<1.50	1.90	<2.10	0.67	<1.30	<0.90	1.30	<0.40
Ru (ppb)	—	—	<0.50	—	—	—	—	—	—	—
Rh	—	—	<0.50	<0.50	<0.50	—	—	—	<0.50	<0.50
Pd	<0.50	5.3	<0.80	1.10	1.80	<0.50	1.40	<0.50	3.5	0.70
Ir	—	—	<0.50	—	—	—	—	—	—	—
Pt	3.3	4.3	<0.50	<1.00	5.0	<1.00	3.2	<1.00	3.3	<1.00
Au	—	<27.0	<16.0	<10.0	—	<2.20	—	—	<4.0	<12.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
A. Amphibolites.

	5	6	54	89	32	7	62	46	8	152
Lat.	34°42'N	34°48'N	34°56'N	34°33'N	34°37'N	34°39'N	34°56'N	34°58'N	34°47'N	33°15'N
Long.	83°41'W	83°33'W	83°34'W	84° 3'W	83°40'W	83°45'W	83°10'W	83°45'W	83°46'W	84°22'W
SiO_2 (%)	46.30	46.20	46.70	46.70	47.00	47.00	47.00	47.10	47.10	47.30
TiO_2	1.28	0.36	0.96	0.23	3.49	1.40	1.50	0.54	1.49	1.70
Al_2O_3	14.80	15.80	16.00	16.80	13.50	15.00	15.90	17.00	14.60	14.50
$Fe_2O_3^*$	13.10	10.50	14.06	7.03	17.30	12.80	16.59	8.29	13.60	14.23
Fe_2O_3	—	—	5.00	—	—	—	4.70	2.20	—	4.30
FeO	8.50	7.70	7.60	5.20	7.10	8.00	9.60	5.10	7.60	9.10
MnO	0.25	0.16	0.20	0.11	0.24	0.24	0.19	0.13	0.17	0.26
MgO	8.27	11.30	7.60	12.40	5.87	7.97	7.50	9.00	7.16	7.10
CaO	11.40	12.90	11.20	13.90	6.96	10.80	10.00	14.80	12.00	10.50
Na_2O	2.31	1.27	2.43	1.21	0.81	2.43	1.19	1.99	2.05	2.70
K_2O	0.09	0.06	0.40	0.13	0.49	0.08	0.35	0.13	0.13	0.62
P_2O_5	0.17	<0.05	0.09	<0.05	0.39	0.11	0.11	0.06	0.10	0.18
S	—	—	<0.01	—	—	—	0.14	0.05	—	—
H_2O^+	1.40	0.75	0.94	0.56	2.10	1.50	1.10	0.62	0.97	1.90
H_2O^-	0.75	0.07	0.04	0.11	1.40	0.88	0.18	0.09	0.43	0.37
CO_2	0.01	0.01	0.02	0.01	0.02	0.01	<0.01	0.01	0.01	0.15
Σ	—	—	—	—	—	—	99.00	99.00	—	—
Li (ppm)	—	—	—	—	—	—	—	—	—	24.0
B	—	—	—	—	—	—	2.00	<2.00	—	—
Sc	46	34	54	34	34	49	51	49	50	47
Cr	274	760	168	710	80	320	94	990	210	194
Co	52	60	58	51	51	50	59	41	52	49
Ni	81	280	82	270	75	78	66	132	84	62
Cu	82	170	140	84	1.60	67	134	50	2.50	20.0
Zn	110	65	120	46	160	550	120	65	73	119
As	<1.90	<3.0	<4.0	<2.30	<1.40	<2.00	<5.0	<5.0	<4.0	—
Rb	<2.00	4.0	5.0	<2.00	9.0	3.0	16.0	<2.00	7.0	7.0
Sr	161	154	60	132	263	133	162	155	251	120
Y	23.0	11.0	32	6.0	50	36	15.0	11.0	30	34
Zr	73	17.0	54	18.0	270	88	69	30	94	125
Nb	3.6	1.50	<0.50	<1.00	26.0	4.1	4.3	1.00	5.3	5.8
Mo	—	—	—	—	—	—	—	—	—	1.20
Sb	<0.80	<0.60	<0.70	<0.60	<0.50	<0.70	<0.60	<0.80	0.35	2.25
Cs	<1.00	<1.00	<0.90	<0.90	<0.90	<1.00	<1.10	<0.70	<1.10	<0.90
Ba	20.0	8.0	40	29.0	430	10.0	71	31	17.0	50
La	4.2	0.57	1.10	0.66	27.4	6.1	10.0	1.40	5.7	4.4
Ce	11.0	19.0	4.1	2.10	57	11.0	18.0	24.0	14.0	11.7
Nd	12.0	<17.0	<80	<17.0	34	10.0	9.0	<14.0	<50	21.9
Sm	3.0	0.63	2.24	0.56	10.2	3.6	2.49	1.35	3.9	3.7
Eu	1.03	0.36	0.84	0.250	2.90	1.33	0.62	0.53	1.40	1.27
Tb	0.71	0.160	0.63	0.180	1.59	0.90	0.40	0.36	0.85	1.20
Yb	2.80	0.54	3.1	0.68	4.2	3.5	1.30	1.20	3.7	4.7
Lu	0.42	0.130	0.47	0.092	0.60	0.49	0.220	0.200	0.52	0.62
Hf	1.97	0.42	1.30	0.37	6.8	2.20	1.50	0.66	2.50	3.6
Ta	0.260	<0.040	0.0290	<0.040	1.75	0.270	0.39	0.070	0.38	<0.60
Th	0.290	<0.60	<0.70	<0.50	2.90	<0.70	2.20	<1.10	0.32	0.48
U	<0.50	<1.20	<2.20	<1.00	0.87	<0.40	<1.50	<1.00	<1.40	<0.80
Ru (ppb)	—	0.60	—	<0.50	—	—	—	—	<0.50	—
Rh	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	<0.50	—
Pd	1.50	3.6	1.90	6.3	4.0	1.30	2.10	<0.50	<0.80	—
Ir	—	<0.50	—	<0.50	—	—	—	—	<0.50	—
Pt	1.00	4.0	4.0	20.0	19.0	<1.00	2.50	<1.00	<0.50	—
Au	7.7	<16.0	—	<14.0	9.8	9.3	—	—	<14.0	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology. A. Amphibolites.

	63	116	45	57	9	10	11	117	55	120
Lat.	34°55'N	34°28'N	34°50'N	34°57'N	34°48'N	34°54'N	34°33'N	37°10'N	34°55'N	34°22'N
Long.	83°10'W	83°58'W	83°48'W	83°16'W	83°33'W	83°37'W	83°52'W	83°34'W	83°36'W	84° 9'W
SiO_2 (%)	47.40	47.40	47.60	47.60	47.60	47.70	47.70	47.70	47.80	47.90
TiO_2	0.96	0.70	1.24	2.20	1.15	1.26	0.96	1.74	3.00	1.82
Al_2O_3	15.70	15.30	17.50	14.70	18.10	17.00	17.20	14.80	12.60	14.20
$Fe_2O_3^*$	13.57	10.90	14.20	16.02	15.90	13.90	13.30	13.50	18.02	14.70
Fe_2O_3	3.40	—	—	3.00	—	—	—	—	4.10	—
FeO	8.90	6.80	8.80	10.40	10.20	5.40	6.40	7.56	11.60	10.70
MnO	0.21	0.20	0.23	0.23	0.22	0.20	0.29	0.28	0.23	0.20
MgO	12.30	10.20	5.08	6.20	4.46	5.41	5.05	6.71	6.90	7.24
CaO	9.00	11.10	10.40	11.10	10.20	9.72	11.00	12.30	9.30	9.32
Na_2O	0.76	2.62	2.80	1.89	0.86	3.09	3.71	1.50	1.67	3.36
K_2O	0.16	0.20	0.10	0.38	0.20	0.27	0.27	0.29	0.60	0.11
P_2O_5	0.05	0.05	0.14	0.25	0.24	0.09	0.08	0.15	0.30	0.19
S	0.12	—	—	0.01	—	—	—	—	<0.01	—
H_2O^+	0.68	0.33	0.63	1.10	1.40	1.20	0.69	2.04	0.90	0.63
H_2O^-	0.07	0.05	0.01	0.30	0.05	0.39	0.03	0.31	0.20	0.03
CO_2	<0.01	0.09	0.01	<0.01	0.01	<0.01	0.44	<0.01	0.01	0.82
Σ	100.00	—	—	99.00	—	—	—	—	—	—
B (ppm)	3.0	—	—	<2.00	—	—	—	—	—	—
Sc	39	48	43	42	79	50	55	51	40	47
Cr	620	400	13.0	124	20.0	150	310	79	143	60
Co	61	56	46	48	37	54	55	43	55	53
Ni	206	170	26.0	85	29.0	75	120	26.0	82	63
Cu	67	96	60	88	140	200	220	46	170	72
Zn	92	100	120	130	170	110	120	160	150	120
As	<3.0	<2.90	<4.0	<6.0	<5.0	<3.0	<6.0	<0.80	<2.30	<3.0
Rb	5.0	<2.00	5.0	9.0	<2.00	<2.00	11.0	14.0	10.0	4.0
Sr	157	87	181	279	149	37	108	261	176	144
Y	15.0	19.0	14.0	33	45	28.0	33	45	39	37
Zr	37	43	23.0	146	161	62	62	114	179	139
Nb	<1.00	<1.00	1.70	11.0	8.9	1.50	1.30	1.40	16.0	6.5
Ag	—	—	—	—	—	—	—	0.0160	—	—
Sb	<0.60	0.93	<0.60	<0.70	<0.90	<0.60	<0.80	<0.50	<0.60	<0.70
Cs	<0.80	<1.10	<1.10	<0.70	<1.40	<1.20	<1.20	<0.40	<0.80	0.60
Ba	47	7.0	29.0	110	44	28.0	67	140	145	16.0
La	3.5	1.20	2.60	14.6	13.0	1.70	1.60	9.7	15.3	6.4
Ce	9.0	3.6	5.2	34	30	4.1	4.7	22.0	31	17.0
Nd	6.9	<20.0	<19.0	22.0	<25.0	<21.0	<21.0	15.0	<70	<30
Sm	1.97	1.67	1.48	5.8	10.2	2.40	2.36	5.0	6.9	4.4
Eu	0.66	0.59	0.73	1.85	1.30	0.84	0.83	1.60	2.00	1.40
Tb	0.34	0.45	0.260	1.10	1.40	0.61	0.58	1.10	1.10	0.85
Yb	1.50	2.60	1.30	3.3	4.2	3.5	3.5	4.1	3.3	3.7
Lu	0.230	0.36	0.250	0.46	0.63	0.51	0.50	0.58	0.47	0.56
Hf	0.83	0.96	<0.70	3.8	3.6	1.80	1.50	3.2	4.9	3.0
Ta	0.200	0.037	0.068	0.93	0.210	0.049	<0.070	<0.190	1.20	0.40
Th	<0.60	<0.60	<0.60	1.20	0.57	<0.70	<0.70	1.20	1.60	0.70
U	<1.20	<1.30	<1.40	<1.10	<1.70	<1.30	<1.70	0.50	0.98	<1.40
Ru (ppb)	—	<0.50	<0.50	—	<0.50	<0.50	0.70	—	—	<0.50
Rh	—	<0.50	<0.50	—	<0.50	<0.50	<0.50	—	<0.50	<0.50
Pd	2.40	8.2	<0.80	—	<0.80	1.00	2.10	<0.50	14.0	<0.80
Ir	—	<0.50	<0.50	—	<0.50	<0.50	<0.50	—	—	<0.50
Pt	3.5	6.0	0.70	—	3.7	2.60	3.8	<1.00	3.0	<0.50
Au	—	<17.0	<19.0	—	<18.0	<18.0	<23.0	<1.50	—	<15.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology. A. Amphibolites.

	40	12	13	64	118	14	68	33	56	58
Lat.	34°41'N	34°53'N	34°37'N	34°55'N	37°10'N	34°54'N	34°39'N	34°37'N	34°58'N	34°54'N
Long.	83°48'W	83°33'W	83°49'W	83°10'W	83°34'W	83°32'W	83°18'W	83°37'W	83°38'W	83°19'W
SiO_2 (%)	48.00	48.00	48.10	48.20	48.20	48.30	48.30	48.40	48.50	48.70
TiO_2	1.31	0.25	1.32	2.40	1.67	0.21	1.14	2.71	0.86	1.00
Al_2O_3	14.70	16.60	16.80	15.50	18.20	16.10	14.90	14.50	15.60	15.60
$Fe_2O_3^*$	11.70	7.34	10.90	16.30	7.83	8.25	11.20	15.80	10.07	13.11
Fe_2O_3	—	—	—	5.50	—	—	—	—	2.30	3.70
FeO	8.80	5.20	8.20	9.40	5.68	5.80	6.80	9.20	6.40	7.50
MnO	0.23	0.12	0.25	0.25	0.14	0.14	0.17	0.23	0.15	0.20
MgO	9.41	11.00	7.88	7.10	4.12	10.90	8.11	5.89	9.40	7.80
CaO	10.90	13.80	10.60	9.30	17.80	13.00	11.70	9.34	12.50	9.60
Na_2O	2.22	0.97	3.35	1.32	0.56	1.54	2.45	1.08	1.79	1.89
K_2O	0.78	0.15	0.42	0.37	0.30	0.17	0.05	0.48	0.80	0.75
P_2O_5	0.09	<0.05	0.19	0.40	0.55	<0.05	0.09	0.32	0.11	0.11
S	—	—	0.24	0.14	—	—	—	—	0.04	<0.01
H_2O^+	0.75	0.76	0.60	1.10	0.84	0.65	2.30	1.50	0.44	1.70
H_2O^-	0.14	0.04	0.29	0.27	0.05	0.04	0.22	0.64	0.12	0.86
CO_2	0.02	0.02	0.06	<0.01	0.11	0.01	0.01	0.04	0.01	0.01
Σ	—	—	—	101.00	—	—	—	—	99.00	99.00
B (ppm)	—	—	2.00	4.0	—	—	—	—	—	5.0
Sc	44	41	36	43	31	40	41	44	43	50
Cr	340	970	159	156	169	480	340	87	960	271
Co	53	45	46	46	31	53	45	48	44	46
Ni	110	220	130	76	49	190	120	62	187	77
Cu	110	68	18.0	73	23.0	130	80	77	120	7.0
Zn	130	60	132	130	90	60	68	150	120	110
As	<2.10	<2.90	<5.0	<4.0	<0.70	<3.1	<5.0	0.75	<0.90	<7.0
Rb	21.0	2.00	14.0	13.0	10.0	<2.00	3.0	7.0	<2.00	18.0
Sr	189	132	292	292	440	124	93	370	138	162
Y	32	8.0	34	37	25.0	9.0	36	43	17.0	31
Zr	66	20.0	109	115	204	17.0	82	183	54	60
Nb	1.00	<1.00	2.00	10.0	29.0	<1.00	1.70	12.0	4.0	2.20
Ag	—	—	—	—	0.035	—	—	—	—	—
Sb	<0.60	<0.70	0.83	<0.60	<0.40	<0.60	<0.70	<0.60	<0.120	<0.80
Cs	<1.00	<1.00	0.65	<1.00	<0.290	<1.00	<1.00	<1.00	<0.290	<0.70
Ba	61	10.0	89	53	2000	23.0	25.0	38	69	138
La	1.90	1.30	3.3	18.8	39	0.230	3.0	15.0	9.0	4.6
Ce	6.7	6.0	10.0	41	76	12.0	19.0	35	20.5	12.0
Nd	9.4	<17.0	<70	26.0	35	<17.0	<21.0	25.0	11.0	8.5
Sm	3.1	0.73	4.0	6.5	7.2	0.48	3.1	6.9	3.3	2.96
Eu	1.13	0.30	1.22	2.10	1.77	0.34	0.96	1.96	0.94	0.99
Tb	0.79	0.150	0.90	0.99	0.91	0.140	0.70	1.20	0.65	0.65
Yb	3.5	0.78	3.9	3.4	2.50	<0.90	3.6	4.2	1.80	2.60
Lu	0.50	0.120	0.57	0.48	0.34	0.094	0.51	0.62	0.290	0.40
Hf	1.80	<0.50	2.80	3.0	5.4	0.290	2.10	4.8	1.90	1.70
Ta	0.063	<0.040	0.170	1.10	2.20	<0.040	0.110	0.92	0.30	0.260
Th	<0.60	<0.60	<0.70	0.79	8.2	<0.60	<0.70	0.89	1.00	<1.10
U	0.270	<1.20	<0.70	<1.30	2.30	<1.20	<1.40	0.270	0.270	<1.20
Ru (ppb)	—	<0.50	—	—	—	<0.50	0.70	—	—	—
Rh	<0.50	<0.50	—	—	—	<0.50	<0.50	<0.50	—	—
Pd	<0.50	4.5	<0.50	1.00	0.70	<0.80	<0.80	15.0	3.6	<0.50
Ir	—	<0.50	—	—	—	<0.50	<0.50	—	—	—
Pt	<1.00	7.2	<1.00	1.90	1.00	<0.50	0.60	6.2	15.0	<1.00
Au	<10.0	<15.0	<26.0	—	40	<16.0	<19.0	<8.0	5.6	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
A. Amphibolites.

	15	16	90	47	28	29	65	66	34	91
Lat.	34°47'N	34°52'N	34°32'N	34°58'N	34°31'N	34°31'N	34°56'N	34°55'N	34°42'N	34°33'N
Long.	83°34'W	83°33'W	84° 3'W	83°45'W	83°57'W	83°58'W	83°10'W	83°10'W	83°35'W	84° 4'W
SiO_2 (%)	48.70	48.80	48.90	49.00	49.10	49.40	49.50	49.60	49.70	49.80
TiO_2	0.93	1.34	1.26	1.30	1.59	1.09	0.24	0.71	1.43	0.47
Al_2O_3	14.90	14.10	14.10	14.60	14.10	14.30	9.30	16.60	14.10	15.50
$Fe_2O_3^*$	11.70	12.90	12.80	12.70	13.00	13.10	17.02	11.53	13.50	9.48
Fe_2O_3	—	—	—	2.90	—	—	2.30	3.20	—	—
FeO	7.30	3.30	8.60	8.40	8.20	9.10	13.20	7.20	4.40	5.60
MnO	0.19	0.19	0.18	0.20	0.21	0.16	0.34	0.19	0.20	0.18
MgO	8.41	8.44	7.96	7.30	7.66	8.10	17.20	9.30	7.53	8.49
CaO	12.70	11.10	12.30	12.80	10.70	10.10	4.70	12.40	11.80	12.50
Na_2O	1.63	2.75	1.95	2.37	2.38	3.13	0.75	0.69	1.04	1.37
K_2O	0.09	0.17	0.09	0.10	0.06	0.12	0.08	0.45	0.46	0.12
P_2O_5	<0.05	<0.01	<0.05	0.14	0.14	0.13	0.26	0.03	0.15	<0.05
S	—	0.05	—	<0.01	—	—	0.01	0.21	0.13	—
H_2O^+	0.62	0.63	0.34	0.56	0.47	0.26	0.82	0.50	0.50	1.30
H_2O^-	0.16	0.15	0.04	0.15	0.03	0.01	0.12	0.09	0.26	0.50
CO_2	0.01	0.01	0.01	0.01	<0.01	0.02	0.02	0.01	0.02	0.01
Σ	—	—	—	—	—	—	99.00	101.00	—	—
Li (ppm)	—	8.0	—	—	—	—	—	—	15.0	—
Be	—	<1.00	—	—	—	—	—	—	2.00	—
B	—	—	—	—	—	—	2.00	4.0	—	—
Sc	51	52	51	48	50	50	47	54	48	55
V	—	410	—	—	—	—	—	—	330	—
Cr	250	164	84	310	200	250	1600	185	148	210
Co	46	50	57	42	50	42	68	46	51	42
Ni	100	81	75	65	75	89	470	72	63	87
Cu	130	26.0	27.0	97	62	29.0	13.0	52	63	52
Zn	100	82	67	110	110	110	190	92	140	74
Ga	—	16.0	—	—	—	—	—	—	22.0	—
As	<4.0	<2.00	<2.70	<2.90	<6.0	<5.0	<5.0	<4.0	<1.90	<2.80
Rb	7.0	<9.0	7.0	5.0	4.0	<2.00	4.0	8.0	<9.0	8.0
Sr	152	170	162	136	221	148	53	281	100	137
Y	22.0	10.0	20.0	33	33	29.0	13.0	20.0	27.0	15.0
Zr	24.0	<180	21.0	92	102	86	126	26.0	<110	23.0
Nb	10.0	<1.00	10.0	4.2	5.3	4.5	<1.00	10.0	6.0	<1.00
Mo	—	<2.00	—	—	—	—	—	—	<2.00	—
Ag	—	<2.00	—	—	—	—	—	—	<2.00	—
Cd	—	<2.00	—	—	—	—	—	—	<2.00	—
Sn	—	<10.0	—	—	—	—	—	—	<10.0	—
Sb	<0.80	<0.160	<0.70	<0.60	<0.80	0.58	<0.60	<0.70	<0.150	<0.70
Cs	<1.10	<0.30	<1.20	<0.80	<1.10	<1.10	<0.90	<0.90	<0.30	<1.20
Ba	16.0	32	20.0	24.0	41	10.0	24.0	29.0	48	25.0
La	2.10	0.93	0.71	4.1	4.9	4.3	7.9	2.20	5.5	1.80
Ce	4.2	2.30	2.70	10.0	12.0	11.0	15.0	4.9	13.0	4.6
Nd	<19.0	<3.0	<18.0	<30	<23.0	<22.0	9.4	<11.0	9.4	<18.0
Sm	1.39	1.14	0.99	3.0	3.8	3.3	1.94	1.36	3.4	1.11
Eu	0.65	0.73	0.64	1.10	1.20	0.95	0.68	0.64	1.10	0.49
Tb	0.34	0.36	0.30	0.68	0.78	0.74	0.270	0.31	0.76	0.290
Yb	1.40	1.50	1.20	3.0	3.7	3.2	2.00	1.20	3.0	1.30
Lu	0.230	0.200	0.220	0.47	0.54	0.50	0.32	0.200	0.44	0.220
Hf	0.80	<0.60	0.49	2.10	2.50	2.30	2.80	0.48	2.20	0.48
Ta	0.036	<0.130	<0.050	0.280	0.31	0.250	<0.40	<0.40	0.30	<0.050
Pb	—	<4.0	—	—	—	—	—	—	<4.0	—
Bi	—	<10.0	—	—	—	—	—	—	<10.0	—
Th	<0.60	<0.260	<0.70	<0.70	0.40	<0.70	<0.70	<0.70	0.46	0.49
U	<1.40	<0.40	<1.20	<2.00	<1.70	<1.60	<1.50	<1.30	<0.40	<1.20
Ru (ppb)	<0.50	—	<1.00	—	<0.50	0.50	—	—	—	<1.00
Rh	<0.50	—	<1.00	<0.50	<0.50	<0.50	—	—	—	<1.00
Pd	<0.80	<0.50	<2.00	1.50	<0.80	<0.80	6.7	1.10	0.90	<2.00
Ir	<0.50	—	<1.00	—	<0.50	<0.50	—	—	—	<1.00
Pt	<0.50	<1.00	<1.00	3.0	0.90	<0.50	8.2	1.00	1.10	<1.00
Au	<18.0	<3.0	<17.0	—	11.0	<21.0	—	—	<1.70	<16.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology. A. Amphibolites.

	121	69	41	17	18	19	153	35	20	154
Lat.	34°25'N	34°39'N	34°42'N	34°45'N	34°44'N	34°40'N	33°15'N	34°37'N	34°31'N	33°22'N
Long.	83° 4'W	83°18'W	83°47'W	83°40'W	83°37'W	83°43'W	84°22'W	83°40'W	83°54'W	84°22'W
SiO_2 (%)	49.80	49.90	50.00	50.20	50.20	51.00	51.00	51.30	51.40	51.60
TiO_2	1.23	0.41	1.74	1.62	0.44	0.78	1.00	0.76	1.14	0.30
Al_2O_3	13.60	15.60	18.80	15.80	16.80	16.00	16.70	14.70	16.90	5.17
$Fe_2O_3^*$	11.10	9.53	10.10	11.00	11.80	13.10	11.94	9.84	11.60	12.20
Fe_2O_3	—	—	—	—	—	—	8.10	—	—	—
FeO	8.10	5.30	5.70	8.60	7.10	8.60	3.30	6.10	7.00	—
MnO	0.18	0.20	0.09	0.18	0.19	0.22	0.20	0.18	0.17	0.31
MgO	7.87	8.64	4.70	6.82	7.21	6.57	2.90	8.42	4.61	24.50
CaO	11.60	12.70	7.43	12.40	12.40	9.05	13.70	10.50	8.23	1.05
Na_2O	2.51	2.21	4.10	1.99	1.01	2.58	0.45	0.89	1.64	0.23
K_2O	0.08	0.10	0.43	0.08	0.08	0.13	0.10	0.50	0.07	0.02
P_2O_5	0.13	<0.05	0.24	0.14	<0.05	0.08	0.21	0.08	0.09	0.07
H_2O^+	2.20	0.48	1.80	0.21	0.38	1.10	2.00	2.00	2.60	—
H_2O^-	0.01	0.03	0.92	0.02	0.16	0.13	0.63	1.00	2.40	—
CO_2	0.89	0.01	0.02	0.02	0.01	<0.01	0.13	0.01	0.04	—
Li (ppm)	—	—	—	—	—	—	8.0	—	—	—
Be	—	—	—	—	—	—	—	—	—	<1.00
B	—	—	—	—	—	—	—	—	—	32
Sc	43	49	28.4	46	47	39	36	47	39	26.0
V	—	—	—	—	—	—	—	—	—	77
Cr	300	450	98	260	16.0	68	153	410	54	1520
Co	46	35	27.0	45	46	38	18.4	42	33	65
Ni	89	110	52	84	43	39	22.0	120	46	—
Cu	12.0	17.0	67	140	82	11.0	20.0	1.00	17.0	51
Zn	87	92	100	83	96	74	56	100	68	104
As	2.10	<5.0	<2.00	<4.0	<5.0	<1.80	—	<1.50	<5.0	—
Rb	7.0	<2.00	15.0	4.0	5.0	19.0	2.00	2.00	<2.00	<20.0
Sr	139	177	950	220	108	210	215	132	68	<15.0
Y	32	13.0	29.0	37	16.0	20.0	72	23.0	23.0	14.0
Zr	89	20.0	280	111	38	46	75	51	54	28.0
Nb	4.1	<1.00	6.5	2.40	1.80	1.40	3.6	2.30	1.40	<25.0
Mo	—	—	—	—	—	—	1.50	—	—	<10.0
Ag	—	—	—	—	—	—	—	—	—	<1.00
Cd	—	—	—	—	—	—	—	—	—	<2.00
Sb	<0.60	0.41	<0.40	<0.70	<0.70	0.290	0.63	<0.60	<0.60	—
Cs	<1.00	<1.10	<0.80	<1.10	<1.10	<0.90	<0.80	<0.90	<1.00	<0.60
Ba	16.0	29.0	99	10.0	9.0	32	48	135	14.0	<200
La	5.0	0.74	10.3	4.6	3.4	4.7	9.6	3.8	4.5	4.5
Ce	12.0	9.0	26.0	13.0	8.8	9.5	12.2	9.2	9.1	11.6
Nd	<50	<19.0	23.0	12.0	<20.0	<10.0	<40	6.1	<20.0	7.0
Sm	3.1	1.21	7.6	4.2	1.58	1.94	4.6	2.40	3.2	1.51
Eu	1.00	0.72	1.80	1.40	0.45	0.73	2.05	0.72	1.11	0.38
Tb	0.63	0.36	1.28	0.91	0.290	0.46	1.44	0.56	0.70	0.240
Yb	2.70	1.60	3.3	4.0	1.50	1.90	5.6	2.80	3.6	0.80
Lu	0.39	0.280	0.46	0.59	0.240	0.290	0.77	0.45	0.51	0.160
Hf	2.00	0.38	7.5	2.70	0.84	0.85	2.00	1.20	1.40	0.37
Ta	0.260	<0.050	0.31	0.120	0.097	0.081	0.189	0.200	0.094	<0.40
Th	0.47	<0.60	0.94	<0.90	0.66	<0.80	0.289	0.60	0.85	0.290
U	<1.40	<1.60	0.39	<1.50	<1.50	0.200	0.51	0.72	<1.50	<0.60
Ru (ppb)	<0.50	0.80	—	<0.50	<0.50	—	—	—	<0.50	—
Rh	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	—	<0.50	<0.50	—
Pd	1.40	<0.80	0.90	<0.80	<0.80	0.70	—	0.70	<0.80	—
Ir	<0.50	<0.50	—	<0.50	<0.50	—	—	—	<0.50	—
Pt	2.90	<0.50	<1.00	<0.50	0.70	<1.00	—	2.90	<0.50	—
Au	<15.0	<20.0	<9.0	<16.0	<19.0	<12.0	—	<4.0	<19.0	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
A. Amphibolites.

	21	67	22	59	23	60	155	158	24	36
Lat.	34°37'N	34°56'N	34°42'N	34°54'N	34°35'N	34°57'N	33°15'N	33°15'N	34°50'N	34°40'N
Long.	83°46'W	83°10'W	83°41'W	83°18'W	83°46'W	83°11'W	84°22'W	84°22'W	83°35'W	83°38'W
SiO_2 (%)	51.80	51.80	51.90	52.20	52.30	53.30	52.40	52.80	53.80	54.10
TiO_2	1.12	1.40	1.31	1.00	1.52	0.89	0.34	0.57	0.58	0.98
Al_2O_3	16.70	13.90	15.70	15.70	13.40	15.10	4.81	18.50	17.10	15.30
$Fe_2O_3^*$	11.40	14.30	12.00	12.11	15.00	10.51	9.96	8.38	11.00	11.10
Fe_2O_3	—	6.70	—	4.10	—	2.60	—	4.90	—	—
FeO	6.90	7.00	5.00	6.70	8.70	6.70	—	2.50	7.00	7.20
MnO	0.25	0.25	0.27	0.21	0.30	0.17	0.19	0.21	0.15	0.18
MgO	6.10	6.20	4.81	6.00	5.18	7.00	25.20	2.80	4.24	5.79
CaO	6.87	9.10	9.76	8.70	6.82	11.10	2.41	9.20	11.30	9.50
Na_2O	4.18	1.17	0.99	1.35	3.34	1.62	0.31	4.50	0.85	1.13
K_2O	0.08	0.29	0.32	0.54	0.06	0.42	<0.02	1.00	0.12	0.41
P_2O_5	0.16	0.14	0.13	0.13	0.13	0.11	0.07	0.19	0.08	0.16
S	—	0.01	0.02	<0.01	1.10	0.08	—	—	—	—
H_2O^+	1.60	1.50	3.50	1.80	1.30	0.73	—	1.60	0.46	1.00
H_2O^-	0.84	0.51	0.99	1.10	0.57	0.02	—	0.89	0.01	0.56
CO_2	0.02	<0.01	0.02	<0.01	0.06	<0.01	—	0.05	0.01	0.02
Σ	—	100.00	—	99.00	—	—	—	—	—	—
Li (ppm)	—	—	—	—	—	—	—	7.0	—	—
Be	—	—	—	—	—	—	<1.00	—	—	—
B	—	4.0	20.0	6.0	2.00	—	<10.0	—	—	—
Sc	37	48	43	41	38	40	24.6	28.7	49	39
V	—	—	—	—	—	—	87	—	—	—
Cr	21.0	50	168	64	45	153	2140	55	9.8	41
Co	36	48	39	38	41	38	65	23.9	34	46
Ni	24.0	72	75	26.0	25.0	44	—	<10.0	20.0	32
Cu	54	87	73	5.0	207	82	15.0	16.0	4.0	40
Zn	100	130	123	120	1430	90	86	87	71	100
As	1.10	<5.0	<5.0	<6.0	<4.0	<3.1	—	—	<4.0	<1.40
Rb	7.0	13.0	4.0	12.0	<2.00	2.00	<20.0	43	12.0	14.0
Sr	193	215	194	278	111	183	<15.0	460	181	300
Y	32	35	38	28.0	38	24.0	21.0	19.0	26.0	26.0
Zr	70	97	102	65	74	79	33	95	51	69
Nb	2.20	4.1	5.1	2.80	1.90	2.90	<25.0	7.1	5.5	3.4
Mo	—	—	—	—	—	—	<10.0	1.40	—	—
Ag	—	—	—	—	—	—	<1.00	—	—	—
Cd	—	—	—	—	—	—	<2.00	—	—	—
Sb	<0.60	<0.60	0.54	<0.70	1.20	<0.60	—	<0.80	<0.60	<0.60
Cs	<0.90	<0.90	<0.60	<0.60	<0.60	<0.80	<0.60	0.30	<1.10	<0.90
Ba	12.0	160	56	89	14.0	78	<200	310	37	43
La	6.8	9.1	16.4	5.2	3.7	6.3	10.2	13.2	12.0	9.1
Ce	9.9	19.0	30	11.0	8.2	13.0	23.8	22.7	27.0	16.0
Nd	10.0	15.0	19.0	8.6	<15.0	<70	16.0	19.9	<22.0	<27.0
Sm	3.4	4.0	5.5	2.60	3.1	2.60	2.42	3.2	3.9	3.0
Eu	1.17	1.20	1.41	0.89	0.97	0.85	0.51	0.92	0.80	1.00
Tb	0.68	0.79	0.97	0.54	0.72	0.54	0.40	0.59	0.65	0.58
Yb	3.0	3.7	4.1	2.20	3.6	2.10	1.30	2.37	2.70	2.50
Lu	0.45	0.57	0.64	0.34	0.49	0.30	0.180	0.34	0.39	0.37
Hf	1.70	2.60	2.70	1.60	1.90	1.80	0.49	2.66	1.60	1.80
Ta	0.160	0.38	0.41	0.230	0.190	0.290	<0.40	0.45	0.33	0.31
Th	0.90	1.80	2.00	1.20	0.75	1.10	0.210	4.5	2.50	1.30
U	0.59	<1.60	0.84	0.55	<0.70	<1.50	<0.70	6.2	<1.40	1.00
Ru (ppb)	—	—	—	—	—	—	—	—	<0.50	—
Rh	<0.50	—	—	—	—	<0.50	—	—	<0.50	<0.50
Pd	0.50	<0.50	1.20	<0.50	<0.50	<0.50	—	—	<0.80	0.60
Ir	—	—	—	—	—	—	—	—	<0.50	—
Pt	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	—	—	2.60	<1.00
Au	<10.0	—	20.0	—	<28.0	—	—	—	<18.0	<8.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology.
A. Amphibolites.

	92	156	159	160	25	161	26	30	162	27
Lat.	34°33'N	33°22'N	33°15'N	33°15'N	34°52'N	33°15'N	34°53'N	34°32'N	33°15'N	34°53'N
Long.	84° 4'W	84°22'W	84°22'W	84°22'W	83°33'W	84°22'W	83°32'W	83°55'W	84°22'W	83°32'W
SiO_2 (%)	54.60	54.70	57.20	57.90	61.00	61.60	61.70	61.80	62.40	68.20
TiO_2	0.81	1.50	0.54	0.66	0.34	0.56	0.43	0.27	0.37	0.44
Al_2O_3	17.70	12.90	16.00	17.00	14.50	17.00	15.50	18.30	16.00	14.90
$Fe_2O_3^*$	9.68	11.10	7.47	8.54	8.99	4.86	8.39	4.96	6.04	5.36
Fe_2O_3	—	3.00	3.60	3.90	—	3.10	—	—	3.40	—
FeO	6.40	6.80	4.20	3.70	5.60	2.10	5.70	3.00	2.80	3.40
MnO	0.15	0.15	0.14	0.18	0.12	0.11	0.15	0.08	0.16	0.10
MgO	4.47	5.50	3.40	2.50	4.14	1.60	3.00	2.63	2.40	1.44
CaO	7.83	9.50	5.20	7.30	9.17	5.30	7.46	6.11	7.00	5.75
Na_2O	1.54	3.00	5.30	4.10	1.20	5.90	1.95	3.46	4.30	2.69
K_2O	0.16	1.70	2.00	1.20	0.05	0.79	0.87	0.29	0.78	0.76
P_2O_5	0.08	0.24	0.04	0.18	0.08	0.18	0.08	0.06	0.11	0.11
S	—	—	—	—	—	—	—	0.02	—	—
H_2O^+	1.90	1.20	1.20	1.20	0.39	0.72	0.68	1.90	0.85	0.76
H_2O^-	1.10	0.16	0.41	0.39	0.01	0.23	0.01	1.20	0.19	0.02
CO_2	0.02	0.08	0.04	0.05	0.01	0.04	0.01	0.02	0.06	0.01
Li (ppm)	—	6.0	4.0	5.0	—	2.00	—	—	5.0	—
B	—	—	—	—	—	—	—	24.0	—	—
Sc	46	41	25.9	25.2	39	17.2	29.0	18.5	21.5	16.8
Cr	23.0	127	43	8.9	21.0	14.9	11.0	43	48	11.0
Co	30	43	19.9	20.9	28.0	8.9	22.0	13.9	14.2	12.4
Ni	23.0	44	<10.0	<10.0	9.7	<10.0	5.1	14.0	<10.0	4.6
Cu	14.0	<10.0	12.0	72	620	28.0	60	39	64	18.0
Zn	58	64	87	76	60	47	85	45	70	54
As	<2.60	—	—	—	<4.0	—	<2.70	<3.1	—	<2.10
Rb	<2.00	4.0	47	31	<2.00	11.0	24.0	8.0	19.0	36
Sr	169	245	210	183	86	224	115	176	282	191
Y	50	30	14.0	22.0	12.0	21.0	18.0	11.0	11.0	16.0
Zr	31	103	93	108	36	128	102	57	63	166
Nb	8.9	8.6	6.7	6.1	2.20	7.1	5.0	2.70	9.8	6.2
Mo	—	0.70	0.36	0.82	—	0.46	—	—	0.30	—
Sb	<0.70	<10.00	0.78	0.66	<0.60	0.63	<0.50	1.60	1.15	<0.40
Cs	<1.10	1.18	0.50	0.48	<1.00	<0.60	2.20	0.41	0.33	1.10
Ba	33	46	400	530	37	148	146	74	135	203
La	14.2	4.2	10.0	12.2	7.0	12.8	12.1	8.2	7.4	10.0
Ce	37	11.4	17.6	29.4	12.0	27.2	25.0	17.7	11.4	25.0
Nd	33	<50	<40	21.9	<19.0	20.9	<19.0	<12.0	<29.9	8.0
Sm	10.3	3.7	2.18	3.7	1.50	3.6	3.0	1.96	1.81	1.94
Eu	1.40	1.26	0.62	1.05	0.32	1.07	0.68	0.46	0.52	0.66
Tb	1.50	1.18	0.46	0.76	0.31	0.75	0.49	0.31	0.38	0.31
Yb	4.4	3.8	1.88	2.68	1.30	2.84	2.00	1.10	1.38	1.10
Lu	0.60	0.55	0.263	0.38	0.200	0.38	0.290	0.210	0.208	0.190
Hf	1.20	2.86	2.47	3.3	0.74	3.7	3.1	2.00	1.70	4.8
Ta	0.58	<0.50	0.46	0.64	0.220	0.59	0.35	0.250	1.59	0.40
Th	3.4	<0.60	4.1	5.1	2.00	6.0	3.3	2.10	3.7	4.2
U	1.60	<0.80	1.71	2.89	1.00	1.77	1.10	<0.90	3.3	1.30
Ru (ppb)	<0.50	—	—	—	<0.50	—	<0.50	—	—	<0.50
Rh	<0.50	—	—	—	<0.50	—	<0.50	—	—	<0.50
Pd	<0.80	—	—	—	0.90	—	<0.80	1.30	—	<0.80
Ir	<0.50	—	—	—	<0.50	—	<0.50	—	—	<0.50
Pt	<0.50	—	—	—	1.10	—	<0.50	1.30	—	<0.50
Au	<16.0	—	—	—	<17.0	—	<15.0	<24.0	—	<13.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology.
A. Amphibolites.

	128	129	130	131	132	133	134	148	157	164
Lat.	33°45'N	33°44'N	33°44'N	33°44'N	33°34'N	33°48'N	33°49'N	33°33'N	33°21'N	33°21'N
Long.	84°51'W	84°49'W	84°55'W	84°56'W	84°55'W	84°56'W	84°55'W	85° 8'W	84°29'W	84°29'W
$Fe_2O_3^*$ (%)	14.30	9.64	9.67	12.78	12.16	15.73	8.52	11.68	12.44	11.67
Fe_2O_3	4.90	2.80	2.60	4.10	3.60	5.90	3.30	7.60	4.40	2.80
FeO	7.70	5.90	6.20	7.30	7.20	8.20	4.60	3.80	6.90	8.20
MnO	0.21	0.15	0.14	0.15	0.18	0.18	0.14	0.21	0.26	0.21
Na_2O	3.23	3.10	2.56	2.16	2.56	1.48	2.29	0.50	2.43	0.71
P_2O_5	0.10	0.07	<0.02	0.07	0.10	0.08	0.17	0.05	0.07	0.03
H_2O^+	1.20	0.65	0.78	0.71	0.73	0.55	1.30	0.81	0.65	4.10
H_2O^-	0.05	0.15	0.15	0.10	0.14	0.14	0.18	0.39	0.12	0.49
Li (ppm)	15.0	7.9	6.0	8.9	8.4	6.5	38	<5.0	8.9	7.5
Be	0.76	<0.50	<0.50	<0.50	0.50	0.61	2.40	<0.50	<0.50	<0.50
Sc	40	45	35	48	47	37	17.8	35	45	24.4
V	400	190	170	300	310	410	120	200	480	170
Cr	28.0	119	510	350	254	48	77	570	310	1450
Co	33	43	43	47	50	40	20.6	41	41	75
Ni	9.0	61	153	77	57	22.0	43	203	100	580
Cu	21.0	53	29.0	18.0	268	33	28.0	22.0	39	30
Zn	110	74	100	85	82	110	73	120	96	94
Rb	9.0	<2.00	4.0	7.0	3.0	5.0	100	2.00	<2.00	<2.00
Sr	235	135	123	254	139	285	131	440	261	9.0
Y	34	20.0	12.0	28.0	33	26.0	42	68	35	90
Zr	70	46	33	61	85	82	255	57	83	23.0
Nb	1.00	<1.00	<1.00	2.40	3.4	1.30	16.0	<1.00	1.00	<1.00
Mo	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Cd	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Sn	<2.00	<2.00	<2.00	<2.00	<2.00	2.00	4.0	<2.00	<2.00	<2.00
Sb	<0.70	<0.70	<0.70	<0.80	<0.70	<0.70	<0.40	<0.70	<0.90	<0.70
Cs	<0.70	<0.70	<1.10	<0.70	<0.70	<1.20	3.9	<1.20	<1.30	<1.10
Ba	75	26.0	73	64	39	121	540	33	45	44
La	7.6	2.90	2.90	4.0	2.40	5.8	34	40	3.7	43
Ce	13.0	6.4	4.7	9.7	6.6	14.0	77	13.0	7.9	9.1
Nd	14.0	6.7	<8.0	9.6	7.3	10.0	34	63	9.1	78
Sm	4.1	1.91	1.30	2.83	2.75	3.3	7.8	17.0	3.4	24.4
Eu	1.40	0.68	0.47	1.05	0.82	1.20	1.58	5.0	1.20	6.8
Tb	0.79	0.43	0.30	0.67	0.70	0.84	1.20	2.90	0.92	4.1
Yb	3.7	1.80	1.20	2.50	3.0	2.90	3.8	7.5	3.5	11.6
Lu	0.53	0.250	0.180	0.39	0.46	0.45	0.56	1.02	0.48	1.50
Hf	1.60	1.00	0.81	1.50	2.00	2.10	6.6	1.50	2.30	0.65
Ta	<0.160	0.072	0.054	0.190	0.290	0.150	1.40	0.055	0.092	<0.070
Pb	9.0	28.0	7.8	6.4	10.0	8.2	16.0	10.0	7.0	7.0
Th	1.10	0.49	<0.70	<0.70	<0.70	1.10	9.7	0.77	<0.80	<0.70
U	0.280	0.76	<0.280	<0.40	<0.40	<0.40	2.10	<0.40	<0.40	<0.50

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
B. Amphibolite Saprolite.

	70	3	71	16
Lat.	34°50'N	34°50'N	34°52'N	34°52'N
Long.	83°19'W	83°19'W	83°33'W	83°33'W
SiO_2 (%)	30.70	45.60	41.90	48.80
TiO_2	2.18	1.77	1.79	1.34
Al_2O_3	24.30	16.60	17.30	14.10
$Fe_2O_3^*$	19.40	14.40	18.00	12.90
FeO	3.70	3.20	5.80	3.30
MnO	0.24	0.23	0.21	0.19
MgO	5.22	7.35	5.92	8.44
CaO	4.13	9.46	7.10	11.10
Na_2O	0.63	2.16	1.59	2.75
K_2O	1.14	0.53	0.25	0.17
P_2O_5	0.24	0.22	0.02	<0.01
S	0.05	0.02	0.02	0.05
H_2O^+	9.90	1.30	5.00	0.63
H_2O^-	1.60	0.94	1.40	0.15
CO_2	0.02	0.01	0.01	0.01
Li (ppm)	31	14.0	11.0	8.0
Be	2.00	1.00	<1.00	<1.00
Sc	45	31	66	52
V	260	210	520	410
Cr	125	86	205	164
Co	101	52	69	50
Ni	67	43	90	81
Cu	14.0	4.0	46	26.0
Zn	160	130	76	82
Ga	28.0	21.0	23.0	16.0
As	<4.0	<2.30	<2.40	<2.00
Rb	54	18.0	12.0	<9.0
Sr	30	280	83	170
Y	35	26.0	8.0	10.0
Zr	220	<70	<200	<180
Nb	10.0	6.6	<1.00	<1.00
Mo	<2.00	<2.00	<2.00	<2.00
Ag	<2.00	<2.00	<2.00	<2.00
Cd	<2.00	<2.00	<2.00	<2.00
Sn	<10.0	<10.0	<10.0	<10.0
Sb	<0.130	<0.140	<0.180	<0.160
Cs	1.30	<0.280	<0.40	<0.30
Ba	390	71	140	32
La	18.0	9.3	3.2	0.93
Ce	32	21.0	15.0	2.30
Nd	24.0	16.0	<8.0	<3.0
Sm	7.2	4.1	1.80	1.14
Eu	2.41	1.50	0.69	0.73
Tb	1.20	0.76	0.48	0.36
Yb	4.7	2.90	1.80	1.50
Lu	0.67	0.47	0.270	0.200
Hf	3.7	2.60	0.62	<0.60
Ta	0.61	0.45	<0.160	<0.130
Pb	<4.0	<4.0	<4.0	<4.0
Bi	10.0	<10.0	<10.0	<10.0
Th	2.50	1.40	0.52	<0.260
U	0.64	0.67	<0.40	<0.40
Pd (ppb)	<0.50	<0.50	<0.50	<0.50
Pt	<1.00	<1.00	<1.00	<1.00
Au	<8.0	<2.20	<5.0	<3.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
C. Metagabbros.

	72	93	76	94	95	74	96	75	97	98
Lat.	34°53'N	34° 1'N	34°53'N	34° 2'N	34° 4'N	34° 0'N	34° 1'N	34°57'N	34° 1'N	34° 4'N
Long.	83°46'W	83°40'W	83°32'W	83°40'W	83°48'W	83°45'W	83°46'W	83°47'W	82°46'W	82°47'W
SiO_2 (%)	42.10	42.70	43.40	44.90	45.60	46.40	47.40	47.60	48.20	49.10
TiO_2	0.13	2.96	5.03	0.27	0.35	0.19	1.17	0.80	1.00	1.23
Al_2O_3	8.00	13.40	14.20	5.42	8.47	21.70	14.50	16.00	19.50	8.45
$Fe_2O_3^*$	12.61	15.50	15.90	15.80	10.90	5.48	12.40	11.61	8.64	9.60
Fe_2O_3	1.50	—	—	—	—	1.00	—	3.50	—	—
FeO	9.30	10.30	10.30	8.16	6.10	4.00	7.45	6.50	5.07	1.60
MnO	0.16	0.19	0.20	0.19	0.17	0.09	0.24	0.18	0.14	0.20
MgO	30.80	8.67	7.23	19.40	24.20	9.00	9.21	8.40	6.66	13.90
CaO	6.30	12.80	10.60	8.83	3.12	14.40	11.10	14.00	10.30	15.20
Na_2O	0.51	1.57	2.17	0.18	0.34	1.50	2.29	1.16	2.96	0.48
K_2O	0.04	0.32	0.14	<0.02	<0.02	0.08	0.23	0.14	0.12	0.10
P_2O_5	0.04	0.07	<0.05	<0.05	0.05	0.02	0.17	0.07	0.12	0.10
S	<0.01	—	—	—	—	0.03	—	0.14	—	0.03
H_2O^+	0.54	2.42	0.65	4.41	0.57	0.57	2.12	0.52	2.31	0.47
H_2O^-	0.04	<0.05	0.06	0.06	6.21	0.10	<0.05	0.10	0.54	0.29
CO_2	0.01	0.48	0.01	<0.01	<0.01	0.01	0.19	0.01	<0.01	0.01
Σ	—	—	—	—	—	99.00	—	99.00	—	—
Li (ppm)	—	—	—	—	—	—	—	—	—	<2.00
Be	—	—	—	—	—	—	—	—	—	<1.00
B	—	—	—	—	—	<2.00	—	2.00	—	—
Sc	18.5	44	48	27.0	12.8	25.0	46	53	29.5	79
V	—	—	—	—	—	—	—	—	—	250
Cr	1580	135	90	5100	1300	630	79	330	37	890
Co	114	68	66	120	90	38	41	47	31	54
Ni	1100	99	58	660	1330	192	77	64	36	250
Cu	53	50	120	191	10.0	124	93	56	110	2.00
Zn	58	120	90	130	94	31	110	92	81	110
Ga	—	—	—	—	—	—	—	—	—	15.0
As	<2.90	1.40	<3.0	2.80	<0.70	<4.0	<0.90	<8.0	<0.90	<1.70
Rb	<2.00	15.0	<2.00	<2.00	<2.00	5.0	<2.00	2.00	4.0	<15.0
Sr	74	630	199	12.0	22.0	144	287	121	410	260
Y	7.0	12.0	11.0	5.0	20.0	8.0	39	15.0	23.0	31
Zr	12.0	65	40	15.0	50	21.0	180	36	75	<100
Nb	<0.50	7.9	7.4	<1.00	<1.00	<1.00	2.70	<1.00	1.80	1.90
Mo	—	—	—	—	—	—	—	—	—	<2.00
Ag	—	0.0290	—	0.31	<0.0100	—	0.046	—	<0.0100	<2.00
Cd	—	—	—	—	—	—	—	—	—	<2.00
Sn	—	—	—	—	—	—	—	—	—	<10.0
Sb	<0.50	<0.60	<0.60	<0.50	<0.40	<0.50	<0.50	<0.80	<0.40	<0.190
Cs	<0.70	<0.40	<1.20	<0.40	<0.290	<0.50	<0.30	<0.70	<0.280	<0.40
Ba	17.0	<90	25.0	240	<60	31	<70	45	160	71
La	0.40	6.0	2.20	2.30	13.4	0.58	10.3	3.0	8.1	16.1
Ce	1.90	16.0	4.6	<1.50	20.0	11.0	32	6.7	21.0	40
Nd	<60	11.0	<20.0	<6.0	11.0	<10.0	25.0	<15.0	17.0	31
Sm	0.250	3.4	1.43	0.47	2.69	0.48	7.7	2.01	4.4	8.6
Eu	0.140	1.30	0.58	0.110	0.72	0.270	1.82	0.75	1.40	2.30
Tb	0.077	0.51	0.280	<0.120	0.43	0.130	1.10	0.39	0.64	1.10
Yb	0.33	1.10	1.20	0.33	1.40	0.40	3.9	1.90	2.40	2.70
Lu	<0.130	0.180	0.200	0.052	0.190	0.064	0.56	0.32	0.32	0.35
Hf	<0.40	2.00	0.97	<0.230	0.99	<0.50	4.2	1.20	2.10	1.70
Ta	<0.040	0.58	0.280	<0.270	0.57	<0.050	0.240	0.096	0.200	<0.170
Pb	—	—	—	—	—	—	—	—	—	<4.0
Bi	—	—	—	—	—	—	—	—	—	<10.0
Th	<0.60	<0.40	<0.80	<0.260	0.88	<0.80	0.35	<1.10	<0.160	0.62
U	<1.60	<0.50	<1.30	<0.40	<0.30	<0.70	<0.50	<1.30	<0.50	0.260
Ru (ppb)	—	—	<0.50	—	—	—	—	—	—	—
Rh	<0.50	—	<0.50	—	—	—	—	—	—	—
Pd	4.4	<0.50	<0.80	18.0	2.80	<0.50	<0.50	<0.50	<0.50	1.90
Ir	—	—	<0.50	—	—	—	—	—	—	—
Pt	5.0	<1.00	<0.50	9.5	4.5	<1.00	1.00	<1.00	1.00	1.30
Au	—	<2.40	<18.0	20.0	4.3	18.0	<0.80	—	<8.0	<5.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
C. Metagabbros.

	99	73
Lat.	34° 4'N	34°57'N
Long.	83°46'W	83°46'W
SiO_2 (%)	50.10	51.20
TiO_2	0.67	1.40
Al_2O_3	18.80	14.40
$Fe_2O_3^*$	7.73	15.87
Fe_2O_3	—	2.00
FeO	4.77	11.80
MnO	0.13	0.24
MgO	6.94	5.80
CaO	11.50	9.10
Na_2O	2.80	0.71
K_2O	0.32	0.32
P_2O_5	0.12	0.16
S	—	0.06
H_2O^+	1.56	1.10
H_2O^-	0.11	0.41
CO_2	<0.01	0.03
Σ	—	99.00
B (ppm)	—	5.0
Sc	29.1	50
Cr	43	31
Co	31	48
Ni	54	33
Cu	120	11.0
Zn	74	150
As	<0.60	<6.0
Rb	7.0	3.0
Sr	530	102
Y	13.0	61
Zr	49	105
Nb	1.20	4.9
Ag	0.065	—
Sb	<0.50	<0.70
Cs	<0.31	<0.70
Ba	<70	113
La	11.4	31
Ce	26.5	18.0
Nd	16.0	35
Sm	3.9	9.8
Eu	1.20	2.76
Tb	0.42	1.70
Yb	1.50	7.1
Lu	0.200	1.00
Hf	1.40	2.90
Ta	0.150	0.35
Th	0.80	1.70
U	<0.30	<0.70
Pd (ppb)	<0.50	2.10
Pt	3.2	2.20
Au	<3.0	<7.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
D. Ultramafic Rocks.

	100	101	85	102	82	77	86	135	136	83
Lat.	34° 1'N	34° 1'N	34°52'N	34° 1'N	34°52'N	34°53'N	34°52'N	33°37'N	33°37'N	34°56'N
Long.	83°46'W	82°46'W	83°34'W	83°46'W	83°34'W	83°37'W	83°34'W	84°15'W	84°15'W	83°10'W
SiO_2 (%)	36.90	37.80	37.90	38.20	38.70	39.60	40.20	41.10	41.20	42.00
TiO_2	<0.02	0.05	0.09	<0.02	0.01	0.34	0.03	0.62	0.57	<0.01
Al_2O_3	9.13	4.99	0.88	12.80	0.29	6.70	0.58	5.96	6.49	0.61
$Fe_2O_3^*$	14.70	16.50	24.03	15.10	14.14	12.81	13.16	19.80	14.10	7.61
Fe_2O_3	—	—	2.70	—	3.90	5.70	2.60	—	—	3.50
FeO	4.87	7.42	17.00	10.40	8.30	6.00	8.80	—	—	3.60
MnO	0.19	0.15	0.29	0.13	0.20	0.18	0.19	0.26	0.17	0.10
MgO	25.50	29.70	39.50	21.80	44.00	27.90	45.80	25.60	27.20	43.10
CaO	4.89	0.67	0.04	5.24	0.08	3.30	<0.01	0.22	1.26	0.16
Na_2O	0.26	0.01	0.02	0.16	0.03	0.19	0.02	0.18	<0.15	0.02
K_2O	<0.02	<0.02	0.03	<0.02	0.02	0.03	0.02	<0.02	<0.02	0.19
P_2O_5	<0.05	<0.05	0.09	<0.05	0.04	0.06	0.08	0.16	0.18	0.03
S	—	—	0.01	—	<0.01	<0.01	0.04	—	—	0.01
H_2O^+	8.66	10.50	1.40	7.97	3.40	3.00	2.20	—	—	6.00
H_2O^-	0.48	0.44	0.10	0.20	0.27	2.00	0.23	—	—	0.53
CO_2	0.20	0.02	0.07	<0.01	0.05	4.70	0.13	—	—	1.20
Σ	—	—	100.00	—	—	—	101.00	—	—	101.00
Be (ppm)	—	—	—	—	—	—	—	<1.00	<1.00	—
B	—	—	—	—	—	—	—	—	<10.0	3.0
Sc	5.1	8.3	8.6	5.6	5.9	14.4	6.2	14.4	12.4	5.7
V	—	—	—	—	—	—	—	150	97	—
Cr	45	68	5300	95	4000	2140	4400	1960	2130	4200
Co	145	138	195	160	146	116	155	122	141	115
Ni	292	630	1350	255	1500	1500	3100	—	—	3900
Cu	11.0	4.0	<1.00	10.0	1.40	51	10.0	36	38	4.0
Zn	55	55	99	43	67	68	68	106	76	60
As	<0.50	13.0	<1.40	1.50	<1.30	<1.80	<0.60	—	—	<2.80
Rb	5.0	<2.00	2.00	4.0	<2.00	3.0	<2.00	<20.0	<20.0	2.00
Sr	157	11.0	11.0	29.0	4.0	22.0	11.0	<15.0	29.0	4.0
Y	6.0	5.0	5.0	7.0	5.0	13.0	8.0	19.0	19.0	<2.00
Zr	18.0	17.0	16.0	21.0	6.0	27.0	17.0	94	72	<2.00
Nb	<1.00	<1.00	<1.00	11.0	<0.50	<0.50	<1.00	—	<25.0	<1.00
Mo	—	—	—	—	—	—	—	—	<10.0	—
Ag	<0.0100	<0.0100	—	<0.0100	—	—	—	<1.00	<1.00	—
Cd	—	—	—	—	—	—	—	<2.00	<2.00	—
Sb	<0.30	<0.40	<0.070	<0.40	<0.40	<0.40	<0.080	—	—	<0.280
Cs	<0.240	<0.260	<0.250	<0.260	<0.60	<0.60	<0.210	<0.60	<0.60	<0.50
Ba	<40	<50	7.0	<110	11.0	11.0	8.0	70	52	22.0
La	0.190	0.31	0.065	0.190	0.100	0.70	0.130	8.9	9.0	0.075
Ce	<1.80	<1.60	15.0	<2.00	<2.30	2.60	10.0	19.2	20.3	11.0
Nd	<1.20	<1.60	<2.70	<1.20	<40	<50	<2.60	11.0	5.2	<9.0
Sm	0.039	0.190	<0.0170	0.065	<0.050	0.66	<0.040	1.72	1.91	<0.070
Eu	0.062	0.034	<0.040	0.031	<0.050	0.270	<0.030	0.32	0.34	<0.070
Tb	<0.070	<0.080	<0.090	<0.070	<0.090	0.150	<0.070	—	0.280	<0.110
Yb	<0.110	0.160	<0.110	<0.100	<0.50	0.66	<0.070	0.61	0.64	<0.40
Lu	<0.0140	0.0280	<0.0180	<0.0190	<0.100	0.098	<0.0160	0.092	0.110	<0.080
Hf	<0.100	<0.120	<0.180	<0.110	<0.40	0.48	<0.160	1.27	1.41	<0.40
Ta	<0.230	<0.200	<0.170	<0.240	<0.040	0.0290	<0.200	0.190	<0.40	<0.240
Th	<0.200	<0.30	<0.240	<0.31	<0.50	<0.60	<0.40	0.83	0.83	<0.40
U	<0.270	<0.270	<0.40	<0.280	<1.20	<1.30	<0.30	<0.60	<0.60	<1.00
Rh (ppb)	—	—	—	—	0.60	<0.50	—	—	—	—
Pd	<0.50	8.2	2.50	<0.50	1.40	2.70	13.0	—	—	5.4
Pt	<1.00	1.20	1.80	<1.00	9.0	5.0	6.6	—	—	6.5
Au	<2.90	90	<2.80	<3.0	—	—	<2.40	—	—	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology. D. Ultramafic Rocks.

	103	104	105	84	78	79	167	142	80	163
Lat.	34° 2'N	34° 2'N	34° 2'N	34°56'N	34°55'N	34°53'N	33° 0'N	33°45'N	34°56'N	33°15'N
Long.	83°41'W	83°41'W	83°46'W	83°10'W	83°36'W	83°35'W	85° 7'W	84° 7'W	83°37'W	84°22'W
SiO_2 (%)	42.10	42.40	42.50	42.70	47.80	43.20	43.70	43.70	44.00	44.50
TiO_2	0.08	0.10	0.24	0.01	3.00	0.56	0.25	0.32	0.52	0.48
Al_2O_3	13.50	10.70	7.66	0.60	12.60	6.70	8.24	7.30	6.00	11.50
$Fe_2O_3^*$	10.70	10.00	13.70	8.58	18.02	14.87	11.70	12.00	15.44	11.97
Fe_2O_3	—	—	—	3.00	4.10	5.00	—	—	6.70	2.30
FeO	7.30	6.96	6.46	4.60	11.60	8.00	—	—	7.50	8.50
MnO	0.15	0.14	0.14	0.12	0.23	0.21	0.26	0.15	0.21	0.20
MgO	18.90	22.40	25.70	43.40	6.90	24.60	23.60	28.40	26.40	18.60
CaO	8.70	7.32	2.83	0.15	9.30	4.20	6.24	0.02	0.69	6.70
Na_2O	0.65	0.22	0.01	0.02	1.67	0.25	0.51	<0.15	0.04	1.10
K_2O	0.18	<0.02	<0.02	<0.01	0.60	0.05	0.05	<0.02	0.24	0.14
P_2O_5	<0.05	<0.05	<0.05	0.02	0.30	0.07	<0.05	<0.05	0.08	0.05
S	—	—	—	0.01	<0.01	<0.01	—	—	<0.01	—
H_2O^+	5.80	6.64	7.12	4.20	0.90	4.80	—	—	5.90	4.40
H_2O^-	0.14	0.16	0.12	1.30	0.20	0.02	—	—	0.04	0.31
CO_2	0.01	0.04	<0.01	0.10	0.01	1.20	—	—	0.71	0.25
Σ	—	—	—	100.00	—	—	—	—	—	—
Li (ppm)	—	—	—	—	—	—	—	—	—	10.0
Be	—	—	—	—	—	—	1.80	<1.00	—	—
B	—	—	—	2.00	—	—	<10.0	12.0	—	—
Sc	23.7	29.6	15.4	6.5	40	20.1	27.6	12.2	18.7	28.2
V	—	—	—	—	—	—	110	73	—	—
Cr	700	1070	1180	2900	143	1750	2220	2650	2200	1300
Co	85	97	104	114	55	116	91	103	123	88
Ni	420	570	800	4900	82	970	—	—	1100	620
Cu	152	87	40	3.0	170	42	81	38	18.0	50
Zn	74	73	56	26.0	150	115	78	71	110	70
As	<0.50	<0.50	<0.70	<2.30	<2.30	<3.1	—	—	<1.50	—
Rb	4.0	4.0	<2.00	4.0	10.0	<2.00	9.3	<20.0	<2.00	<2.00
Sr	39	23.0	21.0	5.0	176	22.0	<15.0	<15.0	7.0	23.0
Y	8.0	8.0	11.0	9.0	39	16.0	22.0	13.0	18.0	15.0
Zr	19.0	17.0	28.0	17.0	179	51	32	47	49	37
Nb	<1.00	11.0	<1.00	<1.00	16.0	2.60	<25.0	<25.0	2.30	1.80
Mo	—	—	—	—	—	—	<10.0	<10.0	—	0.060
Ag	<0.0100	0.0210	<0.0100	—	—	—	<1.00	<1.00	—	—
Cd	—	—	—	—	—	—	<2.00	<2.00	—	—
Sb	<0.50	<0.50	<0.40	<0.30	<0.60	0.260	—	—	<0.40	0.92
Cs	<0.30	<0.30	<0.260	<0.50	<0.80	<0.70	<0.70	<0.60	<0.70	<0.80
Ba	<70	<70	<60	29.0	145	20.0	120	<200	71	23.0
La	3.3	1.10	6.0	<0.040	15.3	6.7	7.1	5.3	6.1	1.93
Ce	4.5	1.50	9.0	13.0	31	15.0	9.8	12.0	13.0	6.1
Nd	3.9	<3.0	5.1	<8.0	<70	<60	8.5	<20.0	<50	<40
Sm	0.77	0.39	1.35	<0.060	6.9	2.02	2.32	0.76	1.78	1.22
Eu	0.30	0.150	0.220	<0.040	2.00	0.46	0.55	0.160	0.31	0.44
Tb	<0.100	<0.190	0.260	<0.100	1.10	0.35	0.48	0.099	0.33	0.41
Yb	0.33	0.220	0.79	<0.40	3.3	1.10	2.53	0.270	1.20	1.57
Lu	0.054	0.039	0.110	<0.070	0.47	0.190	0.37	0.052	0.190	0.223
Hf	<0.160	<0.170	0.55	<0.40	4.9	1.30	<0.80	0.70	1.20	0.84
Ta	<0.190	<0.210	<0.210	<0.240	1.20	0.180	<0.40	<0.40	0.250	<0.50
Th	<0.31	<0.190	<0.150	<0.40	1.60	1.30	0.30	1.16	1.20	10.000
U	<0.260	<0.40	<0.40	<0.90	0.98	<1.70	0.170	<0.70	<1.20	<0.60
Rh (ppb)	—	—	—	—	<0.50	0.80	—	—	1.00	—
Pd	40	61	1.70	<0.50	14.0	12.0	—	—	6.8	—
Pt	33	22.0	2.20	2.00	3.0	32	—	—	32	—
Au	<6.0	8.3	<5.0	—	—	—	—	—	—	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology. D. Ultramafic Rocks.

	87	106	107	137	108	109	110	111	81	138
Lat.	34°53'N	34° 1'N	34° 4'N	33°37'N	34° 4'N	34° 1'N	34° 1'N	34° 1'N	34°58'N	33°37'N
Long.	83°35'W	83°40'W	83°48'W	84°15'W	82°47'W	82°49'W	82°49'W	83°40'W	83°38'W	84°15'W
SiO_2 (%)	44.70	44.80	45.10	45.10	45.30	45.40	46.00	46.40	46.40	46.50
TiO_2	0.63	3.05	0.32	0.30	0.30	0.25	0.40	0.11	0.66	0.26
Al_2O_3	6.80	6.64	7.41	6.36	7.22	5.88	9.06	8.15	6.90	6.64
$Fe_2O_3^*$	14.73	14.70	10.50	12.00	11.00	9.58	10.50	12.00	15.73	9.72
Fe_2O_3	5.40	—	—	—	—	—	—	—	6.70	—
FeO	8.00	9.12	4.63	—	9.40	4.10	6.34	8.95	7.20	—
MnO	0.18	0.22	0.18	0.16	0.15	0.12	0.19	0.36	0.23	0.24
MgO	24.40	12.30	25.70	28.40	25.90	21.40	22.30	19.90	26.00	23.50
CaO	5.10	17.20	3.92	0.34	3.37	12.50	5.69	8.88	5.00	8.33
Na_2O	0.24	0.68	0.25	<0.15	0.21	0.25	0.46	0.39	0.61	0.21
K_2O	0.06	0.12	<0.02	<0.02	<0.02	<0.02	0.04	0.04	0.24	<0.02
P_2O_5	0.14	<0.05	0.05	<0.05	0.05	<0.05	0.06	<0.05	0.13	<0.05
S	0.03	—	—	—	0.03	—	—	—	0.19	—
H_2O^+	4.20	1.33	6.21	—	5.40	4.01	6.11	4.97	0.23	—
H_2O^-	0.09	0.06	0.09	—	0.48	0.06	0.10	0.07	0.04	—
CO_2	0.01	0.07	<0.01	—	<0.01	0.76	<0.01	<0.01	0.07	—
Σ	100.00	—	—	—	—	—	—	—	100.00	—
Li (ppm)	—	—	—	—	<2.00	—	—	—	—	—
Be	—	—	—	<1.00	<1.00	—	—	—	—	<1.00
B	—	—	—	<10.0	—	—	—	—	—	<10.0
Sc	21.8	78	13.3	11.2	13.3	63	17.9	12.5	22.3	15.4
V	—	—	—	65	83	—	—	—	—	78
Cr	1850	510	2270	2900	2760	2050	1090	320	1740	2400
Co	104	48	89	128	92	70	85	77	119	101
Ni	890	101	1060	—	1000	420	860	660	830	—
Cu	14.0	72	16.0	81	30	98	31	<1.00	38	35
Zn	99	130	86	81	67	50	84	120	119	67
Ga	—	—	—	—	9.0	—	—	—	—	—
As	<0.70	<0.80	<0.40	—	<1.00	<0.90	<0.50	<0.50	<1.10	—
Rb	4.0	2.00	<2.00	<20.0	<9.0	4.0	<2.00	<2.00	9.0	<20.0
Sr	26.0	153	38	<15.0	39	47	31	15.0	103	<15.0
Y	25.0	21.0	37	13.0	18.0	16.0	12.0	17.0	20.0	25.0
Zr	63	90	45	39	<70	26.0	48	33	71	56
Nb	3.8	4.9	1.10	<25.0	1.00	13.0	<1.00	<1.00	4.2	<25.0
Mo	—	—	—	<10.0	<2.00	—	—	—	—	<10.0
Ag	—	0.040	<0.0100	<1.00	<2.00	0.044	0.0190	0.073	—	<1.00
Cd	—	—	—	<2.00	<2.00	—	—	—	—	<2.00
Sn	—	—	—	—	<10.0	—	—	—	—	—
Sb	<0.080	<0.80	<0.40	—	<0.100	<0.60	<0.40	<0.40	<0.080	—
Cs	<0.250	<0.50	<0.280	<0.70	<0.230	<0.40	<0.260	<0.270	<0.30	0.35
Ba	14.0	<110	<60	44	21.0	<90	<50	<60	26.0	67
La	6.7	5.8	31	3.6	16.1	3.6	6.0	7.5	6.6	35
Ce	15.8	18.0	44	10.1	27.0	6.8	15.0	6.9	16.1	61
Nd	8.9	16.0	21.0	<20.0	13.0	4.3	6.1	7.0	8.5	38
Sm	2.45	5.2	4.1	0.72	2.93	1.01	1.50	2.38	2.18	7.4
Eu	0.56	1.50	1.30	0.220	0.84	0.270	0.48	0.72	0.57	3.3
Tb	0.43	0.92	0.69	0.084	0.46	0.190	0.270	0.41	0.37	1.04
Yb	1.40	1.80	1.80	0.33	1.40	0.50	1.00	1.60	1.22	1.86
Lu	0.200	0.250	0.270	0.063	0.180	0.093	0.140	0.220	0.170	0.246
Hf	1.40	3.4	0.86	0.53	0.92	0.59	1.00	0.80	1.70	0.80
Ta	0.34	0.45	<0.260	0.130	0.150	<0.180	<0.170	<0.180	0.250	0.36
Pb	—	—	—	—	<4.0.	—	—	—	—	—
Bi	—	—	—	—	<10.0	—	—	—	—	—
Th	1.30	<0.270	<0.170	0.65	0.66	<0.230	1.30	<0.150	1.40	0.79
U	0.85	<0.40	<0.30	0.280	<0.30	<0.50	<0.30	<0.270	0.41	<0.60
Pd (ppb)	17.0	<0.50	2.50	—	3.3	3.1	4.3	<0.50	3.7	—
Pt	13.0	<1.00	1.80	—	2.20	5.2	4.9	<1.00	3.6	—
Au	<4.0	<2.60	<1.40	—	<5.0	7.3	<1.70	30.0	<4.0	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Litholog
D. Ultramafic Rocks.

	139	112	113	114	140	141	143	144
Lat.	33°37'N	34° 2'N	34° 4'N	34° 0'N	33°37'N	33°37'N	33°37'N	33°45'N
Long.	84°15'W	83°46'W	83°46'W	83°40'W	84°15'W	84°22'W	84°37'W	84°22'W
SiO_2 (%)	47.10	47.40	48.90	49.10	49.20	50.40	53.00	58.30
TiO_2	0.30	0.37	0.21	0.94	0.57	0.21	0.24	<0.02
Al_2O_3	5.51	7.12	6.57	13.80	6.83	5.20	4.53	0.91
$Fe_2O_3^*$	11.60	9.95	10.30	12.80	10.30	—	10.10	7.95
Fe_2O_3	—	—	—	—	—	7.20	—	—
FeO	—	6.06	6.52	3.37	—	4.20	—	—
MnO	0.15	0.21	0.17	0.15	0.16	0.17	0.19	0.16
MgO	27.80	20.40	21.50	5.34	23.60	27.40	24.80	27.30
CaO	0.67	9.49	7.18	15.90	3.55	1.20	1.96	0.06
Na_2O	0.16	0.47	0.39	0.19	0.33	<0.01	0.36	<0.15
K_2O	<0.02	0.05	<0.02	0.03	0.04	<0.01	<0.02	<0.02
P_2O_5	0.13	0.06	<0.05	<0.05	0.11	0.06	<0.05	0.12
H_2O^+	—	4.61	4.74	4.89	—	2.70	—	—
H_2O^-	—	0.21	0.17	0.05	—	0.97	—	—
CO_2	—	0.01	<0.01	<0.01	—	<0.01	—	—
Be (ppm)	<1.00	—	—	—	<1.00	—	<1.00	<1.00
B	<10.0	—	—	—	<10.0	—	15.0	<10.0
Sc	10.7	22.3	13.6	58	23.2	—	25.0	3.6
V	59	—	—	—	82	—	84	26.0
Cr	1940	1470	860	80	1740	—	2890	3600
Co	74	78	81	39	83	—	65	79
Ni	—	560	810	41	—	—	—	—
Cu	200	57	17.0	114	6.2	—	19.0	6.9
Zn	102	78	74	81	111	—	106	110
As	—	<0.70	<0.40	1.30	—	—	—	—
Rb	<20.0	2.00	<2.00	<2.00	<20.0	—	<20.0	<20.0
Sr	<15.0	52	20.0	274	<15.0	—	<15.0	<15.0
Y	15.0	12.0	13.0	8.0	36	—	59	<10.0
Zr	48	38	46	39	140	—	55	<20.0
Nb	<25.0	12.0	<1.00	1.10	<25.0	—	<25.0	<25.0
Mo	<10.0	—	—	—	<10.0	—	<10.0	<10.0
Ag	<1.00	0.0140	<0.0100	<0.0100	<1.00	—	<1.00	<1.00
Cd	<2.00	—	—	—	<2.00	—	<2.00	<2.00
Sb	—	<0.40	<0.40	<0.70	—	—	—	—
Cs	<0.50	<0.280	<0.40	<0.50	<0.60	—	<0.60	<0.50
Ba	<200	<60	<70	<110	<200	—	<200	<90
La	15.9	2.40	9.7	5.0	61	—	33	1.08
Ce	22.6	8.8	12.0	14.0	54	—	19.3	13.0
Nd	13.0	5.8	9.9	5.3	53	—	36	<7.0
Sm	1.92	1.70	2.37	1.88	10.1	—	8.4	0.266
Eu	0.38	0.79	0.69	0.52	2.67	—	1.84	0.044
Tb	0.230	0.240	0.240	0.39	1.20	—	1.66	<0.30
Yb	0.65	0.84	0.90	1.50	2.79	—	5.3	0.280
Lu	0.098	0.130	0.150	0.230	0.34	—	0.78	0.044
Hf	0.79	0.73	0.66	1.50	2.47	—	0.56	<0.50
Ta	0.093	<0.190	<0.190	<0.220	0.250	—	0.52	0.190
Th	1.02	<0.160	0.60	0.87	4.5	—	0.77	0.50
U	0.50	0.47	0.220	0.220	0.51	—	<0.80	0.190
Pd (ppb)	—	2.60	5.7	<0.50	—	—	—	—
Pt	—	2.40	1.30	<1.00	—	—	—	—
Au	—	<4.0	<2.50	<8.0	—	—	—	—

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
E. Fe-Mn Quartzite.

	122
Lat.	34°25'N
Long.	84° 5'W
SiO_2 (%)	47.20
TiO_2	0.42
Al_2O_3	17.10
$Fe_2O_3^*$	12.16
Fe_2O_3	4.10
FeO	6.70
MnO	0.21
MgO	7.70
CaO	13.40
Na_2O	0.91
K_2O	0.06
P_2O_5	0.05
S	0.01
H_2O^+	0.64
H_2O^-	0.11
CO_2	0.01
Σ	99.00
Sc (ppm)	64
Cr	15.0
Co	45
Ni	29.0
Cu	34
Zn	110
As	<1.40
Rb	3.0
Sr	99
Y	11.0
Zr	19.0
Nb	<1.00
Sb	0.180
Cs	<0.40
Ba	9.0
La	1.30
Ce	11.0
Nd	<2.20
Sm	0.60
Eu	0.34
Tb	0.30
Yb	0.78
Lu	0.120
Hf	<0.190
Ta	<0.160
Th	<0.220
U	<0.50
Pd (ppb)	12.0
Pt	7.2
Au	<3.0

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology F. Diabase Dikes.

	123	170	149	119	147	124	165	168	125	150
Lat.	33°30'N	32°45'N	33°15'N	34° 0'N	33°52'N	33°52'N	33° 0'N	32°52'N	33°52'N	33°22'N
Long.	82°52'W	84°37'W	83°45'W	83°15'W	84°15'W	83°45'W	84° 0'W	83°45'W	83°21'W	83°22'W
SiO_2 (%)	46.20	46.30	46.60	46.70	46.70	46.70	47.10	47.40	47.40	47.70
TiO_2	1.20	0.68	0.56	1.10	0.92	0.97	0.45	0.54	0.44	0.74
Al_2O_3	16.20	15.90	14.30	17.10	17.60	15.00	16.40	14.90	12.80	18.20
$Fe_2O_3^*$	14.87	12.94	12.98	14.44	13.86	14.44	11.18	13.00	10.37	13.34
Fe_2O_3	1.80	2.20	2.90	2.30	4.10	2.40	1.90	2.80	1.90	1.70
FeO	10.80	9.30	8.80	10.40	7.90	10.60	7.90	9.00	7.40	9.30
MnO	0.18	0.13	0.12	0.18	0.15	0.14	0.15	0.12	0.09	0.16
MgO	8.50	11.20	12.60	7.70	6.60	10.00	12.10	11.60	15.00	8.40
CaO	10.00	10.60	9.40	9.40	9.20	9.60	9.80	9.70	9.90	10.30
Na_2O	2.75	1.91	1.77	3.05	2.45	2.44	1.90	1.98	1.47	2.70
K_2O	0.24	0.14	0.26	0.18	0.28	0.44	0.31	0.21	0.24	0.25
P_2O_5	0.14	0.11	0.11	0.19	0.17	0.13	0.09	0.08	0.08	0.11
H_2O^+	1.10	1.30	1.80	1.10	3.20	1.10	1.40	1.40	0.96	0.81
H_2O^-	0.23	0.16	0.67	0.21	1.30	0.18	0.28	0.56	0.19	0.18
CO_2	0.03	0.01	0.18	0.15	0.02	0.04	0.01	0.05	1.90	0.21
Sc (ppm)	37	42	39	31	32	41	31	37	34	33
Cr	340	330	640	78	27.7	286	880	540	1460	150
Co	63	67	70	58	59	69	65	70	65	62
Ni	170	270	280	130	87	210	320	250	390	160
Cu	250	230	210	140	140	310	130	240	130	150
Zn	121	106	113	116	105	121	88	96	87	104
Rb	<90	<70	<73	<88	<71	<76	<71	<74	<63	<85
Sr	150	43	130	180	160	130	78	55	57	150
Y	22.0	21.0	<20.0	<20.0	22.0	22.0	<20.0	<20.0	<20.0	<20.0
Zr	50	<20.0	40	40	50	50	20.0	<20.0	<20.0	<20.0
Nb	<40	<40	<40	<40	—	<40	<40	<40	<40	<40
Sb	<3.3	<2.30	<2.40	<3.3	<2.10	<2.50	<2.60	<2.60	<1.90	<2.90
Cs	2.40	1.70	1.40	<2.90	3.5	1.00	<2.60	4.0	<2.50	0.70
Ba	<440	<390	<410	<430	212	245	<370	<400	<370	<410
La	3.0	3.0	7.0	5.0	4.0	9.0	5.0	2.00	3.0	4.0
Ce	9.0	5.0	16.0	13.0	11.0	18.0	12.0	6.0	8.0	8.0
Nd	11.0	<43	14.0	<45	11.0	12.0	<39	<43	<40	<44
Sm	3.0	1.60	2.00	2.70	2.50	3.3	1.50	1.20	1.30	1.90
Eu	1.08	0.60	0.72	1.06	0.88	1.02	0.51	0.48	0.46	76
Tb	1.13	<1.96	<2.00	<2.03	<1.86	<2.05	<1.75	<1.97	<1.78	<1.96
Yb	3.1	2.70	3.0	3.2	2.70	3.7	2.20	2.60	1.60	2.80
Lu	0.43	0.39	0.41	0.47	0.40	0.50	0.31	0.37	0.260	0.42
Hf	2.00	1.00	1.80	1.40	1.50	2.40	1.00	1.10	1.00	1.40
Ta	<1.32	<0.93	0.110	0.230	0.160	0.150	0.100	<1.04	<0.88	0.120
Th	<2.00	<1.90	<1.90	<1.90	<1.80	<2.00	0.90	0.90	<1.80	<1.90
U	<1.00	<1.00	<0.90	<0.90	<1.00	<1.00	<0.80	<0.90	<0.90	<0.90

Table 2. Chemical Data For Platinum Potential In The Crystalline Rocks Of Georgia Arranged By Lithology
F. Diabase Dikes.

	145	151	169	126	166	127	146
Lat.	33°45'N	34° 7'N	32°45'N	33°45'N	33° 0'N	33°30'N	33°37'N
Long.	84°15'W	83°45'W	83°52'W	83°37'W	84°45'W	83° 7'W	84° 0'W
SiO_2 (%)	47.70	47.70	48.00	48.80	51.60	51.70	53.00
TiO_2	0.92	0.96	0.56	0.91	1.30	1.30	0.82
Al_2O_3	17.70	17.70	15.00	17.90	13.70	13.70	14.50
$Fe_2O_3^*$	13.54	13.47	12.26	12.21	15.59	15.30	11.91
Fe_2O_3	2.60	3.00	2.50	1.10	2.30	2.50	2.40
FeO	9.40	8.90	8.40	9.20	11.40	10.90	8.30
MnO	0.12	0.15	0.12	0.14	0.18	0.15	0.15
MgO	7.30	7.40	10.00	7.10	6.00	5.90	6.60
CaO	9.40	9.50	10.90	10.50	10.20	9.70	10.80
Na_2O	2.72	2.86	1.97	2.76	2.32	2.43	2.20
K_2O	0.24	0.29	0.20	0.60	0.47	0.55	0.41
P_2O_5	0.16	0.18	0.09	0.13	0.14	0.14	0.11
H_2O^+	1.40	1.60	1.80	0.45	0.84	0.86	1.10
H_2O^-	0.20	0.22	0.44	0.26	0.19	0.33	0.23
CO_2	0.03	0.02	0.01	0.05	0.02	0.01	0.03
Sc (ppm)	32	31	44	38	47	45	45
Cr	30	56	470	257	71	64	160
Co	56	57	60	51	52	51	46
Ni	120	110	290	140	58	56	45
Cu	150	120	190	250	200	210	130
Zn	98	110	96	103	127	124	103
Rb	<66	<69	<66	<88	<71	<81	<66
Sr	150	160	72	160	100	84	110
Y	23.0	<20.0	22.0	<20.0	29.0	27.0	20.0
Zr	<20.0	48	<20.0	60	80	60	60
Nb	<40	<40	<40	<40	—	<40	—
Sb	<2.00	<2.20	<2.10	<3.4	<2.20	<2.90	<2.20
Cs	1.80	1.80	3.2	<3.0	0.80	0.70	1.00
Ba	<360	<370	<390	<440	<420	<450	<400
La	5.0	6.0	3.0	9.0	9.0	9.0	8.0
Ce	10.0	13.0	7.0	19.0	19.0	20.0	16.0
Nd	8.0	13.0	6.0	<46	13.0	15.0	10.0
Sm	2.40	2.70	1.30	3.2	3.6	3.7	2.80
Eu	0.85	0.98	0.53	1.05	1.12	1.15	0.83
Tb	<1.75	0.78	<1.92	0.82	0.97	<2.18	<1.98
Yb	3.0	2.80	2.80	3.4	3.4	3.6	2.60
Lu	0.42	0.40	0.41	0.46	0.53	0.53	0.36
Hf	1.30	1.40	1.00	2.40	2.60	2.70	1.70
Ta	<0.95	0.210	0.140	0.210	0.31	0.34	0.31
Th	<1.70	<1.70	<1.90	<2.00	1.80	1.40	1.90
U	<0.90	<1.00	<0.90	<0.90	<1.10	<1.00	<1.10