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Particle Shape and Composition of NU-LHT-2M

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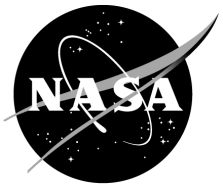

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LIST OF ACRONYMS

BSE	backscatter electron
EDS	energy dispersive x-ray spectroscopy (sometimes referred to as EDX)
FPA	fine particle analyzer
KSC	Kennedy Space Center
PDF	probability distribution function
SEM	scanning electron microscope
TM	Technical Memorandum
USGS	United States Geological Survey

NOMENCLATURE

AR	aspect ratio
$C.I.$	contour interval
D	sphere of diameter
d	diameter
H	Heywood factor
h	dimension of a shape as indicated on accompanying figure
L	size of the square
M	Feret diameter
m	orthogonal Feret diameter
n	number of
P	perimeter
S	side

TECHNICAL MEMORANDUM

PARTICLE SHAPE AND COMPOSITION OF NU-LHT-2M

1. INTRODUCTION

Particle shape is one of four characteristics required by the figure of merit algorithm used to evaluate the quality of lunar regolith simulants. There are a large number of ways to make shape measurements, with both obvious and subtle differences between results. In practice, the practical way to compare the results of the different approaches is to make multiple measurements of the same material by different methods. This Technical Memorandum (TM) covers data obtained on the simulant NU-LHT-2M by the United States Geological Survey (USGS) using potted polished sections in a scanning electron microscope (SEM) and by Phil Metzger of Kennedy Space Center (KSC) using the fine particle analyzer (FPA), which images the particles in silhouette.

2. SAMPLE PREPARATION AND MEASUREMENT

For the analysis by SEM, the NU-LHT-2M material was sieved to four size fractions using Tyler screens: <200 mesh (<75 μm), 200–100 mesh (75–150 μm), 100–35 mesh (150–425 μm), and >35 mesh (>425 μm). Polished grain mounts, ≈7 mm in diameter, were prepared of each size fraction. No effort was made to assure the particle orientations were random and no assessment of particle orientation was made. The mounts were coated with carbon for conductivity.

A JEOL 5800LV SEM operating at 15 keV accelerating voltage and 0.5 nA current (cup) was used. The SEM is equipped with a Thermo Scientific 10 mm^2 active area silicon drift detector. The working distance for the <200, 200–100, and 100–35 size fractions was 11 mm. The working distance for the >35 size fraction was 21 mm. Magnifications of ×250, ×100, ×85, and ×50 were used for the <200, 200–100, 100–35, and >35 size fractions, respectively. The pixel dimension for each configuration is given in appendix A (table 3). Different magnifications and working distances were used to maximize the number of grains in each field of view. Adjacent, nonoverlapping fields of view at the respective magnifications were analyzed so that the entire grain mount was covered.

NORAN System SIX feature sizing software was used to program the automated motion, measure particle morphology, and determine phase identification.[1] Binary backscattered electron images were acquired of each field of view. The software determines grain boundaries based on the threshold values. Morphology parameters and a 3-s energy dispersive spectra were acquired for each particle that fit within predetermined threshold values. For energy dispersive x-ray spectroscopy (EDS) acquisition, a focused electron beam is deflected to each geometric center of the defined grains within each field of view. EDS results were matched to a chemical species library previously set up using the simulant starting components. In most cases, this provided a match for a single phase. This was expected as the dominant source rocks for NU-LHT-2M are from the coarsely crystalline Stillwater Complex, Montana. EDS spectra that did not match a chemical library entry were marked as Learn1, Learn2, etc., for later manual identification. Each grain's identification was manually checked for accuracy. In total, values for 5,193 particles were obtained.

In addition to composition, for each particle, an area, perimeter, width, and length were obtained. These values for each particle, as well as derived measures discussed below, are given in appendix B, particle dimensions, shape, and composition by size fraction.

The definitions of area, perimeter, width, and length are illustrated in figure 1. The perimeter is obtained by connecting the centers of the exterior pixels. The area is the sum of all pixels in the particle. As discussed in appendix A, thus there is a significant mismatch between the spatial regions defined by area and by perimeter. The resulting error is substantial for the work done here and is easily demonstrated in the data. As the significance of the error decreases as particle size relative to pixel size increases, the analyses reported here are based on particles with areas >192 pixels. Consideration of figure 1 shows there are analogous errors in the values of length and width. However, as these errors are similar in nature and as most of the particles are crudely equant, these errors may, to some extent, be self-cancelling in most cases.

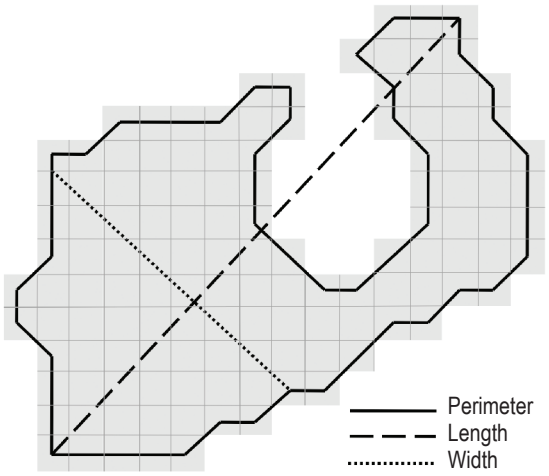


Figure 1. Relationships of particle area, perimeter, length, and width as defined within the NORAN software. Redrawn from the product documentation.

In this work, no attempt was made to correct for analysis of particles that may have been touching. Besides being physically unlikely due to particle angularity, visual inspection of the back-scatter electron (BSE) images suggests this is not a major problem (fig. 2). Particles were removed that had a chemical signature of epoxy or the sample holder and those that had insufficient data for an EDS pattern and chemical typing errors. No attempt was made to acquire volumetrically representative data across all size fractions, therefore modal abundances for the entire simulant cannot be directly extracted from these data.

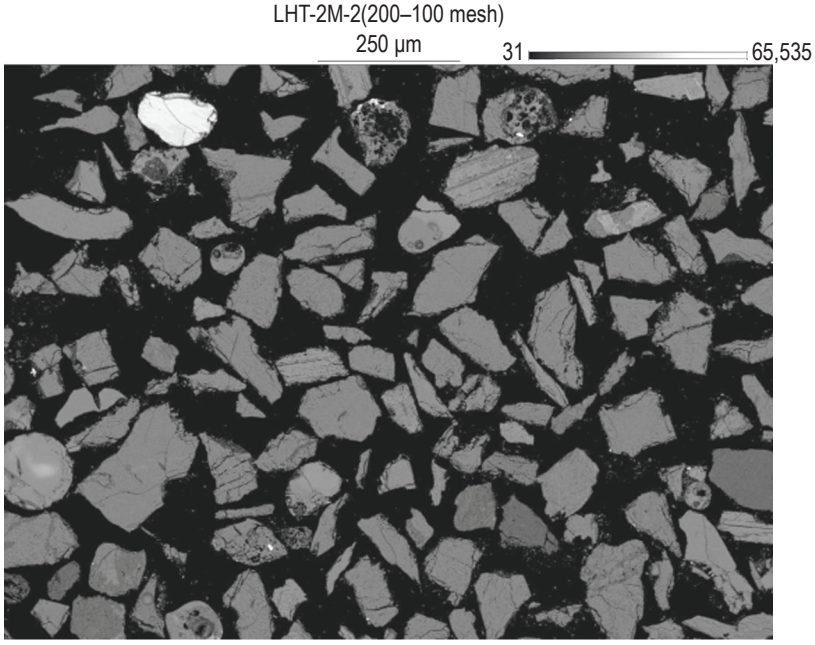


Figure 2. Representative BSE image of the sieved fraction 200–100 mesh. Note the lack of particle to particle contacts and the range of particle outlines.

3. ANALYSIS OF SCANNING ELECTRON MICROSCOPE DATA

Two derived values—aspect ratio and Heywood factor—were computed for each particle. Preferably, aspect ratio is a ratio of the maximum Feret diameter and the orthogonal Feret diameter. It was assumed for this analysis that these measures are equivalents of the length and width measures in appendix B. However, because of the definitions for length and width used by the NORAN software, it is likely the computed aspect ratio values will tend to be slightly lower than true values. No attempt was made to assess the magnitude of this factor. The Heywood factor expresses the complexity of a particle's perimeter. Formally, the Heywood factor is equal to 1 divided by particle perimeter divided by the circumference of a circle with the same area as the particle. It is expressed in this manner to make it apparent that the Heywood factor is the inverse of circularity, another common shape measure. Both aspect ratio and the Heywood factor have ranges of >0 to 1 and equal 1 for a circle.

Frequency distributions of aspect ratio versus Heywood factor for selected subsets of the total data were created using custom code. Each distribution was binned into intervals of 0.05 on each axis, normalized to an accumulated value of 1 (freq = $n_{(AR,H)}/\sum n$), was then plotted using gnuplot 4.4 (http://www.gnuplot.info/). The curves in black on each plot are for all possible ellipses (—), rectangles (– –), and "rectangles" of the given area but with 25% greater perimeters than actual rectangles. These are the same techniques used for the data provided by Phil Metzger of KSC using the FPA.[2]

Three questions were asked of the USGS data:

(1) Is there a variation of shape with sieved fraction?

(2) Is there a variation of shape with particle composition?

(3) How do the frequency distributions of the USGS and FPA data compare?

3.1 Variation of Particle Shape With Sieved Fraction

Normalized frequency plots were made for each sieved fraction (fig. 3). The natural variation of small samples is an obvious problem with the 100–35 mesh and the >35 mesh samples. In fact, it is so severe with the >35 mesh fraction that the contour interval was reduced, which has the effect of visually smoothing the surface. The graphs suggest the number of particles needed for robust distribution approaches or exceeds 2,000, which is compatible with the conclusion of Rickman et al.[2]

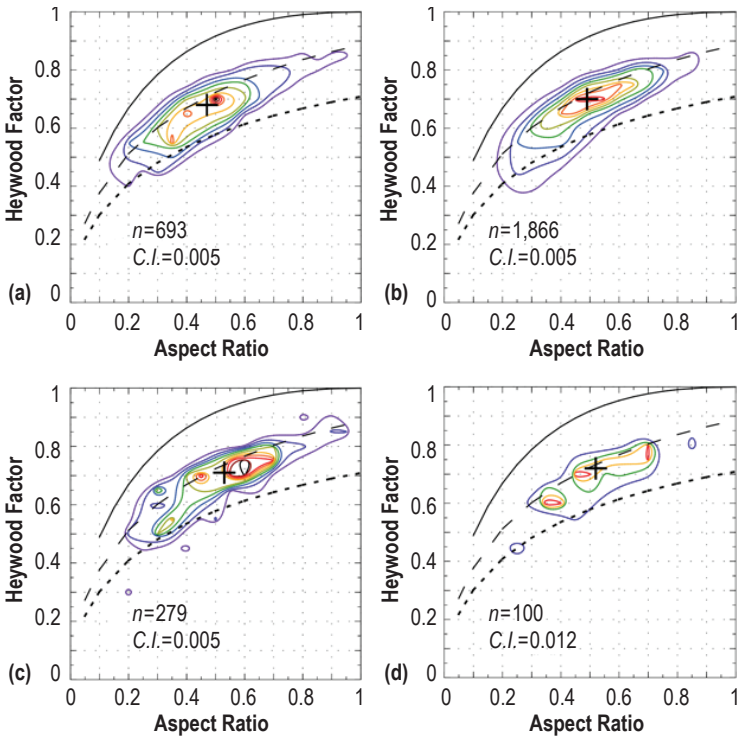


Figure 3. Frequency distribution for each of the four sieved fractions: (a) <200 mesh, (b) 200–100 mesh, (c) 100–35 mesh, and (d) >35 mesh. Only particles >192 pixels are included. The black cross is the population median.The black curves are for visual assistance.

The median values of aspect ratio and Heywood factor for each fraction are very similar, though there is an apparent drift to higher values of aspect ratio and Heywood factor as mesh size increases. The overall positions of the frequency distributions are very similar. While it is tempting to ascribe significance to differences between the outer limits of the <200 mesh and the 200–100 mesh distributions, this is not prudent. The location of the outer contour lines in these graphs denotes the presence of approximately a single particle. Therefore, it is concluded these data do not support a hypothesis that particle shape in NU-LHT-2M varies with particle size. More completely, these data suggest an upper limit to how much shape changes with size in this simulant.

3.2 Variation of Particle Shape With Particle Composition

In almost all cases, 99.2%, the composition of each particle was a single phase. This result was expected as the primary feedstocks of the simulant are coarsely crystalline rocks from the Stillwater Complex. For the subsequent discussion, only those particles with a composition matching a single phase were used. Table 1 gives the volume fraction by mineral for each sieved split. These minerals make up 99.4%, by volume, of the particles sampled. The remaining fraction is made up of the trace phases: apatite, calcite, FeOx (20–11 particles each); biotite, chromite, clay, epidote, feldspar, illite, Kspar, pyrite, sphene(?), and TiO_2 (8–1 each). In none of the splits did any of these trace phases reach 0.3% by volume of the split.

Table 1. Observed phase abundance of particles by sieved fraction.

Mineral	Composite		<200 Mesh	200–100 Mesh	100–35 Mesh	>35 Mesh
			n=2,440	*n*=2,319	*n*=315	*n*=119
	Total No. Particles	Volume (%)				
Plagioclase	3,135	62	56.8	59	56.5	70.1
Glass	896	18.7	13.8	17.3	22.5	17.8
Clinopyroxene	181	5.6	4.1	3	4.7	9.8
Orthopyroxene	356	5.6	10	8.3	6.7	1.1
Olivine	311	4.5	7.6	6.6	6.1	0.3
Chlorite	121	1.7	3.9	2.3	2.3	0.4
Ilmenite	23	0.6	–	1.5	–	–
Quartz	57	0.4	2.1	0.3	1.1	–
Albite	38	0.4	0.4	0.9	0.1	–

The absolute magnitudes of volume percent should be treated with caution. First, there are size versus composition effects, as can be seen in table 2. Second, and very critically, the relationship between area and volume is not simple where particle shapes are not uniform and sample volume (volume of excitation) is a significant percentage of the particle volume. Third, the number of particles is low for the two coarsest splits.

Table 2 shows several interesting features caused by the source materials and the nature of the minerals. As a baseline, assume five things:

(1) All of the minerals in the simulant start as grains with sizes larger than the measured sieve fractions.
(2) All of the minerals mill the same way.
(3) Within a bounded sieve fraction, a large number of particles of each mineral is measured.
(4) Each particle consists of a single mineral.
(5) Milled particle shapes are roughly similar irrespective of mineral.

Given these assumptions, within a bounded size range, all of the minerals should have approximately the same average area. To a first approximation for the 200–100 mesh and 100–35 mesh fractions, plagioclase, glass, clinopyroxene, orthopyroxene, and chlorite are consistent with these assumptions. In contrast, quartz is anomalously small in the 100–35 and 200–100 fractions and large in the <200 fraction. Albite, apatite, and calcite are all missing from the 100–35 mesh fraction and apatite is clearly undersized in the 200–100 fraction. Also, ilmenite is present only in the 200–100 fraction and is distinctly oversized.

Table 2. Average square root of particle area (μm^2) by size fraction and mineral. All monominerallic particles are used in this analysis. Note that the number of particles of ilmenite, quartz, albite, apatite, and calcite are much smaller than for the other minerals.

Mineral	Average Square Root of Area (μm^2)			Normalized by Plagioclase		
	<200 Mesh	200–100 Mesh	100–35 Mesh	<200 Mesh	200–100 Mesh	100–35 Mesh
Plagioclase	7.8	56.2	121.7	1	1	1
Glass	7.5	53	121.6	0.96	0.94	1
Clinopyroxene	9.6	49.9	139.2	1.22	0.88	1.14
Orthopyroxene	10.7	56.5	139.8	1.36	1	1.15
Olivine	8.6	60.3	125.7	1.1	1.07	1.03
Chlorite	8.3	49.5	130.8	1.06	0.88	1.07
Ilmenite	–	88.5	–	–	1.57	–
Quartz	11	28.5	25.3	1.41	0.51	0.21
Albite	7.5	52.5	–	0.96	0.93	–
Apatite	6.1	25.9	–	0.79	0.46	–
Calcite	6.3	53.9	0.81	0.81	0.96	–

Albite and calcite are believed to be hydrothermal alteration minerals present in the source rocks from the Stillwater Complex. These secondary phases are typically very fine grained in the source rock; therefore, it is not surprising they are missing in the course fraction. Quartz is also believed to be a hydrothermal alteration mineral, and therefore, relatively fine grained in the source rock. It lacks cleavage or parting, which the other minerals in the list do have, and is resistant to grinding, which could explain it being oversized in the <200 mesh fraction. The ilmenite in the simulant was added during the manufacture of the simulant. The ilmenite was obtained from a commercial source, and was mined from beach sand. Ilmenite's abrasion resistance is key to its deposition in such ores. The source of the apatite could have been original to the Stillwater source rock or it could have been from material added in manufacture. Why it is so anomalously small in the 200–100 fraction is not known.

In addition to the minerals discussed above, several particles of other materials were found: brass, 5; Al_2O_3, 2; Ca-Si, 1; and CaO, 1.

Data for each of the first six minerals in table 1 were segregated into separate frequency of occurrence plots, shown in figure 4. An additional plot, which combined the data for ortho-pyroxenes and clinopyroxenes, was also made in order to increase the sample size.

The medians of these data are essentially identical: aspect ratio ≈0.49 and Heywood factor ≈0.70. The exception is chlorite, at 0.57 and 0.73, respectively; it is noticeably more equant than the other components. Even though the number of chlorite particles is small, this is probably an accurate reflection of reality. Statistical tests of significance for these or other differences have not been done. An examination of the one-dimensional distributions of aspect ratio and Heywood factor (fig. 5) suggest use of any standard parametric test would be questionable, especially for the

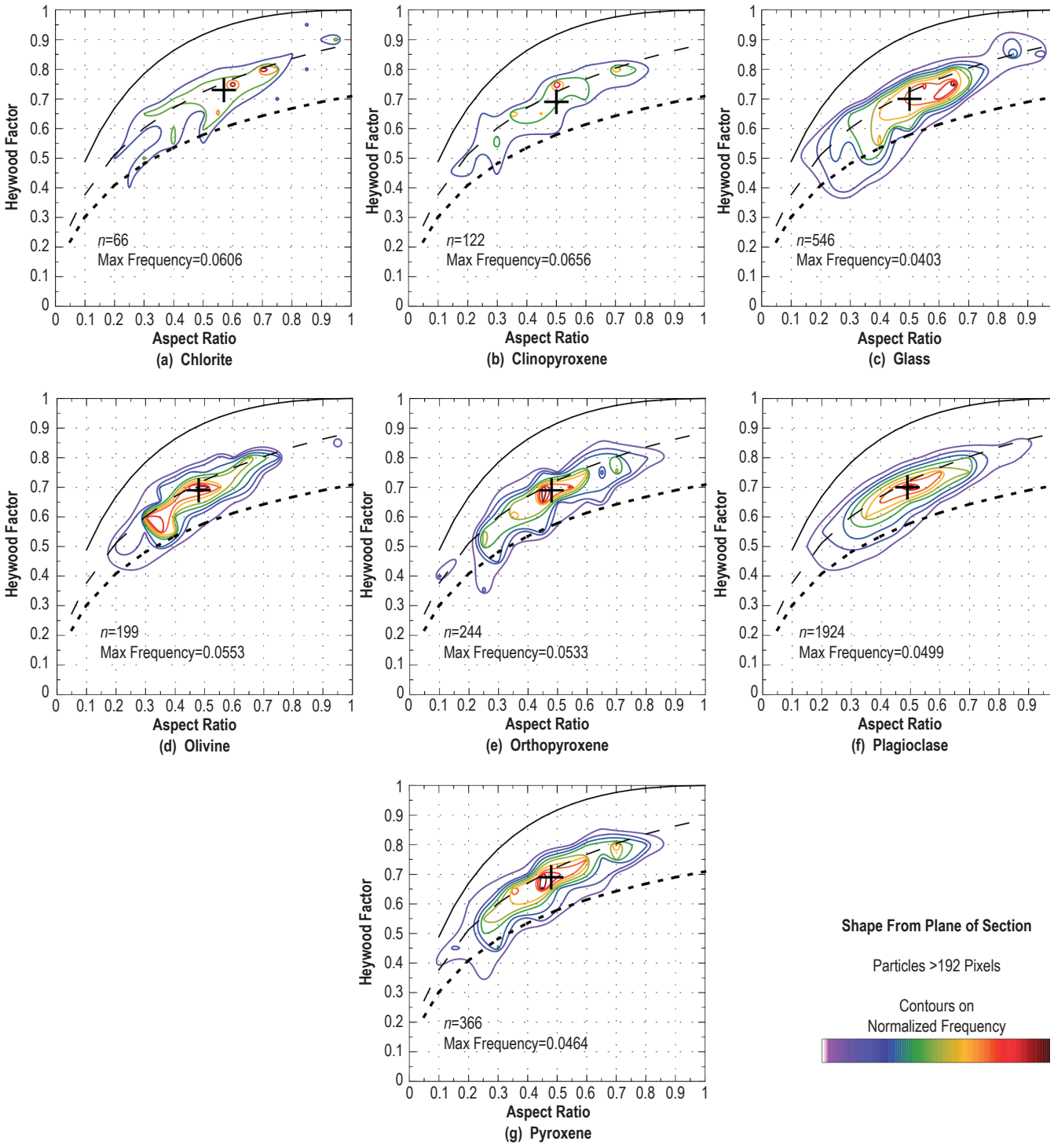


Figure 4. Relative frequency distributions for the major minerals in NU-LHT-2M. Values from all sieved fractions were combined and only particles with areas >192 pixels used. The pyroxene plot is a combination of the clinopyroxene and orthopyroxene data. Contour intervals are at one-tenth data range, except for chlorite and clinopyroxene, which are at one-fifth the data range. The black cross is the population median. The black curves are only for visual assistance.

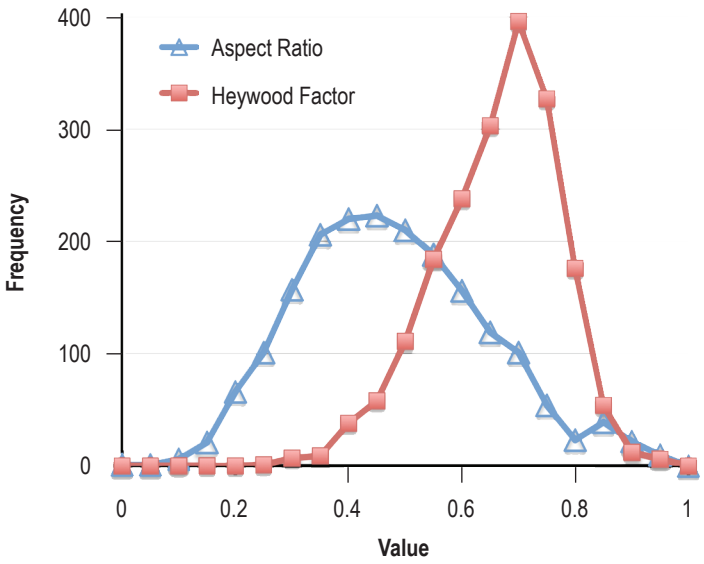


Figure 5. Frequency of occurrence of two shape factors for plagioclase particles in NU-LHT-2M. The distributions for all minerals combined is almost visually identical with the distributions shown here.

small population sizes in these data. A statistical test based on a Monte Carlo procedure is possible, though this has not been done.

In these data, the only mineral with sufficient particles to be analyzed also by sieve fraction is plagioclase. A comparison of the –200 mesh with the 200–100 mesh fraction is shown in figure 6. For this analysis, only particles with at least 192 pixels were included. Although there is a small difference between the population medians, it may or may not be significant.

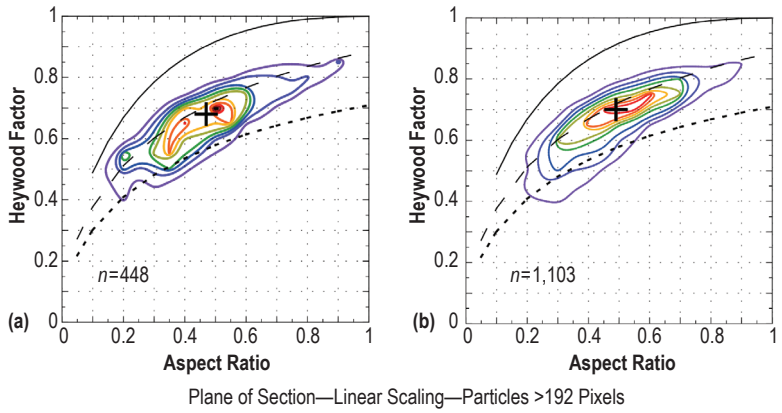
A few details about these plots need to be recognized. Each plot is contoured in a way that is sensitive to the maximum frequency in that data set. The following factors affect the maximum frequency:

(1) There is the inherent range of particle shapes for a data set. Data from a plane of section will inherently have a broader range of shapes than will the same material viewed from plane of projection.

(2) There is scatter due to random chance. As data sets get smaller, the probability random sample effects will be visible in a plot increases.

(3) Also, as sample size becomes small, the maximum normalized frequency tends to increase.

To elucidate, in the limit of a single particle, the relative frequency of that particle's shape is 1. Figure 7 illustrates this general trend using the data reported here. There is a clear trend in the smaller sample sizes to have higher maximum frequencies.



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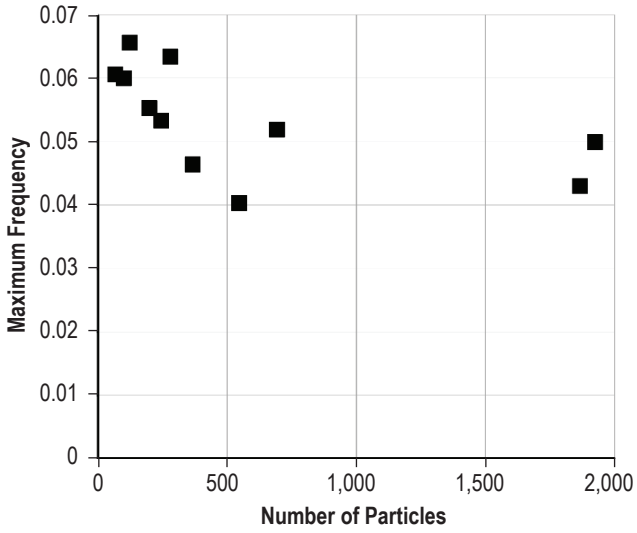

Figure 7. Number of particles in a sample and the maximum frequency observed for the sample.

(4) In these plots, the first contour line effectively marks those combinations of aspect ratio and Heywood factor for which there is at least one particle. Therefore, if a value of aspect ratio and Heywood factor is outside the lowest contour, the observed incidence rate of particles with that shape is zero.

(5) Finally, the plots are made from data binned into intervals 0.05 units wide.

With the above points in mind, even though several of these data sets suffer from inadequate sample size, there are several probable conclusions that may be drawn.

Glass particles clearly have a subpopulation that is roughly circular in outline. While not numerically abundant, they are quite distinctive. Figure 2 shows such particles. These particles are in fact desired, as similar particles are common in the finer fractions of lunar regolith.[3] Glass also has an unusually low maximum frequency. In figure 7, it is the lowest point. This suggests the glass particles have a wider than usual range of shapes. Indeed, the region of aspect ratio versus Heywood factor enclosed by the first contour line is greater than for any other component of the simulant. Related to this is the fact that the mode frequency for glass (0.65, 0.75) is substantially offset from the median (0.50, 0.70). Thus, while there is a large number of glass particles with relatively irregular shapes, there also is a large number of particles distinctly more equant than all of the other particles in the simulant.

The olivine plot is distinctly multimodal, which may be an artifact of inadequate sample numbers. Assuming the bimodal distribution is correct, its origin or significance is unknown.

3.3 Comparison of Fine Particle Analyzer and NORAN Data

The particle shapes of NU-LHT-2M were also measured by Phil Metzger of KSC using the FPA.[2] The methods used for both sets of measurements actually measure a two-dimensional region within a rasterized image. The major difference between the two studies is the location of the sample plane from which the pixel grid was taken. The USGS data are taken in a plane of section. The data generated by the FPA are from a plane of projection, or as silhouettes. The results of the two approaches are not easily comparable.

In geometry, if a known plane intersects a known solid geometry, the size and shape of the intersection area can be determined. If one randomly performs such intersections, there will be a probability for a given area of intersection relative to the maximum possible area of intersection. For nontangent intersections of a plane and a sphere, the area, which is a circle, may be readily computed. According to Russ and Dehoff[4] the probability of a circle of diameter (d) resulting from the intersection of a plane with a sphere of diameter (D) is

$$P(d_{\text{circle}}) = d/(D \bullet (D^2 - d^2)^{0.5}) \quad .$$

As shown in figure 8, this is a smooth, monotonic curve. If uniformly sized spheres of unknown diameter are sectioned, with this relationship it is relatively easy to experimentally determine the size of the spheres. It is even possible to determine the distribution of sizes from a mixture of spheres when observed in a plane of section.

No such simple pattern exists for most solids. For example, Hull and Houk determined the probability curves for the area of intersection between a cube and a plane, and for three other solids.[5] For a cube, an outline from such an ideal intersection can have three, four, five, or six sides, and tangent intersections may give either squares, lines, or points. The probability curve for the area of intersection for a plane and a cube, along with that of a plane and a sphere, is given in figure 8.

Effectively, in almost all cases, one cannot uniquely, quantitatively determine either the three-dimensional sizes or shapes of solids by examining in either a plane of projection or a plane of section. Therefore, the only way to compare such data is experimentally.

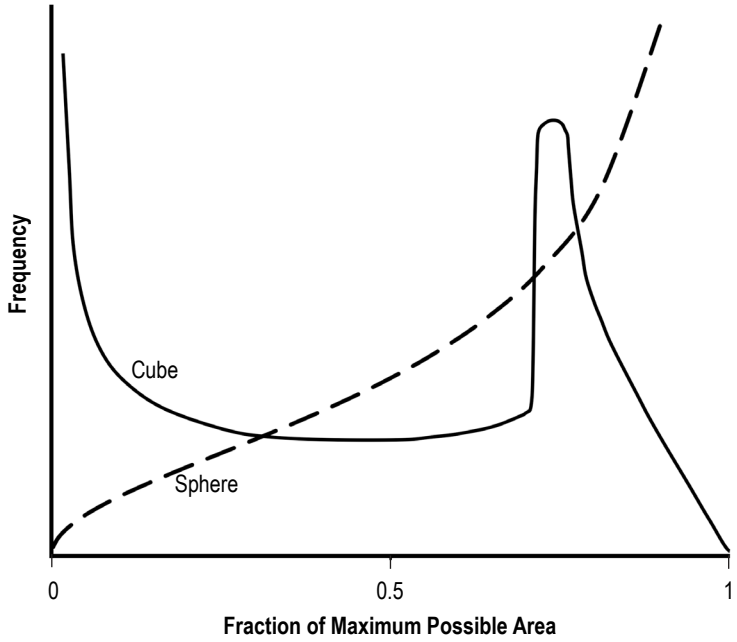

Figure 8. Probability for a given area of intersection relative to the maximum possible area of intersection for a sphere (----) and a cube (——). Data for the cube are from Hull and Houk.[5]

Before doing such an experiment, it is desirable to consider how the two data sets should differ. For this thought experiment, assume the plane of projection view is the baseline and the metrics considered are aspect ratio and the Heywood factor. Note that both metrics are independent of size. The experiment will also assume the geometric measurements are made with unlimited precision. In reality, as the measurements are made using raster-based processes, there will be differences independent of ideal behavior. This is most significant as the particle size approaches the dimension of a pixel. Appendix A contains a detailed discussion of a specific set of such problems. Particle orientation must also be considered. For nonspherical shapes, the simplest assumption is that no preferential orientation was induced by either the procedure used to pot the sieved fractions or by the FPA. This assumption is used in the results reported here. The robustness of the assumption has not been rigorously tested for either procedure. However, it should be noted the randomization technique used by the FPA is common to many analogous commerical systems. Also, for roughly equant particles, sections from potted materials are commonly assumed to be randomly oriented for most purposes, including x-ray work. A final real-world consideration is the variation of particle shape with particle size. The details of how such variation interacts with measurement resolution is complex.

For the thought experiment, as already stated, if the particles are spherical, there will be no difference between measurements made in the two planes, at least for the two metrics considered here. Both views yield circles; the aspect ratio and Heywood factor for circles are 1. But for nonspherical volumes, such as rectangular prisms, the plane of section view will have more elongate and angular shapes when compared to the plane of projection view. For example, as illustrated in figure 9, a plane intersecting a cube can yield intersections with three to six sides. The bulk of all

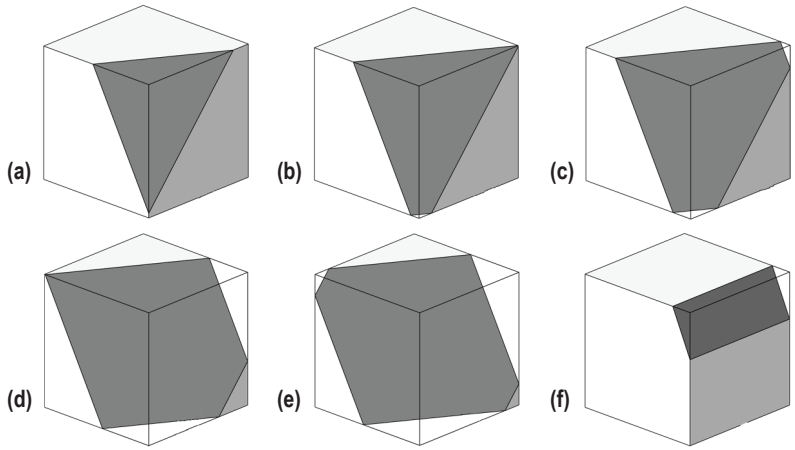

Figure 9. Intersections of a plane and a cube: the planes in (a)–(e) intersect all three axes of the cube. The plane in (f) intersects two axes of the cube. (a)–(e) are generated using parallel planes, varying only the depth within the cube. As illustrated, this may generate three-, four-, five-, and six-sided areas.

randomly oriented plane—cube intersection generates three- or four-sided regions.[5] These intersections may have a wide range of aspect ratios and Heywood factors, as discussed in appendix C. By examination of figure 9, it can readily be seen that some intersections will have aspect ratios that are very low. In contrast to the figures generated by intersections, only some on-axis views of trigonal pyramids and in a single, perfectly on-axis view of a trigonal prism can a silhouette have as few as three sides. All other orientations of these solids and all other solids will have more than three sides to the silhouettes. If the figure has a convex hull, the number of sides increases the maximum possible aspect ratio and Heywood factor.

Therefore, if all other things are equal, it is clear that for aspect ratio and Heywood factor, the average of measurements from a plane of section will be lower than measurements made from a plane of projection. How much lower is a very complex problem in stereology and not amenable to direct numerical solution. A discussion of how to obtain the relationship is in appendix D.

Figure 10 shows the observed distributions of aspect ratio and Heywood factor for NU-LHT-2M as measured using the two types of view. While the distribution on the left contains 30 times the data of the other, it seems highly probable that the general pattern for the plane of section view is close to what would be obtained if substantially more particles were measured. As predicted by the preceding thought experiment, the distribution for the USGS work is significantly below and to the left of that from the FPA. Whereas the bulk of the plane of projection data is between the ellipse and rectangle lines, the plane of section data clearly shows that a significant number of particles have slightly concave hulls, as explained in appendix C.

The morphology of the surfaces is also distinctly different. Interestingly, both surfaces are very reminiscent of the shells of molluscs in the class Bivalvia, such as clams and oysters. For comparison, refer to *Margaritifera margaritifera* <http://en.wikipedia.org/wiki/Freshwater_pearl_mussel> and Barnea candida.[6,7] It is likely that the mathematics describing the morphological shifts between such species could be of use in describing shifts in shape distributions such as found in the data.

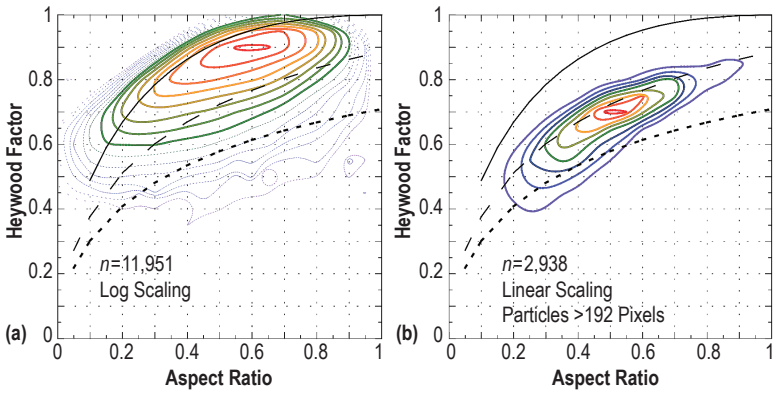

Figure 10. Particle shape of NU-LHT-2M as measured in (a) plane of projection and (b) plane of section. In plot (a), contours are scaled using the $\log_{10}$. Also in plot (a), ≈99% of the particles are within the heavy contour lines. The black curves are for visual assistance. The upper, solid curve is the trace of all ellipses. The center, dashed line is the trace of rectangles. The lower, short-dashed line is for rectangular shapes with 25% greater perimeter lengths than a true rectangle.

4. CONCLUSIONS

The particle composition, size, and shape data presented here are the first publication of composition, shape, and size data by particle for any lunar simulant; 5,193 particles were measured and checked individually. The data were acquired from potted sections of NU-LHT-2M sieved into four fractions: <200 mesh, 200–100 mesh, 100–35 mesh, and >35 mesh. Virtually all of the particles, 99.2%, are monominerallic. Contamination particles were approximately one per thousand. There are size versus mineralogy differences in the simulant, but these are subtle and clearly affect only minor and trace minerals. There may be size affects in the major minerals, but that was not established by this study.

The source data have an inherent defect in the shape-related measures: the value of area is not computed from precisely the same region of the image as is perimeter. This problem is serious for small particles. A detailed analysis of this problem is provided in appendix A. Therefore, shape measurements in this TM are restricted to particles containing at least 192 pixels, which significantly reduced the number of useful measurements. Shape is seen to vary slightly between phase in the simulant. This is clear for chlorite and glass. To aid understanding of the shape data, curves were plotted for multiple, simple geometric shapes. This is developed in appendix C. Several of the curves so generated are used on the relevant graphs in this TM.

The data acquired from the potted sections, i.e., plane of section, are compared to data acquired under the direction of Phil Metzger of KSC and reported in Rickman et al.[2] The latter data were acquired from a plane of projection method. As mineralogy information is not available in the latter data, only a total simulant comparison is possible. This comparison, done graphical, is the first of its kind. The difference between the two measurements is in line with conceptual expectations. Assuming the plane of projection data are the baseline, the plane of section data are at significantly lower values of Heywood factor and aspect ratio. Whereas the bulk of the plane of projection data is between the ellipse and rectangle lines, the plane of section data clearly shows that a significant number of particles have concave hulls.

As a result of this work, it was realized that there is conceptually a way to compare data acquired from plane of projection and plane of section. This utilizes the fact that the measurement process actually draws from probability distribution functions (PDFs) and the functions, though not known, can be algorithmically approximated. This logic is summarized in appendix D.

APPENDIX A—PERIMETER LENGTH ERROR ANALYSIS

There is a substantial error in how perimeter is computed by the NORAN software used by the USGS to produce shape data for NU-LHT-2M. According to the product documentation, the perimeter for a particle is computed by linking the centers of the peripheral pixels, but area is computed by counting the pixels. Therefore, the definitions of area and perimeter are not for the same two-dimensional region. Of necessity, the region defined for "area" must be larger than the region for "perimeter." The relative magnitude of the error varies with particle size and geometry. For particles containing a very large number of pixels, the relative difference is negligible, but in small particles, the difference is substantial. To illustrate, assuming the "area" definition is "correct," for a particle of 2×2 pixels, the area is 4, the true perimeter is 8, and the perimeter by the NORAN software is 4. Intuitively, this is the worst possible case.

The magnitude of the problem and the effect of shape are explored in tables 3 and 4. In both tables, the measures are in units of pixels. As seen in table 3, considering rectangular shapes, the worst case is seen to be squares, as expected. With respect to size, the fewer the pixels, the worse the magnitude of error, also as expected. Table 4 gives the relationship between the size of a square and the Heywood factor value that would be obtained from the NORAN software. Note that this error causes the reported Heywood value to be too large. Again, the magnitude of the error increases as particle size is reduced. Though larger particles suffer less error, there remains an error for all sizes. Table 4 also gives the ratio between the reported Heywood factor and the true value of 0.886. A square particle of 8×8 pixels has an error in perimeter of 14%. A particle with approximately three times the area still has an error of ≈8%.

Four sized fractions of NU-LHT-2M were studied by the USGS. Some of the attributes of each fraction are given in table 5. The actual pixel resolution was not given. By examination, the dimensions given below were determined. As can be seen, a significant number of particles had Heywood factors >1.

On inspection, the particles with impossibly high Heywood factors were seen to have areas less than ≈60 pixels (fig. 11). Further, the magnitude of the excess in the Heywood value is strongly related to the size of the particle.

The <200 mesh data contained a significant number of particles with area between 64 (8^2) and 192 (14^2) pixels. From table 4, the corresponding magnitude of error is 1.143 versus 1.077. Therefore, two plots of aspect ratio versus Heywood factor were made from these data—one for all particles with area >64 pixels and one for all particles with area >192 pixels. The results are shown in figure 12. Removing the particles in the size range 64 to 192 pixels, 37% of the data causes a marked reduction in frequencies along the upper edge of the surface. The median Heywood value shifted by 0.02 units. Given the available data, to obtain a second, comparable shift by dropping a range of particles >192 pixels would be impractical.

Table 3. Error in perimeter using the NORAN System SIX feature software for rectangular particles of different sizes. Perimeter(bad) ($\mathbf{P}_{bad}$) is computed based on the method of NORAN System SIX feature sizing used at the USGS. Error is defined as $(\mathbf{P}_{true}-\mathbf{P}_{bad})/\mathbf{P}_{bad}$.

X	Y	Area	Perimeter (True)	Perimeter (Bad)	Error
2	2	4	8	4	1.000
4	4	16	16	12	0.333
8	8	64	32	28	0.143
4	16	64	40	36	0.111
2	32	64	68	64	0.062
16	16	256	64	60	0.066
8	32	256	80	76	0.052
4	64	256	136	132	0.030
2	128	256	260	256	0.016

Table 4. Error in Heywood factor due to perimeter length for square particles. The Heywood factor for a square is 0.886.

Particle Width	Area		Perimeter		Equivalent Circumference	NORAN Heywood	Ratio to True
	Actual	Within Perimeter	Actual	NORAN			
5	25	16	20	16	17.72	1.108	1.250
7	49	36	28	24	24.81	1.034	1.167
8	64	49	32	28	28.35	1.013	1.143
9	81	64	36	32	31.90	0.997	1.125
10	100	81	40	36	35.44	0.985	1.111
11	121	100	44	40	38.994	0.975	1.100
13	169	144	52	48	46.084	0.960	1.084
14	196	169	56	52	49.629	0.954	1.077
15	225	196	60	56	53.174	0.950	1.072
20	400	361	80	76	70.898	0.933	1.053

In contrast to the <200 mesh fraction, the 200–100 mesh fraction has proportionally fewer small particles (see table 6). When the same procedures that were used to make figure 12 were used on the 200–100 mesh, the difference between the two plots was largely undetectable. Dropping ≈8% of the total data made no change in the median.

Based on the preceding analysis, it was concluded that for these data, only particles with area >192 pixels would be included in subsequent analyses. Exclusion of additional particles would improve the accuracy for individual measurements but deteriorate the robustness of the total distribution. Further, additional exclusions would also probably not make a significant difference to the overall frequency distribution.

Table 5. Some characteristics of the data for each sieved fraction.

Fraction in Mesh	Magnification	Number of Particles	Number With Heywood >1	Pixel Width	Area of 64 Pixels
<200	× 250	2,440	424	0.523797	18
200–100	× 100	2,319	95	1.309493	110
100–35	× 85	315	13	1.540579	152
≥35	× 50	119	3	2.618985	439

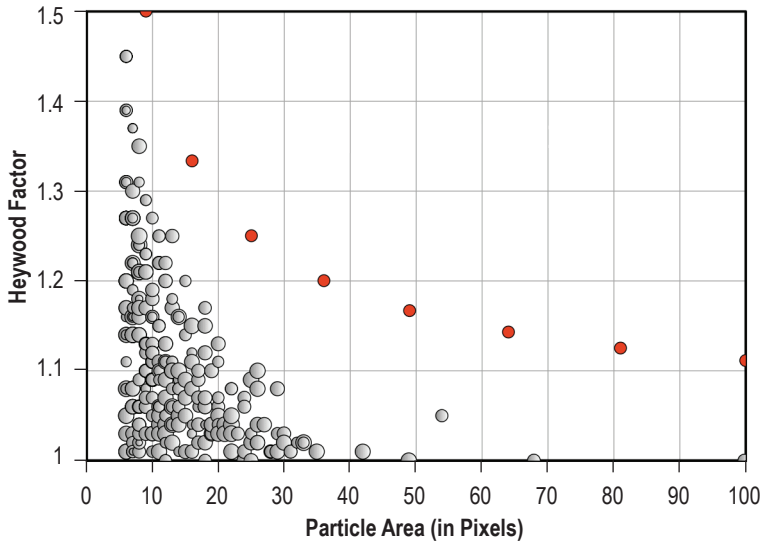

Figure 11. For the sieved fraction <200 mesh, observed particle size (area) versus Heywood factor (H) value for particles with $H > 1$. Red circles denote the computed values for squares. The width of a circle is a function of the particle's aspect ratio. Values of aspect ratio range from 0.39 to ≈1, with an average of 0.79. The red circles are plotted as though they have an aspect ratio of 0.75.

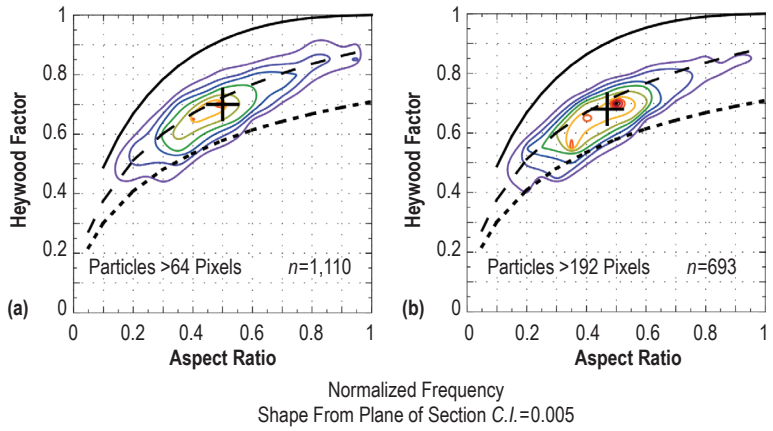

Figure 12. Distribution of aspect ratio and Heywood factor for particles <200 mesh. Particles with area <64 pixels are excluded from graph (a). Particles with area <192 pixels are excluded from graph (b). The magnitude of contours is affected by the number of total particles in each; therefore, it is of minimal significance. The shift in the distribution's position is due largely to the problem with the perimeter values.

Table 6. Percentage of particles in a sieved fraction with areas (expressed in pixels) greater than a given value.

Particle Size (pixels)	Sieve Fraction (mesh)			
	<200	200–100	100–35	>35
1	100.00	100.00	100.00	100.00
64	45.49	87.24	90.16	90.76
128	34.02	83.53	89.52	86.55
192	28.40	80.47	88.57	84.03
384	20.78	75.16	86.35	81.51
640	16.15	68.74	84.76	77.31
1,280	10.90	56.83	80.32	72.27
3,200	6.39	28.46	71.75	56.30
6,400	2.62	10.05	49.21	39.50
Number of Particles	2,440	2,319	315	119

APPENDIX B—PARTICLE DIMENSIONS, SHAPE, AND COMPOSITION BY SIZE FRACTION

The particle dimensions, shape, and composition by size fraction are given here.

Shape data for NU-LHT-2M

Measurements by Heather Lowers, USGS, and processing by Doug Rickman, NASA. April 3, 2012

No. of Pixels	Area (µm2)	Perimeter (µm2)	Length (µm)	Width (µm)	Aspect Ratio	Heywood factor	SQRT (Area)	Composition	Size Fraction (mesh range)
12	3.3	7.6	2.44	1.05	0.430	0.848	1.81	Orthopyroxene	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Orthopyroxene	<200
104	28.5	41.2	19.08	2.10	0.110	0.460	5.34	Plagioclase	<200
9	2.5	5.9	1.48	0.52	0.351	0.941	1.57	Plagioclase	<200
11	3.0	7.7	2.73	1.05	0.385	0.803	1.74	Glass	<200
178	48.8	53.3	24.67	4.71	0.191	0.465	6.99	Plagioclase	<200
44	12.1	17.0	6.69	2.62	0.392	0.725	3.47	Orthopyroxene	<200
7	1.9	4.2	1.06	1.05	0.991	1.164	1.39	Chlorite	<200
35	9.6	11.0	2.76	3.14	1.138	0.995	3.10	Plagioclase	<200
408	111.9	71.3	32.17	7.86	0.244	0.526	10.58	Plagioclase	<200
22	6.0	13.4	5.62	1.57	0.279	0.651	2.46	Plagioclase	<200
12	3.3	7.1	1.78	1.57	0.882	0.902	1.81	Plagioclase	<200
134	36.8	24.9	7.64	5.24	0.686	0.863	6.06	Plagioclase	<200
51	14.0	14.6	3.64	3.67	1.008	0.910	3.74	FeOx	<200
25	6.9	9.3	2.32	2.62	1.129	1.001	2.62	Plagioclase	<200
7	1.9	4.5	1.13	1.05	0.929	1.084	1.39	Olivine	<200
54	14.8	14.2	3.54	2.62	0.740	0.964	3.85	Glass	<200
379	104.0	42.0	13.05	11.00	0.843	0.860	10.20	Plagioclase	<200
15	4.1	7.6	1.91	1.57	0.822	0.943	2.03	Chlorite	<200
589	161.6	51.1	14.11	12.05	0.854	0.881	12.71	Plagioclase	<200
16	4.4	7.7	1.93	1.57	0.813	0.963	2.10	Glass	<200
8	2.2	5.4	1.34	1.57	1.172	0.977	1.48	Plagioclase	<200
45	12.4	17.5	6.95	2.62	0.377	0.714	3.51	Plagioclase	<200
34	9.3	13.2	4.52	2.62	0.580	0.823	3.05	Plagioclase	<200
9	2.5	4.6	1.16	1.57	1.353	1.206	1.57	Glass	<200
63	17.3	15.3	3.82	3.67	0.961	0.966	4.16	Plagioclase	<200
36	9.9	15.3	5.99	3.14	0.524	0.729	3.14	Plagioclase	<200
38	10.4	13.0	3.59	2.62	0.730	0.881	3.23	Plagioclase	<200
2003	549.6	116.2	46.20	23.05	0.499	0.715	23.44	Glass	<200
13	3.6	6.7	1.68	1.57	0.935	0.997	1.89	Plagioclase	<200
847	232.4	78.7	32.12	14.14	0.440	0.687	15.24	Plagioclase	<200
62	17.0	15.8	3.95	4.19	1.061	0.927	4.12	Glass	<200
946	259.6	78.8	31.02	18.86	0.608	0.725	16.11	Plagioclase	<200
4174	1145.2	185.5	78.10	34.57	0.443	0.647	33.84	Plagioclase	<200
404	110.8	57.2	23.97	9.95	0.415	0.652	10.53	Plagioclase	<200
18	4.9	12.1	5.06	2.62	0.518	0.652	2.22	Plagioclase	<200
8	2.2	5.2	1.29	1.57	1.217	1.013	1.48	Plagioclase	<200
8	2.2	4.3	1.08	1.57	1.454	1.214	1.48	Glass	<200
32	8.8	10.9	2.71	3.14	1.159	0.967	2.96	Clinopyroxene	<200
464	127.3	46.4	14.28	10.48	0.734	0.862	11.28	Plagioclase	<200
291	79.8	43.3	16.94	8.38	0.495	0.731	8.94	Plagioclase	<200
1799	493.6	132.4	57.62	28.29	0.491	0.595	22.22	Plagioclase	<200
52	14.3	20.9	8.83	2.62	0.297	0.641	3.78	Plagioclase	<200
49	13.4	15.5	5.09	3.67	0.721	0.841	3.67	Olivine	<200
61	16.7	17.3	5.69	3.67	0.645	0.840	4.09	Orthopyroxene	<200
50	13.7	15.6	5.12	3.14	0.613	0.842	3.70	Plagioclase	<200
68	18.7	24.2	10.30	3.14	0.305	0.632	4.32	Olivine	<200
16	4.4	8.5	2.49	1.57	0.631	0.873	2.10	Plagioclase	<200
24	6.6	10.9	3.59	1.05	0.292	0.838	2.57	Orthopyroxene	<200
138	37.9	23.9	5.96	5.24	0.879	0.914	6.15	FeOx	<200
7318	2007.8	198.3	70.80	46.09	0.651	0.801	44.81	FeOx	<200
51	14.0	15.5	4.87	3.67	0.754	0.857	3.74	Glass	<200
37	10.2	12.9	3.67	3.14	0.856	0.878	3.19	Plagioclase	<200

17	4.7	9.6	3.41	2.10	0.616	0.801	2.16	Plagioclase	<200
138	37.9	34.9	14.91	4.19	0.281	0.625	6.15	Plagioclase	<200
13	3.6	8.7	3.27	1.05	0.321	0.768	1.89	Plagioclase	<200
13	3.6	6.9	1.71	2.10	1.228	0.978	1.89	Illite	<200
19	5.2	7.8	1.95	2.10	1.077	1.037	2.28	Plagioclase	<200
35	9.6	12.4	3.32	2.62	0.789	0.884	3.10	Plagioclase	<200
53	14.5	15.7	4.89	2.62	0.536	0.859	3.81	Plagioclase	<200
12	3.3	7.0	1.75	1.57	0.897	0.920	1.81	Plagioclase	<200
8	2.2	5.1	1.28	1.57	1.227	1.025	1.48	Plagioclase	<200
16	4.4	8.3	2.08	1.05	0.505	0.893	2.10	Pyrite	<200
6	1.7	4.8	1.21	0.52	0.430	0.941	1.28	Plagioclase	<200
324	88.9	48.6	19.79	7.33	0.370	0.688	9.43	Calcite	<200
45	12.4	15.5	5.53	3.14	0.568	0.802	3.51	Glass	<200
10	2.7	8.5	3.46	1.05	0.303	0.690	1.66	Plagioclase	<200
86	23.6	23.2	8.95	3.14	0.351	0.743	4.86	Plagioclase	<200
538	147.6	81.2	36.59	19.90	0.544	0.530	12.15	Plagioclase	<200
259	71.1	49.6	21.47	5.24	0.244	0.603	8.43	Plagioclase	<200
55	15.1	15.5	3.88	4.19	1.080	0.888	3.88	Plagioclase	<200
52	14.3	18.2	7.06	3.67	0.520	0.737	3.78	Plagioclase	<200
14	3.8	8.7	3.10	1.05	0.339	0.800	1.96	Plagioclase	<200
23	6.3	17.0	7.69	1.05	0.137	0.523	2.51	Plagioclase	<200
62	17.0	17.7	6.03	4.71	0.781	0.826	4.12	Plagioclase	<200
27	7.4	12.7	4.77	2.10	0.440	0.763	2.72	Plagioclase	<200
8	2.2	5.4	1.34	1.57	1.172	0.977	1.48	Plagioclase	<200
41	11.3	15.4	5.77	2.10	0.364	0.770	3.35	Plagioclase	<200
28	7.7	11.5	3.68	2.62	0.712	0.851	2.77	Plagioclase	<200
558	153.1	78.7	34.99	14.14	0.404	0.557	12.37	Plagioclase	<200
13	3.6	7.0	1.76	1.57	0.892	0.954	1.89	Orthopyroxene	<200
17	4.7	9.7	3.49	1.57	0.450	0.793	2.16	Plagioclase	<200
4054	1112.3	167.6	67.24	38.24	0.569	0.706	33.35	Glass	<200
24	6.6	10.3	2.78	2.10	0.755	0.883	2.57	Clinopyroxene	<200
9	2.5	5.1	1.26	1.57	1.246	1.101	1.57	Plagioclase	<200
51	14.0	17.4	6.53	4.19	0.642	0.764	3.74	Plagioclase	<200
130	35.7	24.5	7.45	4.71	0.632	0.865	5.97	Plagioclase	<200
63	17.3	16.5	4.12	4.71	1.143	0.895	4.16	Plagioclase	<200
18	4.9	7.1	1.77	2.10	1.186	1.116	2.22	Plagioclase	<200
55	15.1	16.3	5.25	3.67	0.699	0.847	3.88	Plagioclase	<200
812	222.8	80.0	33.32	14.67	0.440	0.661	14.93	Plagioclase	<200
10	2.7	6.1	1.53	0.52	0.340	0.960	1.66	Plagioclase	<200
54	14.8	16.1	5.23	3.67	0.702	0.846	3.85	Plagioclase	<200
8	2.2	4.3	1.08	1.57	1.454	1.214	1.48	Plagioclase	<200
60	16.5	20.0	7.93	2.62	0.330	0.719	4.06	Orthopyroxene	<200
3689	1012.1	208.5	93.39	25.14	0.269	0.541	31.81	Plagioclase	<200
360	98.8	49.0	19.44	12.57	0.647	0.718	9.94	Plagioclase	<200
12	3.3	7.3	2.09	1.57	0.751	0.877	1.81	Glass	<200
8	2.2	5.1	1.26	1.05	0.833	1.037	1.48	Plagioclase	<200
47	12.9	13.6	3.41	3.14	0.921	0.933	3.59	Plagioclase	<200
6	1.7	3.9	0.97	1.05	1.082	1.174	1.28	Clinopyroxene	<200
37	10.2	11.9	2.98	2.10	0.705	0.947	3.19	Plagioclase	<200
112	30.7	30.6	12.93	4.19	0.324	0.642	5.54	Glass	<200
10	2.7	5.1	1.26	1.57	1.246	1.160	1.66	Plagioclase	<200
209	57.3	50.3	22.60	8.38	0.371	0.534	7.57	Plagioclase	<200
110	30.2	24.6	8.92	3.67	0.411	0.791	5.49	Plagioclase	<200
14	3.8	9.1	3.41	1.05	0.308	0.766	1.96	Plagioclase	<200
416	114.1	80.7	37.26	7.33	0.197	0.470	10.68	Ca-Si	<200
11	3.0	6.0	1.49	1.05	0.705	1.032	1.74	Plagioclase	<200
932	255.7	81.9	33.27	16.76	0.504	0.692	15.99	Plagioclase	<200

7	1.9	4.6	1.16	1.57	1.353	1.063	1.39	Plagioclase	<200
1167	320.2	136.4	63.14	15.71	0.249	0.465	17.89	Plagioclase	<200
128	35.1	25.0	8.27	6.29	0.761	0.839	5.93	Plagioclase	<200
5340	1465.1	164.0	55.66	39.81	0.715	0.828	38.28	Orthopyroxene	<200
8	2.2	4.5	1.13	1.57	1.389	1.158	1.48	Clinopyroxene	<200
65	17.8	18.1	6.12	3.67	0.600	0.828	4.22	Plagioclase	<200
593	162.7	66.2	27.11	13.09	0.483	0.683	12.76	Plagioclase	<200
400	109.8	56.8	23.76	11.00	0.463	0.654	10.48	Plagioclase	<200
79	21.7	20.0	6.83	5.24	0.767	0.825	4.66	Plagioclase	<200
15	4.1	9.0	3.20	2.10	0.656	0.801	2.03	Plagioclase	<200
3161	867.3	148.8	59.92	27.24	0.455	0.702	29.45	Orthopyroxene	<200
487	133.6	68.8	29.92	9.43	0.315	0.596	11.56	Plagioclase	<200
21	5.8	8.5	2.14	2.10	0.981	0.996	2.40	Plagioclase	<200
819	224.7	77.2	31.46	15.19	0.483	0.688	14.99	Plagioclase	<200
10	2.7	5.8	1.45	1.05	0.724	1.012	1.66	Plagioclase	<200
1051	288.4	79.6	30.28	16.76	0.554	0.756	16.98	Plagioclase	<200
35	9.6	11.3	2.81	2.62	0.932	0.976	3.10	Glass	<200
80	22.0	21.5	8.04	3.67	0.456	0.771	4.69	Glass	<200
9	2.5	4.8	1.19	1.05	0.882	1.173	1.57	Plagioclase	<200
122	33.5	27.7	10.72	4.71	0.439	0.741	5.79	Plagioclase	<200
47	12.9	16.2	5.96	3.14	0.527	0.784	3.59	Orthopyroxene	<200
4290	1177.0	160.4	60.87	37.71	0.620	0.758	34.31	Glass	<200
2029	556.7	111.4	42.68	31.43	0.736	0.751	23.59	Plagioclase	<200
14	3.8	7.9	2.29	1.05	0.459	0.875	1.96	Clinopyroxene	<200
8	2.2	4.6	1.16	1.05	0.905	1.135	1.48	Illite	<200
79	21.7	19.3	6.06	4.19	0.691	0.856	4.66	Plagioclase	<200
30	8.2	11.7	3.42	1.57	0.459	0.872	2.87	Glass	<200
63	17.3	21.3	8.66	2.62	0.303	0.692	4.16	Plagioclase	<200
23	6.3	11.8	4.51	2.10	0.466	0.754	2.51	Plagioclase	<200
11	3.0	5.9	1.48	1.05	0.709	1.041	1.74	Orthopyroxene	<200
45	12.4	16.8	6.47	3.14	0.485	0.743	3.51	Clinopyroxene	<200
1049	287.8	102.7	44.94	17.29	0.385	0.586	16.96	Plagioclase	<200
21	5.8	11.4	4.37	1.57	0.359	0.748	2.40	Orthopyroxene	<200
9	2.5	5.1	1.26	1.05	0.833	1.101	1.57	Glass	<200
76	20.9	18.5	5.41	4.19	0.774	0.874	4.57	Plagioclase	<200
4353	1194.3	193.3	82.08	30.38	0.370	0.634	34.56	Plagioclase	<200
4793	1315.0	223.6	98.44	41.38	0.420	0.575	36.26	Orthopyroxene	<200
230	63.1	43.9	18.52	10.48	0.566	0.642	7.94	Clinopyroxene	<200
16	4.4	8.5	2.48	2.10	0.847	0.874	2.10	Glass	<200
4422	1213.2	169.0	66.17	31.95	0.483	0.731	34.83	Plagioclase	<200
8	2.2	4.0	1.00	1.57	1.570	1.308	1.48	Plagioclase	<200
12	3.3	6.6	1.66	2.10	1.265	0.970	1.81	Plagioclase	<200
7	1.9	4.0	1.00	1.05	1.050	1.225	1.39	Chlorite	<200
15	4.1	9.4	3.54	1.05	0.297	0.765	2.03	Orthopyroxene	<200
52	14.3	15.6	4.82	3.14	0.651	0.861	3.78	Plagioclase	<200
8244	2261.9	221.8	83.97	50.81	0.605	0.760	47.56	Plagioclase	<200
20	5.5	8.5	2.13	1.57	0.737	0.973	2.34	Plagioclase	<200
58	15.9	22.2	9.41	4.71	0.501	0.637	3.99	Plagioclase	<200
14	3.8	9.9	3.99	1.57	0.393	0.701	1.96	Plagioclase	<200
10	2.7	5.9	1.47	1.57	1.068	0.998	1.66	Plagioclase	<200
247	67.8	35.8	12.50	7.86	0.629	0.814	8.23	Clinopyroxene	<200
24	6.6	11.3	4.03	2.10	0.521	0.803	2.57	Glass	<200
852	233.8	93.1	40.82	13.62	0.334	0.582	15.29	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Albite	<200
15	4.1	7.8	1.95	1.57	0.805	0.922	2.03	Clinopyroxene	<200
406	111.4	61.4	26.46	9.43	0.356	0.610	10.55	Plagioclase	<200
244	66.9	44.0	18.35	6.81	0.371	0.659	8.18	Plagioclase	<200

1024	281.0	95.4	40.84	20.43	0.500	0.623	16.76	Plagioclase	<200
439	120.5	76.9	34.99	5.76	0.165	0.506	10.97	Plagioclase	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
64	17.6	20.7	8.22	4.71	0.573	0.717	4.19	Plagioclase	<200
428	117.4	73.9	33.43	6.81	0.204	0.520	10.84	Plagioclase	<200
6	1.7	4.8	1.19	1.05	0.882	0.953	1.28	Orthopyroxene	<200
145	39.8	33.1	13.63	4.19	0.307	0.675	6.31	Olivine	<200
11	3.0	5.8	1.45	1.57	1.083	1.062	1.74	Glass	<200
9	2.5	6.1	1.53	1.57	1.026	0.907	1.57	Plagioclase	<200
151	41.4	32.7	13.18	7.33	0.556	0.699	6.44	Plagioclase	<200
3434	942.2	152.5	60.71	30.90	0.509	0.714	30.69	Plagioclase	<200
157	43.1	33.9	13.86	4.19	0.302	0.686	6.56	Olivine	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
822	225.5	93.4	41.24	9.95	0.241	0.570	15.02	Plagioclase	<200
18	4.9	8.9	2.22	1.57	0.707	0.888	2.22	Plagioclase	<200
2182	598.7	116.4	44.83	29.86	0.666	0.745	24.47	Plagioclase	<200
8277	2270.9	267.9	114.04	41.38	0.363	0.631	47.65	Plagioclase	<200
98	26.9	24.4	9.31	4.19	0.450	0.753	5.19	Plagioclase	<200
36	9.9	17.9	7.67	3.14	0.409	0.622	3.14	Plagioclase	<200
40	11.0	11.9	2.97	2.62	0.882	0.987	3.31	Plagioclase	<200
74	20.3	20.3	7.38	4.71	0.638	0.788	4.51	Glass	<200
397	108.9	50.6	19.83	8.90	0.449	0.731	10.44	Chlorite	<200
19	5.2	8.1	2.04	1.05	0.515	0.994	2.28	Plagioclase	<200
17	4.7	8.1	2.03	2.10	1.034	0.944	2.16	Plagioclase	<200
27	7.4	10.1	2.53	1.57	0.621	0.955	2.72	Olivine	<200
14	3.8	7.3	1.82	1.57	0.863	0.952	1.96	Plagioclase	<200
13	3.6	6.0	1.50	2.10	1.400	1.114	1.89	Glass	<200
3095	849.2	137.5	52.61	30.38	0.577	0.751	29.14	Plagioclase	<200
15	4.1	6.9	1.71	2.62	1.532	1.050	2.03	Orthopyroxene	<200
14	3.8	9.9	4.01	1.05	0.262	0.699	1.96	Plagioclase	<200
69	18.9	17.9	5.54	4.71	0.850	0.861	4.35	Glass	<200
113	31.0	21.9	5.46	6.81	1.247	0.903	5.57	Plagioclase	<200
37	10.2	12.9	3.64	3.14	0.863	0.878	3.19	Plagioclase	<200
80	22.0	21.0	7.60	4.71	0.620	0.792	4.69	Plagioclase	<200
270	74.1	57.8	26.06	11.00	0.422	0.528	8.61	Plagioclase	<200
7	1.9	4.5	1.13	1.05	0.929	1.084	1.39	Olivine	<200
89	24.4	24.6	9.80	3.67	0.374	0.713	4.94	Plagioclase	<200
26	7.1	10.7	2.67	1.57	0.588	0.887	2.67	Plagioclase	<200
1266	347.3	91.0	35.79	21.48	0.600	0.726	18.64	Plagioclase	<200
60	16.5	16.9	5.36	3.14	0.586	0.853	4.06	Plagioclase	<200
199	54.6	31.1	10.19	6.81	0.668	0.842	7.39	Plagioclase	<200
9	2.5	5.7	1.42	1.05	0.739	0.983	1.57	Plagioclase	<200
6791	1863.2	213.1	84.53	48.19	0.570	0.718	43.16	Orthopyroxene	<200
76	20.9	22.2	8.68	3.67	0.423	0.730	4.57	Glass	<200
6922	1899.1	271.1	119.70	45.57	0.381	0.570	43.58	Plagioclase	<200
19	5.2	10.1	3.62	2.10	0.580	0.800	2.28	Olivine	<200
1207	331.2	98.8	41.41	18.33	0.443	0.653	18.20	Plagioclase	<200
19	5.2	7.8	1.95	1.57	0.805	1.037	2.28	Plagioclase	<200
801	219.8	71.6	27.90	15.19	0.544	0.734	14.82	Plagioclase	<200
561	153.9	60.7	23.90	11.52	0.482	0.725	12.41	Olivine	<200
288	79.0	39.2	13.88	9.43	0.679	0.805	8.89	Plagioclase	<200
53	14.5	14.5	3.64	4.71	1.294	0.930	3.81	Quartz	<200
10	2.7	5.0	1.24	1.57	1.266	1.183	1.66	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Plagioclase	<200
940	257.9	87.4	36.65	14.67	0.400	0.652	16.06	Plagioclase	<200
25	6.9	13.7	5.61	2.62	0.467	0.680	2.62	Plagioclase	<200
558	153.1	67.3	28.24	14.67	0.519	0.651	12.37	Glass	<200

31	8.5	10.8	2.69	2.62	0.974	0.959	2.92	Plagioclase	<200
317	87.0	37.8	11.04	9.95	0.901	0.874	9.33	Plagioclase	<200
2109	578.6	128.2	53.23	23.05	0.433	0.665	24.05	Plagioclase	<200
161	44.2	35.7	14.89	4.71	0.316	0.660	6.65	Plagioclase	<200
1398	383.6	132.3	59.74	20.95	0.351	0.525	19.58	Orthopyroxene	<200
317	87.0	55.7	24.27	6.81	0.281	0.593	9.33	Plagioclase	<200
27	7.4	10.7	2.68	1.57	0.586	0.899	2.72	Plagioclase	<200
840	230.5	72.1	27.74	14.67	0.529	0.746	15.18	Plagioclase	<200
41	11.3	12.7	3.18	2.10	0.660	0.934	3.35	Plagioclase	<200
18020	4944.0	374.8	155.60	66.00	0.424	0.665	70.31	Orthopyroxene	<200
267	73.3	43.6	17.64	10.48	0.594	0.696	8.56	Plagioclase	<200
1622	445.0	97.9	36.89	27.76	0.753	0.764	21.10	Plagioclase	<200
10	2.7	5.3	1.32	1.57	1.189	1.113	1.66	Ilmenite	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
122	33.5	34.8	15.17	6.29	0.415	0.590	5.79	Plagioclase	<200
161	44.2	42.3	18.81	3.14	0.167	0.557	6.65	Plagioclase	<200
54	14.8	21.5	9.13	2.10	0.230	0.634	3.85	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Olivine	<200
3274	898.3	154.6	63.08	27.76	0.440	0.687	29.97	Olivine	<200
35	9.6	12.2	3.05	3.14	1.030	0.900	3.10	Plagioclase	<200
69	18.9	26.0	11.32	5.76	0.509	0.593	4.35	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
6589	1807.8	212.6	85.05	31.43	0.370	0.709	42.52	Plagioclase	<200
10	2.7	5.4	1.34	1.57	1.172	1.093	1.66	Olivine	<200
58	15.9	16.3	4.97	3.67	0.738	0.865	3.99	Glass	<200
44	12.1	15.5	5.60	3.14	0.561	0.794	3.47	Plagioclase	<200
162	44.5	30.6	11.41	7.33	0.642	0.772	6.67	Olivine	<200
8	2.2	4.3	1.08	0.52	0.481	1.214	1.48	Plagioclase	<200
6	1.7	3.5	0.87	1.57	1.805	1.308	1.28	Plagioclase	<200
22	6.0	8.1	2.02	2.62	1.297	1.080	2.46	Plagioclase	<200
10	2.7	6.5	1.61	0.52	0.323	0.910	1.66	Olivine	<200
16	4.4	7.5	1.87	1.57	0.840	0.992	2.10	Olivine	<200
226	62.0	46.6	20.22	7.33	0.363	0.599	7.87	Olivine	<200
9	2.5	5.7	1.43	1.05	0.734	0.976	1.57	Olivine	<200
337	92.5	51.3	21.31	7.86	0.369	0.664	9.62	Plagioclase	<200
565	155.0	83.6	37.69	12.57	0.334	0.528	12.45	Clinopyroxene	<200
933	256.0	84.9	35.14	16.24	0.462	0.668	16.00	Plagioclase	<200
253	69.4	41.5	16.58	9.95	0.600	0.711	8.33	Plagioclase	<200
7536	2067.6	236.3	96.76	44.00	0.455	0.682	45.47	Clinopyroxene	<200
13	3.6	6.1	1.53	1.57	1.026	1.096	1.89	Glass	<200
119	32.7	28.4	11.34	5.76	0.508	0.712	5.71	Chlorite	<200
41	11.3	14.0	4.54	2.62	0.577	0.847	3.35	Plagioclase	<200
88	24.1	24.7	9.94	6.29	0.633	0.704	4.91	Plagioclase	<200
9	2.5	4.6	1.16	1.57	1.353	1.206	1.57	Epidote	<200
23	6.3	9.4	2.36	3.14	1.331	0.943	2.51	Olivine	<200
10	2.7	4.9	1.23	1.57	1.276	1.190	1.66	Plagioclase	<200
101	27.7	24.0	8.84	4.71	0.533	0.779	5.26	Glass	<200
104	28.5	26.4	10.49	5.76	0.549	0.717	5.34	Olivine	<200
27	7.4	9.3	2.32	2.10	0.905	1.040	2.72	Glass	<200
19	5.2	7.8	1.95	1.57	0.805	1.037	2.28	Plagioclase	<200
10	2.7	5.3	1.32	1.57	1.189	1.113	1.66	Orthopyroxene	<200
20	5.5	11.2	4.31	1.05	0.244	0.744	2.34	Plagioclase	<200
52	14.3	17.6	6.66	2.62	0.393	0.760	3.78	Plagioclase	<200
10368	2844.6	402.6	186.01	60.24	0.324	0.470	53.33	Olivine	<200
101	27.7	21.2	5.94	6.29	1.059	0.880	5.26	Glass	<200
321	88.1	54.1	23.29	7.33	0.315	0.614	9.38	Orthopyroxene	<200
159	43.6	27.0	8.15	6.81	0.836	0.867	6.60	Plagioclase	<200

69	18.9	16.7	4.18	4.19	1.002	0.922	4.35	Plagioclase	<200
66	18.1	24.5	10.53	4.71	0.447	0.616	4.26	Glass	<200
18	4.9	9.6	3.27	1.05	0.321	0.824	2.22	Glass	<200
8	2.2	5.7	1.42	0.52	0.366	0.925	1.48	Orthopyroxene	<200
10	2.7	6.0	1.49	1.57	1.054	0.983	1.66	Glass	<200
88	24.1	21.0	7.11	4.19	0.589	0.829	4.91	Plagioclase	<200
8527	2339.5	252.1	103.41	59.19	0.572	0.680	48.37	Plagioclase	<200
159	43.6	33.5	13.52	6.29	0.465	0.699	6.60	Plagioclase	<200
15	4.1	6.7	1.68	1.05	0.625	1.071	2.03	Plagioclase	<200
29	8.0	9.7	2.42	3.14	1.298	1.033	2.82	Glass	<200
223	61.2	48.6	21.47	4.19	0.195	0.570	7.82	Plagioclase	<200
6122	1679.7	228.1	96.65	43.48	0.450	0.637	40.98	Glass	<200
342	93.8	48.5	19.44	8.38	0.431	0.707	9.69	Plagioclase	<200
5401	1481.8	175.5	64.94	49.24	0.758	0.777	38.49	Plagioclase	<200
8	2.2	6.6	2.34	1.05	0.449	0.801	1.48	Plagioclase	<200
342	93.8	56.7	24.52	8.38	0.342	0.606	9.69	Plagioclase	<200
632	173.4	68.0	27.73	18.33	0.661	0.687	13.17	Plagioclase	<200
19	5.2	11.3	4.49	1.57	0.350	0.716	2.28	Plagioclase	<200
301	82.6	60.5	27.21	4.71	0.173	0.533	9.09	Plagioclase	<200
918	251.9	77.8	30.68	20.95	0.683	0.723	15.87	Glass	<200
5535	1518.6	238.3	104.64	42.43	0.405	0.580	38.97	Plagioclase	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Orthopyroxene	<200
13	3.6	7.3	1.82	1.57	0.863	0.921	1.89	Plagioclase	<200
225	61.7	39.0	15.50	7.33	0.473	0.715	7.86	Plagioclase	<200
25	6.9	11.9	4.39	2.10	0.478	0.780	2.62	Orthopyroxene	<200
8	2.2	4.5	1.13	1.57	1.389	1.158	1.48	Plagioclase	<200
82	22.5	22.2	8.46	3.67	0.434	0.756	4.74	Plagioclase	<200
920	252.4	69.3	24.20	14.67	0.606	0.813	15.89	Glass	<200
127	34.8	33.1	14.06	3.67	0.261	0.633	5.90	Plagioclase	<200
671	184.1	65.9	25.82	11.52	0.446	0.730	13.57	Plagioclase	<200
43	11.8	13.7	3.43	3.67	1.070	0.888	3.44	Plagioclase	<200
425	116.6	52.2	20.41	7.86	0.385	0.733	10.80	Plagioclase	<200
42	11.5	14.7	5.12	3.14	0.613	0.816	3.39	Glass	<200
664	182.2	92.2	41.70	16.24	0.389	0.519	13.50	Quartz	<200
141	38.7	43.0	19.53	5.76	0.295	0.513	6.22	Glass	<200
25	6.9	8.5	2.14	2.10	0.981	1.087	2.62	Plagioclase	<200
52	14.3	14.5	3.62	3.14	0.867	0.924	3.78	Plagioclase	<200
608	166.8	61.8	23.94	13.09	0.547	0.741	12.92	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Glass	<200
39	10.7	14.8	5.41	1.57	0.290	0.785	3.27	Clinopyroxene	<200
7	1.9	4.2	1.06	0.52	0.491	1.164	1.39	Plagioclase	<200
138	37.9	37.3	16.32	8.38	0.513	0.585	6.15	Plagioclase	<200
35	9.6	15.1	5.94	3.14	0.529	0.726	3.10	Plagioclase	<200
14	3.8	6.0	1.50	1.05	0.700	1.156	1.96	Plagioclase	<200
2567	704.3	152.9	65.71	29.86	0.454	0.615	26.54	Plagioclase	<200
4226	1159.5	220.5	98.47	37.19	0.378	0.547	34.05	Plagioclase	<200
7298	2002.3	229.0	92.98	47.14	0.507	0.693	44.75	Clinopyroxene	<200
59	16.2	17.2	5.79	4.19	0.724	0.831	4.02	Plagioclase	<200
14	3.8	6.4	1.59	1.05	0.660	1.094	1.96	Plagioclase	<200
877	240.6	66.2	22.34	19.90	0.891	0.830	15.51	Plagioclase	<200
162	44.5	37.3	15.81	5.76	0.364	0.634	6.67	Plagioclase	<200
1283	352.0	89.6	34.67	16.24	0.468	0.742	18.76	Plagioclase	<200
127	34.8	31.1	12.84	5.24	0.408	0.673	5.90	Plagioclase	<200
157	43.1	24.8	6.19	7.33	1.184	0.940	6.56	Plagioclase	<200
18	4.9	9.0	2.61	2.10	0.805	0.875	2.22	Plagioclase	<200
12	3.3	5.9	1.48	1.57	1.061	1.086	1.81	Plagioclase	<200
134	36.8	29.9	11.87	5.76	0.485	0.718	6.06	Plagioclase	<200

17	4.7	7.2	1.79	2.62	1.464	1.070	2.16	Plagioclase	<200
17	4.7	7.2	1.80	2.62	1.456	1.061	2.16	Orthopyroxene	<200
5521	1514.8	217.7	92.49	37.19	0.402	0.634	38.92	Clinopyroxene	<200
143	39.2	33.7	14.05	6.29	0.448	0.659	6.26	Plagioclase	<200
11	3.0	7.2	2.21	1.57	0.710	0.862	1.74	Glass	<200
75	20.6	23.7	9.72	4.19	0.431	0.679	4.54	Plagioclase	<200
177	48.6	37.0	15.35	7.86	0.512	0.667	6.97	Orthopyroxene	<200
1526	418.7	106.5	43.67	17.81	0.408	0.681	20.46	Glass	<200
32	8.8	11.3	2.81	2.62	0.932	0.934	2.96	Plagioclase	<200
2578	707.3	176.4	79.30	28.81	0.363	0.534	26.60	Plagioclase	<200
199	54.6	34.3	12.95	7.33	0.566	0.763	7.39	Plagioclase	<200
1799	493.6	97.7	34.53	25.14	0.728	0.807	22.22	Clinopyroxene	<200
15	4.1	8.4	2.65	2.10	0.792	0.856	2.03	Plagioclase	<200
3521	966.0	193.9	85.66	23.05	0.269	0.568	31.08	Orthopyroxene	<200
15	4.1	8.7	2.96	2.10	0.709	0.827	2.03	Plagioclase	<200
49	13.4	15.7	5.35	2.62	0.490	0.826	3.67	Plagioclase	<200
212	58.2	34.0	12.25	8.38	0.684	0.795	7.63	Glass	<200
15	4.1	6.6	1.66	1.57	0.946	1.085	2.03	Olivine	<200
25	6.9	10.0	2.50	1.57	0.628	0.930	2.62	Glass	<200
3360	921.9	159.2	65.53	24.62	0.376	0.676	30.36	Chlorite	<200
56	15.4	26.2	11.81	2.10	0.178	0.530	3.92	Plagioclase	<200
736	201.9	83.5	36.15	13.09	0.362	0.603	14.21	Plagioclase	<200
630	172.9	103.0	47.87	7.86	0.164	0.453	13.15	Plagioclase	<200
8	2.2	4.2	1.06	1.05	0.991	1.243	1.48	Plagioclase	<200
61	16.7	16.9	5.26	2.62	0.498	0.859	4.09	Olivine	<200
7	1.9	5.6	1.55	1.57	1.013	0.880	1.39	Olivine	<200
2045	561.1	119.2	47.90	21.48	0.448	0.704	23.69	Plagioclase	<200
9	2.5	5.6	1.40	1.05	0.750	0.993	1.57	Glass	<200
50	13.7	15.3	4.76	2.62	0.550	0.859	3.70	Quartz	<200
8	2.2	5.9	1.46	1.57	1.075	0.897	1.48	Chlorite	<200
219	60.1	32.7	10.82	7.33	0.677	0.839	7.75	Plagioclase	<200
34	9.3	12.1	3.03	2.62	0.865	0.894	3.05	Plagioclase	<200
54	14.8	13.0	3.24	4.19	1.293	1.051	3.85	Plagioclase	<200
16	4.4	7.2	1.79	1.05	0.587	1.039	2.10	Olivine	<200
40	11.0	15.3	5.77	3.14	0.544	0.765	3.31	Plagioclase	<200
8	2.2	5.5	1.38	1.05	0.761	0.947	1.48	Chlorite	<200
41	11.3	12.8	3.21	3.14	0.978	0.927	3.35	Plagioclase	<200
769	211.0	71.5	28.28	15.71	0.556	0.720	14.53	Plagioclase	<200
49	13.4	18.9	7.71	2.62	0.340	0.687	3.67	Glass	<200
1189	326.2	73.1	21.01	19.90	0.947	0.876	18.06	Plagioclase	<200
58	15.9	25.5	11.36	4.19	0.369	0.554	3.99	Quartz	<200
20	5.5	7.8	1.95	1.57	0.805	1.065	2.34	Plagioclase	<200
680	186.6	86.5	38.37	8.38	0.218	0.560	13.66	Plagioclase	<200
20	5.5	10.9	4.14	1.05	0.254	0.761	2.34	Plagioclase	<200
17	4.7	11.2	4.56	1.57	0.344	0.686	2.16	Plagioclase	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
89	24.4	19.1	4.78	4.71	0.985	0.916	4.94	Plagioclase	<200
1500	411.5	108.5	45.15	17.29	0.383	0.663	20.29	Plagioclase	<200
32	8.8	10.5	2.64	3.14	1.189	0.997	2.96	Olivine	<200
36	9.9	16.5	6.82	3.14	0.460	0.674	3.14	Glass	<200
30	8.2	10.3	2.58	2.10	0.814	0.984	2.87	Glass	<200
22	6.0	12.2	4.83	1.05	0.217	0.717	2.46	Glass	<200
8	2.2	4.8	1.21	1.57	1.298	1.086	1.48	Plagioclase	<200
28	7.7	12.8	4.77	2.10	0.440	0.769	2.77	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
131	35.9	22.9	5.72	5.24	0.916	0.929	5.99	Plagioclase	<200
22	6.0	10.3	3.34	2.10	0.629	0.846	2.46	Plagioclase	<200

1024	281.0	95.4	40.84	20.43	0.500	0.623	16.76	Plagioclase	<200
439	120.5	76.9	34.99	5.76	0.165	0.506	10.97	Plagioclase	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
64	17.6	20.7	8.22	4.71	0.573	0.717	4.19	Plagioclase	<200
428	117.4	73.9	33.43	6.81	0.204	0.520	10.84	Plagioclase	<200
6	1.7	4.8	1.19	1.05	0.882	0.953	1.28	Orthopyroxene	<200
145	39.8	33.1	13.63	4.19	0.307	0.675	6.31	Olivine	<200
11	3.0	5.8	1.45	1.57	1.083	1.062	1.74	Glass	<200
9	2.5	6.1	1.53	1.57	1.026	0.907	1.57	Plagioclase	<200
151	41.4	32.7	13.18	7.33	0.556	0.699	6.44	Plagioclase	<200
3434	942.2	152.5	60.71	30.90	0.509	0.714	30.69	Plagioclase	<200
157	43.1	33.9	13.86	4.19	0.302	0.686	6.56	Olivine	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
822	225.5	93.4	41.24	9.95	0.241	0.570	15.02	Plagioclase	<200
18	4.9	8.9	2.22	1.57	0.707	0.888	2.22	Plagioclase	<200
2182	598.7	116.4	44.83	29.86	0.666	0.745	24.47	Plagioclase	<200
8277	2270.9	267.9	114.04	41.38	0.363	0.631	47.65	Plagioclase	<200
98	26.9	24.4	9.31	4.19	0.450	0.753	5.19	Plagioclase	<200
36	9.9	17.9	7.67	3.14	0.409	0.622	3.14	Plagioclase	<200
40	11.0	11.9	2.97	2.62	0.882	0.987	3.31	Plagioclase	<200
74	20.3	20.3	7.38	4.71	0.638	0.788	4.51	Glass	<200
397	108.9	50.6	19.83	8.90	0.449	0.731	10.44	Chlorite	<200
19	5.2	8.1	2.04	1.05	0.515	0.994	2.28	Plagioclase	<200
17	4.7	8.1	2.03	2.10	1.034	0.944	2.16	Plagioclase	<200
27	7.4	10.1	2.53	1.57	0.621	0.955	2.72	Olivine	<200
14	3.8	7.3	1.82	1.57	0.863	0.952	1.96	Plagioclase	<200
13	3.6	6.0	1.50	2.10	1.400	1.114	1.89	Glass	<200
3095	849.2	137.5	52.61	30.38	0.577	0.751	29.14	Plagioclase	<200
15	4.1	6.9	1.71	2.62	1.532	1.050	2.03	Orthopyroxene	<200
14	3.8	9.9	4.01	1.05	0.262	0.699	1.96	Plagioclase	<200
69	18.9	17.9	5.54	4.71	0.850	0.861	4.35	Glass	<200
113	31.0	21.9	5.46	6.81	1.247	0.903	5.57	Plagioclase	<200
37	10.2	12.9	3.64	3.14	0.863	0.878	3.19	Plagioclase	<200
80	22.0	21.0	7.60	4.71	0.620	0.792	4.69	Plagioclase	<200
270	74.1	57.8	26.06	11.00	0.422	0.528	8.61	Plagioclase	<200
7	1.9	4.5	1.13	1.05	0.929	1.084	1.39	Olivine	<200
89	24.4	24.6	9.80	3.67	0.374	0.713	4.94	Plagioclase	<200
26	7.1	10.7	2.67	1.57	0.588	0.887	2.67	Plagioclase	<200
1266	347.3	91.0	35.79	21.48	0.600	0.726	18.64	Plagioclase	<200
60	16.5	16.9	5.36	3.14	0.586	0.853	4.06	Plagioclase	<200
199	54.6	31.1	10.19	6.81	0.668	0.842	7.39	Plagioclase	<200
9	2.5	5.7	1.42	1.05	0.739	0.983	1.57	Plagioclase	<200
6791	1863.2	213.1	84.53	48.19	0.570	0.718	43.16	Orthopyroxene	<200
76	20.9	22.2	8.68	3.67	0.423	0.730	4.57	Glass	<200
6922	1899.1	271.1	119.70	45.57	0.381	0.570	43.58	Plagioclase	<200
19	5.2	10.1	3.62	2.10	0.580	0.800	2.28	Olivine	<200
1207	331.2	98.8	41.41	18.33	0.443	0.653	18.20	Plagioclase	<200
19	5.2	7.8	1.95	1.57	0.805	1.037	2.28	Plagioclase	<200
801	219.8	71.6	27.90	15.19	0.544	0.734	14.82	Plagioclase	<200
561	153.9	60.7	23.90	11.52	0.482	0.725	12.41	Olivine	<200
288	79.0	39.2	13.88	9.43	0.679	0.805	8.89	Plagioclase	<200
53	14.5	14.5	3.64	4.71	1.294	0.930	3.81	Quartz	<200
10	2.7	5.0	1.24	1.57	1.266	1.183	1.66	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Plagioclase	<200
940	257.9	87.4	36.65	14.67	0.400	0.652	16.06	Plagioclase	<200
25	6.9	13.7	5.61	2.62	0.467	0.680	2.62	Plagioclase	<200
558	153.1	67.3	28.24	14.67	0.519	0.651	12.37	Glass	<200

249	68.3	44.6	18.65	8.90	0.477	0.657	8.27	Albite	<200
7	1.9	4.9	1.22	1.57	1.287	1.009	1.39	Glass	<200
125	34.3	32.6	13.79	4.71	0.342	0.638	5.86	Plagioclase	<200
23	6.3	10.1	2.81	1.57	0.559	0.881	2.51	Plagioclase	<200
7	1.9	5.5	1.36	1.05	0.772	0.901	1.39	Plagioclase	<200
55	15.1	16.4	5.39	3.67	0.681	0.841	3.88	Albite	<200
117	32.1	23.1	6.96	6.29	0.904	0.868	5.67	Plagioclase	<200
20	5.5	13.4	5.75	1.05	0.183	0.619	2.34	Glass	<200
27	7.4	9.9	2.47	2.62	1.061	0.976	2.72	Plagioclase	<200
9	2.5	4.5	1.13	1.57	1.389	1.230	1.57	Olivine	<200
205	56.2	35.8	13.86	6.81	0.491	0.742	7.50	Calcite	<200
62	17.0	18.7	6.89	3.67	0.533	0.781	4.12	Plagioclase	<200
116	31.8	30.4	12.71	6.81	0.536	0.657	5.64	Olivine	<200
48	13.2	21.5	9.32	2.10	0.225	0.599	3.63	Plagioclase	<200
1012	277.7	99.1	43.13	13.62	0.316	0.596	16.66	Plagioclase	<200
1025	281.2	77.7	29.26	13.62	0.465	0.765	16.77	Glass	<200
42	11.5	19.2	8.20	2.10	0.256	0.626	3.39	Quartz	<200
24	6.6	10.4	3.04	1.57	0.516	0.874	2.57	FeOx	<200
76	20.9	32.1	14.62	3.67	0.251	0.504	4.57	Glass	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
8	2.2	4.4	1.11	1.05	0.946	1.182	1.48	Clinopyroxene	<200
21	5.8	10.6	3.75	3.14	0.837	0.805	2.40	Plagioclase	<200
179	49.1	43.4	19.12	4.19	0.219	0.573	7.01	Plagioclase	<200
485	133.1	62.3	26.01	11.52	0.443	0.657	11.54	Olivine	<200
28	7.7	12.4	4.50	2.62	0.582	0.791	2.77	Plagioclase	<200
6507	1785.3	242.1	103.83	44.52	0.429	0.619	42.25	Plagioclase	<200
15	4.1	6.0	1.49	2.10	1.409	1.203	2.03	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
163	44.7	31.1	11.72	4.71	0.402	0.763	6.69	Plagioclase	<200
428	117.4	55.0	22.21	7.33	0.330	0.699	10.84	Orthopyroxene	<200
11499	3154.9	309.0	130.28	57.62	0.442	0.644	56.17	Plagioclase	<200
13	3.6	6.1	1.53	1.05	0.686	1.096	1.89	Plagioclase	<200
6	1.7	3.5	0.87	1.05	1.207	1.308	1.28	Glass	<200
652	178.9	86.3	38.51	14.14	0.367	0.549	13.37	Plagioclase	<200
77	21.1	19.2	6.16	4.19	0.680	0.850	4.60	Plagioclase	<200
49	13.4	13.1	3.29	3.67	1.116	0.989	3.67	Plagioclase	<200
12	3.3	5.3	1.32	1.57	1.189	1.220	1.81	Glass	<200
230	63.1	34.4	11.88	7.86	0.662	0.819	7.94	Plagioclase	<200
6	1.7	4.6	1.16	1.57	1.353	0.986	1.28	Glass	<200
11	3.0	4.9	1.23	1.57	1.276	1.250	1.74	Plagioclase	<200
119	32.7	27.9	10.98	6.81	0.620	0.726	5.71	Orthopyroxene	<200
8	2.2	4.2	1.06	1.57	1.481	1.243	1.48	Chlorite	<200
11	3.0	6.4	1.60	1.57	0.981	0.961	1.74	Plagioclase	<200
1010	277.1	79.7	30.85	16.76	0.543	0.741	16.65	Glass	<200
485	133.1	59.9	24.52	10.48	0.427	0.683	11.54	Plagioclase	<200
51	14.0	13.8	3.45	4.19	1.214	0.960	3.74	Glass	<200
35	9.6	11.9	2.97	3.14	1.057	0.924	3.10	Glass	<200
56	15.4	16.7	5.60	4.19	0.748	0.833	3.92	Plagioclase	<200
56	15.4	22.0	9.37	4.19	0.447	0.631	3.92	Plagioclase	<200
355	97.4	52.6	21.82	7.86	0.360	0.665	9.87	Glass	<200
10	2.7	5.4	1.34	1.57	1.172	1.093	1.66	Quartz	<200
81	22.2	24.0	9.72	2.62	0.270	0.696	4.71	Plagioclase	<200
96	26.3	28.5	12.06	7.33	0.608	0.639	5.13	Clinopyroxene	<200
33	9.1	10.4	2.60	2.62	1.008	1.023	3.01	Olivine	<200
38	10.4	13.3	4.14	2.62	0.633	0.859	3.23	Glass	<200
5837	1601.5	252.7	112.07	42.95	0.383	0.561	40.02	Glass	<200
34	9.3	11.9	2.98	2.62	0.879	0.910	3.05	Epidote	<200

219	60.1	34.1	12.06	9.43	0.782	0.806	7.75	Glass	<200
61	16.7	18.3	6.59	3.14	0.476	0.794	4.09	Plagioclase	<200
20	5.5	8.5	2.11	1.57	0.744	0.983	2.34	Plagioclase	<200
571	156.7	72.6	31.29	15.71	0.502	0.611	12.52	Plagioclase	<200
13	3.6	6.1	1.53	2.10	1.373	1.096	1.89	Plagioclase	<200
34	9.3	11.8	2.94	3.14	1.068	0.919	3.05	Plagioclase	<200
26	7.1	9.3	2.32	2.10	0.905	1.020	2.67	Glass	<200
55	15.1	17.1	6.04	3.67	0.608	0.806	3.88	Plagioclase	<200
13	3.6	6.4	1.60	1.57	0.981	1.045	1.89	Plagioclase	<200
316	86.7	39.0	12.60	10.48	0.832	0.847	9.31	Plagioclase	<200
15	4.1	7.3	1.82	2.10	1.154	0.990	2.03	Clinopyroxene	<200
13	3.6	7.8	2.44	2.10	0.861	0.859	1.89	Plagioclase	<200
4522	1240.7	213.6	93.54	39.28	0.420	0.585	35.22	Plagioclase	<200
12	3.3	5.7	1.42	1.57	1.106	1.134	1.81	Plagioclase	<200
36	9.9	17.2	7.22	2.62	0.363	0.649	3.14	Glass	<200
17	4.7	7.3	1.83	1.57	0.858	1.044	2.16	Plagioclase	<200
110	30.2	22.5	6.80	5.76	0.847	0.866	5.49	Orthopyroxene	<200
13	3.6	5.7	1.43	1.57	1.098	1.173	1.89	Plagioclase	<200
38	10.4	12.8	3.19	2.62	0.821	0.897	3.23	Glass	<200
23	6.3	12.4	4.89	1.05	0.215	0.720	2.51	Plagioclase	<200
15	4.1	7.5	1.87	1.57	0.840	0.961	2.03	Glass	<200
4787	1313.4	213.3	92.46	34.05	0.368	0.602	36.24	Plagioclase	<200
35	9.6	13.8	4.95	2.62	0.529	0.797	3.10	Plagioclase	<200
20	5.5	10.6	3.91	1.57	0.402	0.781	2.34	Plagioclase	<200
1547	424.4	100.8	39.68	25.14	0.634	0.725	20.60	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
99	27.2	22.0	7.27	5.24	0.721	0.839	5.21	Plagioclase	<200
196	53.8	35.4	13.83	7.86	0.568	0.734	7.33	Plagioclase	<200
4256	1167.7	176.0	71.68	44.00	0.614	0.688	34.17	Plagioclase	<200
204	56.0	35.5	13.65	7.86	0.576	0.747	7.48	Plagioclase	<200
20	5.5	11.4	4.46	2.10	0.471	0.730	2.34	Albite	<200
1103	302.6	80.2	30.00	20.95	0.698	0.769	17.40	Plagioclase	<200
33	9.1	11.6	2.90	2.62	0.903	0.919	3.01	Chlorite	<200
35	9.6	11.8	2.96	3.14	1.061	0.928	3.10	Glass	<200
24	6.6	9.1	2.27	2.10	0.925	1.003	2.57	Plagioclase	<200
177	48.6	30.8	10.96	6.81	0.621	0.803	6.97	Plagioclase	<200
809	222.0	79.6	33.07	11.00	0.333	0.664	14.90	Olivine	<200
40	11.0	16.8	6.80	2.10	0.309	0.698	3.31	Plagioclase	<200
8	2.2	5.8	1.46	1.05	0.719	0.900	1.48	Plagioclase	<200
7	1.9	4.2	1.06	1.57	1.481	1.164	1.39	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Glass	<200
71	19.5	16.1	4.02	4.71	1.172	0.973	4.41	Plagioclase	<200
18	4.9	9.8	3.49	1.57	0.450	0.803	2.22	Plagioclase	<200
9	2.5	5.7	1.42	1.57	1.106	0.983	1.57	Plagioclase	<200
11	3.0	6.7	1.68	1.57	0.935	0.917	1.74	Plagioclase	<200
34	9.3	11.1	2.78	2.10	0.755	0.975	3.05	Plagioclase	<200
8	2.2	4.3	1.08	0.52	0.481	1.214	1.48	Plagioclase	<200
81	22.2	19.2	5.69	4.71	0.828	0.871	4.71	Clinopyroxene	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Plagioclase	<200
6	1.7	3.5	0.87	0.52	0.598	1.308	1.28	Ilmenite	<200
38	10.4	13.7	4.53	2.10	0.464	0.838	3.23	Plagioclase	<200
134	36.8	24.6	7.09	4.71	0.664	0.875	6.06	Plagioclase	<200
41	11.3	14.8	5.24	2.62	0.500	0.805	3.35	Glass	<200
10	2.7	5.0	1.24	1.57	1.266	1.183	1.66	Plagioclase	<200
49	13.4	16.3	5.86	2.62	0.447	0.797	3.67	Glass	<200
34	9.3	11.5	2.87	2.62	0.913	0.942	3.05	Plagioclase	<200
2479	680.2	126.8	49.69	31.95	0.643	0.729	26.08	Plagioclase	<200

227	62.3	63.7	29.78	3.14	0.105	0.439	7.89	Orthopyroxene	<200
14	3.8	6.0	1.50	1.57	1.047	1.156	1.96	Plagioclase	<200
333	91.4	71.0	32.71	8.38	0.256	0.477	9.56	Orthopyroxene	<200
559	153.4	60.7	23.92	10.48	0.438	0.724	12.38	Plagioclase	<200
777	213.2	65.7	23.97	15.19	0.634	0.787	14.60	Glass	<200
29	8.0	10.7	2.68	2.62	0.978	0.933	2.82	Plagioclase	<200
31	8.5	10.4	2.61	2.62	1.004	0.992	2.92	Plagioclase	<200
306	84.0	45.8	18.31	8.38	0.458	0.709	9.16	Plagioclase	<200
8	2.2	5.1	1.28	0.52	0.406	1.021	1.48	Glass	<200
25	6.9	10.3	2.57	2.10	0.817	0.902	2.62	Glass	<200
128	35.1	31.5	13.08	4.71	0.360	0.666	5.93	Plagioclase	<200
53	14.5	17.9	6.78	3.67	0.541	0.757	3.81	Plagioclase	<200
81	22.2	18.2	4.55	4.71	1.035	0.919	4.71	Plagioclase	<200
28	7.7	14.5	5.97	2.10	0.352	0.677	2.77	Plagioclase	<200
16	4.4	7.7	1.92	1.57	0.818	0.968	2.10	Clinopyroxene	<200
33	9.1	12.3	3.69	2.62	0.710	0.868	3.01	Plagioclase	<200
1341	367.9	136.2	62.15	15.19	0.244	0.499	19.18	Plagioclase	<200
192	52.7	37.5	15.29	7.86	0.514	0.687	7.26	Plagioclase	<200
48	13.2	14.5	3.63	3.67	1.011	0.886	3.63	Glass	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
56	15.4	23.8	10.40	3.14	0.302	0.585	3.92	Plagioclase	<200
68	18.7	15.3	3.83	4.71	1.230	1.000	4.32	Plagioclase	<200
25	6.9	12.9	5.08	2.62	0.516	0.723	2.62	Plagioclase	<200
51	14.0	17.2	6.40	3.14	0.491	0.772	3.74	Plagioclase	<200
32	8.8	15.5	6.36	2.10	0.330	0.679	2.96	Plagioclase	<200
122	33.5	22.1	5.51	6.29	1.142	0.930	5.79	Plagioclase	<200
8	2.2	6.5	2.32	1.57	0.677	0.803	1.48	Calcite	<200
31	8.5	10.2	2.55	3.14	1.231	1.014	2.92	Plagioclase	<200
15	4.1	7.5	1.87	2.10	1.123	0.965	2.03	Plagioclase	<200
23	6.3	9.8	2.45	2.10	0.857	0.908	2.51	Plagioclase	<200
42	11.5	14.4	4.76	2.62	0.550	0.838	3.39	Glass	<200
15	4.1	8.7	2.98	1.05	0.352	0.825	2.03	Plagioclase	<200
177	48.6	29.7	9.96	7.86	0.789	0.832	6.97	Glass	<200
811	222.5	69.2	26.08	15.19	0.582	0.764	14.92	Plagioclase	<200
28	7.7	9.9	2.47	2.62	1.061	0.992	2.77	Plagioclase	<200
6938	1903.5	264.8	116.00	47.67	0.411	0.584	43.63	Glass	<200
10	2.7	6.2	1.54	1.57	1.019	0.954	1.66	Plagioclase	<200
44	12.1	14.6	4.74	3.14	0.662	0.845	3.47	Plagioclase	<200
1166	319.9	99.1	41.89	23.57	0.563	0.640	17.89	Glass	<200
27	7.4	12.0	4.26	2.10	0.493	0.804	2.72	Plagioclase	<200
51	14.0	16.0	5.45	4.19	0.769	0.827	3.74	Albite	<200
8	2.2	5.4	1.34	1.05	0.784	0.977	1.48	Plagioclase	<200
8	2.2	4.3	1.08	1.57	1.454	1.214	1.48	Plagioclase	<200
64	17.6	23.2	9.78	3.14	0.321	0.642	4.19	Orthopyroxene	<200
8	2.2	5.1	1.26	1.05	0.833	1.037	1.48	Plagioclase	<200
15	4.1	8.2	2.41	1.57	0.651	0.874	2.03	Plagioclase	<200
33	9.1	13.0	4.43	2.62	0.591	0.823	3.01	Plagioclase	<200
13	3.6	10.1	4.21	1.57	0.373	0.662	1.89	Plagioclase	<200
150	41.2	29.7	11.19	6.81	0.609	0.765	6.41	Orthopyroxene	<200
21	5.8	9.8	2.94	2.62	0.891	0.868	2.40	Plagioclase	<200
11	3.0	5.4	1.34	1.05	0.784	1.147	1.74	Plagioclase	<200
19	5.2	8.4	2.09	2.10	1.005	0.968	2.28	Plagioclase	<200
498	136.6	55.8	21.53	10.48	0.487	0.743	11.69	Plagioclase	<200
32	8.8	10.8	2.70	2.62	0.970	0.972	2.96	Plagioclase	<200
20	5.5	7.9	1.98	2.10	1.061	1.047	2.34	Plagioclase	<200
5983	1641.5	181.0	65.39	40.33	0.617	0.794	40.52	Plagioclase	<200
8	2.2	5.1	1.26	1.57	1.246	1.037	1.48	Olivine	<200

8	2.2	4.5	1.13	1.57	1.389	1.158	1.48	Chlorite	<200
88	24.1	21.7	7.70	5.24	0.681	0.804	4.91	Glass	<200
8	2.2	4.3	1.08	1.05	0.972	1.214	1.48	Glass	<200
25	6.9	9.5	2.37	2.10	0.886	0.981	2.62	Glass	<200
426	116.9	49.4	18.28	9.43	0.516	0.777	10.81	Plagioclase	<200
295	80.9	36.6	10.84	9.95	0.918	0.871	9.00	Plagioclase	<200
6	1.7	3.9	0.97	1.57	1.619	1.174	1.28	Plagioclase	<200
7	1.9	5.1	1.26	1.05	0.833	0.971	1.39	Plagioclase	<200
507	139.1	118.5	56.82	17.81	0.313	0.353	11.79	Plagioclase	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Glass	<200
12	3.3	6.9	1.71	1.05	0.614	0.939	1.81	Plagioclase	<200
185	50.8	39.4	16.68	6.29	0.377	0.640	7.12	Plagioclase	<200
96	26.3	20.4	5.10	5.24	1.027	0.891	5.13	Plagioclase	<200
7	1.9	5.1	1.26	0.52	0.413	0.971	1.39	Plagioclase	<200
8	2.2	4.5	1.12	1.57	1.402	1.168	1.48	Plagioclase	<200
10	2.7	6.6	1.64	1.05	0.640	0.893	1.66	Plagioclase	<200
19	5.2	7.8	1.96	2.10	1.071	1.033	2.28	Glass	<200
61	16.7	21.2	8.68	3.67	0.423	0.684	4.09	Plagioclase	<200
989	271.4	96.0	41.45	12.57	0.303	0.608	16.47	Plagioclase	<200
155	42.5	46.1	21.04	4.19	0.199	0.501	6.52	Glass	<200
553	151.7	68.2	28.83	14.14	0.490	0.640	12.32	Plagioclase	<200
64	17.6	25.2	10.97	2.62	0.239	0.591	4.19	Plagioclase	<200
135	37.0	22.5	5.63	6.81	1.210	0.958	6.09	Plagioclase	<200
9	2.5	5.1	1.26	1.05	0.833	1.101	1.57	Plagioclase	<200
34	9.3	12.2	3.22	2.10	0.652	0.885	3.05	Plagioclase	<200
15	4.1	9.1	3.28	1.57	0.479	0.793	2.03	Plagioclase	<200
30	8.2	13.6	5.22	2.10	0.402	0.748	2.87	Plagioclase	<200
217	59.5	31.2	8.91	9.43	1.058	0.877	7.72	Plagioclase	<200
76	20.9	19.8	6.84	3.67	0.537	0.818	4.57	Plagioclase	<200
6834	1875.0	211.8	83.43	46.62	0.559	0.725	43.30	Plagioclase	<200
10	2.7	6.2	1.55	1.05	0.677	0.948	1.66	Glass	<200
88	24.1	18.0	4.50	6.29	1.398	0.967	4.91	Plagioclase	<200
1129	309.8	86.9	34.48	22.52	0.653	0.718	17.60	Chlorite	<200
38	10.4	13.9	4.73	2.62	0.554	0.825	3.23	Plagioclase	<200
51	14.0	19.8	8.16	3.14	0.385	0.671	3.74	Plagioclase	<200
80	22.0	24.6	10.12	4.19	0.414	0.676	4.69	Orthopyroxene	<200
60	16.5	21.4	8.84	3.67	0.415	0.672	4.06	Orthopyroxene	<200
61	16.7	28.7	13.05	2.62	0.201	0.506	4.09	Glass	<200
51	14.0	21.1	8.99	6.29	0.700	0.628	3.74	Plagioclase	<200
73	20.0	23.3	9.54	5.24	0.549	0.681	4.48	Plagioclase	<200
21	5.8	11.3	4.35	2.10	0.483	0.750	2.40	Plagioclase	<200
20	5.5	10.5	3.82	1.57	0.411	0.790	2.34	Glass	<200
16	4.4	9.6	3.56	1.57	0.441	0.774	2.10	Chlorite	<200
39	10.7	14.6	5.23	2.62	0.501	0.797	3.27	Plagioclase	<200
12	3.3	5.8	1.45	1.05	0.724	1.109	1.81	Plagioclase	<200
9185	2520.0	303.5	132.79	49.24	0.371	0.586	50.20	Glass	<200
63	17.3	18.5	6.67	4.71	0.706	0.796	4.16	Glass	<200
84	23.1	23.4	9.17	3.14	0.342	0.729	4.80	Plagioclase	<200
20	5.5	7.5	1.87	2.62	1.401	1.109	2.34	Plagioclase	<200
138	37.9	28.7	10.89	5.76	0.529	0.759	6.15	Plagioclase	<200
11	3.0	6.5	1.63	2.10	1.288	0.942	1.74	Olivine	<200
22	6.0	10.8	3.79	1.57	0.414	0.810	2.46	Clinopyroxene	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
16	4.4	8.2	2.04	2.10	1.029	0.908	2.10	Plagioclase	<200
12	3.3	6.5	1.63	1.57	0.963	0.983	1.81	Orthopyroxene	<200
514	141.0	63.2	26.24	13.62	0.519	0.666	11.88	Orthopyroxene	<200
89	24.4	21.3	7.32	3.67	0.501	0.822	4.94	Plagioclase	<200

13	3.6	6.4	1.60	2.10	1.313	1.045	1.89	Clinopyroxene	<200
27	7.4	13.0	4.99	2.10	0.421	0.745	2.72	Plagioclase	<200
76	20.9	17.4	4.36	5.24	1.202	0.929	4.57	Clinopyroxene	<200
7	1.9	4.1	1.03	1.57	1.524	1.189	1.39	Glass	<200
6	1.7	3.9	0.98	1.57	1.602	1.162	1.28	Orthopyroxene	<200
12	3.3	8.1	2.88	1.05	0.365	0.799	1.81	Plagioclase	<200
38	10.4	12.5	3.12	3.14	1.006	0.917	3.23	Plagioclase	<200
52	14.3	17.1	6.31	3.14	0.498	0.781	3.78	Plagioclase	<200
1944	533.4	125.3	52.49	22.52	0.429	0.653	23.09	Plagioclase	<200
22	6.0	8.9	2.21	2.62	1.186	0.984	2.46	Plagioclase	<200
52	14.3	15.9	5.22	3.67	0.703	0.842	3.78	Plagioclase	<200
1192	327.0	101.6	43.26	18.86	0.436	0.631	18.08	Glass	<200
625	171.5	59.7	22.09	11.00	0.498	0.777	13.10	Orthopyroxene	<200
21	5.8	8.2	2.05	2.10	1.024	1.038	2.40	Plagioclase	<200
229	62.8	43.7	18.42	10.48	0.569	0.644	7.93	Plagioclase	<200
587	161.1	66.3	27.24	14.67	0.539	0.679	12.69	Plagioclase	<200
3570	979.5	138.2	49.21	34.57	0.702	0.803	31.30	Clinopyroxene	<200
31	8.5	10.5	2.63	2.10	0.798	0.984	2.92	Plagioclase	<200
7299	2002.6	236.0	97.42	41.38	0.425	0.672	44.75	Chlorite	<200
10	2.7	8.8	3.66	1.05	0.287	0.666	1.66	Plagioclase	<200
228	62.6	40.5	16.47	8.38	0.509	0.692	7.91	Plagioclase	<200
188	51.6	33.5	12.67	9.95	0.785	0.760	7.18	Olivine	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
51	14.0	15.0	3.74	3.14	0.840	0.887	3.74	Plagioclase	<200
16	4.4	9.0	3.09	1.57	0.508	0.823	2.10	Plagioclase	<200
42	11.5	15.9	6.07	2.10	0.346	0.755	3.39	Plagioclase	<200
48	13.2	14.4	3.61	3.14	0.870	0.892	3.63	Glass	<200
8	2.2	5.1	1.28	1.57	1.227	1.029	1.48	Olivine	<200
649	178.1	87.5	39.20	5.76	0.147	0.541	13.34	Plagioclase	<200
20	5.5	9.6	2.85	2.10	0.737	0.870	2.34	Plagioclase	<200
10	2.7	5.3	1.32	1.05	0.795	1.113	1.66	Glass	<200
165	45.3	40.1	17.43	3.67	0.211	0.595	6.73	Plagioclase	<200
23	6.3	12.0	4.66	1.57	0.337	0.740	2.51	Plagioclase	<200
19	5.2	8.2	2.06	2.10	1.019	0.983	2.28	Plagioclase	<200
395	108.4	40.4	10.10	12.05	1.193	0.914	10.41	Plagioclase	<200
25	6.9	9.1	2.28	2.10	0.921	1.018	2.62	Plagioclase	<200
151	41.4	35.6	15.04	8.90	0.592	0.641	6.44	Plagioclase	<200
639	175.3	60.8	22.70	12.05	0.531	0.771	13.24	Glass	<200
3607	989.6	198.1	87.76	20.95	0.239	0.563	31.46	Plagioclase	<200
74	20.3	20.2	7.35	4.71	0.641	0.790	4.51	Plagioclase	<200
1295	355.3	92.2	36.29	24.62	0.678	0.725	18.85	Olivine	<200
662	181.6	64.0	24.63	14.67	0.596	0.746	13.48	Orthopyroxene	<200
229	62.8	37.3	14.24	7.33	0.515	0.753	7.93	Clinopyroxene	<200
42	11.5	17.5	7.12	3.67	0.515	0.688	3.39	Olivine	<200
6	1.7	4.5	1.12	1.05	0.938	1.014	1.28	Plagioclase	<200
555	152.3	77.1	34.10	12.05	0.353	0.567	12.34	Plagioclase	<200
118	32.4	23.2	6.94	5.76	0.830	0.869	5.69	Clinopyroxene	<200
43	11.8	14.4	4.65	3.14	0.675	0.847	3.44	Plagioclase	<200
26	7.1	10.1	2.53	2.10	0.830	0.936	2.67	Plagioclase	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
45	12.4	15.6	5.62	3.14	0.559	0.797	3.51	Plagioclase	<200
17	4.7	8.0	1.99	1.05	0.528	0.961	2.16	Glass	<200
45	12.4	15.9	5.84	3.14	0.538	0.784	3.51	Plagioclase	<200
10	2.7	5.4	1.34	1.57	1.172	1.093	1.66	Plagioclase	<200
83	22.8	21.1	7.48	4.19	0.560	0.804	4.77	Glass	<200
18	4.9	8.9	2.48	2.10	0.847	0.881	2.22	Plagioclase	<200
25	6.9	11.0	3.62	2.10	0.580	0.842	2.62	Plagioclase	<200

24	6.6	9.8	2.44	3.67	1.504	0.931	2.57	Olivine	<200
15	4.1	7.8	1.94	1.05	0.541	0.926	2.03	Plagioclase	<200
12	3.3	6.1	1.53	2.10	1.373	1.052	1.81	Glass	<200
12	3.3	6.4	1.60	2.10	1.313	1.003	1.81	Quartz	<200
26	7.1	8.8	2.19	2.10	0.959	1.081	2.67	Plagioclase	<200
216	59.3	49.1	21.84	5.24	0.240	0.556	7.70	Plagioclase	<200
70	19.2	17.1	4.27	4.19	0.981	0.909	4.38	Plagioclase	<200
11	3.0	6.1	1.53	2.10	1.373	1.008	1.74	Plagioclase	<200
46	12.6	15.1	5.08	3.67	0.722	0.832	3.55	Plagioclase	<200
45	12.4	12.9	3.23	3.67	1.136	0.966	3.51	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Clinopyroxene	<200
114	31.3	39.2	17.83	4.19	0.235	0.506	5.59	Illite	<200
13107	3596.1	318.9	132.23	57.62	0.436	0.667	59.97	Quartz	<200
20	5.5	8.0	2.01	2.62	1.303	1.036	2.34	Plagioclase	<200
19	5.2	9.4	2.87	1.57	0.547	0.863	2.28	Plagioclase	<200
18	4.9	8.3	2.08	2.10	1.010	0.946	2.22	Plagioclase	<200
712	195.4	65.1	24.64	15.19	0.616	0.761	13.98	Plagioclase	<200
23	6.3	11.1	3.95	1.57	0.397	0.802	2.51	Plagioclase	<200
30	8.2	9.9	2.47	2.10	0.850	1.027	2.87	Plagioclase	<200
266	73.0	60.5	27.60	5.24	0.190	0.501	8.54	Plagioclase	<200
89	24.4	26.5	11.03	5.76	0.522	0.661	4.94	Glass	<200
29	8.0	9.9	2.47	2.62	1.061	1.014	2.82	Plagioclase	<200
2552	700.2	134.3	54.21	23.05	0.425	0.699	26.46	Plagioclase	<200
6	1.7	3.6	0.89	1.57	1.764	1.272	1.28	Glass	<200
7	1.9	4.6	1.16	1.05	0.905	1.063	1.39	Plagioclase	<200
27	7.4	12.9	4.96	1.57	0.317	0.748	2.72	Plagioclase	<200
18	4.9	8.1	2.02	1.57	0.777	0.976	2.22	Glass	<200
98	26.9	22.7	7.97	4.19	0.526	0.811	5.19	Plagioclase	<200
151	41.4	30.8	11.95	7.33	0.613	0.740	6.44	Plagioclase	<200
106	29.1	26.4	10.42	4.71	0.452	0.724	5.39	Clinopyroxene	<200
125	34.3	30.1	12.25	6.29	0.513	0.690	5.86	Plagioclase	<200
11	3.0	5.5	1.38	1.57	1.138	1.112	1.74	Plagioclase	<200
389	106.7	52.8	21.44	11.52	0.537	0.693	10.33	Olivine	<200
48	13.2	16.6	6.13	3.14	0.512	0.777	3.63	Plagioclase	<200
4722	1295.5	194.1	81.05	37.19	0.459	0.657	35.99	Orthopyroxene	<200
81	22.2	25.8	10.83	5.24	0.484	0.648	4.71	Plagioclase	<200
145	39.8	25.7	7.61	6.81	0.895	0.871	6.31	Plagioclase	<200
44	12.1	15.1	5.29	3.14	0.594	0.813	3.47	Plagioclase	<200
24	6.6	13.2	5.37	3.14	0.585	0.689	2.57	Plagioclase	<200
7	1.9	5.5	1.38	1.05	0.761	0.890	1.39	Plagioclase	<200
71	19.5	19.5	6.90	4.19	0.607	0.804	4.41	Glass	<200
46	12.6	18.4	7.54	2.62	0.347	0.683	3.55	Plagioclase	<200
84	23.1	29.6	13.01	5.24	0.403	0.576	4.80	Orthopyroxene	<200
18	4.9	7.5	1.86	2.10	1.129	1.056	2.22	Plagioclase	<200
176	48.3	36.3	14.93	8.90	0.596	0.678	6.95	Olivine	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
83	22.8	23.5	9.27	3.67	0.396	0.721	4.77	Plagioclase	<200
81	22.2	28.8	12.63	3.14	0.249	0.581	4.71	Plagioclase	<200
14	3.8	6.6	1.66	1.57	0.946	1.049	1.96	Plagioclase	<200
7	1.9	6.0	2.05	1.57	0.766	0.821	1.39	Plagioclase	<200
23	6.3	11.2	4.00	1.57	0.393	0.799	2.51	Olivine	<200
129	35.4	24.3	7.24	5.24	0.724	0.870	5.95	Plagioclase	<200
26	7.1	10.2	2.55	2.10	0.824	0.928	2.67	Plagioclase	<200
1912	524.6	131.4	56.40	19.90	0.353	0.618	22.90	Plagioclase	<200
46	12.6	15.4	5.32	2.62	0.492	0.818	3.55	Glass	<200
85	23.3	18.9	4.73	4.19	0.886	0.905	4.83	Plagioclase	<200
282	77.4	51.3	22.13	9.95	0.450	0.608	8.80	Plagioclase	<200

131	35.9	27.4	10.20	5.76	0.565	0.774	5.99	Plagioclase	<200
5988	1642.9	236.7	102.26	37.71	0.369	0.607	40.53	Plagioclase	<200
10	2.7	5.2	1.31	1.57	1.198	1.122	1.66	Glass	<200
163	44.7	34.1	13.78	6.29	0.456	0.696	6.69	Plagioclase	<200
258	70.8	48.7	20.96	11.00	0.525	0.613	8.41	Glass	<200
7	1.9	4.1	1.03	1.57	1.524	1.189	1.39	Orthopyroxene	<200
625	171.5	63.2	24.65	12.57	0.510	0.734	13.10	Plagioclase	<200
30	8.2	10.7	2.66	2.10	0.789	0.955	2.87	Plagioclase	<200
47	12.9	12.9	3.21	2.62	0.816	0.991	3.59	Clinopyroxene	<200
230	63.1	37.9	14.65	7.86	0.537	0.743	7.94	Plagioclase	<200
11	3.0	5.6	1.39	1.57	1.129	1.104	1.74	Plagioclase	<200
101	27.7	24.2	9.03	5.24	0.580	0.771	5.26	Plagioclase	<200
7	1.9	4.9	1.22	0.52	0.426	1.009	1.39	Glass	<200
59	16.2	15.3	3.81	4.71	1.236	0.935	4.02	Plagioclase	<200
94	25.8	22.8	8.28	5.76	0.696	0.790	5.08	Olivine	<200
17	4.7	8.7	2.50	1.57	0.628	0.877	2.16	Plagioclase	<200
31	8.5	12.4	4.18	3.14	0.751	0.832	2.92	Plagioclase	<200
17	4.7	8.2	2.05	1.05	0.512	0.933	2.16	Plagioclase	<200
8	2.2	5.8	1.45	1.57	1.083	0.906	1.48	Plagioclase	<200
25	6.9	9.3	2.33	3.14	1.348	0.996	2.62	Olivine	<200
34	9.3	13.0	4.31	3.14	0.729	0.836	3.05	Glass	<200
11	3.0	5.1	1.26	1.57	1.246	1.217	1.74	Plagioclase	<200
43	11.8	17.3	6.95	2.10	0.302	0.704	3.44	Plagioclase	<200
6	1.7	4.3	1.08	1.05	0.972	1.054	1.28	Chlorite	<200
242	66.4	33.4	10.20	8.38	0.822	0.864	8.15	Plagioclase	<200
11	3.0	5.4	1.34	1.05	0.784	1.147	1.74	Glass	<200
44	12.1	17.3	6.91	3.67	0.531	0.711	3.47	Plagioclase	<200
17	4.7	9.4	3.25	2.10	0.646	0.817	2.16	Olivine	<200
507	139.1	49.1	15.65	11.00	0.703	0.852	11.79	Plagioclase	<200
222	60.9	32.1	9.93	8.38	0.844	0.861	7.80	Glass	<200
31	8.5	10.4	2.60	3.14	1.208	0.992	2.92	Glass	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Plagioclase	<200
38	10.4	19.6	8.56	2.10	0.245	0.586	3.23	Olivine	<200
42	11.5	12.1	3.03	3.14	1.036	0.993	3.39	Glass	<200
114	31.3	23.2	7.38	5.24	0.710	0.853	5.59	Plagioclase	<200
9806	2690.4	281.5	117.96	44.00	0.373	0.653	51.87	Glass	<200
15	4.1	10.6	4.36	2.10	0.482	0.679	2.03	Plagioclase	<200
30	8.2	10.3	2.58	2.10	0.814	0.984	2.87	Plagioclase	<200
11	3.0	6.9	1.71	1.57	0.918	0.899	1.74	Plagioclase	<200
77	21.1	19.0	5.93	3.14	0.530	0.858	4.60	Glass	<200
11	3.0	6.4	1.60	1.57	0.981	0.961	1.74	Plagioclase	<200
41	11.3	15.8	6.03	3.67	0.609	0.753	3.35	Plagioclase	<200
119	32.7	26.6	10.03	5.24	0.522	0.762	5.71	Glass	<200
229	62.8	41.2	16.86	8.90	0.528	0.682	7.93	Plagioclase	<200
7	1.9	4.8	1.19	1.05	0.882	1.034	1.39	Plagioclase	<200
207	56.8	34.4	12.75	7.33	0.575	0.776	7.54	Plagioclase	<200
7	1.9	4.6	1.16	1.05	0.905	1.063	1.39	Quartz	<200
22	6.0	12.2	4.87	2.62	0.538	0.714	2.46	Glass	<200
24	6.6	10.5	3.12	2.10	0.673	0.869	2.57	Glass	<200
171	46.9	42.0	18.43	5.76	0.313	0.579	6.85	Plagioclase	<200
24	6.6	9.6	2.40	2.62	1.092	0.948	2.57	Plagioclase	<200
134	36.8	29.7	11.70	4.71	0.403	0.724	6.06	Plagioclase	<200
7	1.9	5.2	1.31	1.57	1.198	0.939	1.39	Plagioclase	<200
403	110.6	62.6	27.23	12.05	0.443	0.596	10.52	Plagioclase	<200
2638	723.8	165.1	72.56	27.76	0.383	0.578	26.90	Plagioclase	<200
56	15.4	15.9	4.60	4.19	0.911	0.875	3.92	Plagioclase	<200
t 234	64.2	32.1	8.54	11.00	1.288	0.884	8.01	Plagioclase	<200

58	15.9	18.5	6.94	4.71	0.679	0.766	3.99	Plagioclase	<200
444	121.8	77.1	35.07	12.05	0.344	0.508	11.04	Plagioclase	<200
16	4.4	8.2	2.04	2.10	1.029	0.908	2.10	Plagioclase	<200
11	3.0	5.1	1.26	1.57	1.246	1.217	1.74	Albite	<200
68	18.7	19.7	7.30	3.67	0.503	0.777	4.32	Olivine	<200
31	8.5	12.1	3.85	2.62	0.681	0.853	2.92	Plagioclase	<200
320	87.8	67.7	31.01	5.76	0.186	0.491	9.37	Calcite	<200
26	7.1	13.7	5.57	1.57	0.282	0.691	2.67	Chlorite	<200
667	183.0	68.0	27.27	14.67	0.538	0.706	13.53	Plagioclase	<200
28	7.7	9.7	2.43	2.10	0.864	1.011	2.77	Chlorite	<200
7	1.9	4.6	1.16	1.57	1.353	1.063	1.39	Orthopyroxene	<200
66	18.1	22.1	9.05	3.67	0.406	0.682	4.26	Plagioclase	<200
9	2.5	7.0	2.49	1.57	0.631	0.799	1.57	Plagioclase	<200
38	10.4	12.3	3.08	3.67	1.192	0.930	3.23	Plagioclase	<200
16	4.4	7.5	1.86	1.57	0.844	0.996	2.10	Plagioclase	<200
89	24.4	22.7	8.47	4.71	0.556	0.772	4.94	Chlorite	<200
74	20.3	24.0	9.99	3.14	0.314	0.664	4.51	Plagioclase	<200
221	60.6	50.1	22.35	7.86	0.352	0.551	7.79	Glass	<200
6	1.7	3.3	0.82	1.57	1.915	1.393	1.28	Plagioclase	<200
893	245.0	91.4	39.49	16.76	0.424	0.607	15.65	Glass	<200
6757	1853.9	237.7	100.40	44.00	0.438	0.642	43.06	Orthopyroxene	<200
9	2.5	4.9	1.23	1.05	0.854	1.130	1.57	Plagioclase	<200
8	2.2	5.5	1.37	1.05	0.766	0.956	1.48	Glass	<200
36	9.9	14.3	5.28	3.14	0.595	0.779	3.14	Plagioclase	<200
228	62.6	32.5	9.97	9.95	0.998	0.863	7.91	Olivine	<200
2655	728.4	125.4	47.33	28.29	0.598	0.763	26.99	Plagioclase	<200
20	5.5	8.5	2.14	2.62	1.224	0.973	2.34	Glass	<200
81	22.2	23.9	9.67	4.19	0.433	0.698	4.71	Plagioclase	<200
27	7.4	13.0	5.03	1.57	0.312	0.742	2.72	Plagioclase	<200
1124	308.4	79.5	29.15	18.33	0.629	0.784	17.56	Plagioclase	<200
14	3.8	8.4	2.81	1.57	0.559	0.831	1.96	Plagioclase	<200
9	2.5	5.2	1.31	0.52	0.397	1.065	1.57	Plagioclase	<200
74	20.3	21.2	8.06	3.14	0.390	0.755	4.51	Plagioclase	<200
36	9.9	11.9	2.97	3.14	1.057	0.936	3.14	Glass	<200
186	51.0	29.1	8.65	7.33	0.847	0.870	7.14	Glass	<200
22	6.0	10.9	3.94	1.57	0.398	0.796	2.46	Glass	<200
256	70.2	52.1	22.98	7.86	0.342	0.571	8.38	Plagioclase	<200
847	232.4	69.7	25.83	17.29	0.669	0.776	15.24	Clinopyroxene	<200
9	2.5	5.8	1.45	1.05	0.724	0.961	1.57	Plagioclase	<200
93	25.5	23.4	8.79	5.24	0.596	0.766	5.05	Plagioclase	<200
3992	1095.3	161.6	63.59	37.71	0.593	0.726	33.09	Plagioclase	<200
54	14.8	13.7	3.44	3.67	1.067	0.993	3.85	Plagioclase	<200
393	107.8	48.0	17.99	12.57	0.699	0.767	10.38	Glass	<200
340	93.3	48.3	19.30	6.81	0.353	0.709	9.66	Olivine	<200
277	76.0	38.9	13.99	8.90	0.636	0.795	8.72	Plagioclase	<200
606	166.3	61.7	23.86	14.14	0.593	0.741	12.89	Plagioclase	<200
2461	675.2	136.4	56.18	33.52	0.597	0.675	25.98	Plagioclase	<200
27	7.4	11.9	4.14	2.10	0.507	0.814	2.72	Chlorite	<200
435	119.4	53.2	20.85	9.95	0.477	0.729	10.92	Olivine	<200
10	2.7	6.9	2.16	1.57	0.727	0.855	1.66	Glass	<200
250	68.6	53.4	23.84	5.76	0.242	0.549	8.28	Plagioclase	<200
73	20.0	32.3	14.79	7.33	0.496	0.491	4.48	Plagioclase	<200
427	117.2	46.2	15.55	10.48	0.674	0.831	10.82	Glass	<200
26	7.1	9.1	2.27	2.10	0.925	1.045	2.67	Plagioclase	<200
16	4.4	9.3	3.29	2.10	0.638	0.803	2.10	Plagioclase	<200
150	41.2	31.9	12.68	4.71	0.371	0.714	6.41	Plagioclase	<200
342	93.8	49.0	19.76	8.90	0.450	0.700	9.69	Plagioclase	<200

23	6.3	10.2	2.90	1.57	0.541	0.877	2.51	Plagioclase	<200
167	45.8	43.4	19.34	6.29	0.325	0.553	6.77	Plagioclase	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Glass	<200
9	2.5	5.7	1.42	1.57	1.106	0.983	1.57	Chlorite	<200
9	2.5	5.1	1.28	2.10	1.641	1.084	1.57	Plagioclase	<200
11	3.0	6.1	1.53	1.57	1.026	1.008	1.74	Plagioclase	<200
11	3.0	5.8	1.45	1.05	0.724	1.062	1.74	Plagioclase	<200
120	32.9	31.1	13.03	6.29	0.483	0.654	5.74	Glass	<200
28	7.7	11.6	3.78	2.62	0.693	0.845	2.77	Plagioclase	<200
99	27.2	20.9	5.72	5.76	1.007	0.882	5.21	Plagioclase	<200
33	9.1	13.0	4.48	2.10	0.469	0.820	3.01	Apatite	<200
7	1.9	3.9	0.97	1.57	1.619	1.266	1.39	Albite	<200
19	5.2	13.3	5.72	1.05	0.184	0.610	2.28	Plagioclase	<200
18	4.9	8.5	2.12	2.62	1.236	0.929	2.22	Plagioclase	<200
109	29.9	25.6	9.73	6.81	0.700	0.757	5.47	Quartz	<200
78	21.4	20.5	7.33	4.19	0.572	0.800	4.63	Glass	<200
202	55.4	31.9	10.85	6.81	0.628	0.827	7.44	Clinopyroxene	<200
12	3.3	7.2	1.80	0.52	0.289	0.894	1.81	Glass	<200
381	104.5	93.2	44.23	11.52	0.260	0.389	10.22	Orthopyroxene	<200
35	9.6	14.0	5.15	2.62	0.509	0.783	3.10	Plagioclase	<200
11	3.0	6.3	1.58	2.10	1.329	0.975	1.74	Plagioclase	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Plagioclase	<200
29	8.0	20.8	9.57	1.57	0.164	0.481	2.82	Plagioclase	<200
10	2.7	6.3	1.58	1.05	0.665	0.928	1.66	Chlorite	<200
31	8.5	11.0	2.76	2.10	0.761	0.938	2.92	Plagioclase	<200
14	3.8	6.7	1.67	2.62	1.569	1.038	1.96	Plagioclase	<200
6	1.7	3.5	0.87	1.05	1.207	1.308	1.28	Plagioclase	<200
24	6.6	9.9	2.47	2.10	0.850	0.919	2.57	Plagioclase	<200
91	25.0	23.9	9.25	3.14	0.339	0.741	5.00	Glass	<200
53	14.5	14.4	3.59	3.14	0.875	0.941	3.81	Clinopyroxene	<200
16	4.4	7.2	1.80	1.05	0.583	1.033	2.10	Plagioclase	<200
48	13.2	17.7	6.98	4.19	0.600	0.726	3.63	Olivine	<200
17	4.7	7.5	1.87	1.57	0.840	1.022	2.16	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Glass	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
133	36.5	27.8	10.35	7.33	0.708	0.772	6.04	Glass	<200
977	268.1	71.3	24.88	15.71	0.631	0.814	16.37	Plagioclase	<200
57	15.6	19.4	7.62	4.71	0.618	0.725	3.95	Plagioclase	<200
31	8.5	12.7	4.41	2.62	0.594	0.816	2.92	Olivine	<200
18	4.9	8.4	2.10	2.10	1.000	0.937	2.22	Clinopyroxene	<200
4964	1361.9	179.2	70.17	46.09	0.657	0.730	36.90	Plagioclase	<200
27	7.4	11.9	4.18	2.62	0.627	0.811	2.72	Plagioclase	<200
50	13.7	18.5	7.36	2.62	0.356	0.712	3.70	Plagioclase	<200
61	16.7	22.0	9.20	3.14	0.341	0.658	4.09	Plagioclase	<200
42	11.5	16.2	6.27	3.14	0.501	0.742	3.39	Glass	<200
30	8.2	13.8	5.37	1.57	0.292	0.736	2.87	Plagioclase	<200
22	6.0	13.3	5.58	1.05	0.188	0.654	2.46	Plagioclase	<200
214	58.7	40.8	16.90	6.29	0.372	0.667	7.66	Plagioclase	<200
173	47.5	29.5	9.97	6.81	0.683	0.829	6.89	Glass	<200
6	1.7	3.3	0.82	1.05	1.280	1.393	1.28	Plagioclase	<200
41	11.3	15.8	6.02	2.10	0.349	0.753	3.35	Olivine	<200
12	3.3	5.8	1.45	1.05	0.724	1.109	1.81	Plagioclase	<200
495	135.8	50.4	17.35	13.09	0.754	0.820	11.65	Chlorite	<200
26	7.1	12.8	4.98	2.10	0.422	0.738	2.67	Plagioclase	<200
6	1.7	4.1	1.02	1.57	1.539	1.113	1.28	Plagioclase	<200
1906	522.9	174.9	80.98	12.57	0.155	0.464	22.87	Orthopyroxene	<200
8	2.2	4.5	1.12	1.05	0.938	1.168	1.48	Olivine	<200

23	6.3	10.2	2.90	1.57	0.541	0.877	2.51	Plagioclase	<200
167	45.8	43.4	19.34	6.29	0.325	0.553	6.77	Plagioclase	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Glass	<200
9	2.5	5.7	1.42	1.57	1.106	0.983	1.57	Chlorite	<200
9	2.5	5.1	1.28	2.10	1.641	1.084	1.57	Plagioclase	<200
11	3.0	6.1	1.53	1.57	1.026	1.008	1.74	Plagioclase	<200
11	3.0	5.8	1.45	1.05	0.724	1.062	1.74	Plagioclase	<200
120	32.9	31.1	13.03	6.29	0.483	0.654	5.74	Glass	<200
28	7.7	11.6	3.78	2.62	0.693	0.845	2.77	Plagioclase	<200
99	27.2	20.9	5.72	5.76	1.007	0.882	5.21	Plagioclase	<200
33	9.1	13.0	4.48	2.10	0.469	0.820	3.01	Apatite	<200
7	1.9	3.9	0.97	1.57	1.619	1.266	1.39	Albite	<200
19	5.2	13.3	5.72	1.05	0.184	0.610	2.28	Plagioclase	<200
18	4.9	8.5	2.12	2.62	1.236	0.929	2.22	Plagioclase	<200
109	29.9	25.6	9.73	6.81	0.700	0.757	5.47	Quartz	<200
78	21.4	20.5	7.33	4.19	0.572	0.800	4.63	Glass	<200
202	55.4	31.9	10.85	6.81	0.628	0.827	7.44	Clinopyroxene	<200
12	3.3	7.2	1.80	0.52	0.289	0.894	1.81	Glass	<200
381	104.5	93.2	44.23	11.52	0.260	0.389	10.22	Orthopyroxene	<200
35	9.6	14.0	5.15	2.62	0.509	0.783	3.10	Plagioclase	<200
11	3.0	6.3	1.58	2.10	1.329	0.975	1.74	Plagioclase	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Plagioclase	<200
29	8.0	20.8	9.57	1.57	0.164	0.481	2.82	Plagioclase	<200
10	2.7	6.3	1.58	1.05	0.665	0.928	1.66	Chlorite	<200
31	8.5	11.0	2.76	2.10	0.761	0.938	2.92	Plagioclase	<200
14	3.8	6.7	1.67	2.62	1.569	1.038	1.96	Plagioclase	<200
6	1.7	3.5	0.87	1.05	1.207	1.308	1.28	Plagioclase	<200
24	6.6	9.9	2.47	2.10	0.850	0.919	2.57	Plagioclase	<200
91	25.0	23.9	9.25	3.14	0.339	0.741	5.00	Glass	<200
53	14.5	14.4	3.59	3.14	0.875	0.941	3.81	Clinopyroxene	<200
16	4.4	7.2	1.80	1.05	0.583	1.033	2.10	Plagioclase	<200
48	13.2	17.7	6.98	4.19	0.600	0.726	3.63	Olivine	<200
17	4.7	7.5	1.87	1.57	0.840	1.022	2.16	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Glass	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
133	36.5	27.8	10.35	7.33	0.708	0.772	6.04	Glass	<200
977	268.1	71.3	24.88	15.71	0.631	0.814	16.37	Plagioclase	<200
57	15.6	19.4	7.62	4.71	0.618	0.725	3.95	Plagioclase	<200
31	8.5	12.7	4.41	2.62	0.594	0.816	2.92	Olivine	<200
18	4.9	8.4	2.10	2.10	1.000	0.937	2.22	Clinopyroxene	<200
4964	1361.9	179.2	70.17	46.09	0.657	0.730	36.90	Plagioclase	<200
27	7.4	11.9	4.18	2.62	0.627	0.811	2.72	Plagioclase	<200
50	13.7	18.5	7.36	2.62	0.356	0.712	3.70	Plagioclase	<200
61	16.7	22.0	9.20	3.14	0.341	0.658	4.09	Plagioclase	<200
42	11.5	16.2	6.27	3.14	0.501	0.742	3.39	Glass	<200
30	8.2	13.8	5.37	1.57	0.292	0.736	2.87	Plagioclase	<200
22	6.0	13.3	5.58	1.05	0.188	0.654	2.46	Plagioclase	<200
214	58.7	40.8	16.90	6.29	0.372	0.667	7.66	Plagioclase	<200
173	47.5	29.5	9.97	6.81	0.683	0.829	6.89	Glass	<200
6	1.7	3.3	0.82	1.05	1.280	1.393	1.28	Plagioclase	<200
41	11.3	15.8	6.02	2.10	0.349	0.753	3.35	Olivine	<200
12	3.3	5.8	1.45	1.05	0.724	1.109	1.81	Plagioclase	<200
495	135.8	50.4	17.35	13.09	0.754	0.820	11.65	Chlorite	<200
26	7.1	12.8	4.98	2.10	0.422	0.738	2.67	Plagioclase	<200
6	1.7	4.1	1.02	1.57	1.539	1.113	1.28	Plagioclase	<200
1906	522.9	174.9	80.98	12.57	0.155	0.464	22.87	Orthopyroxene	<200
t 8	2.2	4.5	1.12	1.05	0.938	1.168	1.48	Olivine	<200

44	12.1	13.6	3.41	3.14	0.921	0.904	3.47	Plagioclase	<200
10	2.7	7.4	2.65	1.57	0.592	0.796	1.66	Plagioclase	<200
81	22.2	21.1	7.61	4.71	0.619	0.793	4.71	Plagioclase	<200
62	17.0	16.7	4.89	4.71	0.963	0.873	4.12	Plagioclase	<200
31	8.5	10.5	2.63	2.10	0.798	0.984	2.92	Chlorite	<200
199	54.6	41.2	17.45	8.90	0.510	0.636	7.39	Plagioclase	<200
7	1.9	4.8	1.21	1.57	1.298	1.017	1.39	Plagioclase	<200
4374	1200.1	202.1	87.30	40.86	0.468	0.608	34.64	Clinopyroxene	<200
32	8.8	12.4	3.97	2.62	0.660	0.849	2.96	Glass	<200
8	2.2	5.1	1.26	0.52	0.413	1.037	1.48	Plagioclase	<200
2086	572.3	126.5	52.32	20.95	0.400	0.670	23.92	Plagioclase	<200
250	68.6	43.9	18.20	8.90	0.489	0.668	8.28	Plagioclase	<200
15	4.1	8.5	2.80	2.62	0.936	0.843	2.03	Plagioclase	<200
228	62.6	48.5	21.30	5.24	0.246	0.578	7.91	Plagioclase	<200
739	202.8	76.7	32.02	13.62	0.425	0.658	14.24	Plagioclase	<200
1759	482.6	111.8	45.21	24.09	0.533	0.697	21.97	Glass	<200
10	2.7	7.9	3.05	1.05	0.344	0.744	1.66	Glass	<200
203	55.7	31.7	10.61	7.86	0.741	0.834	7.46	Plagioclase	<200
33	9.1	13.3	4.70	2.10	0.447	0.804	3.01	Orthopyroxene	<200
37	10.2	13.2	4.21	2.62	0.622	0.853	3.19	Plagioclase	<200
6	1.7	3.5	0.87	0.52	0.598	1.308	1.28	Plagioclase	<200
30	8.2	9.9	2.48	2.62	1.056	1.024	2.87	Plagioclase	<200
59	16.2	14.5	3.62	4.19	1.157	0.986	4.02	Plagioclase	<200
6	1.7	4.8	1.19	1.05	0.882	0.953	1.28	Plagioclase	<200
204	56.0	38.0	15.33	6.29	0.410	0.699	7.48	Plagioclase	<200
366	100.4	44.4	15.85	9.43	0.595	0.801	10.02	Glass	<200
81	22.2	23.7	9.54	4.71	0.494	0.704	4.71	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Glass	<200
35	9.6	12.4	3.10	2.62	0.845	0.887	3.10	Plagioclase	<200
7	1.9	3.6	0.89	0.52	0.584	1.372	1.39	Plagioclase	<200
31	8.5	10.3	2.56	3.14	1.227	1.009	2.92	Glass	<200
592	162.4	80.5	35.68	12.57	0.352	0.561	12.74	Glass	<200
97	26.6	20.0	5.01	6.29	1.255	0.913	5.16	Plagioclase	<200
55	15.1	16.8	5.78	3.14	0.543	0.821	3.88	Glass	<200
245	67.2	34.5	11.32	9.95	0.879	0.842	8.20	Plagioclase	<200
10	2.7	6.3	1.58	1.05	0.665	0.928	1.66	Plagioclase	<200
7	1.9	4.2	1.05	1.57	1.495	1.172	1.39	Olivine	<200
45	12.4	13.6	3.39	3.14	0.926	0.918	3.51	Glass	<200
118	32.4	26.4	9.92	5.76	0.581	0.765	5.69	Plagioclase	<200
84	23.1	21.8	7.99	3.14	0.393	0.782	4.80	Olivine	<200
1939	532.0	116.2	46.73	18.86	0.404	0.704	23.06	Plagioclase	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Plagioclase	<200
69	18.9	17.5	4.78	4.19	0.877	0.882	4.35	Plagioclase	<200
16	4.4	9.0	3.09	1.57	0.508	0.823	2.10	Apatite	<200
78	21.4	18.6	5.15	4.19	0.814	0.881	4.63	Plagioclase	<200
286	78.5	40.9	15.34	10.48	0.683	0.767	8.86	Plagioclase	<200
20	5.5	10.7	3.98	1.05	0.264	0.776	2.34	Plagioclase	<200
111	30.5	20.5	5.12	5.76	1.125	0.956	5.52	Plagioclase	<200
8	2.2	5.3	1.32	1.57	1.189	0.995	1.48	Orthopyroxene	<200
22	6.0	13.7	5.82	2.62	0.450	0.635	2.46	Glass	<200
164	45.0	34.2	13.87	6.81	0.491	0.695	6.71	Plagioclase	<200
157	43.1	34.5	14.20	4.19	0.295	0.675	6.56	Orthopyroxene	<200
76	20.9	18.4	5.16	3.67	0.711	0.880	4.57	Glass	<200
9	2.5	5.6	1.39	1.05	0.755	0.998	1.57	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Chlorite	<200
101	27.7	28.0	11.61	4.71	0.406	0.667	5.26	Plagioclase	<200
14	3.8	7.7	1.91	2.62	1.372	0.908	1.96	Plagioclase	<200

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44	12.1	13.6	3.41	3.14	0.921	0.904	3.47	Plagioclase	<200
10	2.7	7.4	2.65	1.57	0.592	0.796	1.66	Plagioclase	<200
81	22.2	21.1	7.61	4.71	0.619	0.793	4.71	Plagioclase	<200
62	17.0	16.7	4.89	4.71	0.963	0.873	4.12	Plagioclase	<200
31	8.5	10.5	2.63	2.10	0.798	0.984	2.92	Chlorite	<200
199	54.6	41.2	17.45	8.90	0.510	0.636	7.39	Plagioclase	<200
7	1.9	4.8	1.21	1.57	1.298	1.017	1.39	Plagioclase	<200
4374	1200.1	202.1	87.30	40.86	0.468	0.608	34.64	Clinopyroxene	<200
32	8.8	12.4	3.97	2.62	0.660	0.849	2.96	Glass	<200
8	2.2	5.1	1.26	0.52	0.413	1.037	1.48	Plagioclase	<200
2086	572.3	126.5	52.32	20.95	0.400	0.670	23.92	Plagioclase	<200
250	68.6	43.9	18.20	8.90	0.489	0.668	8.28	Plagioclase	<200
15	4.1	8.5	2.80	2.62	0.936	0.843	2.03	Plagioclase	<200
228	62.6	48.5	21.30	5.24	0.246	0.578	7.91	Plagioclase	<200
739	202.8	76.7	32.02	13.62	0.425	0.658	14.24	Plagioclase	<200
1759	482.6	111.8	45.21	24.09	0.533	0.697	21.97	Glass	<200
10	2.7	7.9	3.05	1.05	0.344	0.744	1.66	Glass	<200
203	55.7	31.7	10.61	7.86	0.741	0.834	7.46	Plagioclase	<200
33	9.1	13.3	4.70	2.10	0.447	0.804	3.01	Orthopyroxene	<200
37	10.2	13.2	4.21	2.62	0.622	0.853	3.19	Plagioclase	<200
6	1.7	3.5	0.87	0.52	0.598	1.308	1.28	Plagioclase	<200
30	8.2	9.9	2.48	2.62	1.056	1.024	2.87	Plagioclase	<200
59	16.2	14.5	3.62	4.19	1.157	0.986	4.02	Plagioclase	<200
6	1.7	4.8	1.19	1.05	0.882	0.953	1.28	Plagioclase	<200
204	56.0	38.0	15.33	6.29	0.410	0.699	7.48	Plagioclase	<200
366	100.4	44.4	15.85	9.43	0.595	0.801	10.02	Glass	<200
81	22.2	23.7	9.54	4.71	0.494	0.704	4.71	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Glass	<200
35	9.6	12.4	3.10	2.62	0.845	0.887	3.10	Plagioclase	<200
7	1.9	3.6	0.89	0.52	0.584	1.372	1.39	Plagioclase	<200
31	8.5	10.3	2.56	3.14	1.227	1.009	2.92	Glass	<200
592	162.4	80.5	35.68	12.57	0.352	0.561	12.74	Glass	<200
97	26.6	20.0	5.01	6.29	1.255	0.913	5.16	Plagioclase	<200
55	15.1	16.8	5.78	3.14	0.543	0.821	3.88	Glass	<200
245	67.2	34.5	11.32	9.95	0.879	0.842	8.20	Plagioclase	<200
10	2.7	6.3	1.58	1.05	0.665	0.928	1.66	Plagioclase	<200
7	1.9	4.2	1.05	1.57	1.495	1.172	1.39	Olivine	<200
45	12.4	13.6	3.39	3.14	0.926	0.918	3.51	Glass	<200
118	32.4	26.4	9.92	5.76	0.581	0.765	5.69	Plagioclase	<200
84	23.1	21.8	7.99	3.14	0.393	0.782	4.80	Olivine	<200
1939	532.0	116.2	46.73	18.86	0.404	0.704	23.06	Plagioclase	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Plagioclase	<200
69	18.9	17.5	4.78	4.19	0.877	0.882	4.35	Plagioclase	<200
16	4.4	9.0	3.09	1.57	0.508	0.823	2.10	Apatite	<200
78	21.4	18.6	5.15	4.19	0.814	0.881	4.63	Plagioclase	<200
286	78.5	40.9	15.34	10.48	0.683	0.767	8.86	Plagioclase	<200
20	5.5	10.7	3.98	1.05	0.264	0.776	2.34	Plagioclase	<200
111	30.5	20.5	5.12	5.76	1.125	0.956	5.52	Plagioclase	<200
8	2.2	5.3	1.32	1.57	1.189	0.995	1.48	Orthopyroxene	<200
22	6.0	13.7	5.82	2.62	0.450	0.635	2.46	Glass	<200
164	45.0	34.2	13.87	6.81	0.491	0.695	6.71	Plagioclase	<200
157	43.1	34.5	14.20	4.19	0.295	0.675	6.56	Orthopyroxene	<200
76	20.9	18.4	5.16	3.67	0.711	0.880	4.57	Glass	<200
9	2.5	5.6	1.39	1.05	0.755	0.998	1.57	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Chlorite	<200
101	27.7	28.0	11.61	4.71	0.406	0.667	5.26	Plagioclase	<200
14	3.8	7.7	1.91	2.62	1.372	0.908	1.96	Plagioclase	<200

14	3.8	8.2	2.69	1.05	0.390	0.844	1.96	Plagioclase	<200
155	42.5	35.2	14.73	7.33	0.498	0.656	6.52	Plagioclase	<200
487	133.6	58.3	23.44	12.05	0.514	0.703	11.56	Plagioclase	<200
4169	1143.8	193.6	83.01	38.76	0.467	0.619	33.82	Plagioclase	<200
14	3.8	6.3	1.58	1.57	0.994	1.099	1.96	Plagioclase	<200
32	8.8	13.0	4.54	2.10	0.463	0.811	2.96	Plagioclase	<200
8	2.2	5.4	1.34	1.05	0.784	0.977	1.48	Plagioclase	<200
519	142.4	50.4	16.61	11.52	0.694	0.840	11.93	Clinopyroxene	<200
465	127.6	55.5	21.91	8.90	0.406	0.722	11.30	Olivine	<200
44	12.1	14.6	4.78	3.14	0.657	0.843	3.47	Clinopyroxene	<200
112	30.7	27.9	11.20	4.19	0.374	0.705	5.54	Olivine	<200
31	8.5	10.9	2.71	3.14	1.159	0.953	2.92	Plagioclase	<200
251	68.9	46.7	19.87	5.76	0.290	0.630	8.30	Clinopyroxene	<200
28	7.7	12.8	4.82	2.10	0.436	0.766	2.77	Plagioclase	<200
8	2.2	4.3	1.08	1.05	0.972	1.214	1.48	Plagioclase	<200
23	6.3	11.4	4.17	1.57	0.376	0.783	2.51	Chlorite	<200
19	5.2	8.5	2.11	2.10	0.995	0.958	2.28	Plagioclase	<200
107	29.4	21.3	5.32	5.24	0.985	0.903	5.42	Plagioclase	<200
592	162.4	91.7	41.98	16.24	0.387	0.493	12.74	Plagioclase	<200
12	3.3	6.2	1.55	1.57	1.013	1.039	1.81	Plagioclase	<200
33	9.1	12.0	3.00	2.10	0.700	0.889	3.01	Orthopyroxene	<200
8	2.2	5.5	1.37	0.52	0.380	0.956	1.48	Glass	<200
181	49.7	45.7	20.39	4.19	0.205	0.547	7.05	Plagioclase	<200
324	88.9	51.6	21.73	7.33	0.337	0.647	9.43	Olivine	<200
14	3.8	9.7	3.88	1.05	0.271	0.713	1.96	Plagioclase	<200
684	187.7	77.8	33.25	14.14	0.425	0.624	13.70	Plagioclase	<200
126	34.6	30.9	12.72	5.24	0.412	0.675	5.88	Plagioclase	<200
8	2.2	5.1	1.26	0.52	0.413	1.037	1.48	Plagioclase	<200
10	2.7	5.2	1.29	1.57	1.217	1.133	1.66	Plagioclase	<200
38	10.4	12.8	3.21	3.14	0.978	0.892	3.23	Orthopyroxene	<200
384	105.4	52.3	21.19	11.00	0.519	0.695	10.26	Glass	<200
71	19.5	19.7	7.08	3.67	0.518	0.795	4.41	Glass	<200
47	12.9	13.8	3.45	2.62	0.759	0.923	3.59	Olivine	<200
4403	1208.0	186.1	77.44	50.81	0.656	0.662	34.76	Orthopyroxene	<200
6	1.7	4.0	1.00	1.05	1.050	1.136	1.28	Plagioclase	<200
11	3.0	5.6	1.39	2.10	1.511	1.104	1.74	Plagioclase	<200
62	17.0	25.3	11.11	3.14	0.283	0.578	4.12	Glass	<200
73	20.0	22.0	8.70	4.19	0.482	0.721	4.48	Plagioclase	<200
141	38.7	25.4	7.59	5.76	0.759	0.869	6.22	Orthopyroxene	<200
3838	1053.0	163.2	65.52	38.24	0.584	0.705	32.45	Quartz	<200
102	28.0	23.3	8.29	5.24	0.632	0.804	5.29	Orthopyroxene	<200
104	28.5	20.6	5.16	5.24	1.016	0.918	5.34	Glass	<200
905	248.3	103.7	46.52	15.19	0.327	0.539	15.76	Glass	<200
36	9.9	12.7	3.68	4.19	1.139	0.875	3.14	Plagioclase	<200
7	1.9	4.5	1.13	1.05	0.929	1.084	1.39	Plagioclase	<200
27	7.4	11.2	3.45	2.62	0.759	0.862	2.72	Glass	<200
49	13.4	20.5	8.72	2.10	0.241	0.633	3.67	Plagioclase	<200
10	2.7	5.9	1.47	1.57	1.068	0.998	1.66	Plagioclase	<200
229	62.8	37.9	14.70	6.81	0.463	0.741	7.93	Glass	<200
661	181.4	67.8	27.22	13.62	0.500	0.704	13.47	Plagioclase	<200
32	8.8	10.7	2.67	2.10	0.787	0.984	2.96	Plagioclase	<200
810	222.2	104.8	47.73	13.09	0.274	0.504	14.91	Olivine	<200
698	191.5	75.7	31.86	14.14	0.444	0.648	13.84	Chlorite	<200
26	7.1	10.9	3.20	2.10	0.656	0.872	2.67	Plagioclase	<200
145	39.8	25.9	7.97	4.19	0.526	0.862	6.31	Plagioclase	<200
39	10.7	16.4	6.54	2.10	0.321	0.709	3.27	Ilmenite	<200
46	12.6	16.5	6.24	2.62	0.420	0.762	3.55	Plagioclase	<200

18	4.9	10.3	3.89	1.57	0.404	0.763	2.22	Glass	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
376	103.2	49.6	19.48	10.48	0.538	0.727	10.16	Plagioclase	<200
11	3.0	6.9	1.71	1.57	0.918	0.899	1.74	Plagioclase	<200
21	5.8	8.9	2.24	1.57	0.701	0.952	2.40	Orthopyroxene	<200
168	46.1	29.8	10.51	5.76	0.548	0.808	6.79	Plagioclase	<200
171	46.9	39.8	17.17	4.19	0.244	0.610	6.85	Plagioclase	<200
8	2.2	5.4	1.34	1.57	1.172	0.977	1.48	Glass	<200
10	2.7	5.4	1.34	1.57	1.172	1.093	1.66	Plagioclase	<200
359	98.5	44.8	16.42	14.14	0.861	0.785	9.92	Plagioclase	<200
515	141.3	60.7	24.62	15.19	0.617	0.694	11.89	Orthopyroxene	<200
7	1.9	4.6	1.16	1.05	0.905	1.063	1.39	Plagioclase	<200
8	2.2	7.3	2.91	1.57	0.540	0.716	1.48	Orthopyroxene	<200
36	9.9	11.6	2.90	3.67	1.266	0.961	3.14	Plagioclase	<200
27	7.4	11.5	3.77	1.57	0.416	0.841	2.72	Plagioclase	<200
22	6.0	9.5	2.38	2.10	0.882	0.914	2.46	Plagioclase	<200
20	5.5	12.5	5.21	1.05	0.202	0.663	2.34	Plagioclase	<200
32	8.8	13.2	4.75	2.62	0.552	0.796	2.96	Plagioclase	<200
29	8.0	17.1	7.46	2.10	0.282	0.587	2.82	Plagioclase	<200
8	2.2	4.2	1.06	1.57	1.481	1.243	1.48	Glass	<200
35	9.6	14.7	5.68	2.10	0.370	0.745	3.10	Plagioclase	<200
13	3.6	6.0	1.50	2.10	1.400	1.114	1.89	Plagioclase	<200
32	8.8	11.6	2.90	3.14	1.083	0.906	2.96	Plagioclase	<200
5786	1587.5	189.1	72.73	37.71	0.518	0.747	39.84	Orthopyroxene	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
24	6.6	10.0	2.50	3.14	1.256	0.910	2.57	Plagioclase	<200
212	58.2	42.4	17.97	7.86	0.437	0.637	7.63	Plagioclase	<200
65	17.8	20.6	8.12	4.19	0.516	0.726	4.22	Plagioclase	<200
39	10.7	18.0	7.60	2.10	0.276	0.644	3.27	Plagioclase	<200
30	8.2	12.2	4.06	2.10	0.517	0.836	2.87	Plagioclase	<200
6	1.7	4.9	1.23	1.05	0.854	0.924	1.28	Plagioclase	<200
35	9.6	13.7	4.91	3.14	0.640	0.800	3.10	Plagioclase	<200
33	9.1	11.5	2.88	2.62	0.910	0.925	3.01	Plagioclase	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
175	48.0	31.5	11.63	8.38	0.721	0.779	6.93	Glass	<200
8	2.2	5.1	1.26	0.52	0.413	1.037	1.48	Plagioclase	<200
88	24.1	23.8	9.28	4.71	0.508	0.733	4.91	Olivine	<200
6	1.7	4.6	1.16	1.05	0.905	0.986	1.28	Plagioclase	<200
56	15.4	24.3	10.73	4.71	0.439	0.571	3.92	Glass	<200
59	16.2	15.3	3.81	3.67	0.963	0.935	4.02	Plagioclase	<200
7	1.9	5.1	1.26	1.05	0.833	0.971	1.39	Plagioclase	<200
321	88.1	38.6	11.87	11.00	0.927	0.862	9.38	Plagioclase	<200
282	77.4	57.8	25.89	7.33	0.283	0.540	8.80	Glass	<200
1198	328.7	90.4	36.08	15.19	0.421	0.711	18.13	Plagioclase	<200
11	3.0	5.4	1.34	1.05	0.784	1.147	1.74	Plagioclase	<200
12	3.3	5.4	1.34	1.57	1.172	1.197	1.81	Plagioclase	<200
836	229.4	89.9	39.09	11.52	0.295	0.597	15.14	Albite	<200
135	37.0	30.0	11.88	7.86	0.662	0.719	6.09	Plagioclase	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Glass	<200
4451	1221.2	198.7	84.97	25.67	0.302	0.623	34.95	Plagioclase	<200
127	34.8	27.2	10.18	5.24	0.515	0.769	5.90	Plagioclase	<200
66	18.1	18.3	6.27	3.14	0.501	0.823	4.26	Plagioclase	<200
17	4.7	9.7	3.54	1.05	0.297	0.788	2.16	Plagioclase	<200
715	196.2	67.4	26.23	13.62	0.519	0.737	14.01	Plagioclase	<200
16	4.4	6.5	1.61	1.57	0.975	1.152	2.10	Plagioclase	<200
10	2.7	5.0	1.24	1.57	1.266	1.183	1.66	Plagioclase	<200
84	23.1	21.8	8.04	4.71	0.586	0.780	4.80	Olivine	<200

23	6.3	8.9	2.24	2.62	1.170	0.996	2.51	Plagioclase	<200
51	14.0	16.3	5.70	3.67	0.644	0.813	3.74	Plagioclase	<200
60	16.5	14.6	3.65	3.14	0.860	0.986	4.06	Orthopyroxene	<200
8	2.2	5.4	1.35	1.57	1.163	0.973	1.48	Plagioclase	<200
58	15.9	14.3	3.57	4.19	1.174	0.989	3.99	Plagioclase	<200
8	2.2	5.7	1.42	1.57	1.106	0.925	1.48	Plagioclase	<200
285	78.2	52.0	22.55	6.81	0.302	0.602	8.84	Orthopyroxene	<200
21	5.8	11.8	4.66	1.57	0.337	0.721	2.40	Orthopyroxene	<200
6	1.7	4.0	1.00	1.05	1.050	1.136	1.28	Plagioclase	<200
36	9.9	11.3	2.82	3.14	1.113	0.987	3.14	Glass	<200
1823	500.2	109.3	43.01	23.57	0.548	0.726	22.36	Plagioclase	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
896	245.8	69.4	24.77	15.71	0.634	0.801	15.68	Plagioclase	<200
151	41.4	25.9	7.25	6.29	0.868	0.880	6.44	Plagioclase	<200
21	5.8	12.2	4.94	1.57	0.318	0.697	2.40	Plagioclase	<200
78	21.4	20.6	7.38	5.76	0.780	0.798	4.63	Plagioclase	<200
61	16.7	15.5	3.88	3.14	0.809	0.935	4.09	Chlorite	<200
34	9.3	13.4	4.74	2.62	0.553	0.807	3.05	Glass	<200
39	10.7	17.8	7.48	2.62	0.350	0.651	3.27	Chlorite	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Plagioclase	<200
20	5.5	9.7	3.07	1.57	0.511	0.855	2.34	Plagioclase	<200
50	13.7	14.2	3.54	3.14	0.887	0.926	3.70	Chlorite	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Plagioclase	<200
26	7.1	10.0	2.51	3.14	1.251	0.943	2.67	Plagioclase	<200
1240	340.2	89.3	34.88	17.81	0.511	0.732	18.44	Orthopyroxene	<200
963	264.2	86.7	36.03	20.43	0.567	0.664	16.25	Plagioclase	<200
94	25.8	25.5	10.21	4.71	0.461	0.707	5.08	Plagioclase	<200
17	4.7	7.0	1.76	2.10	1.193	1.090	2.16	Olivine	<200
446	122.4	64.8	28.06	7.33	0.261	0.605	11.06	Plagioclase	<200
61	16.7	21.2	8.64	3.14	0.363	0.685	4.09	Plagioclase	<200
31	8.5	13.3	4.92	2.62	0.533	0.778	2.92	Plagioclase	<200
21	5.8	10.6	3.75	2.10	0.560	0.804	2.40	Plagioclase	<200
202	55.4	36.0	14.09	5.24	0.372	0.732	7.44	Plagioclase	<200
6	1.7	3.8	0.95	1.05	1.105	1.201	1.28	Olivine	<200
7	1.9	4.9	1.22	1.57	1.287	1.009	1.39	Apatite	<200
6	1.7	5.2	1.57	2.10	1.338	0.869	1.28	Plagioclase	<200
18	4.9	9.0	2.55	1.57	0.616	0.877	2.22	Plagioclase	<200
8	2.2	5.0	1.24	0.52	0.419	1.058	1.48	Plagioclase	<200
23	6.3	9.0	2.24	2.10	0.938	0.994	2.51	Plagioclase	<200
20	5.5	8.4	2.10	2.10	1.000	0.990	2.34	Orthopyroxene	<200
328	90.0	49.4	20.28	10.48	0.517	0.680	9.49	Plagioclase	<200
31	8.5	17.0	7.35	2.62	0.356	0.608	2.92	Plagioclase	<200
37	10.2	11.9	2.97	2.62	0.882	0.950	3.19	Plagioclase	<200
16	4.4	7.6	1.90	1.05	0.553	0.979	2.10	Plagioclase	<200
1267	347.6	84.3	30.88	14.67	0.475	0.784	18.64	Plagioclase	<200
34	9.3	11.6	2.90	2.10	0.724	0.933	3.05	Chlorite	<200
90	24.7	23.3	8.88	3.67	0.413	0.755	4.97	Glass	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Chlorite	<200
14	3.8	7.5	1.87	1.57	0.840	0.931	1.96	Olivine	<200
189	51.9	41.3	17.70	6.81	0.385	0.619	7.20	Plagioclase	<200
185	50.8	40.9	17.54	5.76	0.328	0.618	7.12	Glass	<200
11	3.0	5.8	1.45	1.05	0.724	1.062	1.74	Plagioclase	<200
1270	348.4	97.4	39.99	15.71	0.393	0.679	18.67	Plagioclase	<200
33	9.1	14.3	5.51	1.57	0.285	0.745	3.01	Glass	<200
77	21.1	22.7	8.98	5.24	0.584	0.719	4.60	Glass	<200
11	3.0	4.9	1.23	1.57	1.276	1.250	1.74	Chlorite	<200
23	6.3	11.8	4.51	2.62	0.581	0.753	2.51	Plagioclase	<200

134	36.8	25.7	8.53	6.29	0.737	0.837	6.06	Plagioclase	<200
62	17.0	22.7	9.57	4.71	0.492	0.644	4.12	Plagioclase	<200
8	2.2	4.3	1.08	1.05	0.972	1.214	1.48	Plagioclase	<200
37	10.2	17.5	7.34	1.57	0.214	0.647	3.19	Plagioclase	<200
743	203.9	61.9	21.44	15.19	0.708	0.818	14.28	Illite	<200
48	13.2	17.5	6.78	2.62	0.386	0.737	3.63	Plagioclase	<200
604	165.7	86.5	38.98	8.90	0.228	0.528	12.87	Plagioclase	<200
46	12.6	14.6	4.53	3.67	0.810	0.860	3.55	Plagioclase	<200
32	8.8	15.7	6.47	2.10	0.325	0.671	2.96	Plagioclase	<200
83	22.8	22.4	8.52	5.76	0.676	0.755	4.77	Olivine	<200
42	11.5	11.9	2.96	3.67	1.240	1.014	3.39	Plagioclase	<200
7	1.9	3.8	0.95	1.05	1.105	1.296	1.39	Orthopyroxene	<200
425	116.6	74.3	33.70	8.90	0.264	0.515	10.80	Plagioclase	<200
10	2.7	7.8	2.96	1.57	0.530	0.755	1.66	Orthopyroxene	<200
24	6.6	9.0	2.25	2.62	1.164	1.011	2.57	Plagioclase	<200
82	22.5	22.2	8.39	3.67	0.437	0.759	4.74	Plagioclase	<200
12	3.3	5.7	1.43	2.10	1.469	1.126	1.81	Glass	<200
11	3.0	6.0	1.49	1.57	1.054	1.035	1.74	Glass	<200
38	10.4	18.9	8.16	2.10	0.257	0.607	3.23	Olivine	<200
6	1.7	4.5	1.12	1.05	0.938	1.014	1.28	Plagioclase	<200
24	6.6	14.5	6.20	2.10	0.339	0.626	2.57	Glass	<200
25	6.9	9.6	2.41	2.10	0.871	0.965	2.62	Olivine	<200
14	3.8	7.8	1.94	1.05	0.541	0.894	1.96	Plagioclase	<200
172	47.2	25.9	6.48	7.86	1.213	0.939	6.87	Olivine	<200
4529	1242.6	178.2	71.76	33.52	0.467	0.701	35.25	Plagioclase	<200
146	40.1	34.0	14.18	5.76	0.406	0.660	6.33	Plagioclase	<200
16	4.4	7.4	1.84	1.57	0.853	1.008	2.10	Plagioclase	<200
366	100.4	52.4	21.56	9.43	0.437	0.677	10.02	Plagioclase	<200
126	34.6	22.8	5.71	5.24	0.918	0.913	5.88	Plagioclase	<200
11	3.0	7.9	2.91	2.62	0.900	0.781	1.74	Plagioclase	<200
13	3.6	5.7	1.42	2.10	1.479	1.181	1.89	Plagioclase	<200
2674	733.7	179.2	80.48	19.90	0.247	0.536	27.09	Plagioclase	<200
195	53.5	32.0	11.22	8.38	0.747	0.811	7.31	Plagioclase	<200
173	47.5	31.2	11.48	7.86	0.685	0.782	6.89	Plagioclase	<200
2022	554.8	125.2	51.91	29.33	0.565	0.667	23.55	Glass	<200
508	139.4	57.1	22.31	16.24	0.728	0.733	11.81	Plagioclase	<200
621	170.4	74.3	31.76	11.00	0.346	0.623	13.05	Orthopyroxene	<200
2584	709.0	128.6	50.20	30.38	0.605	0.734	26.63	Plagioclase	<200
3197	877.1	158.8	66.11	30.38	0.460	0.661	29.62	Illite	<200
8791	2411.9	256.5	105.33	50.28	0.477	0.679	49.11	Plagioclase	<200
5922	1624.8	197.4	77.82	48.19	0.619	0.724	40.31	Quartz	<200
114	31.3	38.4	17.37	4.71	0.271	0.517	5.59	Plagioclase	<200
17	4.7	7.2	1.79	2.10	1.173	1.070	2.16	Plagioclase	<200
157	43.1	25.4	6.34	7.86	1.240	0.917	6.56	Glass	<200
40	11.0	18.4	7.76	2.10	0.271	0.640	3.31	Plagioclase	<200
272	74.6	36.7	12.24	10.48	0.856	0.835	8.64	Olivine	<200
190	52.1	31.3	10.80	6.81	0.631	0.819	7.22	Glass	<200
807	221.4	84.8	36.32	13.62	0.375	0.622	14.88	Plagioclase	<200
6	1.7	3.8	0.95	1.05	1.105	1.201	1.28	Plagioclase	<200
559	153.4	71.0	30.46	13.62	0.447	0.618	12.38	Glass	<200
11	3.0	5.4	1.34	2.10	1.567	1.147	1.74	Plagioclase	<200
188	51.6	28.2	7.04	8.38	1.190	0.904	7.18	Plagioclase	<200
18	4.9	8.2	2.05	2.10	1.024	0.961	2.22	Quartz	<200
2029	556.7	117.8	47.07	23.57	0.501	0.710	23.59	Olivine	<200
58	15.9	15.7	3.93	3.67	0.934	0.898	3.99	Plagioclase	<200
34	9.3	14.9	5.88	3.67	0.624	0.725	3.05	Plagioclase	<200
307	84.2	42.3	15.85	12.05	0.760	0.769	9.18	Plagioclase	<200

6	1.7	3.5	0.87	1.05	1.207	1.308	1.28	Plagioclase	<200
244	66.9	46.4	19.82	8.38	0.423	0.625	8.18	Plagioclase	<200
101	27.7	23.9	8.80	3.67	0.417	0.781	5.26	Plagioclase	<200
13	3.6	8.1	2.76	1.57	0.569	0.826	1.89	Orthopyroxene	<200
9	2.5	4.5	1.13	1.57	1.389	1.230	1.57	Chlorite	<200
20	5.5	10.2	3.56	2.10	0.590	0.814	2.34	Plagioclase	<200
3162	867.5	169.4	72.80	35.62	0.489	0.616	29.45	Olivine	<200
29	8.0	11.7	3.67	3.14	0.856	0.856	2.82	Glass	<200
3116	854.9	140.9	54.90	34.57	0.630	0.735	29.24	Plagioclase	<200
3180	872.5	227.4	105.41	21.48	0.204	0.461	29.54	Plagioclase	<200
380	104.3	43.2	14.35	9.43	0.657	0.837	10.21	Plagioclase	<200
3480	954.8	187.9	82.34	39.81	0.483	0.583	30.90	Plagioclase	<200
56	15.4	15.3	3.83	3.14	0.820	0.906	3.92	Plagioclase	<200
46	12.6	16.3	6.04	3.14	0.520	0.774	3.55	Plagioclase	<200
268	73.5	34.9	10.30	8.90	0.864	0.871	8.57	Glass	<200
25	6.9	9.9	2.48	2.10	0.847	0.935	2.62	Plagioclase	<200
22	6.0	9.6	2.39	2.10	0.879	0.911	2.46	Plagioclase	<200
248	68.0	50.1	21.95	7.33	0.334	0.584	8.25	Plagioclase	<200
58	15.9	17.4	6.11	3.14	0.514	0.811	3.99	Glass	<200
3866	1060.7	232.1	106.06	34.05	0.321	0.497	32.57	Plagioclase	<200
57	15.6	15.5	3.88	3.67	0.946	0.902	3.95	Plagioclase	<200
22	6.0	8.6	2.16	2.10	0.972	1.010	2.46	Plagioclase	<200
103	28.3	28.6	11.92	4.19	0.352	0.659	5.32	Plagioclase	<200
19	5.2	7.4	1.84	2.10	1.141	1.098	2.28	Plagioclase	<200
83	22.8	18.7	4.66	4.19	0.899	0.907	4.77	Olivine	<200
11	3.0	6.9	1.71	1.05	0.614	0.899	1.74	Plagioclase	<200
11	3.0	6.9	1.71	1.05	0.614	0.899	1.74	Plagioclase	<200
7	1.9	4.0	1.00	2.10	2.100	1.225	1.39	Plagioclase	<200
82	22.5	18.8	4.70	4.71	1.002	0.894	4.74	Orthopyroxene	<200
969	265.9	73.8	27.10	19.38	0.715	0.783	16.31	Plagioclase	<200
109	29.9	23.8	8.33	4.19	0.503	0.813	5.47	Plagioclase	<200
180	49.4	34.7	13.78	5.24	0.380	0.718	7.03	Glass	<200
18	4.9	12.8	5.52	2.10	0.380	0.614	2.22	Clinopyroxene	<200
1574	431.9	111.6	46.52	22.00	0.473	0.660	20.78	Plagioclase	<200
85	23.3	20.6	6.91	4.19	0.606	0.832	4.83	Plagioclase	<200
132	36.2	31.4	12.89	7.33	0.569	0.679	6.02	Plagioclase	<200
675	185.2	79.0	34.07	16.24	0.477	0.611	13.61	Plagioclase	<200
64	17.6	20.5	8.08	4.71	0.583	0.725	4.19	Plagioclase	<200
5690	1561.1	198.3	79.52	42.43	0.534	0.706	39.51	Plagioclase	<200
46	12.6	18.6	7.67	2.10	0.274	0.676	3.55	Plagioclase	<200
993	272.4	109.7	49.31	13.09	0.265	0.534	16.51	Plagioclase	<200
8652	2373.8	255.5	105.21	56.05	0.533	0.676	48.72	Plagioclase	<200
2508	688.1	129.7	51.45	27.24	0.529	0.717	26.23	Olivine	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
6133	1682.7	324.7	151.20	33.00	0.218	0.448	41.02	Plagioclase	<200
163	44.7	32.2	12.49	7.33	0.587	0.737	6.69	Glass	<200
46	12.6	14.9	4.86	3.67	0.755	0.844	3.55	Plagioclase	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
8	2.2	5.0	1.24	1.05	0.847	1.058	1.48	Olivine	<200
87	23.9	22.7	8.55	3.67	0.429	0.764	4.89	Plagioclase	<200
82	22.5	22.6	8.74	4.19	0.479	0.743	4.74	Plagioclase	<200
9	2.5	5.3	1.32	1.57	1.189	1.057	1.57	Glass	<200
165	45.3	40.3	17.56	4.19	0.239	0.592	6.73	Glass	<200
137	37.6	27.2	9.74	5.76	0.591	0.799	6.13	Glass	<200
9	2.5	5.1	1.26	1.57	1.246	1.101	1.57	Plagioclase	<200
10	2.7	5.1	1.26	1.05	0.833	1.160	1.66	Plagioclase	<200
2445	670.8	121.0	45.85	33.52	0.731	0.759	25.90	Orthopyroxene	<200

181	49.7	34.2	13.39	6.81	0.509	0.731	7.05	Clinopyroxene	<200
57	15.6	18.0	6.62	4.71	0.711	0.780	3.95	Plagioclase	<200
96	26.3	21.7	7.17	6.81	0.950	0.839	5.13	Plagioclase	<200
77	21.1	21.9	8.42	4.19	0.498	0.745	4.60	Plagioclase	<200
90	24.7	24.1	9.40	3.67	0.390	0.732	4.97	Plagioclase	<200
21	5.8	8.8	2.20	2.62	1.191	0.966	2.40	Plagioclase	<200
6186	1697.2	225.6	94.93	33.52	0.353	0.647	41.20	Plagioclase	<200
357	98.0	49.6	19.89	10.48	0.527	0.707	9.90	Plagioclase	<200
13902	3814.2	355.8	152.98	78.57	0.514	0.615	61.76	Plagioclase	<200
909	249.4	84.1	34.92	17.81	0.510	0.666	15.79	Olivine	<200
22	6.0	8.4	2.10	2.10	1.000	1.036	2.46	Plagioclase	<200
210	57.6	48.1	21.37	5.76	0.270	0.559	7.59	Plagioclase	<200
193	53.0	36.7	14.76	7.33	0.497	0.703	7.28	Orthopyroxene	<200
85	23.3	21.2	7.47	5.76	0.771	0.808	4.83	Glass	<200
39	10.7	11.9	2.97	3.14	1.057	0.975	3.27	Glass	<200
7716	2117.0	283.0	124.50	55.00	0.442	0.576	46.01	Glass	<200
6	1.7	4.0	1.00	2.10	2.100	1.136	1.28	Plagioclase	<200
102	28.0	24.4	9.12	4.71	0.516	0.769	5.29	Orthopyroxene	<200
246	67.5	35.6	12.29	9.95	0.810	0.819	8.22	Plagioclase	<200
12757	3500.1	279.2	106.84	63.38	0.593	0.751	59.16	Glass	<200
33	9.1	13.1	4.54	2.62	0.577	0.816	3.01	Glass	<200
17	4.7	7.0	1.74	2.10	1.207	1.098	2.16	Chlorite	<200
114	31.3	31.4	13.33	5.76	0.432	0.632	5.59	Plagioclase	<200
1434	393.4	104.6	43.17	25.67	0.595	0.672	19.84	Olivine	<200
11	3.0	7.2	2.23	1.05	0.471	0.860	1.74	Glass	<200
12144	3331.9	371.3	165.53	60.76	0.367	0.551	57.72	Plagioclase	<200
12835	3521.5	337.6	144.43	48.71	0.337	0.623	59.34	Plagioclase	<200
18	4.9	6.9	1.71	1.57	0.918	1.150	2.22	Glass	<200
2106	577.8	138.7	59.69	19.90	0.333	0.614	24.04	Olivine	<200
11	3.0	6.4	1.60	1.05	0.656	0.961	1.74	Plagioclase	<200
204	56.0	30.6	9.21	8.90	0.966	0.868	7.48	Plagioclase	<200
138	37.9	24.4	6.09	6.81	1.118	0.895	6.15	Plagioclase	<200
248	68.0	42.5	17.30	9.95	0.575	0.689	8.25	Plagioclase	<200
1672	458.7	118.5	50.10	13.09	0.261	0.641	21.42	Glass	<200
27	7.4	11.2	3.41	1.57	0.460	0.865	2.72	Olivine	<200
13	3.6	7.1	1.77	1.05	0.593	0.949	1.89	Plagioclase	<200
486	133.3	67.0	28.87	9.43	0.327	0.611	11.55	Olivine	<200
7273	1995.4	246.4	104.04	38.24	0.368	0.643	44.67	Plagioclase	<200
14	3.8	6.4	1.60	2.10	1.313	1.084	1.96	Glass	<200
12	3.3	10.0	4.19	1.57	0.375	0.646	1.81	Olivine	<200
38	10.4	14.4	5.18	3.14	0.606	0.796	3.23	Plagioclase	<200
40	11.0	13.4	3.81	3.14	0.824	0.878	3.31	Glass	<200
157	43.1	29.7	10.86	6.29	0.579	0.784	6.56	Plagioclase	<200
150	41.2	35.7	15.11	8.38	0.555	0.638	6.41	Orthopyroxene	<200
1107	303.7	99.8	42.83	15.71	0.367	0.619	17.43	Plagioclase	<200
21	5.8	10.6	3.77	2.62	0.695	0.803	2.40	Plagioclase	<200
16	4.4	6.6	1.66	2.62	1.578	1.122	2.10	Plagioclase	<200
13	3.6	6.3	1.58	1.57	0.994	1.060	1.89	Plagioclase	<200
1432	392.9	97.3	38.39	20.43	0.532	0.723	19.82	Glass	<200
472	129.5	52.9	19.93	10.48	0.526	0.763	11.38	Plagioclase	<200
52	14.3	18.9	7.57	3.14	0.415	0.708	3.78	Glass	<200
1638	449.4	97.7	36.52	19.90	0.545	0.770	21.20	Plagioclase	<200
37	10.2	15.6	6.14	2.62	0.427	0.724	3.19	Glass	<200
7	1.9	4.2	1.06	0.52	0.491	1.164	1.39	Plagioclase	<200
41	11.3	16.1	6.27	2.62	0.418	0.737	3.35	Plagioclase	<200
15	4.1	6.3	1.58	2.10	1.329	1.139	2.03	Plagioclase	<200
48	13.2	13.4	3.35	3.67	1.096	0.959	3.63	Plagioclase	<200

18	4.9	7.9	1.97	1.57	0.797	1.002	2.22	Orthopyroxene	<200
25	6.9	11.4	3.95	2.10	0.532	0.817	2.62	Plagioclase	<200
73	20.0	20.6	7.71	3.67	0.476	0.769	4.48	Plagioclase	<200
56	15.4	18.9	7.38	2.62	0.355	0.734	3.92	Plagioclase	<200
12	3.3	6.0	1.50	1.57	1.047	1.070	1.81	Plagioclase	<200
509	139.7	72.4	31.79	9.43	0.297	0.579	11.82	Glass	<200
998	273.8	79.0	30.54	18.33	0.600	0.742	16.55	Olivine	<200
54	14.8	23.9	10.52	2.62	0.249	0.572	3.85	Plagioclase	<200
4701	1289.8	206.2	88.55	35.09	0.396	0.617	35.91	Plagioclase	<200
361	99.1	41.8	13.60	12.57	0.924	0.845	9.95	Glass	<200
18	4.9	6.7	1.68	2.10	1.250	1.172	2.22	Plagioclase	<200
12	3.3	6.1	1.53	2.10	1.373	1.052	1.81	Glass	<200
37	10.2	13.5	4.52	3.14	0.695	0.835	3.19	Clinopyroxene	<200
72	19.8	21.6	8.46	4.71	0.557	0.730	4.44	Plagioclase	<200
2118	581.1	128.9	53.62	22.52	0.420	0.663	24.11	Orthopyroxene	<200
8573	2352.1	289.6	126.17	44.52	0.353	0.594	48.50	Plagioclase	<200
367	100.7	49.3	19.48	11.52	0.591	0.722	10.03	Olivine	<200
8494	2330.4	293.4	128.60	36.14	0.281	0.583	48.27	Plagioclase	<200
265	72.7	53.7	23.78	6.81	0.286	0.563	8.53	Glass	<200
542	148.7	58.5	22.68	14.14	0.623	0.739	12.19	Glass	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Chlorite	<200
39	10.7	13.2	3.74	2.62	0.701	0.878	3.27	Orthopyroxene	<200
1377	377.8	100.1	40.78	20.95	0.514	0.688	19.44	Glass	<200
12	3.3	6.4	1.60	2.10	1.313	1.003	1.81	Plagioclase	<200
19	5.2	9.3	2.80	2.10	0.750	0.867	2.28	Orthopyroxene	<200
3080	845.0	164.1	69.96	17.81	0.255	0.628	29.07	Glass	<200
211	57.9	38.3	15.35	7.86	0.512	0.705	7.61	Glass	<200
17	4.7	9.1	3.01	1.57	0.522	0.839	2.16	Glass	<200
186	51.0	44.5	19.63	5.76	0.293	0.570	7.14	Plagioclase	<200
85	23.3	24.8	10.10	5.24	0.519	0.690	4.83	Plagioclase	<200
74	20.3	22.2	8.80	3.67	0.417	0.719	4.51	Plagioclase	<200
17	4.7	8.5	2.14	1.57	0.734	0.896	2.16	Plagioclase	<200
1238	339.7	95.8	39.27	22.00	0.560	0.682	18.43	Plagioclase	<200
532	146.0	63.0	25.84	10.48	0.406	0.680	12.08	Plagioclase	<200
79	21.7	24.5	10.11	3.14	0.311	0.673	4.66	Plagioclase	<200
19	5.2	8.5	2.11	1.57	0.744	0.958	2.28	Plagioclase	<200
11306	3102.0	482.3	227.52	49.76	0.219	0.409	55.70	Glass	<200
10	2.7	6.8	2.02	1.05	0.520	0.869	1.66	Plagioclase	<200
12	3.3	6.5	1.63	1.05	0.644	0.983	1.81	Clinopyroxene	<200
22	6.0	10.9	3.92	2.62	0.668	0.798	2.46	Plagioclase	<200
250	68.6	39.8	15.47	6.29	0.407	0.737	8.28	Plagioclase	<200
40	11.0	14.4	4.98	2.62	0.526	0.817	3.31	Plagioclase	<200
11	3.0	7.4	2.49	1.05	0.422	0.832	1.74	Plagioclase	<200
186	51.0	29.9	9.63	7.33	0.761	0.848	7.14	Plagioclase	<200
120	32.9	23.1	6.46	5.76	0.892	0.880	5.74	Plagioclase	<200
2815	772.3	172.6	76.18	20.43	0.268	0.571	27.79	Glass	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Plagioclase	<200
7713	2116.2	255.6	108.28	54.47	0.503	0.638	46.00	Glass	<200
19	5.2	8.5	2.13	2.10	0.986	0.952	2.28	Glass	<200
105	28.8	22.2	6.98	6.81	0.976	0.857	5.37	Clinopyroxene	<200
796	218.4	64.0	22.10	14.14	0.640	0.819	14.78	Plagioclase	<200
32	8.8	12.9	4.46	3.14	0.704	0.817	2.96	Plagioclase	<200
923	253.2	78.3	30.98	19.38	0.626	0.720	15.91	Plagioclase	<200
6	1.7	4.9	1.23	1.57	1.276	0.924	1.28	Plagioclase	<200
538	147.6	65.4	27.27	10.48	0.384	0.659	12.15	Plagioclase	<200
147	40.3	31.2	12.33	6.29	0.510	0.722	6.35	Plagioclase	<200
1367	375.1	110.7	47.44	17.81	0.375	0.620	19.37	Olivine	<200

181	49.7	34.2	13.39	6.81	0.509	0.731	7.05	Clinopyroxene	<200
57	15.6	18.0	6.62	4.71	0.711	0.780	3.95	Plagioclase	<200
96	26.3	21.7	7.17	6.81	0.950	0.839	5.13	Plagioclase	<200
77	21.1	21.9	8.42	4.19	0.498	0.745	4.60	Plagioclase	<200
90	24.7	24.1	9.40	3.67	0.390	0.732	4.97	Plagioclase	<200
21	5.8	8.8	2.20	2.62	1.191	0.966	2.40	Plagioclase	<200
6186	1697.2	225.6	94.93	33.52	0.353	0.647	41.20	Plagioclase	<200
357	98.0	49.6	19.89	10.48	0.527	0.707	9.90	Plagioclase	<200
13902	3814.2	355.8	152.98	78.57	0.514	0.615	61.76	Plagioclase	<200
909	249.4	84.1	34.92	17.81	0.510	0.666	15.79	Olivine	<200
22	6.0	8.4	2.10	2.10	1.000	1.036	2.46	Plagioclase	<200
210	57.6	48.1	21.37	5.76	0.270	0.559	7.59	Plagioclase	<200
193	53.0	36.7	14.76	7.33	0.497	0.703	7.28	Orthopyroxene	<200
85	23.3	21.2	7.47	5.76	0.771	0.808	4.83	Glass	<200
39	10.7	11.9	2.97	3.14	1.057	0.975	3.27	Glass	<200
7716	2117.0	283.0	124.50	55.00	0.442	0.576	46.01	Glass	<200
6	1.7	4.0	1.00	2.10	2.100	1.136	1.28	Plagioclase	<200
102	28.0	24.4	9.12	4.71	0.516	0.769	5.29	Orthopyroxene	<200
246	67.5	35.6	12.29	9.95	0.810	0.819	8.22	Plagioclase	<200
12757	3500.1	279.2	106.84	63.38	0.593	0.751	59.16	Glass	<200
33	9.1	13.1	4.54	2.62	0.577	0.816	3.01	Glass	<200
17	4.7	7.0	1.74	2.10	1.207	1.098	2.16	Chlorite	<200
114	31.3	31.4	13.33	5.76	0.432	0.632	5.59	Plagioclase	<200
1434	393.4	104.6	43.17	25.67	0.595	0.672	19.84	Olivine	<200
11	3.0	7.2	2.23	1.05	0.471	0.860	1.74	Glass	<200
12144	3331.9	371.3	165.53	60.76	0.367	0.551	57.72	Plagioclase	<200
12835	3521.5	337.6	144.43	48.71	0.337	0.623	59.34	Plagioclase	<200
18	4.9	6.9	1.71	1.57	0.918	1.150	2.22	Glass	<200
2106	577.8	138.7	59.69	19.90	0.333	0.614	24.04	Olivine	<200
11	3.0	6.4	1.60	1.05	0.656	0.961	1.74	Plagioclase	<200
204	56.0	30.6	9.21	8.90	0.966	0.868	7.48	Plagioclase	<200
138	37.9	24.4	6.09	6.81	1.118	0.895	6.15	Plagioclase	<200
248	68.0	42.5	17.30	9.95	0.575	0.689	8.25	Plagioclase	<200
1672	458.7	118.5	50.10	13.09	0.261	0.641	21.42	Glass	<200
27	7.4	11.2	3.41	1.57	0.460	0.865	2.72	Olivine	<200
13	3.6	7.1	1.77	1.05	0.593	0.949	1.89	Plagioclase	<200
486	133.3	67.0	28.87	9.43	0.327	0.611	11.55	Olivine	<200
7273	1995.4	246.4	104.04	38.24	0.368	0.643	44.67	Plagioclase	<200
14	3.8	6.4	1.60	2.10	1.313	1.084	1.96	Glass	<200
12	3.3	10.0	4.19	1.57	0.375	0.646	1.81	Olivine	<200
38	10.4	14.4	5.18	3.14	0.606	0.796	3.23	Plagioclase	<200
40	11.0	13.4	3.81	3.14	0.824	0.878	3.31	Glass	<200
157	43.1	29.7	10.86	6.29	0.579	0.784	6.56	Plagioclase	<200
150	41.2	35.7	15.11	8.38	0.555	0.638	6.41	Orthopyroxene	<200
1107	303.7	99.8	42.83	15.71	0.367	0.619	17.43	Plagioclase	<200
21	5.8	10.6	3.77	2.62	0.695	0.803	2.40	Plagioclase	<200
16	4.4	6.6	1.66	2.62	1.578	1.122	2.10	Plagioclase	<200
13	3.6	6.3	1.58	1.57	0.994	1.060	1.89	Plagioclase	<200
1432	392.9	97.3	38.39	20.43	0.532	0.723	19.82	Glass	<200
472	129.5	52.9	19.93	10.48	0.526	0.763	11.38	Plagioclase	<200
52	14.3	18.9	7.57	3.14	0.415	0.708	3.78	Glass	<200
1638	449.4	97.7	36.52	19.90	0.545	0.770	21.20	Plagioclase	<200
37	10.2	15.6	6.14	2.62	0.427	0.724	3.19	Glass	<200
7	1.9	4.2	1.06	0.52	0.491	1.164	1.39	Plagioclase	<200
41	11.3	16.1	6.27	2.62	0.418	0.737	3.35	Plagioclase	<200
15	4.1	6.3	1.58	2.10	1.329	1.139	2.03	Plagioclase	<200
48	13.2	13.4	3.35	3.67	1.096	0.959	3.63	Plagioclase	<200

18	4.9	7.9	1.97	1.57	0.797	1.002	2.22	Orthopyroxene	<200
25	6.9	11.4	3.95	2.10	0.532	0.817	2.62	Plagioclase	<200
73	20.0	20.6	7.71	3.67	0.476	0.769	4.48	Plagioclase	<200
56	15.4	18.9	7.38	2.62	0.355	0.734	3.92	Plagioclase	<200
12	3.3	6.0	1.50	1.57	1.047	1.070	1.81	Plagioclase	<200
509	139.7	72.4	31.79	9.43	0.297	0.579	11.82	Glass	<200
998	273.8	79.0	30.54	18.33	0.600	0.742	16.55	Olivine	<200
54	14.8	23.9	10.52	2.62	0.249	0.572	3.85	Plagioclase	<200
4701	1289.8	206.2	88.55	35.09	0.396	0.617	35.91	Plagioclase	<200
361	99.1	41.8	13.60	12.57	0.924	0.845	9.95	Glass	<200
18	4.9	6.7	1.68	2.10	1.250	1.172	2.22	Plagioclase	<200
12	3.3	6.1	1.53	2.10	1.373	1.052	1.81	Glass	<200
37	10.2	13.5	4.52	3.14	0.695	0.835	3.19	Clinopyroxene	<200
72	19.8	21.6	8.46	4.71	0.557	0.730	4.44	Plagioclase	<200
2118	581.1	128.9	53.62	22.52	0.420	0.663	24.11	Orthopyroxene	<200
8573	2352.1	289.6	126.17	44.52	0.353	0.594	48.50	Plagioclase	<200
367	100.7	49.3	19.48	11.52	0.591	0.722	10.03	Olivine	<200
8494	2330.4	293.4	128.60	36.14	0.281	0.583	48.27	Plagioclase	<200
265	72.7	53.7	23.78	6.81	0.286	0.563	8.53	Glass	<200
542	148.7	58.5	22.68	14.14	0.623	0.739	12.19	Glass	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Chlorite	<200
39	10.7	13.2	3.74	2.62	0.701	0.878	3.27	Orthopyroxene	<200
1377	377.8	100.1	40.78	20.95	0.514	0.688	19.44	Glass	<200
12	3.3	6.4	1.60	2.10	1.313	1.003	1.81	Plagioclase	<200
19	5.2	9.3	2.80	2.10	0.750	0.867	2.28	Orthopyroxene	<200
3080	845.0	164.1	69.96	17.81	0.255	0.628	29.07	Glass	<200
211	57.9	38.3	15.35	7.86	0.512	0.705	7.61	Glass	<200
17	4.7	9.1	3.01	1.57	0.522	0.839	2.16	Glass	<200
186	51.0	44.5	19.63	5.76	0.293	0.570	7.14	Plagioclase	<200
85	23.3	24.8	10.10	5.24	0.519	0.690	4.83	Plagioclase	<200
74	20.3	22.2	8.80	3.67	0.417	0.719	4.51	Plagioclase	<200
17	4.7	8.5	2.14	1.57	0.734	0.896	2.16	Plagioclase	<200
1238	339.7	95.8	39.27	22.00	0.560	0.682	18.43	Plagioclase	<200
532	146.0	63.0	25.84	10.48	0.406	0.680	12.08	Plagioclase	<200
79	21.7	24.5	10.11	3.14	0.311	0.673	4.66	Plagioclase	<200
19	5.2	8.5	2.11	1.57	0.744	0.958	2.28	Plagioclase	<200
11306	3102.0	482.3	227.52	49.76	0.219	0.409	55.70	Glass	<200
10	2.7	6.8	2.02	1.05	0.520	0.869	1.66	Plagioclase	<200
12	3.3	6.5	1.63	1.05	0.644	0.983	1.81	Clinopyroxene	<200
22	6.0	10.9	3.92	2.62	0.668	0.798	2.46	Plagioclase	<200
250	68.6	39.8	15.47	6.29	0.407	0.737	8.28	Plagioclase	<200
40	11.0	14.4	4.98	2.62	0.526	0.817	3.31	Plagioclase	<200
11	3.0	7.4	2.49	1.05	0.422	0.832	1.74	Plagioclase	<200
186	51.0	29.9	9.63	7.33	0.761	0.848	7.14	Plagioclase	<200
120	32.9	23.1	6.46	5.76	0.892	0.880	5.74	Plagioclase	<200
2815	772.3	172.6	76.18	20.43	0.268	0.571	27.79	Glass	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Plagioclase	<200
7713	2116.2	255.6	108.28	54.47	0.503	0.638	46.00	Glass	<200
19	5.2	8.5	2.13	2.10	0.986	0.952	2.28	Glass	<200
105	28.8	22.2	6.98	6.81	0.976	0.857	5.37	Clinopyroxene	<200
796	218.4	64.0	22.10	14.14	0.640	0.819	14.78	Plagioclase	<200
32	8.8	12.9	4.46	3.14	0.704	0.817	2.96	Plagioclase	<200
923	253.2	78.3	30.98	19.38	0.626	0.720	15.91	Plagioclase	<200
6	1.7	4.9	1.23	1.57	1.276	0.924	1.28	Plagioclase	<200
538	147.6	65.4	27.27	10.48	0.384	0.659	12.15	Plagioclase	<200
147	40.3	31.2	12.33	6.29	0.510	0.722	6.35	Plagioclase	<200
1367	375.1	110.7	47.44	17.81	0.375	0.620	19.37	Olivine	<200

6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
20	5.5	8.5	2.11	2.10	0.995	0.983	2.34	Glass	<200
103	28.3	25.9	10.18	4.71	0.463	0.727	5.32	Plagioclase	<200
324	88.9	46.4	18.36	9.95	0.542	0.720	9.43	Plagioclase	<200
5799	1591.0	199.1	79.58	34.05	0.428	0.710	39.89	Plagioclase	<200
10	2.7	5.5	1.37	1.05	0.766	1.069	1.66	Glass	<200
10	2.7	5.7	1.43	1.57	1.098	1.028	1.66	Orthopyroxene	<200
25	6.9	16.3	7.18	1.57	0.219	0.570	2.62	Glass	<200
197	54.1	27.9	6.98	7.86	1.126	0.933	7.35	Glass	<200
23	6.3	9.3	2.32	2.62	1.129	0.960	2.51	Plagioclase	<200
25	6.9	9.9	2.48	2.10	0.847	0.935	2.62	Plagioclase	<200
9	2.5	4.3	1.08	1.57	1.454	1.290	1.57	Glass	<200
6	1.7	3.8	0.95	1.05	1.105	1.201	1.28	Plagioclase	<200
44	12.1	13.5	3.36	3.14	0.935	0.916	3.47	Glass	<200
297	81.5	47.0	19.27	6.29	0.326	0.681	9.03	Glass	<200
43	11.8	13.6	3.39	3.67	1.083	0.897	3.44	Glass	<200
50	13.7	19.8	8.23	3.67	0.446	0.663	3.70	Glass	<200
14	3.8	6.6	1.66	1.57	0.946	1.048	1.96	Plagioclase	<200
126	34.6	23.4	5.86	5.24	0.894	0.890	5.88	Plagioclase	<200
105	28.8	22.3	7.13	5.76	0.808	0.852	5.37	Plagioclase	<200
30	8.2	13.0	4.77	2.10	0.440	0.783	2.87	Plagioclase	<200
15	4.1	8.5	2.77	1.57	0.567	0.846	2.03	Plagioclase	<200
34	9.3	11.5	2.88	2.10	0.729	0.939	3.05	Glass	<200
27	7.4	10.8	2.69	2.10	0.781	0.895	2.72	Glass	<200
10	2.7	7.8	2.96	2.10	0.709	0.755	1.66	Plagioclase	<200
115	31.6	38.6	17.50	6.81	0.389	0.516	5.62	FeOx	<200
16	4.4	9.4	3.39	1.57	0.463	0.792	2.10	Plagioclase	<200
28	7.7	10.7	2.68	3.14	1.172	0.916	2.77	Glass	<200
9	2.5	5.7	1.43	1.05	0.734	0.976	1.57	Plagioclase	<200
8	2.2	4.5	1.12	1.57	1.402	1.168	1.48	Plagioclase	<200
253	69.4	46.2	19.55	6.29	0.322	0.639	8.33	Glass	<200
4280	1174.3	174.1	70.33	36.14	0.514	0.698	34.27	Plagioclase	<200
207	56.8	45.6	19.92	6.81	0.342	0.586	7.54	Orthopyroxene	<200
15	4.1	8.2	2.35	1.05	0.447	0.877	2.03	Plagioclase	<200
3208	880.2	148.3	59.32	27.76	0.468	0.709	29.67	Plagioclase	<200
2356	646.4	178.7	81.40	15.19	0.187	0.504	25.42	Glass	<200
26	7.1	11.5	3.91	3.14	0.803	0.825	2.67	Orthopyroxene	<200
216	59.3	40.1	16.47	7.86	0.477	0.680	7.70	Plagioclase	<200
56	15.4	16.1	4.93	3.14	0.637	0.863	3.92	Plagioclase	<200
28	7.7	11.2	3.12	2.62	0.840	0.880	2.77	Quartz	<200
44	12.1	23.9	10.84	2.10	0.194	0.515	3.47	Plagioclase	<200
12	3.3	6.3	1.57	1.57	1.000	1.027	1.81	Glass	<200
965	264.8	111.8	50.65	27.24	0.538	0.516	16.27	Orthopyroxene	<200
159	43.6	28.8	10.07	8.38	0.832	0.813	6.60	Glass	<200
79	21.7	18.2	4.55	3.14	0.690	0.907	4.66	Orthopyroxene	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
3807	1044.5	244.9	113.24	38.24	0.338	0.468	32.32	Plagioclase	<200
6	1.7	4.5	1.12	1.05	0.938	1.014	1.28	Glass	<200
929	254.9	135.2	63.60	8.90	0.140	0.419	15.96	Orthopyroxene	<200
1034	283.7	82.4	32.43	18.86	0.582	0.725	16.84	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Apatite	<200
841	230.7	106.7	48.61	15.19	0.312	0.505	15.19	Plagioclase	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Plagioclase	<200
23	6.3	12.2	4.79	1.57	0.328	0.729	2.51	Plagioclase	<200
123	33.8	26.3	9.62	4.71	0.490	0.785	5.81	Plagioclase	<200
49	13.4	13.9	3.47	3.67	1.058	0.937	3.67	FeOx	<200
21	5.8	9.1	2.27	2.62	1.154	0.938	2.40	Plagioclase	<200

54	14.8	15.6	4.61	3.14	0.681	0.873	3.85	Glass	<200
346	94.9	43.3	15.55	10.48	0.674	0.797	9.74	Plagioclase	<200
545	149.5	48.0	12.01	12.05	1.003	0.903	12.23	Plagioclase	<200
15	4.1	7.6	1.91	1.57	0.822	0.943	2.03	Glass	<200
11	3.0	7.2	2.29	1.05	0.459	0.854	1.74	Glass	<200
7	1.9	3.6	0.89	0.52	0.584	1.372	1.39	Plagioclase	<200
1797	493.0	115.4	47.25	19.38	0.410	0.682	22.20	FeOx	<200
148	40.6	28.4	10.23	7.33	0.717	0.795	6.37	Plagioclase	<200
1805	495.2	107.7	42.05	25.14	0.598	0.733	22.25	Glass	<200
374	102.6	60.7	26.49	7.33	0.277	0.591	10.13	Plagioclase	<200
23	6.3	9.9	2.47	2.62	1.061	0.903	2.51	Plagioclase	<200
14	3.8	6.0	1.49	2.10	1.409	1.162	1.96	Plagioclase	<200
67	18.4	18.6	6.47	3.14	0.485	0.816	4.29	Plagioclase	<200
2821	774.0	164.2	71.20	22.00	0.309	0.601	27.82	Plagioclase	<200
418	114.7	51.0	19.65	10.48	0.533	0.745	10.71	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Glass	<200
39	10.7	12.6	3.16	3.14	0.994	0.917	3.27	Plagioclase	<200
76	20.9	23.3	9.41	4.71	0.501	0.696	4.57	Plagioclase	<200
39	10.7	18.1	7.62	3.67	0.482	0.642	3.27	Plagioclase	<200
38	10.4	12.1	3.02	3.14	1.040	0.948	3.23	Plagioclase	<200
10	2.7	6.9	2.14	2.10	0.981	0.857	1.66	Quartz	<200
9	2.5	5.0	1.24	1.57	1.266	1.123	1.57	Glass	<200
14	3.8	7.6	1.90	1.57	0.826	0.915	1.96	Glass	<200
59	16.2	19.3	7.52	4.19	0.557	0.738	4.02	Plagioclase	<200
41	11.3	13.2	3.29	2.62	0.796	0.903	3.35	Orthopyroxene	<200
268	73.5	45.6	18.91	6.81	0.360	0.667	8.57	Plagioclase	<200
106	29.1	29.0	12.08	3.14	0.260	0.660	5.39	Plagioclase	<200
88	24.1	20.0	5.94	4.19	0.705	0.870	4.91	Plagioclase	<200
263	72.2	64.5	29.82	6.29	0.211	0.467	8.49	Olivine	<200
53	14.5	23.3	10.20	1.57	0.154	0.581	3.81	Chromite	<200
11	3.0	5.4	1.34	1.05	0.784	1.147	1.74	Plagioclase	<200
71	19.5	22.3	9.00	2.62	0.291	0.701	4.41	Olivine	<200
31	8.5	14.3	5.61	3.14	0.560	0.726	2.92	Illite	<200
1320	362.2	88.5	33.43	16.24	0.486	0.762	19.03	Plagioclase	<200
45	12.4	13.6	3.40	3.14	0.924	0.917	3.51	Plagioclase	<200
689	189.0	86.8	38.51	7.86	0.204	0.561	13.75	Plagioclase	<200
415	113.9	46.3	16.07	12.05	0.750	0.817	10.67	Plagioclase	<200
947	259.8	74.7	28.08	18.33	0.653	0.765	16.12	Plagioclase	<200
29	8.0	10.2	2.56	2.62	1.023	0.977	2.82	Plagioclase	<200
541	148.4	66.8	28.11	12.57	0.447	0.647	12.18	Plagioclase	<200
7262	1992.4	304.6	137.86	50.28	0.365	0.519	44.64	Clinopyroxene	<200
148	40.6	34.9	14.66	5.76	0.393	0.648	6.37	Olivine	<200
1792	491.7	137.8	60.79	14.67	0.241	0.571	22.17	Plagioclase	<200
267	73.3	64.8	29.96	12.57	0.420	0.468	8.56	Plagioclase	<200
19	5.2	11.6	4.69	1.05	0.224	0.698	2.28	Glass	<200
3972	1089.8	215.1	96.19	34.05	0.354	0.544	33.01	Plagioclase	<200
21	5.8	9.9	3.07	1.57	0.511	0.859	2.40	Plagioclase	<200
55	15.1	16.7	5.72	3.67	0.642	0.824	3.88	Chlorite	<200
321	88.1	44.9	17.37	7.33	0.422	0.741	9.38	Plagioclase	<200
9008	2471.5	228.9	85.55	64.43	0.753	0.770	49.71	Glass	<200
41	11.3	20.6	9.08	3.67	0.404	0.576	3.35	Plagioclase	<200
42	11.5	12.9	3.22	3.14	0.975	0.933	3.39	Plagioclase	<200
8	2.2	4.3	1.08	0.52	0.481	1.214	1.48	Plagioclase	<200
24	6.6	8.5	2.13	2.62	1.230	1.069	2.57	Glass	<200
52	14.3	13.9	3.48	3.14	0.902	0.961	3.78	Plagioclase	<200
1266	347.3	90.1	35.16	23.05	0.656	0.733	18.64	Olivine	<200
760	208.5	78.5	32.93	15.19	0.461	0.652	14.44	Plagioclase	<200

235	64.5	37.8	14.46	6.81	0.471	0.752	8.03	Plagioclase	<200
1164	319.4	77.8	27.12	21.48	0.792	0.814	17.87	Albite	<200
61	16.7	19.2	7.32	3.14	0.429	0.755	4.09	Plagioclase	<200
723	198.4	76.4	32.03	18.33	0.572	0.653	14.08	Plagioclase	<200
3583	983.0	140.6	51.00	34.57	0.678	0.791	31.35	Glass	<200
167	45.8	30.1	10.77	8.38	0.778	0.799	6.77	Clinopyroxene	<200
1346	369.3	115.4	50.36	20.95	0.416	0.590	19.22	Plagioclase	<200
990	271.6	73.4	26.41	20.95	0.793	0.796	16.48	Plagioclase	<200
10	2.7	4.6	1.16	1.57	1.353	1.270	1.66	Plagioclase	<200
15	4.1	7.3	1.83	1.57	0.858	0.984	2.03	Orthopyroxene	<200
11051	3032.0	265.3	103.33	64.43	0.624	0.736	55.06	Plagioclase	<200
3379	927.1	137.9	50.64	27.76	0.548	0.783	30.45	Plagioclase	<200
16	4.4	7.7	1.92	2.10	1.094	0.968	2.10	Glass	<200
14	3.8	7.8	1.94	1.57	0.809	0.894	1.96	Orthopyroxene	<200
17	4.7	8.2	2.05	2.10	1.024	0.933	2.16	Plagioclase	<200
4500	1234.6	190.0	79.44	44.52	0.560	0.656	35.14	Plagioclase	<200
33	9.1	10.4	2.60	3.67	1.412	1.024	3.01	Plagioclase	<200
6	1.7	4.6	1.16	0.52	0.448	0.986	1.28	Plagioclase	<200
83	22.8	27.2	11.66	4.71	0.404	0.621	4.77	Glass	<200
108	29.6	27.9	11.33	5.24	0.462	0.692	5.44	Plagioclase	<200
7	1.9	4.6	1.16	1.05	0.905	1.063	1.39	Plagioclase	<200
22	6.0	8.5	2.12	2.10	0.991	1.027	2.46	Plagioclase	<200
18	4.9	8.9	2.21	1.57	0.710	0.889	2.22	Plagioclase	<200
31	8.5	11.4	2.84	3.14	1.106	0.910	2.92	Plagioclase	<200
68	18.7	20.8	8.09	3.14	0.388	0.737	4.32	Plagioclase	<200
20	5.5	10.9	4.10	1.05	0.256	0.764	2.34	Olivine	<200
160	43.9	28.2	9.47	7.33	0.774	0.833	6.63	Glass	<200
7	1.9	4.2	1.05	1.57	1.495	1.172	1.39	Olivine	<200
107	29.4	26.1	10.12	4.71	0.465	0.737	5.42	Glass	<200
91	25.0	32.4	14.46	5.24	0.362	0.547	5.00	Olivine	<200
179	49.1	44.1	19.52	7.86	0.403	0.564	7.01	Plagioclase	<200
7	1.9	5.2	1.31	1.05	0.802	0.937	1.39	Chlorite	<200
11	3.0	5.9	1.47	1.57	1.068	1.048	1.74	Plagioclase	<200
8	2.2	5.0	1.24	1.05	0.847	1.058	1.48	Olivine	<200
503	138.0	57.7	22.82	15.71	0.688	0.721	11.75	Plagioclase	<200
6	1.7	4.9	1.23	1.05	0.854	0.924	1.28	Olivine	<200
31	8.5	14.0	5.40	3.14	0.581	0.741	2.92	Plagioclase	<200
22	6.0	8.3	2.08	2.10	1.010	1.046	2.46	Plagioclase	<200
2811	771.2	134.2	52.36	34.57	0.660	0.734	27.77	Plagioclase	<200
10	2.7	6.4	1.60	2.10	1.313	0.915	1.66	Plagioclase	<200
18	4.9	7.6	1.90	1.05	0.553	1.038	2.22	Chlorite	<200
2674	733.7	190.7	86.92	33.52	0.386	0.503	27.09	Plagioclase	<200
3827	1050.0	217.8	98.22	36.67	0.373	0.527	32.40	Plagioclase	<200
3066	841.2	134.8	50.82	29.33	0.577	0.763	29.00	Plagioclase	<200
271	74.4	49.2	21.09	6.81	0.323	0.621	8.62	Olivine	<200
6710	1841.0	246.9	106.11	51.33	0.484	0.616	42.91	Plagioclase	<200
11	3.0	6.5	1.63	1.05	0.644	0.942	1.74	Plagioclase	<200
20	5.5	8.1	2.01	2.10	1.045	1.032	2.34	Plagioclase	<200
1349	370.1	152.4	70.96	16.24	0.229	0.448	19.24	Plagioclase	<200
31	8.5	11.9	3.62	3.14	0.867	0.866	2.92	Plagioclase	<200
35	9.6	16.3	6.70	2.62	0.391	0.675	3.10	Plagioclase	<200
229	62.8	52.6	23.64	5.76	0.244	0.534	7.93	Plagioclase	<200
53	14.5	20.7	8.65	3.67	0.424	0.654	3.81	Olivine	<200
4036	1107.3	169.1	68.34	40.86	0.598	0.698	33.28	Plagioclase	<200
25	6.9	13.8	5.66	2.62	0.463	0.675	2.62	Plagioclase	<200
8	2.2	5.4	1.34	1.57	1.172	0.977	1.48	Plagioclase	<200
89	24.4	20.4	6.38	4.19	0.657	0.858	4.94	Glass	<200

27	7.4	10.3	2.58	2.10	0.814	0.934	2.72	Glass	<200
5976	1639.6	236.8	102.35	47.67	0.466	0.606	40.49	Plagioclase	<200
6774	1858.5	317.2	145.85	46.62	0.320	0.482	43.11	Olivine	<200
205	56.2	47.0	20.79	7.33	0.353	0.566	7.50	Olivine	<200
14210	3898.7	335.5	139.87	67.57	0.483	0.660	62.44	Chlorite	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
20	5.5	8.9	2.21	1.57	0.710	0.939	2.34	Glass	<200
2530	694.1	135.3	55.05	25.14	0.457	0.690	26.35	Orthopyroxene	<200
378	103.7	51.6	20.81	10.48	0.504	0.700	10.18	Clinopyroxene	<200
46	12.6	13.9	3.48	3.14	0.902	0.905	3.55	Plagioclase	<200
13	3.6	7.0	1.76	1.05	0.597	0.953	1.89	Olivine	<200
225	61.7	49.3	21.80	8.38	0.384	0.565	7.86	Plagioclase	<200
11111	3048.5	345.5	152.78	56.57	0.370	0.567	55.21	Plagioclase	<200
171	46.9	34.8	14.06	6.81	0.484	0.698	6.85	Plagioclase	<200
8004	2196.0	221.5	84.89	44.52	0.524	0.750	46.86	Plagioclase	<200
568	155.8	58.6	22.28	14.14	0.635	0.756	12.48	Plagioclase	<200
30	8.2	15.9	6.74	3.67	0.545	0.638	2.87	Apatite	<200
71	19.5	19.3	6.73	3.14	0.467	0.813	4.41	Plagioclase	<200
34	9.3	16.6	6.93	2.10	0.303	0.654	3.05	Plagioclase	<200
101	27.7	25.5	10.00	6.29	0.629	0.731	5.26	Plagioclase	<200
19	5.2	10.1	3.62	2.10	0.580	0.800	2.28	Plagioclase	<200
1911	524.3	120.2	49.53	25.14	0.508	0.675	22.90	Plagioclase	<200
548	150.4	59.6	23.37	12.05	0.516	0.729	12.26	Plagioclase	<200
25	6.9	12.6	4.89	2.10	0.429	0.738	2.62	Plagioclase	<200
173	47.5	30.2	10.63	7.33	0.690	0.809	6.89	Plagioclase	<200
23	6.3	9.8	2.45	2.10	0.857	0.908	2.51	Plagioclase	<200
3296	904.3	170.6	72.92	35.09	0.481	0.625	30.07	Plagioclase	<200
1222	335.3	95.1	38.96	19.90	0.511	0.682	18.31	Plagioclase	<200
9	2.5	5.7	1.43	0.52	0.364	0.976	1.57	Plagioclase	<200
5064	1389.4	206.5	87.37	31.95	0.366	0.640	37.27	Glass	<200
21	5.8	12.0	4.78	2.62	0.548	0.711	2.40	Plagioclase	<200
14	3.8	7.4	1.85	2.10	1.135	0.939	1.96	FeOx	<200
3715	1019.3	215.8	97.41	22.00	0.226	0.525	31.93	Chlorite	<200
14	3.8	8.2	2.65	1.57	0.592	0.847	1.96	Plagioclase	<200
15	4.1	7.5	1.87	1.57	0.840	0.961	2.03	Plagioclase	<200
7	1.9	5.5	1.38	1.05	0.761	0.890	1.39	Plagioclase	<200
114	31.3	34.4	15.15	4.19	0.277	0.576	5.59	Plagioclase	<200
1443	395.9	86.1	29.75	22.52	0.757	0.819	19.90	Plagioclase	<200
13	3.6	8.3	2.96	2.10	0.709	0.804	1.89	Plagioclase	<200
15	4.1	11.3	4.76	1.57	0.330	0.640	2.03	Olivine	<200
1445	396.5	125.6	55.65	17.81	0.320	0.562	19.91	Clinopyroxene	<200
1407	386.0	106.3	44.49	14.67	0.330	0.655	19.65	Plagioclase	<200
8	2.2	6.0	1.69	1.57	0.929	0.877	1.48	Orthopyroxene	<200
70	19.2	17.4	4.34	4.71	1.085	0.896	4.38	Chlorite	<200
463	127.0	59.1	24.31	11.52	0.474	0.676	11.27	Plagioclase	<200
10	2.7	6.6	1.68	1.05	0.625	0.885	1.66	Olivine	<200
86	23.6	27.3	11.61	3.67	0.316	0.631	4.86	Orthopyroxene	<200
974	267.2	90.6	38.35	15.71	0.410	0.639	16.35	Orthopyroxene	<200
14	3.8	7.6	1.90	1.57	0.826	0.915	1.96	Plagioclase	<200
13379	3670.7	384.6	170.80	74.38	0.435	0.558	60.59	Chlorite	<200
24	6.6	8.5	2.14	2.62	1.224	1.065	2.57	Plagioclase	<200
318	87.3	62.9	28.39	8.90	0.313	0.526	9.34	Plagioclase	<200
69	18.9	30.9	14.10	4.71	0.334	0.499	4.35	Olivine	<200
339	93.0	43.9	16.18	8.38	0.518	0.780	9.64	Plagioclase	<200
18	4.9	7.1	1.77	1.57	0.887	1.116	2.22	Chlorite	<200
117	32.1	29.2	11.89	4.71	0.396	0.688	5.67	Orthopyroxene	<200
71	19.5	24.1	10.13	6.29	0.621	0.649	4.41	Olivine	<200

76	20.9	22.4	8.81	4.71	0.535	0.724	4.57	Plagioclase	<200
11655	3197.7	320.1	136.65	59.19	0.433	0.626	56.55	Olivine	<200
4415	1211.3	169.8	66.76	36.14	0.541	0.727	34.80	Glass	<200
892	244.7	78.1	31.18	13.62	0.437	0.710	15.64	Plagioclase	<200
1284	352.3	102.4	43.00	23.05	0.536	0.650	18.77	Plagioclase	<200
32	8.8	13.0	4.62	1.57	0.340	0.806	2.96	Glass	<200
85	23.3	18.9	4.72	5.24	1.110	0.906	4.83	Plagioclase	<200
9	2.5	6.2	1.56	1.57	1.006	0.894	1.57	Apatite	<200
53	14.5	14.8	3.69	5.24	1.420	0.915	3.81	Plagioclase	<200
955	262.0	75.1	28.32	14.67	0.518	0.764	16.19	Olivine	<200
13	3.6	5.4	1.34	1.57	1.172	1.247	1.89	Glass	<200
35	9.6	16.5	6.83	1.57	0.230	0.667	3.10	Plagioclase	<200
106	29.1	23.0	7.79	5.76	0.739	0.830	5.39	Clinopyroxene	<200
13	3.6	7.8	2.39	2.10	0.879	0.863	1.89	Glass	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
557	152.8	56.8	21.22	13.62	0.642	0.771	12.36	Plagioclase	<200
10	2.7	5.4	1.34	0.52	0.388	1.093	1.66	Glass	<200
3876	1063.4	155.4	59.95	34.05	0.568	0.744	32.61	Plagioclase	<200
203	55.7	40.0	16.62	11.52	0.693	0.662	7.46	Plagioclase	<200
33	9.1	10.7	2.67	2.62	0.981	0.999	3.01	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
125	34.3	27.0	10.10	5.76	0.570	0.769	5.86	Plagioclase	<200
3868	1061.2	239.4	110.06	35.62	0.324	0.482	32.58	Plagioclase	<200
144	39.5	45.0	20.56	4.71	0.229	0.496	6.29	Plagioclase	<200
94	25.8	20.5	5.89	5.24	0.890	0.876	5.08	Plagioclase	<200
23	6.3	9.8	2.45	2.10	0.857	0.908	2.51	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
25	6.9	12.6	4.88	1.57	0.322	0.739	2.62	Plagioclase	<200
111	30.5	34.2	15.07	5.76	0.382	0.572	5.52	Plagioclase	<200
13	3.6	7.3	1.82	1.05	0.577	0.920	1.89	Quartz	<200
14	3.8	9.1	3.43	1.57	0.458	0.763	1.96	Clinopyroxene	<200
1705	467.8	142.5	63.94	28.29	0.442	0.538	21.63	Plagioclase	<200
4065	1115.3	194.4	83.92	27.24	0.325	0.609	33.40	Plagioclase	<200
35	9.6	14.3	5.32	3.67	0.690	0.771	3.10	Chlorite	<200
11	3.0	6.6	1.66	1.05	0.633	0.929	1.74	Plagioclase	<200
17	4.7	8.3	2.08	1.05	0.505	0.919	2.16	Chlorite	<200
61	16.7	22.5	9.47	3.14	0.332	0.645	4.09	Plagioclase	<200
49	13.4	13.0	3.26	4.19	1.285	0.997	3.67	Glass	<200
2362	648.1	110.4	38.22	24.62	0.644	0.818	25.46	Plagioclase	<200
20	5.5	11.3	4.40	1.57	0.357	0.736	2.34	Orthopyroxene	<200
20	5.5	10.1	3.48	1.57	0.451	0.821	2.34	Orthopyroxene	<200
347	95.2	46.5	17.93	10.48	0.584	0.744	9.76	Plagioclase	<200
88	24.1	24.8	9.96	3.14	0.315	0.703	4.91	Plagioclase	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
1647	451.9	111.6	45.97	27.76	0.604	0.675	21.26	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
98	26.9	35.6	16.12	3.14	0.195	0.517	5.19	Plagioclase	<200
736	201.9	63.3	22.78	11.52	0.506	0.796	14.21	Plagioclase	<200
585	160.5	79.2	35.04	8.38	0.239	0.567	12.67	Plagioclase	<200
41	11.3	12.1	3.03	2.62	0.865	0.981	3.35	Plagioclase	<200
402	110.3	54.1	22.07	12.57	0.570	0.688	10.50	Plagioclase	<200
12097	3319.0	350.4	153.58	70.19	0.457	0.583	57.61	Plagioclase	<200
3561	977.0	190.2	83.36	40.86	0.490	0.583	31.26	Plagioclase	<200
678	186.0	89.1	39.87	16.76	0.420	0.543	13.64	Quartz	<200
6222	1707.1	229.0	96.90	36.67	0.378	0.639	41.32	Orthopyroxene	<200
13	3.6	9.0	3.48	1.57	0.451	0.744	1.89	Clinopyroxene	<200
114	31.3	40.8	18.74	6.81	0.363	0.486	5.59	Olivine	<200

210	57.6	49.1	21.90	6.29	0.287	0.548	7.59	Glass	<200
243	66.7	43.1	17.83	7.86	0.441	0.671	8.17	Plagioclase	<200
7	1.9	4.2	1.06	0.52	0.491	1.164	1.39	Plagioclase	<200
539	147.9	61.3	24.65	12.05	0.489	0.703	12.16	Plagioclase	<200
949	260.4	85.1	35.13	12.05	0.343	0.672	16.14	Plagioclase	<200
25	6.9	12.0	4.46	2.10	0.471	0.774	2.62	Plagioclase	<200
14	3.8	7.6	1.90	1.05	0.553	0.915	1.96	Plagioclase	<200
6	1.7	4.0	1.00	0.52	0.520	1.136	1.28	Plagioclase	<200
18	4.9	8.5	2.12	1.05	0.495	0.929	2.22	Glass	<200
409	112.2	46.6	16.46	11.00	0.668	0.807	10.59	Glass	<200
225	61.7	41.9	17.42	5.24	0.301	0.664	7.86	Plagioclase	<200
586	160.8	53.5	17.64	13.09	0.742	0.840	12.68	Plagioclase	<200
1761	483.2	98.7	35.90	25.14	0.700	0.789	21.98	Plagioclase	<200
8	2.2	4.5	1.13	1.05	0.929	1.158	1.48	Plagioclase	<200
8	2.2	4.2	1.05	1.05	1.000	1.252	1.48	Plagioclase	<200
3092	848.3	151.8	62.30	34.57	0.555	0.680	29.13	Plagioclase	<200
115	31.6	22.6	6.14	5.24	0.853	0.883	5.62	Plagioclase	<200
131	35.9	33.4	14.14	4.71	0.333	0.637	5.99	Plagioclase	<200
155	42.5	27.4	8.95	6.81	0.761	0.844	6.52	Plagioclase	<200
779	213.7	78.8	32.93	10.48	0.318	0.657	14.62	Plagioclase	<200
4882	1339.4	241.1	108.15	39.28	0.363	0.538	36.60	Plagioclase	<200
44	12.1	19.1	8.08	2.10	0.260	0.643	3.47	Olivine	<200
5071	1391.3	206.4	87.28	47.14	0.540	0.641	37.30	Orthopyroxene	<200
131	35.9	28.6	11.04	5.24	0.475	0.743	5.99	Olivine	<200
10286	2822.1	273.6	111.48	56.57	0.507	0.688	53.12	Plagioclase	<200
79	21.7	19.8	6.62	4.71	0.711	0.834	4.66	FeOx	<200
13	3.6	6.1	1.53	1.57	1.026	1.096	1.89	Glass	<200
74	20.3	26.5	11.50	2.62	0.228	0.602	4.51	Plagioclase	<200
114	31.3	29.1	11.91	5.24	0.440	0.682	5.59	Orthopyroxene	<200
26	7.1	10.4	2.61	3.14	1.203	0.908	2.67	Orthopyroxene	<200
13	3.6	9.1	3.52	1.05	0.298	0.738	1.89	Olivine	<200
9	2.5	4.5	1.13	1.57	1.389	1.230	1.57	Orthopyroxene	<200
10	2.7	6.3	1.57	1.57	1.000	0.934	1.66	Plagioclase	<200
47	12.9	16.2	5.88	4.19	0.713	0.788	3.59	Orthopyroxene	<200
8	2.2	4.6	1.16	1.05	0.905	1.135	1.48	Olivine	<200
9	2.5	6.7	2.27	1.05	0.463	0.829	1.57	Plagioclase	<200
10	2.7	6.1	1.53	1.57	1.026	0.960	1.66	Clinopyroxene	<200
801	219.8	94.3	41.92	13.09	0.312	0.557	14.82	Plagioclase	<200
4808	1319.1	213.2	92.31	38.76	0.420	0.604	36.32	Plagioclase	<200
35	9.6	15.8	6.41	1.57	0.245	0.694	3.10	Plagioclase	<200
2710	743.5	134.4	53.25	21.48	0.403	0.719	27.27	Plagioclase	<200
383	105.1	50.7	20.13	12.05	0.599	0.717	10.25	Clinopyroxene	<200
33	9.1	14.0	5.27	2.10	0.398	0.763	3.01	Plagioclase	<200
15	4.1	10.2	4.07	1.57	0.386	0.708	2.03	Clinopyroxene	<200
173	47.5	35.7	14.60	4.71	0.323	0.684	6.89	Plagioclase	<200
60	16.5	14.8	3.71	4.19	1.129	0.970	4.06	Clinopyroxene	<200
124	34.0	27.1	10.21	6.29	0.616	0.764	5.83	Plagioclase	<200
893	245.0	78.6	31.53	14.67	0.465	0.706	15.65	Clinopyroxene	<200
137	37.6	42.0	19.00	4.19	0.221	0.518	6.13	Plagioclase	<200
16	4.4	6.7	1.68	1.57	0.935	1.105	2.10	Plagioclase	<200
27	7.4	11.2	3.45	2.10	0.609	0.862	2.72	Plagioclase	<200
4463	1224.5	175.2	70.12	44.00	0.627	0.708	34.99	Albite	<200
2082	571.2	129.7	54.34	26.19	0.482	0.653	23.90	Plagioclase	<200
105	28.8	21.2	5.31	4.19	0.789	0.897	5.37	Plagioclase	<200
84	23.1	25.7	10.68	4.71	0.441	0.663	4.80	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
8	2.2	4.3	1.08	1.57	1.454	1.214	1.48	Plagioclase	<200

103	28.3	24.6	9.27	4.19	0.452	0.765	5.32	Plagioclase	<200
8466	2322.8	258.6	107.74	60.76	0.564	0.661	48.20	Plagioclase	<200
198	54.3	41.8	17.86	9.95	0.557	0.625	7.37	Plagioclase	<200
11095	3044.1	315.3	135.10	66.00	0.489	0.620	55.17	Orthopyroxene	<200
2299	630.8	128.3	52.02	30.90	0.594	0.694	25.11	Plagioclase	<200
6	1.7	3.3	0.82	1.57	1.915	1.393	1.28	Plagioclase	<200
14	3.8	10.0	4.07	1.05	0.258	0.693	1.96	Plagioclase	<200
92	25.2	28.3	12.05	4.71	0.391	0.629	5.02	Glass	<200
47	12.9	17.0	6.50	3.67	0.565	0.750	3.59	Plagioclase	<200
35	9.6	10.9	2.72	2.62	0.963	1.010	3.10	Plagioclase	<200
747	205.0	79.0	33.35	15.19	0.455	0.643	14.32	Plagioclase	<200
18	4.9	9.0	2.55	1.05	0.412	0.877	2.22	Plagioclase	<200
93	25.5	25.9	10.51	3.14	0.299	0.692	5.05	Orthopyroxene	<200
126	34.6	24.5	7.85	5.76	0.734	0.850	5.88	Glass	<200
113	31.0	31.3	13.33	5.76	0.432	0.630	5.57	Orthopyroxene	<200
23	6.3	9.9	2.46	2.10	0.854	0.903	2.51	Plagioclase	<200
17	4.7	9.5	3.37	2.10	0.623	0.806	2.16	Plagioclase	<200
531	145.7	74.8	33.00	14.14	0.428	0.572	12.07	Plagioclase	<200
15	4.1	8.2	2.41	1.57	0.651	0.874	2.03	Olivine	<200
53	14.5	19.7	8.06	4.19	0.520	0.685	3.81	Olivine	<200
491	134.7	55.5	21.45	12.57	0.586	0.742	11.61	Plagioclase	<200
161	44.2	29.6	10.61	7.86	0.741	0.797	6.65	Plagioclase	<200
60	16.5	22.3	9.40	2.62	0.279	0.645	4.06	Plagioclase	<200
10057	2759.3	282.9	118.07	58.67	0.497	0.658	52.53	Plagioclase	<200
10	2.7	7.7	2.89	1.05	0.363	0.765	1.66	Plagioclase	<200
6553	1797.9	203.9	79.29	52.38	0.661	0.737	42.40	Orthopyroxene	<200
560	153.6	59.6	23.19	13.62	0.587	0.737	12.40	Plagioclase	<200
7	1.9	4.9	1.22	0.52	0.426	1.009	1.39	Plagioclase	<200
9	2.5	4.5	1.13	1.57	1.389	1.230	1.57	Plagioclase	<200
20	5.5	8.5	2.13	2.10	0.986	0.977	2.34	Plagioclase	<200
28	7.7	11.9	4.02	2.10	0.522	0.828	2.77	Plagioclase	<200
8	2.2	4.3	1.08	1.05	0.972	1.214	1.48	Plagioclase	<200
370	101.5	45.6	16.73	9.95	0.595	0.783	10.08	Plagioclase	<200
22	6.0	9.9	2.77	2.62	0.946	0.880	2.46	Glass	<200
81	22.2	22.7	8.84	3.67	0.415	0.736	4.71	Plagioclase	<200
28	7.7	11.1	2.93	2.10	0.717	0.885	2.77	Plagioclase	<200
70	19.2	19.0	6.57	4.71	0.717	0.818	4.38	Plagioclase	<200
22	6.0	12.9	5.32	1.57	0.295	0.675	2.46	Plagioclase	<200
428	117.4	63.3	27.38	9.95	0.363	0.606	10.84	Olivine	<200
74	20.3	25.5	10.86	2.62	0.241	0.627	4.51	Plagioclase	<200
13166	3612.3	316.3	130.45	77.52	0.594	0.674	60.10	Orthopyroxene	<200
592	162.4	76.2	33.23	17.81	0.536	0.593	12.74	Clinopyroxene	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
52	14.3	18.9	7.58	2.62	0.346	0.707	3.78	Glass	<200
82	22.5	27.3	11.71	5.76	0.492	0.617	4.74	Glass	<200
84	23.1	26.7	11.28	4.71	0.418	0.639	4.80	Plagioclase	<200
81	22.2	30.0	13.31	2.62	0.197	0.558	4.71	Orthopyroxene	<200
2510	688.7	121.1	45.40	31.95	0.704	0.768	26.24	Glass	<200
120	32.9	39.9	18.15	4.19	0.231	0.509	5.74	Clinopyroxene	<200
1311	359.7	103.9	43.71	25.14	0.575	0.647	18.97	Plagioclase	<200
444	121.8	54.8	21.82	8.90	0.408	0.714	11.04	Plagioclase	<200
6	1.7	4.9	1.23	0.52	0.423	0.924	1.28	Olivine	<200
74	20.3	19.0	6.30	4.19	0.665	0.839	4.51	Plagioclase	<200
406	111.4	50.9	19.80	8.38	0.423	0.736	10.55	Plagioclase	<200
35	9.6	16.5	6.83	4.19	0.613	0.666	3.10	Glass	<200
21	5.8	8.5	2.13	2.10	0.986	1.000	2.40	Plagioclase	<200
20	5.5	9.7	3.07	1.05	0.342	0.855	2.34	Orthopyroxene	<200

10	2.7	5.2	1.31	1.57	1.198	1.122	1.66	Orthopyroxene	<200
370	101.5	62.9	27.80	9.43	0.339	0.568	10.08	Plagioclase	<200
15	4.1	8.7	2.93	1.57	0.536	0.830	2.03	Plagioclase	<200
3069	842.0	159.7	67.33	29.86	0.443	0.644	29.02	Plagioclase	<200
7	1.9	5.1	1.26	1.57	1.246	0.971	1.39	Plagioclase	<200
11	3.0	6.0	1.49	1.05	0.705	1.030	1.74	Plagioclase	<200
82	22.5	21.3	7.73	3.67	0.475	0.790	4.74	Orthopyroxene	<200
62	17.0	20.3	8.01	3.67	0.458	0.721	4.12	Plagioclase	<200
524	143.8	56.1	21.26	10.48	0.493	0.758	11.99	Glass	<200
7	1.9	3.6	0.89	0.52	0.584	1.372	1.39	Plagioclase	<200
142	39.0	30.4	11.96	4.19	0.350	0.727	6.24	Plagioclase	<200
9	2.5	4.9	1.23	1.57	1.276	1.130	1.57	Plagioclase	<200
10	2.7	5.0	1.24	1.05	0.847	1.183	1.66	Olivine	<200
195	53.5	35.3	13.76	6.81	0.495	0.735	7.31	Plagioclase	<200
6	1.7	7.3	3.14	0.52	0.166	0.621	1.28	Plagioclase	<200
10	2.7	7.2	2.46	1.05	0.427	0.821	1.66	Plagioclase	<200
427	117.2	48.6	17.64	13.09	0.742	0.790	10.82	Plagioclase	<200
6	1.7	4.3	1.08	1.05	0.972	1.054	1.28	Quartz	<200
685	187.9	84.1	36.97	17.29	0.468	0.578	13.71	Plagioclase	<200
226	62.0	46.7	20.28	10.48	0.517	0.598	7.87	Plagioclase	<200
22	6.0	14.9	6.53	1.05	0.161	0.585	2.46	Plagioclase	<200
116	31.8	24.8	8.74	4.19	0.479	0.808	5.64	Ilmenite	<200
5912	1622.0	185.6	69.47	44.00	0.633	0.769	40.27	Orthopyroxene	<200
918	251.9	93.5	40.54	13.09	0.323	0.602	15.87	Olivine	<200
155	42.5	27.9	9.41	4.71	0.501	0.830	6.52	Plagioclase	<200
507	139.1	81.9	37.22	10.48	0.282	0.510	11.79	Glass	<200
83	22.8	23.0	8.94	3.67	0.411	0.736	4.77	Plagioclase	<200
55	15.1	18.5	7.16	4.19	0.585	0.743	3.88	Olivine	<200
10	2.7	4.9	1.23	1.05	0.854	1.190	1.66	Plagioclase	<200
158	43.4	34.5	14.17	6.81	0.481	0.678	6.58	Glass	<200
166	45.5	32.0	12.26	5.76	0.470	0.749	6.75	Plagioclase	<200
14	3.8	9.7	3.86	1.05	0.272	0.715	1.96	Plagioclase	<200
38	10.4	15.8	6.24	3.14	0.503	0.724	3.23	Quartz	<200
9	2.5	5.1	1.26	1.05	0.833	1.101	1.57	Glass	<200
44	12.1	16.7	6.48	3.14	0.485	0.738	3.47	Plagioclase	<200
117	32.1	32.0	13.65	4.19	0.307	0.627	5.67	Plagioclase	<200
529	145.1	58.1	22.62	13.62	0.602	0.735	12.05	Chlorite	<200
34	9.3	17.8	7.66	2.10	0.274	0.610	3.05	Glass	<200
156	42.8	27.6	9.12	6.81	0.747	0.840	6.54	Clinopyroxene	<200
1133	310.9	115.5	51.74	14.14	0.273	0.541	17.63	Glass	<200
23	6.3	10.2	2.99	2.10	0.702	0.873	2.51	Plagioclase	<200
148	40.6	30.1	11.51	6.29	0.546	0.751	6.37	Plagioclase	<200
7	1.9	5.3	1.32	1.57	1.189	0.932	1.39	Glass	<200
27	7.4	11.0	3.14	2.62	0.834	0.877	2.72	Glass	<200
43	11.8	15.7	5.80	2.62	0.452	0.777	3.44	Plagioclase	<200
270	74.1	49.8	21.46	5.76	0.268	0.612	8.61	Plagioclase	<200
277	76.0	39.1	14.20	7.86	0.554	0.790	8.72	Glass	<200
6	1.7	3.5	0.87	0.52	0.598	1.308	1.28	Plagioclase	<200
29	8.0	10.4	2.60	2.10	0.808	0.963	2.82	Plagioclase	<200
35	9.6	14.3	5.39	3.14	0.583	0.766	3.10	Plagioclase	<200
7	1.9	5.1	1.26	0.52	0.413	0.971	1.39	Plagioclase	<200
237	65.0	61.2	28.33	10.48	0.370	0.467	8.06	Glass	<200
55	15.1	14.9	3.72	4.71	1.266	0.927	3.88	Plagioclase	<200
3657	1003.4	232.8	107.05	37.19	0.347	0.482	31.68	Glass	<200
18	4.9	8.1	2.04	2.10	1.029	0.968	2.22	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
1827	501.3	142.8	63.48	24.62	0.388	0.556	22.39	Olivine	<200

3124	857.1	137.9	52.66	31.43	0.597	0.753	29.28	Plagioclase	<200
377	103.4	45.7	16.62	9.43	0.567	0.789	10.17	Glass	<200
73	20.0	18.4	5.72	3.67	0.642	0.860	4.48	Plagioclase	<200
109	29.9	23.4	7.89	6.29	0.797	0.830	5.47	Plagioclase	<200
14	3.8	6.6	1.64	2.10	1.280	1.057	1.96	Plagioclase	<200
623	170.9	64.9	25.80	14.14	0.548	0.715	13.07	Plagioclase	<200
696	191.0	67.7	26.67	18.33	0.687	0.724	13.82	Plagioclase	<200
4621	1267.8	215.3	94.18	37.71	0.400	0.586	35.61	Plagioclase	<200
7	1.9	4.3	1.08	1.57	1.454	1.137	1.39	Plagioclase	<200
180	49.4	33.3	12.79	6.29	0.492	0.748	7.03	Plagioclase	<200
8	2.2	5.4	1.35	1.57	1.163	0.973	1.48	Plagioclase	<200
9	2.5	4.9	1.23	1.57	1.276	1.130	1.57	Plagioclase	<200
36	9.9	12.7	3.69	3.14	0.851	0.875	3.14	Plagioclase	<200
34	9.3	10.9	2.73	2.62	0.960	0.992	3.05	Glass	<200
2147	589.1	123.7	50.07	29.86	0.596	0.696	24.27	Plagioclase	<200
9	2.5	6.5	2.03	1.05	0.517	0.858	1.57	Glass	<200
235	64.5	38.4	14.86	9.43	0.635	0.741	8.03	Glass	<200
15	4.1	7.6	1.90	1.57	0.826	0.948	2.03	Plagioclase	<200
6	1.7	3.9	0.97	1.05	1.082	1.174	1.28	Glass	<200
8	2.2	5.7	1.42	1.05	0.739	0.925	1.48	Plagioclase	<200
28	7.7	11.3	3.44	2.10	0.610	0.866	2.77	Glass	<200
220	60.4	33.5	11.46	6.81	0.594	0.823	7.77	Plagioclase	<200
17	4.7	8.6	2.16	1.05	0.486	0.887	2.16	Orthopyroxene	<200
309	84.8	43.7	16.83	10.48	0.623	0.746	9.21	Plagioclase	<200
488	133.9	48.1	15.30	12.57	0.822	0.853	11.57	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Olivine	<200
8	2.2	5.1	1.26	1.05	0.833	1.037	1.48	Orthopyroxene	<200
43	11.8	15.2	5.40	4.71	0.872	0.803	3.44	Chlorite	<200
7	1.9	4.0	1.00	1.57	1.570	1.225	1.39	Olivine	<200
60	16.5	14.7	3.69	4.19	1.136	0.976	4.06	Plagioclase	<200
11	3.0	7.6	2.66	1.05	0.395	0.812	1.74	Plagioclase	<200
109	29.9	23.1	7.67	5.24	0.683	0.838	5.47	Olivine	<200
9	2.5	5.3	1.32	1.57	1.189	1.057	1.57	Glass	<200
29	8.0	12.1	4.10	2.10	0.512	0.828	2.82	Plagioclase	<200
11	3.0	5.7	1.42	2.10	1.479	1.086	1.74	Glass	<200
109	29.9	26.8	10.55	7.86	0.745	0.724	5.47	Glass	<200
415	113.9	55.2	22.54	12.57	0.558	0.686	10.67	Plagioclase	<200
21	5.8	13.9	5.97	1.05	0.176	0.613	2.40	Olivine	<200
6	1.7	4.4	1.11	1.05	0.946	1.026	1.28	Plagioclase	<200
234	64.2	43.3	18.11	6.81	0.376	0.656	8.01	Plagioclase	<200
868	238.2	78.4	31.71	17.81	0.562	0.698	15.43	Plagioclase	<200
8	2.2	3.9	0.97	1.05	1.082	1.352	1.48	Plagioclase	<200
307	84.2	54.9	23.95	8.38	0.350	0.592	9.18	Plagioclase	<200
95	26.1	20.3	5.07	4.71	0.929	0.892	5.10	Plagioclase	<200
59	16.2	16.5	5.07	3.14	0.619	0.863	4.02	Plagioclase	<200
682	187.1	73.6	30.73	13.62	0.443	0.659	13.68	Plagioclase	<200
7	1.9	5.4	1.34	1.57	1.172	0.915	1.39	Plagioclase	<200
21	5.8	9.2	2.29	2.10	0.917	0.929	2.40	Plagioclase	<200
31	8.5	12.7	4.45	2.62	0.589	0.812	2.92	Plagioclase	<200
741	203.3	87.3	38.34	12.57	0.328	0.579	14.26	Plagioclase	<200
4329	1187.7	193.9	82.55	27.76	0.336	0.630	34.46	Plagioclase	<200
138	37.9	30.1	11.83	7.86	0.664	0.726	6.15	Plagioclase	<200
8	2.2	5.3	1.32	1.57	1.189	0.995	1.48	Plagioclase	<200
13	3.6	7.6	2.07	1.05	0.507	0.882	1.89	Plagioclase	<200
26	7.1	10.2	2.54	2.10	0.827	0.932	2.67	Plagioclase	<200
8	2.2	5.7	1.42	1.57	1.106	0.925	1.48	Quartz	<200
5039	1382.5	209.4	89.19	24.62	0.276	0.629	37.18	Apatite	<200

1363	374.0	123.9	55.15	20.43	0.370	0.553	19.34	Plagioclase	<200
1008	276.6	76.8	28.79	15.19	0.528	0.768	16.63	Apatite	<200
19	5.2	8.2	2.05	1.57	0.766	0.987	2.28	Olivine	<200
406	111.4	54.6	22.27	8.38	0.376	0.686	10.55	Plagioclase	<200
28	7.7	9.9	2.46	2.10	0.854	0.996	2.77	Glass	<200
22	6.0	8.1	2.02	2.62	1.297	1.080	2.46	Glass	<200
33	9.1	12.9	4.38	2.10	0.479	0.827	3.01	Albite	<200
25	6.9	10.7	3.26	2.10	0.644	0.865	2.62	Albite	<200
6	1.7	4.2	1.06	1.05	0.991	1.079	1.28	Plagioclase	<200
7	1.9	5.5	1.36	1.05	0.772	0.901	1.39	Plagioclase	<200
58	15.9	18.1	6.66	3.14	0.471	0.782	3.99	Plagioclase	<200
125	34.3	24.2	7.59	7.86	1.036	0.857	5.86	Orthopyroxene	<200
36	9.9	20.5	9.19	1.57	0.171	0.542	3.14	Plagioclase	<200
34	9.3	17.9	7.73	2.62	0.339	0.606	3.05	Plagioclase	<200
46	12.6	14.4	4.12	4.19	1.017	0.876	3.55	Plagioclase	<200
13	3.6	6.9	1.71	2.62	1.532	0.978	1.89	Plagioclase	<200
195	53.5	33.9	12.73	8.38	0.658	0.766	7.31	Plagioclase	<200
139	38.1	31.9	12.99	4.71	0.363	0.687	6.18	Glass	<200
47	12.9	17.4	6.77	2.10	0.310	0.734	3.59	Plagioclase	<200
2816	772.6	125.2	45.71	28.29	0.619	0.787	27.80	Plagioclase	<200
50	13.7	16.0	5.47	3.14	0.574	0.823	3.70	Plagioclase	<200
90	24.7	23.5	9.03	4.71	0.522	0.749	4.97	Plagioclase	<200
191	52.4	33.0	12.18	6.29	0.516	0.779	7.24	Orthopyroxene	<200
89	24.4	21.3	7.28	3.67	0.504	0.824	4.94	Plagioclase	<200
20	5.5	12.2	5.03	1.05	0.209	0.679	2.34	Plagioclase	<200
44	12.1	16.6	6.39	2.62	0.410	0.744	3.47	Glass	<200
57	15.6	14.3	3.58	4.19	1.170	0.980	3.95	Plagioclase	<200
9	2.5	5.3	1.32	1.57	1.189	1.057	1.57	Glass	<200
55	15.1	22.5	9.68	2.10	0.217	0.613	3.88	Plagioclase	<200
105	28.8	29.6	12.50	3.14	0.251	0.643	5.37	Plagioclase	<200
10	2.7	7.6	2.83	1.05	0.371	0.772	1.66	Glass	<200
59	16.2	19.3	7.48	3.67	0.491	0.740	4.02	Plagioclase	<200
77	21.1	23.4	9.48	4.19	0.442	0.696	4.60	Plagioclase	<200
878	240.9	99.3	44.21	12.57	0.284	0.554	15.52	Plagioclase	<200
13	3.6	7.5	1.86	1.57	0.844	0.898	1.89	Olivine	<200
256	70.2	37.3	13.45	9.43	0.701	0.796	8.38	Glass	<200
11	3.0	7.4	2.45	1.05	0.429	0.837	1.74	Plagioclase	<200
32	8.8	14.9	5.95	1.57	0.264	0.707	2.96	Plagioclase	<200
1446	396.7	130.9	58.69	14.14	0.241	0.539	19.92	Plagioclase	<200
101	27.7	20.6	5.15	5.76	1.118	0.905	5.26	Orthopyroxene	<200
381	104.5	67.8	30.49	11.00	0.361	0.534	10.22	Plagioclase	<200
38	10.4	14.9	5.59	3.14	0.562	0.767	3.23	Plagioclase	<200
160	43.9	41.1	18.15	6.29	0.347	0.571	6.63	Orthopyroxene	<200
12	3.3	6.3	1.58	1.05	0.665	1.017	1.81	Glass	<200
101	27.7	20.7	5.18	5.76	1.112	0.900	5.26	Quartz	<200
56	15.4	14.3	3.56	4.19	1.177	0.974	3.92	Plagioclase	<200
105	28.8	26.5	10.47	5.76	0.550	0.719	5.37	Plagioclase	<200
63	17.3	22.1	9.15	3.67	0.401	0.667	4.16	Plagioclase	<200
33	9.1	14.3	5.53	1.57	0.284	0.744	3.01	Plagioclase	<200
45	12.4	13.9	3.48	2.62	0.753	0.896	3.51	Plagioclase	<200
10	2.7	6.6	1.66	1.05	0.633	0.886	1.66	Plagioclase	<200
81	22.2	18.6	4.66	4.71	1.011	0.897	4.71	Plagioclase	<200
21	5.8	10.6	3.75	1.57	0.419	0.805	2.40	Plagioclase	<200
90	24.7	19.8	4.94	3.67	0.743	0.891	4.97	Glass	<200
87	23.9	25.1	10.18	5.24	0.515	0.691	4.89	Plagioclase	<200
56	15.4	20.5	8.41	3.67	0.436	0.679	3.92	Plagioclase	<200
215	59.0	38.0	15.09	6.29	0.417	0.716	7.68	Glass	<200

100	27.4	44.1	20.72	3.14	0.152	0.421	5.24	Plagioclase	<200
11	3.0	8.1	3.04	1.57	0.516	0.763	1.74	Plagioclase	<200
9	2.5	5.1	1.26	1.57	1.246	1.101	1.57	Glass	<200
12	3.3	6.3	1.57	1.05	0.669	1.024	1.81	Plagioclase	<200
50	13.7	20.5	8.63	2.62	0.304	0.642	3.70	Plagioclase	<200
27	7.4	10.2	2.55	2.10	0.824	0.946	2.72	Illite	<200
22	6.0	12.5	5.03	1.57	0.312	0.699	2.46	Glass	<200
10	2.7	5.2	1.31	1.57	1.198	1.122	1.66	Olivine	<200
11	3.0	5.8	1.45	2.10	1.448	1.062	1.74	Plagioclase	<200
214	58.7	47.5	20.95	4.71	0.225	0.572	7.66	Plagioclase	<200
14	3.8	9.4	3.62	0.52	0.144	0.742	1.96	Plagioclase	<200
317	87.0	45.1	17.60	6.29	0.357	0.733	9.33	Olivine	<200
169	46.4	27.4	7.63	6.29	0.824	0.881	6.81	Plagioclase	<200
14	3.8	6.9	1.73	1.05	0.607	1.005	1.96	Glass	<200
56	15.4	14.7	3.67	4.19	1.142	0.947	3.92	Glass	<200
73	20.0	20.3	7.45	4.71	0.632	0.782	4.48	Plagioclase	<200
7	1.9	5.0	1.24	0.52	0.419	0.990	1.39	Plagioclase	<200
34	9.3	11.8	2.95	3.14	1.064	0.917	3.05	Glass	<200
2347	643.9	144.5	61.81	31.95	0.517	0.623	25.38	Glass	<200
12	3.3	6.5	1.63	1.05	0.644	0.983	1.81	Plagioclase	<200
28	7.7	11.1	3.03	3.14	1.036	0.883	2.77	Plagioclase	<200
29	8.0	10.8	2.69	2.62	0.974	0.928	2.82	Plagioclase	<200
19	5.2	7.9	1.97	1.57	0.797	1.026	2.28	Plagioclase	<200
64	17.6	21.1	8.45	3.67	0.434	0.705	4.19	Plagioclase	<200
7	1.9	5.2	1.31	1.05	0.802	0.937	1.39	Plagioclase	<200
13	3.6	6.1	1.53	2.10	1.373	1.096	1.89	Plagioclase	<200
44	12.1	13.3	3.32	3.14	0.946	0.927	3.47	Plagioclase	<200
15	4.1	7.2	1.79	1.57	0.877	1.006	2.03	Plagioclase	<200
54	14.8	15.0	3.75	4.19	1.117	0.910	3.85	Plagioclase	<200
60	16.5	21.5	8.92	3.14	0.352	0.668	4.06	Plagioclase	<200
9	2.5	5.8	1.45	1.05	0.724	0.961	1.57	Plagioclase	<200
56	15.4	20.0	8.11	3.14	0.387	0.694	3.92	Plagioclase	<200
85	23.3	34.0	15.51	5.24	0.338	0.503	4.83	Plagioclase	<200
132	36.2	26.1	9.05	6.81	0.752	0.817	6.02	Plagioclase	<200
28	7.7	11.0	2.76	3.14	1.138	0.890	2.77	Plagioclase	<200
15	4.1	10.2	4.12	0.52	0.126	0.703	2.03	Glass	<200
33	9.1	11.0	2.74	2.10	0.766	0.972	3.01	Plagioclase	<200
56	15.4	17.8	6.54	2.62	0.401	0.781	3.92	Plagioclase	<200
33	9.1	11.5	2.87	3.14	1.094	0.930	3.01	Plagioclase	<200
20	5.5	10.6	3.89	2.10	0.540	0.784	2.34	Plagioclase	<200
15	4.1	7.5	1.87	1.05	0.561	0.965	2.03	Chlorite	<200
73	20.0	20.1	7.27	3.14	0.432	0.791	4.48	Plagioclase	<200
1823	500.2	110.9	44.11	23.05	0.523	0.715	22.36	Orthopyroxene	<200
15	4.1	6.9	1.71	1.57	0.918	1.050	2.03	Olivine	<200
51	14.0	13.7	3.42	4.19	1.225	0.969	3.74	Plagioclase	<200
44	12.1	16.3	6.17	3.67	0.595	0.758	3.47	Plagioclase	<200
91	25.0	25.0	10.03	3.67	0.366	0.707	5.00	Plagioclase	<200
8	2.2	5.0	1.24	1.57	1.266	1.058	1.48	Plagioclase	<200
13	3.6	6.5	1.63	1.57	0.963	1.024	1.89	Plagioclase	<200
123	33.8	32.3	13.68	4.71	0.344	0.638	5.81	Plagioclase	<200
35	9.6	12.3	3.08	2.10	0.682	0.893	3.10	Plagioclase	<200
34	9.3	11.9	2.96	2.10	0.709	0.913	3.05	Glass	<200
27	7.4	10.6	2.66	2.62	0.985	0.907	2.72	Plagioclase	<200
6	1.7	3.8	0.95	1.05	1.105	1.201	1.28	Olivine	<200
13	3.6	6.1	1.53	1.05	0.686	1.096	1.89	Plagioclase	<200
11635	3192.2	312.4	132.00	75.95	0.575	0.641	56.50	Plagioclase	<200
11	3.0	6.0	1.49	1.57	1.054	1.032	1.74	Glass	<200

190	52.1	48.3	21.75	3.67	0.169	0.530	7.22	Plagioclase	<200
20	5.5	12.0	4.89	1.57	0.321	0.690	2.34	Plagioclase	<200
19	5.2	7.8	1.95	2.10	1.077	1.037	2.28	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Plagioclase	<200
386	105.9	42.1	12.69	12.05	0.950	0.867	10.29	Plagioclase	<200
22	6.0	11.7	4.48	2.10	0.469	0.748	2.46	Plagioclase	<200
87	23.9	23.0	8.80	6.29	0.715	0.752	4.89	Plagioclase	<200
645	177.0	59.8	21.77	12.05	0.554	0.789	13.30	Glass	<200
7574	2078.0	276.0	120.81	46.09	0.382	0.585	45.59	Plagioclase	<200
75	20.6	22.5	8.94	4.71	0.527	0.715	4.54	Plagioclase	<200
2048	561.9	106.2	38.48	29.33	0.762	0.792	23.70	Plagioclase	<200
35	9.6	14.4	5.42	3.67	0.677	0.763	3.10	Olivine	<200
28	7.7	9.7	2.43	3.14	1.292	1.012	2.77	Plagioclase	<200
7518	2062.7	244.6	102.09	38.76	0.380	0.658	45.42	Quartz	<200
9	2.5	5.7	1.42	1.05	0.739	0.983	1.57	Orthopyroxene	<200
690	189.3	86.3	38.18	11.00	0.288	0.565	13.76	Orthopyroxene	<200
667	183.0	69.1	28.02	16.76	0.598	0.694	13.53	Orthopyroxene	<200
559	153.4	75.2	32.93	11.52	0.350	0.584	12.38	Plagioclase	<200
13	3.6	7.0	1.74	1.57	0.902	0.961	1.89	Plagioclase	<200
220	60.4	40.7	16.75	7.33	0.438	0.677	7.77	Clinopyroxene	<200
87	23.9	19.1	4.78	4.19	0.877	0.906	4.89	Clinopyroxene	<200
1547	424.4	103.1	41.28	23.05	0.558	0.708	20.60	Olivine	<200
40	11.0	13.4	3.82	3.67	0.961	0.877	3.31	Plagioclase	<200
8	2.2	4.6	1.16	1.05	0.905	1.135	1.48	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
8	2.2	5.4	1.34	1.05	0.784	0.977	1.48	Glass	<200
39	10.7	13.3	3.90	2.62	0.672	0.873	3.27	Plagioclase	<200
126	34.6	35.6	15.57	3.14	0.202	0.586	5.88	Plagioclase	<200
13	3.6	8.4	2.99	1.05	0.351	0.801	1.89	Plagioclase	<200
80	22.0	19.2	5.81	4.19	0.721	0.866	4.69	Plagioclase	<200
26	7.1	10.1	2.53	2.10	0.830	0.935	2.67	Clinopyroxene	<200
52	14.3	26.0	11.79	3.67	0.311	0.515	3.78	Plagioclase	<200
102	28.0	23.4	8.34	4.71	0.565	0.802	5.29	Chlorite	<200
6	1.7	3.8	0.95	1.05	1.105	1.201	1.28	Olivine	<200
88	24.1	21.5	7.52	4.19	0.557	0.812	4.91	Plagioclase	<200
16	4.4	10.7	4.31	1.05	0.244	0.697	2.10	Plagioclase	<200
26	7.1	10.2	2.54	2.10	0.827	0.930	2.67	Plagioclase	<200
10	2.7	5.2	1.31	1.57	1.198	1.122	1.66	Plagioclase	<200
58	15.9	17.6	6.24	3.67	0.588	0.804	3.99	Olivine	<200
48	13.2	19.1	7.84	3.14	0.401	0.675	3.63	Plagioclase	<200
22	6.0	10.6	3.60	1.05	0.292	0.826	2.46	Orthopyroxene	<200
153	42.0	38.8	16.89	5.76	0.341	0.593	6.48	Orthopyroxene	<200
177	48.6	32.2	12.08	5.24	0.434	0.767	6.97	Plagioclase	<200
288	79.0	40.4	14.89	10.48	0.704	0.780	8.89	Plagioclase	<200
7	1.9	4.9	1.23	1.57	1.276	0.996	1.39	Plagioclase	<200
11	3.0	6.7	1.68	1.57	0.935	0.917	1.74	Plagioclase	<200
568	155.8	72.7	31.37	12.05	0.384	0.609	12.48	Plagioclase	<200
9	2.5	5.4	1.35	1.57	1.163	1.032	1.57	Olivine	<200
7	1.9	4.9	1.22	0.52	0.426	1.009	1.39	Plagioclase	<200
16	4.4	7.6	1.90	1.57	0.826	0.979	2.10	Plagioclase	<200
32	8.8	10.3	2.57	3.67	1.428	1.020	2.96	Plagioclase	<200
46	12.6	14.1	3.53	3.67	1.040	0.892	3.55	Glass	<200
144	39.5	34.0	14.22	6.29	0.442	0.656	6.29	Plagioclase	<200
8	2.2	4.4	1.11	0.52	0.468	1.182	1.48	Glass	<200
2213	607.2	188.9	87.51	26.71	0.305	0.462	24.64	Clinopyroxene	<200
149	40.9	33.8	13.95	7.86	0.563	0.671	6.39	Plagioclase	<200

48	13.2	17.9	7.07	3.67	0.519	0.720	3.63	Plagioclase	<200
235	64.5	30.0	7.50	9.43	1.257	0.949	8.03	Plagioclase	<200
13	3.6	8.5	3.06	1.05	0.343	0.793	1.89	Clinopyroxene	<200
95	26.1	18.1	4.53	5.76	1.272	0.999	5.10	Plagioclase	<200
200	54.9	30.8	9.81	7.86	0.801	0.853	7.41	Chlorite	<200
176	48.3	34.7	13.86	6.29	0.454	0.710	6.95	Plagioclase	<200
717	196.7	88.7	39.35	9.43	0.240	0.561	14.03	Plagioclase	<200
8	2.2	6.3	2.13	2.10	0.986	0.830	1.48	Glass	<200
102	28.0	26.2	10.38	4.71	0.454	0.717	5.29	Glass	<200
466	127.9	59.7	24.69	11.52	0.467	0.671	11.31	Plagioclase	<200
134	36.8	24.7	7.27	5.76	0.792	0.872	6.06	Clinopyroxene	<200
2513	689.5	163.2	72.03	23.05	0.320	0.570	26.26	Plagioclase	<200
7913	2171.0	240.4	98.06	49.24	0.502	0.687	46.59	Plagioclase	<200
144	39.5	26.1	8.30	7.33	0.883	0.853	6.29	Plagioclase	<200
2114	580.0	209.2	98.73	26.71	0.271	0.408	24.08	Plagioclase	<200
51	14.0	16.4	5.81	2.62	0.451	0.807	3.74	Plagioclase	<200
229	62.8	37.2	14.17	7.33	0.517	0.755	7.93	Plagioclase	<200
32	8.8	12.5	4.14	2.62	0.633	0.839	2.96	Plagioclase	<200
212	58.2	32.4	10.78	7.86	0.729	0.836	7.63	Plagioclase	<200
19	5.2	9.7	3.28	1.57	0.479	0.831	2.28	Plagioclase	<200
13	3.6	6.2	1.56	2.10	1.346	1.075	1.89	Plagioclase	<200
23	6.3	10.2	3.05	2.10	0.689	0.870	2.51	Olivine	<200
100	27.4	18.5	4.63	5.76	1.244	1.002	5.24	Orthopyroxene	<200
89	24.4	21.6	7.55	5.24	0.694	0.812	4.94	Plagioclase	<200
6	1.7	3.3	0.82	1.05	1.280	1.393	1.28	Plagioclase	<200
29	8.0	19.5	8.88	1.57	0.177	0.512	2.82	Plagioclase	<200
9	2.5	4.3	1.08	1.57	1.454	1.290	1.57	Plagioclase	<200
16	4.4	6.9	1.71	1.57	0.918	1.084	2.10	Clinopyroxene	<200
8	2.2	5.7	1.42	0.52	0.366	0.925	1.48	Chlorite	<200
53	14.5	16.4	5.64	3.14	0.557	0.822	3.81	Plagioclase	<200
76	20.9	22.1	8.60	5.24	0.609	0.734	4.57	Clinopyroxene	<200
28	7.7	14.1	5.72	2.62	0.458	0.696	2.77	Plagioclase	<200
19	5.2	9.1	2.27	2.10	0.925	0.893	2.28	Plagioclase	<200
402	110.3	80.3	37.18	7.33	0.197	0.464	10.50	Plagioclase	<200
15	4.1	6.7	1.68	1.57	0.935	1.071	2.03	Plagioclase	<200
3722	1021.2	164.0	66.70	31.43	0.471	0.691	31.96	Plagioclase	<200
109	29.9	23.0	7.57	3.14	0.415	0.841	5.47	Plagioclase	<200
77	21.1	24.7	10.31	3.67	0.356	0.659	4.60	Plagioclase	<200
8	2.2	5.8	1.45	0.52	0.359	0.904	1.48	Plagioclase	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Glass	<200
215	59.0	32.8	11.11	7.86	0.707	0.829	7.68	Clinopyroxene	<200
13	3.6	7.7	2.36	1.57	0.665	0.865	1.89	Orthopyroxene	<200
4834	1326.3	208.7	89.53	46.09	0.515	0.619	36.42	Clinopyroxene	<200
970	266.1	68.8	22.61	17.81	0.788	0.841	16.31	Plagioclase	<200
115	31.6	24.3	8.36	5.76	0.689	0.820	5.62	Ilmenite	<200
32	8.8	13.1	4.65	2.10	0.452	0.803	2.96	Glass	<200
117	32.1	25.0	8.92	5.76	0.646	0.802	5.67	Chlorite	<200
7	1.9	5.1	1.26	0.52	0.413	0.971	1.39	Plagioclase	<200
77	21.1	23.4	9.49	3.67	0.387	0.696	4.60	Glass	<200
164	45.0	30.8	11.46	5.76	0.503	0.773	6.71	Plagioclase	<200
9	2.5	5.2	1.31	1.57	1.198	1.065	1.57	Orthopyroxene	<200
39	10.7	16.4	6.57	2.10	0.320	0.707	3.27	Plagioclase	<200
238	65.3	37.3	13.98	8.90	0.637	0.768	8.08	Plagioclase	<200
21	5.8	8.3	2.07	2.10	1.014	1.030	2.40	Plagioclase	<200
10	2.7	6.1	1.53	2.10	1.373	0.960	1.66	Plagioclase	<200
1747	479.3	106.4	41.70	26.19	0.628	0.729	21.89	Orthopyroxene	<200
817	224.2	86.4	37.19	16.76	0.451	0.614	14.97	Orthopyroxene	<200

25	6.9	9.0	2.25	3.14	1.396	1.034	2.62	Plagioclase	<200
34	9.3	13.5	4.79	3.14	0.656	0.804	3.05	Orthopyroxene	<200
21	5.8	10.9	4.05	1.57	0.388	0.778	2.40	Plagioclase	<200
32	8.8	14.7	5.88	2.10	0.357	0.713	2.96	Clinopyroxene	<200
220	60.4	37.4	14.54	9.43	0.649	0.737	7.77	Glass	<200
1380	378.6	84.4	29.24	21.48	0.735	0.817	19.46	Plagioclase	<200
38	10.4	15.8	6.22	2.10	0.338	0.725	3.23	Plagioclase	<200
10	2.7	5.4	1.34	1.05	0.784	1.093	1.66	Orthopyroxene	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Albite	<200
24	6.6	9.4	2.36	2.62	1.110	0.965	2.57	Plagioclase	<200
1259	345.4	88.5	34.16	20.43	0.598	0.744	18.59	Plagioclase	<200
37	10.2	15.7	6.19	1.57	0.254	0.721	3.19	Plagioclase	<200
56	15.4	18.8	7.28	3.14	0.431	0.740	3.92	Plagioclase	<200
6	1.7	4.8	1.21	1.05	0.868	0.941	1.28	Plagioclase	<200
571	156.7	51.1	15.28	11.52	0.754	0.869	12.52	Plagioclase	<200
40	11.0	13.9	4.56	2.62	0.575	0.843	3.31	Clinopyroxene	<200
497	136.4	56.6	22.14	13.09	0.591	0.731	11.68	Plagioclase	<200
6	1.7	4.6	1.16	1.57	1.353	0.986	1.28	Plagioclase	<200
18	4.9	8.2	2.06	2.10	1.019	0.957	2.22	Plagioclase	<200
23	6.3	11.1	3.93	2.10	0.534	0.804	2.51	Apatite	<200
294	80.7	43.9	17.28	8.90	0.515	0.725	8.98	Plagioclase	<200
205	56.2	39.2	16.12	6.29	0.390	0.678	7.50	Plagioclase	<200
18	4.9	7.4	1.84	2.10	1.141	1.071	2.22	Plagioclase	<200
3701	1015.4	236.6	109.00	30.38	0.279	0.477	31.87	Glass	<200
74	20.3	18.9	6.12	3.67	0.600	0.846	4.51	Glass	<200
89	24.4	24.9	10.00	4.71	0.471	0.704	4.94	Plagioclase	<200
457	125.4	61.0	25.59	9.43	0.369	0.651	11.20	Plagioclase	<200
196	53.8	33.5	12.45	7.86	0.631	0.775	7.33	Plagioclase	<200
1078	295.8	86.1	34.45	13.62	0.395	0.708	17.20	Plagioclase	<200
3786	1038.7	218.6	98.78	22.00	0.223	0.523	32.23	Plagioclase	<200
72	19.8	27.3	12.00	3.67	0.306	0.577	4.44	Plagioclase	<200
25	6.9	11.8	4.29	2.62	0.611	0.788	2.62	Plagioclase	<200
427	117.2	68.5	30.41	9.43	0.310	0.560	10.82	Plagioclase	<200
6307	1730.4	250.2	109.26	41.90	0.383	0.589	41.60	Glass	<200
2478	679.9	136.6	56.21	22.52	0.401	0.677	26.07	Plagioclase	<200
5458	1497.5	218.0	92.87	31.43	0.338	0.629	38.70	Clinopyroxene	<200
18	4.9	8.9	2.48	1.57	0.633	0.881	2.22	Glass	<200
41	11.3	15.0	5.46	3.14	0.575	0.791	3.35	Plagioclase	<200
65	17.8	18.1	6.19	3.67	0.593	0.825	4.22	Glass	<200
2219	608.8	114.4	43.02	30.38	0.706	0.765	24.67	Glass	<200
190	52.1	43.5	19.03	7.86	0.413	0.588	7.22	Plagioclase	<200
7	1.9	3.9	0.97	1.05	1.082	1.266	1.39	Plagioclase	<200
352	96.6	41.2	13.40	11.52	0.860	0.845	9.83	Plagioclase	<200
4355	1194.9	159.7	59.87	40.86	0.682	0.767	34.57	Glass	<200
372	102.1	44.2	15.51	13.09	0.844	0.810	10.10	Plagioclase	<200
39	10.7	16.3	6.53	1.57	0.240	0.710	3.27	Glass	<200
8	2.2	6.6	2.34	1.05	0.449	0.801	1.48	Plagioclase	<200
11	3.0	5.1	1.26	1.05	0.833	1.217	1.74	Glass	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Plagioclase	<200
2069	567.7	142.7	62.21	20.43	0.328	0.592	23.83	Plagioclase	<200
555	152.3	54.6	19.51	10.48	0.537	0.801	12.34	Plagioclase	<200
160	43.9	27.2	8.34	6.29	0.754	0.863	6.63	Plagioclase	<200
10	2.7	7.3	2.60	1.57	0.604	0.803	1.66	Plagioclase	<200
8	2.2	5.3	1.32	1.57	1.189	0.995	1.48	Plagioclase	<200
119	32.7	42.0	19.29	6.29	0.326	0.483	5.71	Plagioclase	<200
59	16.2	19.6	7.66	3.14	0.410	0.730	4.02	Glass	<200
1273	349.3	88.2	33.78	20.43	0.605	0.751	18.69	Glass	<200

53	14.5	13.8	3.45	3.67	1.064	0.979	3.81	Orthopyroxene	<200
13	3.6	8.5	3.11	1.57	0.505	0.787	1.89	Plagioclase	<200
217	59.5	32.6	10.73	8.90	0.829	0.840	7.72	Plagioclase	<200
27	7.4	11.4	3.68	2.10	0.571	0.847	2.72	Plagioclase	<200
27	7.4	11.5	3.77	2.10	0.557	0.841	2.72	Plagioclase	<200
257	70.5	34.0	9.79	9.95	1.016	0.876	8.40	Clinopyroxene	<200
12	3.3	5.4	1.34	1.05	0.784	1.197	1.81	Plagioclase	<200
72	19.8	23.6	9.77	3.14	0.321	0.668	4.44	Orthopyroxene	<200
285	78.2	44.1	17.61	8.38	0.476	0.711	8.84	Plagioclase	<200
130	35.7	24.7	7.74	5.24	0.677	0.857	5.97	Glass	<200
174	47.7	37.5	15.73	4.71	0.299	0.653	6.91	Olivine	<200
3154	865.3	152.4	62.28	30.90	0.496	0.684	29.42	Clinopyroxene	<200
201	55.2	34.8	13.25	7.86	0.593	0.756	7.43	Plagioclase	<200
198	54.3	41.5	17.66	5.24	0.297	0.630	7.37	Glass	<200
42	11.5	13.7	3.96	2.10	0.530	0.876	3.39	Glass	<200
3777	1036.3	193.6	84.54	24.09	0.285	0.589	32.19	Plagioclase	<200
78	21.4	19.1	5.97	3.67	0.615	0.858	4.63	Plagioclase	<200
17	4.7	8.5	2.14	1.57	0.734	0.896	2.16	Plagioclase	<200
6	1.7	4.2	1.06	1.57	1.481	1.079	1.28	Plagioclase	<200
42	11.5	12.0	2.99	3.14	1.050	1.005	3.39	Glass	<200
6	1.7	3.6	0.89	0.52	0.584	1.272	1.28	Plagioclase	<200
41	11.3	18.5	7.83	2.10	0.268	0.642	3.35	Glass	<200
789	216.5	79.7	33.37	13.09	0.392	0.654	14.71	Plagioclase	<200
227	62.3	52.4	23.55	7.33	0.311	0.534	7.89	Plagioclase	<200
268	73.5	47.8	20.26	6.81	0.336	0.636	8.57	Plagioclase	<200
7	1.9	4.6	1.16	1.57	1.353	1.063	1.39	Kspar	<200
12	3.3	5.7	1.42	1.57	1.106	1.134	1.81	Glass	<200
13	3.6	7.2	1.79	1.57	0.877	0.937	1.89	Plagioclase	<200
90	24.7	21.1	7.03	5.76	0.819	0.835	4.97	Plagioclase	<200
779	213.7	83.0	35.48	13.09	0.369	0.624	14.62	Orthopyroxene	<200
6	1.7	3.1	0.79	1.05	1.329	1.450	1.28	Plagioclase	<200
1090	299.1	82.0	31.47	17.81	0.566	0.748	17.29	Plagioclase	<200
7971	2187.0	279.8	121.95	51.33	0.421	0.593	46.76	Olivine	<200
12447	3415.0	370.2	164.30	65.47	0.398	0.560	58.44	Olivine	<200
103	28.3	25.6	9.99	3.67	0.367	0.735	5.32	Plagioclase	<200
21	5.8	9.3	2.32	1.57	0.677	0.917	2.40	Plagioclase	<200
98	26.9	27.0	11.07	5.24	0.473	0.681	5.19	Orthopyroxene	<200
3290	902.7	202.6	91.42	36.67	0.401	0.526	30.04	Plagioclase	<200
9242	2535.7	228.6	84.16	58.67	0.697	0.781	50.36	Glass	<200
429	117.7	53.6	21.23	11.52	0.543	0.718	10.85	Plagioclase	<200
51	14.0	18.1	7.04	4.71	0.669	0.734	3.74	Orthopyroxene	<200
2477	679.6	205.5	95.65	29.86	0.312	0.450	26.07	Plagioclase	<200
50	13.7	14.4	3.61	3.14	0.870	0.910	3.70	Chlorite	<200
99	27.2	23.0	8.21	4.19	0.510	0.802	5.21	Clinopyroxene	<200
118	32.4	24.6	8.48	7.33	0.864	0.820	5.69	Glass	<200
42	11.5	21.0	9.25	2.10	0.227	0.573	3.39	Plagioclase	<200
32	8.8	12.4	4.04	3.67	0.908	0.845	2.96	Plagioclase	<200
44	12.1	13.7	3.42	3.67	1.073	0.900	3.47	Plagioclase	<200
21	5.8	8.8	2.20	2.10	0.955	0.966	2.40	Plagioclase	<200
88	24.1	22.4	8.27	4.19	0.507	0.778	4.91	Plagioclase	<200
207	56.8	32.7	11.37	7.33	0.645	0.816	7.54	Plagioclase	<200
8821	2420.2	255.3	104.48	49.24	0.471	0.683	49.20	Plagioclase	<200
142	39.0	23.9	5.96	7.33	1.230	0.928	6.24	Plagioclase	<200
7	1.9	3.6	0.89	0.52	0.584	1.372	1.39	Plagioclase	<200
4380	1201.7	222.2	98.93	41.38	0.418	0.553	34.67	Plagioclase	<200
31	8.5	10.7	2.67	2.10	0.787	0.967	2.92	Plagioclase	<200
102	28.0	25.3	9.77	4.71	0.482	0.742	5.29	Plagioclase	<200

132	36.2	28.0	10.58	6.81	0.644	0.762	6.02	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
656	180.0	67.4	27.06	16.24	0.600	0.705	13.42	Glass	<200
531	145.7	55.5	20.74	11.00	0.530	0.771	12.07	Clinopyroxene	<200
8785	2410.3	281.1	120.54	47.14	0.391	0.619	49.09	Plagioclase	<200
32	8.8	12.6	4.19	3.14	0.749	0.836	2.96	Plagioclase	<200
6	1.7	4.0	1.00	1.57	1.570	1.136	1.28	Plagioclase	<200
1583	434.3	99.7	38.56	20.43	0.530	0.741	20.84	Orthopyroxene	<200
14	3.8	6.7	1.68	1.57	0.935	1.035	1.96	Plagioclase	<200
4335	1189.4	192.8	81.85	41.38	0.506	0.634	34.49	Glass	<200
79	21.7	20.1	6.88	4.71	0.685	0.823	4.66	Plagioclase	<200
14	3.8	7.0	1.76	1.57	0.892	0.990	1.96	Plagioclase	<200
312	85.6	47.2	19.12	6.29	0.329	0.695	9.25	Plagioclase	<200
3681	1009.9	175.6	74.18	26.71	0.360	0.642	31.78	Plagioclase	<200
107	29.4	30.3	12.84	5.24	0.408	0.635	5.42	Plagioclase	<200
42	11.5	12.6	3.14	2.62	0.834	0.957	3.39	Plagioclase	<200
32	8.8	12.3	3.83	2.10	0.548	0.857	2.96	Illite	<200
44	12.1	13.9	3.60	2.62	0.728	0.885	3.47	Plagioclase	<200
962	263.9	77.1	29.63	13.09	0.442	0.747	16.25	Plagioclase	<200
123	33.8	25.4	8.94	5.24	0.586	0.810	5.81	Plagioclase	<200
7232	1984.2	258.3	111.34	42.95	0.386	0.611	44.54	Plagioclase	<200
142	39.0	29.0	10.94	7.33	0.670	0.763	6.24	Plagioclase	<200
770	211.3	81.2	34.48	15.71	0.456	0.634	14.53	Plagioclase	<200
134	36.8	24.2	6.06	6.81	1.124	0.887	6.06	Biotite	<200
247	67.8	56.5	25.60	7.86	0.307	0.517	8.23	Orthopyroxene	<200
224	61.5	38.1	14.91	5.24	0.351	0.730	7.84	Plagioclase	<200
38	10.4	12.0	3.01	2.62	0.870	0.952	3.23	Olivine	<200
32	8.8	12.8	4.42	2.62	0.593	0.820	2.96	Plagioclase	<200
582	159.7	62.2	24.60	9.95	0.404	0.720	12.64	Orthopyroxene	<200
39	10.7	14.9	5.48	2.62	0.478	0.780	3.27	Orthopyroxene	<200
224	61.5	33.3	11.08	7.86	0.709	0.836	7.84	Glass	<200
6	1.7	3.6	0.89	1.05	1.180	1.272	1.28	Plagioclase	<200
40	11.0	15.8	6.11	2.62	0.429	0.742	3.31	Plagioclase	<200
36	9.9	13.3	4.40	2.62	0.595	0.838	3.14	Chlorite	<200
27	7.4	10.0	2.50	2.10	0.840	0.966	2.72	Plagioclase	<200
618	169.6	65.3	26.19	13.09	0.500	0.707	13.02	Plagioclase	<200
1974	541.6	108.1	40.78	25.14	0.616	0.763	23.27	Plagioclase	<200
8	2.2	4.3	1.08	1.57	1.454	1.214	1.48	Plagioclase	<200
25	6.9	10.7	3.26	1.57	0.482	0.865	2.62	Glass	<200
1631	447.5	148.0	67.35	20.95	0.311	0.507	21.15	Plagioclase	<200
13	3.6	6.9	1.73	1.05	0.607	0.967	1.89	Plagioclase	<200
60	16.5	16.8	5.31	4.19	0.789	0.855	4.06	Plagioclase	<200
48	13.2	19.1	7.89	4.71	0.597	0.673	3.63	Plagioclase	<200
13	3.6	8.8	3.34	1.57	0.470	0.760	1.89	Glass	<200
300	82.3	50.5	21.37	8.90	0.416	0.637	9.07	Glass	<200
53	14.5	23.9	10.57	3.14	0.297	0.566	3.81	Glass	<200
9	2.5	5.9	1.46	1.05	0.719	0.952	1.57	Plagioclase	<200
35	9.6	14.0	5.14	2.62	0.510	0.783	3.10	Plagioclase	<200
101	27.7	20.8	5.19	5.24	1.010	0.898	5.26	Plagioclase	<200
31	8.5	11.6	2.90	2.62	0.903	0.891	2.92	Plagioclase	<200
112	30.7	25.1	9.23	6.81	0.738	0.782	5.54	Olivine	<200
7	1.9	6.3	2.31	2.62	1.134	0.781	1.39	Orthopyroxene	<200
8	2.2	4.5	1.12	1.05	0.938	1.168	1.48	Ilmenite	<200
10	2.7	5.7	1.42	1.57	1.106	1.035	1.66	Plagioclase	<200
2025	555.6	116.1	45.98	23.05	0.501	0.720	23.57	Plagioclase	<200
14	3.8	6.4	1.60	2.10	1.313	1.084	1.96	Clinopyroxene	<200
14	3.8	9.3	3.54	1.57	0.444	0.751	1.96	Olivine	<200

54	14.8	14.0	3.51	3.67	1.046	0.973	3.85	Plagioclase	<200
62	17.0	19.2	7.24	5.24	0.724	0.762	4.12	Clinopyroxene	<200
256	70.2	39.2	14.90	8.90	0.597	0.758	8.38	Plagioclase	<200
12	3.3	5.4	1.34	1.57	1.172	1.197	1.81	Plagioclase	<200
1460	400.6	79.2	19.79	20.43	1.032	0.896	20.01	Glass	<200
7457	2045.9	358.9	167.22	38.76	0.232	0.447	45.23	Plagioclase	<200
156	42.8	29.5	10.75	7.33	0.682	0.787	6.54	Plagioclase	<200
145	39.8	27.9	9.96	6.29	0.632	0.801	6.31	Plagioclase	<200
381	104.5	79.6	36.95	6.29	0.170	0.456	10.22	Clinopyroxene	<200
175	48.0	30.0	10.41	6.81	0.654	0.818	6.93	Plagioclase	<200
147	40.3	34.7	14.60	7.33	0.502	0.648	6.35	Plagioclase	<200
117	32.1	25.0	8.85	6.29	0.711	0.805	5.67	Plagioclase	<200
76	20.9	21.4	8.15	3.14	0.385	0.756	4.57	Plagioclase	<200
13	3.6	7.1	1.77	1.57	0.887	0.949	1.89	Olivine	<200
45	12.4	13.3	3.31	3.14	0.949	0.940	3.51	FeOx	<200
2301	631.3	126.5	50.83	28.29	0.557	0.704	25.13	Plagioclase	<200
16	4.4	9.4	3.42	1.57	0.459	0.789	2.10	Apatite	<200
9	2.5	5.8	1.45	1.57	1.083	0.961	1.57	Apatite	<200
23	6.3	10.0	2.50	2.10	0.840	0.891	2.51	Olivine	<200
7	1.9	3.9	0.97	1.57	1.619	1.266	1.39	Apatite	<200
23	6.3	8.6	2.16	2.62	1.213	1.032	2.51	Plagioclase	<200
7	1.9	4.6	1.16	1.05	0.905	1.063	1.39	Plagioclase	<200
50	13.7	17.8	6.93	2.62	0.378	0.737	3.70	Plagioclase	<200
3304	906.5	165.6	69.79	28.29	0.405	0.645	30.11	Plagioclase	<200
20	5.5	7.4	1.84	2.10	1.141	1.127	2.34	Plagioclase	<200
14024	3847.7	341.5	144.00	75.95	0.527	0.644	62.03	Chlorite	<200
18	4.9	8.6	2.16	1.57	0.727	0.913	2.22	Chlorite	<200
18	4.9	8.2	2.06	2.10	1.019	0.957	2.22	Plagioclase	<200
267	73.3	42.1	16.64	6.81	0.409	0.721	8.56	Plagioclase	<200
20	5.5	7.8	1.94	2.62	1.351	1.069	2.34	Plagioclase	<200
185	50.8	28.6	7.78	8.38	1.077	0.883	7.12	Glass	<200
6	1.7	3.3	0.82	1.57	1.915	1.393	1.28	Plagioclase	<200
1835	503.5	132.7	57.63	28.81	0.500	0.599	22.44	Plagioclase	<200
191	52.4	29.0	7.72	6.29	0.815	0.885	7.24	Glass	<200
11	3.0	5.1	1.26	1.57	1.246	1.217	1.74	Plagioclase	<200
613	168.2	80.8	35.70	13.09	0.367	0.569	12.97	Glass	<200
10	2.7	5.1	1.26	2.10	1.667	1.160	1.66	Plagioclase	<200
193	53.0	28.6	7.15	8.38	1.172	0.902	7.28	Plagioclase	<200
25	6.9	11.6	4.11	2.10	0.511	0.803	2.62	Quartz	<200
3846	1055.2	153.2	58.60	27.24	0.465	0.752	32.48	Olivine	<200
34	9.3	12.4	3.61	3.14	0.870	0.874	3.05	Plagioclase	<200
1291	354.2	149.9	69.87	25.67	0.367	0.445	18.82	Plagioclase	<200
1804	495.0	132.4	57.59	19.38	0.337	0.596	22.25	Plagioclase	<200
1171	321.3	111.0	48.95	21.48	0.439	0.572	17.92	Plagioclase	<200
37	10.2	13.7	4.63	2.62	0.566	0.827	3.19	Plagioclase	<200
692	189.9	88.5	39.42	14.14	0.359	0.552	13.78	Plagioclase	<200
111	30.5	24.9	9.06	5.76	0.636	0.787	5.52	Plagioclase	<200
11049	3031.4	316.5	135.93	48.71	0.358	0.617	55.06	Olivine	<200
58	15.9	28.5	13.04	2.10	0.161	0.496	3.99	Plagioclase	<200
102	28.0	24.6	9.26	6.29	0.679	0.763	5.29	Plagioclase	<200
4421	1213.0	151.2	52.47	41.38	0.789	0.817	34.83	Plagioclase	<200
9	2.5	5.1	1.26	1.57	1.246	1.101	1.57	Plagioclase	<200
53	14.5	21.7	9.28	2.62	0.282	0.623	3.81	Plagioclase	<200
88	24.1	24.1	9.49	5.24	0.552	0.724	4.91	Glass	<200
151	41.4	34.9	14.58	6.81	0.467	0.655	6.44	Plagioclase	<200
130	35.7	25.3	8.39	6.81	0.812	0.837	5.97	Glass	<200
229	62.8	39.9	16.05	8.38	0.522	0.704	7.93	Orthopyroxene	<200

214	58.7	32.7	11.07	8.90	0.804	0.830	7.66	Plagioclase	<200
73	20.0	19.0	6.37	3.67	0.576	0.834	4.48	Glass	<200
18	4.9	9.6	3.27	1.57	0.480	0.824	2.22	Glass	<200
8	2.2	5.7	1.42	1.57	1.106	0.925	1.48	Orthopyroxene	<200
50	13.7	16.2	5.64	2.62	0.465	0.813	3.70	Orthopyroxene	<200
26	7.1	8.6	2.16	2.10	0.972	1.097	2.67	Plagioclase	<200
1130	310.0	79.4	28.99	16.24	0.560	0.786	17.61	Plagioclase	<200
13	3.6	7.9	2.55	1.57	0.616	0.848	1.89	Glass	<200
32	8.8	11.5	2.86	3.14	1.098	0.917	2.96	Glass	<200
36	9.9	11.2	2.80	2.10	0.750	0.996	3.14	Glass	<200
390	107.0	61.2	26.55	7.86	0.296	0.600	10.34	Plagioclase	<200
229	62.8	55.2	25.07	4.71	0.188	0.509	7.93	Glass	<200
8	2.2	5.1	1.26	1.05	0.833	1.037	1.48	Glass	<200
22	6.0	11.0	3.96	2.62	0.662	0.794	2.46	Glass	<200
28	7.7	10.2	2.54	2.62	1.031	0.965	2.77	Plagioclase	<200
321	88.1	44.7	17.27	11.52	0.667	0.744	9.38	Glass	<200
123	33.8	31.9	13.45	5.24	0.390	0.645	5.81	Glass	<200
642	176.1	61.8	23.37	14.67	0.628	0.761	13.27	Plagioclase	<200
107	29.4	26.6	10.50	5.24	0.499	0.722	5.42	Plagioclase	<200
62	17.0	17.1	5.39	4.19	0.777	0.855	4.12	Olivine	<200
62	17.0	19.4	7.38	3.14	0.425	0.755	4.12	Plagioclase	<200
13	3.6	6.3	1.58	2.10	1.329	1.060	1.89	Glass	<200
9	2.5	4.6	1.16	1.05	0.905	1.206	1.57	Glass	<200
173	47.5	39.9	17.17	6.29	0.366	0.612	6.89	Plagioclase	<200
1606	440.6	104.3	41.54	24.62	0.593	0.714	20.99	Plagioclase	<200
246	67.5	37.3	13.72	6.81	0.496	0.781	8.22	Plagioclase	<200
169	46.4	33.0	12.89	9.43	0.732	0.732	6.81	Plagioclase	<200
1177	322.9	105.9	45.92	20.95	0.456	0.602	17.97	Olivine	<200
31	8.5	14.3	5.62	2.10	0.374	0.725	2.92	Plagioclase	<200
493	135.3	69.6	30.36	8.38	0.276	0.592	11.63	Plagioclase	<200
6387	1752.4	209.0	83.51	48.71	0.583	0.710	41.86	Plagioclase	<200
39	10.7	13.5	4.14	2.62	0.633	0.862	3.27	Glass	<200
3943	1081.8	206.2	91.25	34.57	0.379	0.565	32.89	Plagioclase	<200
783	214.8	68.6	26.02	14.67	0.564	0.758	14.66	Plagioclase	<200
15	4.1	8.0	2.00	1.57	0.785	0.902	2.03	Glass	<200
13	3.6	6.1	1.53	1.57	1.026	1.096	1.89	Glass	<200
44	12.1	13.1	3.27	3.67	1.122	0.941	3.47	Plagioclase	<200
25	6.9	9.6	2.39	2.10	0.879	0.971	2.62	Olivine	<200
120	32.9	32.7	14.02	6.29	0.449	0.621	5.74	Plagioclase	<200
37	10.2	12.2	3.05	3.67	1.203	0.925	3.19	Glass	<200
129	35.4	25.1	8.27	6.81	0.823	0.840	5.95	Plagioclase	<200
62	17.0	15.7	3.93	3.67	0.934	0.930	4.12	Plagioclase	<200
670	183.8	57.1	18.70	12.57	0.672	0.842	13.56	Olivine	<200
11914	3268.8	253.5	90.70	70.19	0.774	0.800	57.17	Olivine	<200
7	1.9	4.3	1.08	1.05	0.972	1.137	1.39	Plagioclase	<200
7	1.9	4.5	1.13	1.05	0.929	1.084	1.39	Plagioclase	<200
538	147.6	60.0	23.77	12.05	0.507	0.718	12.15	Plagioclase	<200
59	16.2	15.1	3.78	3.67	0.971	0.943	4.02	Glass	<200
106	29.1	25.7	9.92	6.81	0.686	0.744	5.39	Plagioclase	<200
15	4.1	9.4	3.50	1.57	0.449	0.769	2.03	Orthopyroxene	<200
308	528.2	110.8	43.17	24.88	0.576	0.735	22.98	Olivine	200 - 100
1363	2337.2	260.2	108.57	61.55	0.567	0.659	48.34	Chromite	200 - 100
699	1198.6	227.3	101.86	44.52	0.437	0.540	34.62	Plagioclase	200 - 100
4915	8428.1	567.2	249.86	86.43	0.346	0.574	91.80	Orthopyroxene	200 - 100
8313	14254.9	601.8	242.02	115.24	0.476	0.703	119.39	Plagioclase	200 - 100
5230	8968.3	452.7	175.13	89.05	0.508	0.742	94.70	Olivine	200 - 100
3491	5986.3	332.1	113.13	91.66	0.810	0.826	77.37	Glass	200 - 100

127	217.8	69.3	26.41	13.09	0.496	0.755	14.76	Plagioclase	200 - 100
409	701.3	173.9	77.95	17.02	0.218	0.540	26.48	Clinopyroxene	200 - 100
5487	9408.9	476.7	188.42	94.28	0.500	0.721	97.00	Plagioclase	200 - 100
1840	3155.2	251.4	91.03	64.17	0.705	0.792	56.17	Glass	200 - 100
990	1697.6	228.8	96.89	34.05	0.351	0.638	41.20	Glass	200 - 100
2711	4648.7	351.0	142.99	64.17	0.449	0.689	68.18	Plagioclase	200 - 100
1976	3388.4	301.7	123.40	51.07	0.414	0.684	58.21	Plagioclase	200 - 100
146	250.4	74.9	28.72	18.33	0.638	0.749	15.82	Plagioclase	200 - 100
23	39.4	22.0	5.49	6.55	1.193	1.013	6.28	Plagioclase	200 - 100
341	584.7	124.7	50.84	22.26	0.438	0.688	24.18	Glass	200 - 100
2847	4882.0	335.9	130.52	73.33	0.562	0.737	69.87	Plagioclase	200 - 100
2269	3890.8	303.4	118.99	52.38	0.440	0.729	62.38	Plagioclase	200 - 100
10269	17609.0	784.3	340.41	145.35	0.427	0.600	132.70	Olivine	200 - 100
6494	11135.7	474.4	172.74	117.85	0.682	0.788	105.53	Plagioclase	200 - 100
1710	2932.3	234.7	81.22	66.78	0.822	0.818	54.15	Plagioclase	200 - 100
1188	2037.2	246.8	103.78	52.38	0.505	0.648	45.13	Glass	200 - 100
3572	6125.2	337.6	115.95	65.47	0.565	0.822	78.26	Plagioclase	200 - 100
2154	3693.6	286.8	109.76	69.40	0.632	0.751	60.78	Plagioclase	200 - 100
2790	4784.2	364.1	150.21	64.17	0.427	0.673	69.17	Plagioclase	200 - 100
232	397.8	90.8	33.52	17.02	0.508	0.779	19.95	Plagioclase	200 - 100
1426	2445.3	293.0	127.29	28.81	0.226	0.598	49.45	Plagioclase	200 - 100
4543	7790.2	542.9	238.81	106.07	0.444	0.576	88.26	Plagioclase	200 - 100
588	1008.3	162.9	66.22	43.21	0.653	0.691	31.75	Orthopyroxene	200 - 100
2889	4954.0	386.4	162.76	86.43	0.531	0.646	70.38	Glass	200 - 100
48	82.3	38.3	12.66	6.55	0.517	0.839	9.07	Albite	200 - 100
542	929.4	159.0	65.25	36.67	0.562	0.680	30.49	Quartz	200 - 100
2052	3518.7	294.4	117.17	69.40	0.592	0.714	59.32	Plagioclase	200 - 100
5542	9503.3	638.5	286.01	119.16	0.417	0.541	97.48	Glass	200 - 100
829	1421.5	192.6	78.08	41.90	0.537	0.694	37.70	Plagioclase	200 - 100
1208	2071.4	219.8	85.77	41.90	0.489	0.734	45.51	Olivine	200 - 100
7854	13467.8	734.0	325.61	73.33	0.225	0.561	116.05	Plagioclase	200 - 100
239	409.8	87.3	29.97	26.19	0.874	0.822	20.24	Plagioclase	200 - 100
4132	7085.4	382.8	141.26	102.14	0.723	0.779	84.17	Plagioclase	200 - 100
496	850.5	231.8	108.04	13.09	0.121	0.446	29.16	Orthopyroxene	200 - 100
2250	3858.2	283.8	105.23	51.07	0.485	0.776	62.11	Orthopyroxene	200 - 100
51	87.5	35.8	8.95	7.86	0.878	0.926	9.35	Plagioclase	200 - 100
2459	4216.6	349.6	145.89	81.19	0.557	0.658	64.94	Plagioclase	200 - 100
1491	2556.7	400.7	186.67	22.26	0.119	0.447	50.56	Plagioclase	200 - 100
7223	12385.8	531.1	205.15	121.78	0.594	0.743	111.29	Orthopyroxene	200 - 100
80	137.2	75.0	33.36	6.55	0.196	0.554	11.71	Glass	200 - 100
3681	6312.1	349.4	123.69	78.57	0.635	0.806	79.45	Plagioclase	200 - 100
3941	6757.9	552.6	249.19	89.05	0.357	0.527	82.21	Plagioclase	200 - 100
1652	2832.8	251.7	96.46	52.38	0.543	0.750	53.22	Glass	200 - 100
384	658.5	103.2	28.34	27.50	0.970	0.882	25.66	Plagioclase	200 - 100
6	10.3	12.3	3.08	2.62	0.851	0.922	3.21	Plagioclase	200 - 100
1276	2188.1	249.3	103.52	30.12	0.291	0.665	46.78	Clinopyroxene	200 - 100
657	1126.6	151.6	55.51	28.81	0.519	0.785	33.56	Glass	200 - 100
8	13.7	15.3	4.74	1.31	0.276	0.860	3.70	Plagioclase	200 - 100
17	29.2	25.3	9.61	2.62	0.273	0.757	5.40	Plagioclase	200 - 100
3446	5909.1	353.5	132.00	72.02	0.546	0.771	76.87	Plagioclase	200 - 100
417	715.1	116.6	40.74	27.50	0.675	0.813	26.74	Plagioclase	200 - 100
4608	7901.7	447.9	180.06	92.97	0.516	0.704	88.89	Glass	200 - 100
100	171.5	58.9	21.44	13.09	0.611	0.788	13.10	Plagioclase	200 - 100
1922	3295.8	250.9	87.98	56.31	0.640	0.811	57.41	Plagioclase	200 - 100
777	1332.4	198.9	83.46	40.59	0.486	0.651	36.50	Orthopyroxene	200 - 100
3523	6041.1	459.1	199.25	82.50	0.414	0.600	77.72	Clay	200 - 100
5319	9120.9	461.0	179.78	113.93	0.634	0.734	95.50	Olivine	200 - 100

5190	8899.7	432.3	160.81	85.12	0.529	0.774	94.34	Plagioclase	200 - 100
37	63.5	29.4	7.34	6.55	0.892	0.962	7.97	Chlorite	200 - 100
26	44.6	30.3	11.15	5.24	0.470	0.781	6.68	Plagioclase	200 - 100
2683	4600.7	357.7	147.71	81.19	0.550	0.672	67.83	Plagioclase	200 - 100
7279	12481.8	684.5	300.74	110.00	0.366	0.579	111.72	Ilmenite	200 - 100
10422	17871.3	661.9	262.97	137.50	0.523	0.716	133.68	Olivine	200 - 100
649	1112.9	178.2	74.05	32.74	0.442	0.664	33.36	Plagioclase	200 - 100
237	406.4	95.4	36.57	19.64	0.537	0.749	20.16	Plagioclase	200 - 100
2248	3854.8	282.5	104.29	74.64	0.716	0.779	62.09	Chlorite	200 - 100
5207	8928.8	520.3	219.47	102.14	0.465	0.644	94.49	Plagioclase	200 - 100
3108	5329.5	348.3	134.50	90.35	0.672	0.743	73.00	Orthopyroxene	200 - 100
1165	1997.7	302.8	136.82	58.93	0.431	0.523	44.70	Glass	200 - 100
2074	3556.4	371.5	164.08	39.28	0.239	0.569	59.64	Plagioclase	200 - 100
117	200.6	60.6	20.52	13.09	0.638	0.829	14.16	Glass	200 - 100
867	1486.7	161.5	52.38	43.21	0.825	0.846	38.56	Orthopyroxene	200 - 100
16	27.4	17.9	4.47	3.93	0.879	1.039	5.24	Plagioclase	200 - 100
3257	5585.0	463.9	204.64	100.83	0.493	0.571	74.73	Plagioclase	200 - 100
1618	2774.5	257.1	101.14	69.40	0.686	0.726	52.67	Plagioclase	200 - 100
251	430.4	121.5	52.58	20.95	0.398	0.605	20.75	Plagioclase	200 - 100
187	320.7	86.6	33.82	13.09	0.387	0.733	17.91	Orthopyroxene	200 - 100
413	708.2	110.9	35.45	22.26	0.628	0.851	26.61	Olivine	200 - 100
1582	2712.8	241.7	91.02	51.07	0.561	0.764	52.08	Clinopyroxene	200 - 100
975	1671.9	244.5	106.56	36.67	0.344	0.593	40.89	Plagioclase	200 - 100
9	15.4	12.4	3.10	2.62	0.845	1.122	3.93	Glass	200 - 100
3358	5758.2	368.6	144.44	74.64	0.517	0.730	75.88	Clinopyroxene	200 - 100
28	48.0	27.4	6.86	6.55	0.955	0.895	6.93	Glass	200 - 100
7981	13685.6	942.0	439.87	145.35	0.330	0.440	116.99	Plagioclase	200 - 100
51	87.5	42.5	15.63	6.55	0.419	0.781	9.35	Plagioclase	200 - 100
140	240.1	91.7	39.84	18.33	0.460	0.599	15.49	Glass	200 - 100
4404	7551.9	415.7	160.93	104.76	0.651	0.741	86.90	Olivine	200 - 100
616	1056.3	150.3	56.45	40.59	0.719	0.766	32.50	Plagioclase	200 - 100
3829	6565.9	380.8	145.16	92.97	0.640	0.754	81.03	Clinopyroxene	200 - 100
562	963.7	161.4	66.11	40.59	0.614	0.682	31.04	Glass	200 - 100
3001	5146.0	375.6	154.46	47.14	0.305	0.677	71.74	Glass	200 - 100
270	463.0	151.6	69.08	19.64	0.284	0.503	21.52	Plagioclase	200 - 100
252	432.1	104.1	41.67	18.33	0.440	0.708	20.79	Plagioclase	200 - 100
2760	4732.8	273.4	68.35	77.26	1.130	0.892	68.80	Glass	200 - 100
777	1332.4	180.0	71.34	47.14	0.661	0.719	36.50	Plagioclase	200 - 100
1199	2056.0	226.6	90.58	43.21	0.477	0.710	45.34	Plagioclase	200 - 100
1631	2796.8	253.1	98.00	65.47	0.668	0.741	52.88	Plagioclase	200 - 100
237	406.4	145.2	66.46	18.33	0.276	0.492	20.16	Glass	200 - 100
1675	2872.2	328.5	144.37	64.17	0.444	0.578	53.59	Glass	200 - 100
3957	6785.4	395.4	153.48	91.66	0.597	0.739	82.37	Plagioclase	200 - 100
9017	15462.1	600.4	234.19	137.50	0.587	0.734	124.35	Plagioclase	200 - 100
522	895.1	139.5	52.80	31.43	0.595	0.760	29.92	Plagioclase	200 - 100
1166	1999.4	255.6	109.54	40.59	0.371	0.620	44.71	Orthopyroxene	200 - 100
2600	4458.4	302.6	111.24	70.71	0.636	0.782	66.77	Plagioclase	200 - 100
1537	2635.6	290.4	123.91	45.83	0.370	0.627	51.34	Glass	200 - 100
5333	9144.9	490.4	199.35	89.05	0.447	0.691	95.63	Plagioclase	200 - 100
2393	4103.5	392.3	172.34	44.52	0.258	0.579	64.06	Orthopyroxene	200 - 100
6878	11794.2	458.6	151.36	129.64	0.857	0.840	108.60	Plagioclase	200 - 100
1861	3191.2	259.9	97.05	45.83	0.472	0.771	56.49	Plagioclase	200 - 100
732	1255.2	206.8	89.34	44.52	0.498	0.607	35.43	Plagioclase	200 - 100
1096	1879.4	198.5	73.73	36.67	0.497	0.774	43.35	Olivine	200 - 100
14	24.0	17.4	4.36	3.93	0.901	0.997	4.90	Clinopyroxene	200 - 100
7085	12149.2	481.1	168.37	116.54	0.692	0.812	110.22	Plagioclase	200 - 100
1410	2417.8	233.8	90.02	58.93	0.655	0.746	49.17	Glass	200 - 100

4442	7617.0	408.4	155.06	100.83	0.650	0.758	87.28	Plagioclase	200 - 100
319	547.0	176.6	81.62	15.71	0.192	0.469	23.39	Clinopyroxene	200 - 100
7	12.0	13.2	3.29	3.93	1.195	0.932	3.46	Glass	200 - 100
2087	3578.7	294.7	116.68	68.09	0.584	0.720	59.82	Orthopyroxene	200 - 100
2678	4592.2	263.7	65.93	74.64	1.132	0.911	67.77	FeOx	200 - 100
5272	9040.3	594.1	262.63	106.07	0.404	0.567	95.08	Plagioclase	200 - 100
8	13.7	14.5	3.62	1.31	0.362	0.906	3.70	Clinopyroxene	200 - 100
33	56.6	28.9	7.22	7.86	1.089	0.924	7.52	Orthopyroxene	200 - 100
1934	3316.4	329.6	141.33	47.14	0.334	0.619	57.59	Glass	200 - 100
8461	14508.7	935.0	434.05	130.95	0.302	0.457	120.45	Albite	200 - 100
1847	3167.2	250.2	89.86	68.09	0.758	0.797	56.28	Plagioclase	200 - 100
3895	6679.0	340.6	109.08	83.81	0.768	0.851	81.73	Plagioclase	200 - 100
802	1375.3	215.2	92.78	27.50	0.296	0.611	37.08	Plagioclase	200 - 100
423	725.4	120.4	43.52	30.12	0.692	0.793	26.93	Glass	200 - 100
814	1395.8	198.7	82.44	48.45	0.588	0.666	37.36	Plagioclase	200 - 100
998	1711.3	221.3	92.08	43.21	0.469	0.663	41.37	Orthopyroxene	200 - 100
3040	5212.9	512.1	233.76	96.90	0.415	0.500	72.20	Glass	200 - 100
9057	15530.7	844.2	381.39	124.40	0.326	0.523	124.62	Plagioclase	200 - 100
19	32.6	30.3	12.54	3.93	0.313	0.668	5.71	Chlorite	200 - 100
4419	7577.6	416.2	161.08	91.66	0.569	0.741	87.05	Plagioclase	200 - 100
3893	6675.6	608.5	280.44	82.50	0.294	0.476	81.70	Olivine	200 - 100
4067	6974.0	365.1	128.08	78.57	0.613	0.811	83.51	Clinopyroxene	200 - 100
4098	7027.1	573.9	259.88	85.12	0.328	0.518	83.83	Plagioclase	200 - 100
101	173.2	77.8	33.75	13.09	0.388	0.600	13.16	Plagioclase	200 - 100
1488	2551.6	259.9	105.83	49.76	0.470	0.689	50.51	Plagioclase	200 - 100
912	1563.9	199.0	79.91	44.52	0.557	0.705	39.55	Glass	200 - 100
6	10.3	9.7	2.43	2.62	1.078	1.171	3.21	Quartz	200 - 100
1962	3364.4	249.8	85.63	73.33	0.856	0.823	58.00	Plagioclase	200 - 100
2666	4571.6	327.1	127.78	57.62	0.451	0.733	67.61	Orthopyroxene	200 - 100
64	109.8	49.3	18.78	7.86	0.419	0.754	10.48	Plagioclase	200 - 100
1024	1755.9	267.5	119.01	26.19	0.220	0.555	41.90	Olivine	200 - 100
3139	5382.7	352.8	137.12	65.47	0.477	0.737	73.37	Clinopyroxene	200 - 100
8538	14640.7	1117.4	531.16	163.69	0.308	0.384	121.00	Glass	200 - 100
1061	1819.4	215.3	86.65	36.67	0.423	0.702	42.65	Plagioclase	200 - 100
1555	2666.5	269.9	110.92	62.86	0.567	0.678	51.64	Olivine	200 - 100
1601	2745.4	275.2	113.37	51.07	0.450	0.675	52.40	Plagioclase	200 - 100
41	70.3	43.5	17.78	7.86	0.442	0.684	8.39	Glass	200 - 100
1917	3287.2	317.4	134.21	58.93	0.439	0.640	57.33	Clinopyroxene	200 - 100
1810	3103.7	308.6	130.54	43.21	0.331	0.640	55.71	Olivine	200 - 100
2117	3630.2	268.8	96.94	65.47	0.675	0.795	60.25	Plagioclase	200 - 100
20	34.3	22.4	5.59	5.24	0.937	0.929	5.86	Plagioclase	200 - 100
887	1521.0	203.4	83.51	32.74	0.392	0.680	39.00	Plagioclase	200 - 100
2470	4235.5	318.2	125.31	53.69	0.428	0.725	65.08	Plagioclase	200 - 100
816	1399.3	176.8	67.71	36.67	0.542	0.750	37.41	Albite	200 - 100
1315	2254.9	215.5	79.34	53.69	0.677	0.781	47.49	Glass	200 - 100
256	439.0	102.1	40.10	19.64	0.490	0.727	20.95	Albite	200 - 100
2534	4345.2	316.9	123.19	51.07	0.415	0.737	65.92	Plagioclase	200 - 100
924	1584.5	231.2	99.69	34.05	0.342	0.610	39.81	Glass	200 - 100
1261	2162.3	316.5	143.17	64.17	0.448	0.521	46.50	Plagioclase	200 - 100
158	270.9	75.6	28.21	13.09	0.464	0.772	16.46	Olivine	200 - 100
714	1224.4	170.7	67.10	28.81	0.429	0.727	34.99	Plagioclase	200 - 100
478	819.7	166.2	71.64	23.57	0.329	0.611	28.63	Glass	200 - 100
2485	4261.2	327.1	131.01	70.71	0.540	0.708	65.28	Glass	200 - 100
3125	5358.7	341.4	129.24	77.26	0.598	0.760	73.20	Olivine	200 - 100
19	32.6	28.2	11.21	2.62	0.234	0.717	5.71	Olivine	200 - 100
320	548.7	137.8	59.68	19.64	0.329	0.603	23.42	Plagioclase	200 - 100
765	1311.8	166.9	62.40	39.28	0.629	0.770	36.22	Plagioclase	200 - 100

1683	2886.0	265.9	105.65	56.31	0.533	0.716	53.72	Plagioclase	200 - 100
5728	9822.2	582.1	252.11	95.59	0.379	0.604	99.11	Olivine	200 - 100
5135	8805.4	465.0	184.90	74.64	0.404	0.715	93.84	Orthopyroxene	200 - 100
3497	5996.6	392.4	158.33	56.31	0.356	0.700	77.44	Plagioclase	200 - 100
3191	5471.8	355.0	137.79	94.28	0.684	0.739	73.97	Plagioclase	200 - 100
1103	1891.4	198.3	73.40	44.52	0.607	0.777	43.49	Orthopyroxene	200 - 100
6	10.3	9.8	2.45	3.93	1.604	1.162	3.21	Plagioclase	200 - 100
7194	12336.1	919.4	431.06	127.02	0.295	0.428	111.07	Glass	200 - 100
352	603.6	109.8	39.72	24.88	0.626	0.793	24.57	Plagioclase	200 - 100
669	1147.2	177.9	73.28	35.36	0.483	0.675	33.87	Plagioclase	200 - 100
2633	4515.0	291.0	100.63	65.47	0.651	0.819	67.19	Orthopyroxene	200 - 100
1325	2272.1	185.7	46.43	52.38	1.128	0.910	47.67	Glass	200 - 100
2461	4220.1	301.3	113.47	53.69	0.473	0.764	64.96	Plagioclase	200 - 100
9800	16804.8	777.9	339.44	162.38	0.478	0.591	129.63	Plagioclase	200 - 100
945	1620.5	206.8	84.13	34.05	0.405	0.690	40.25	Plagioclase	200 - 100
7746	13282.6	578.2	231.81	102.14	0.441	0.707	115.25	Plagioclase	200 - 100
893	1531.3	259.5	116.61	32.74	0.281	0.535	39.13	Plagioclase	200 - 100
1835	3146.6	290.0	118.42	51.07	0.431	0.686	56.09	Plagioclase	200 - 100
906	1553.6	203.7	83.14	30.12	0.362	0.686	39.42	Glass	200 - 100
437	749.4	142.1	58.15	22.26	0.383	0.683	27.37	Plagioclase	200 - 100
9	15.4	11.3	2.83	3.93	1.389	1.229	3.93	Plagioclase	200 - 100
8861	15194.6	1002.0	468.58	153.21	0.327	0.436	123.27	Glass	200 - 100
7459	12790.5	931.7	436.54	119.16	0.273	0.430	113.09	Clinopyroxene	200 - 100
354	607.0	101.6	31.60	28.81	0.912	0.859	24.64	Plagioclase	200 - 100
4447	7625.6	447.9	182.07	98.21	0.539	0.691	87.32	Plagioclase	200 - 100
1492	2558.4	312.9	137.91	32.74	0.237	0.573	50.58	Glass	200 - 100
1852	3175.8	253.3	92.22	64.17	0.696	0.789	56.35	Glass	200 - 100
25	42.9	37.0	15.79	5.24	0.332	0.627	6.55	Plagioclase	200 - 100
16	27.4	22.4	7.54	1.31	0.174	0.831	5.24	Glass	200 - 100
497	852.2	178.1	78.11	23.57	0.302	0.581	29.19	Plagioclase	200 - 100
2191	3757.1	296.2	115.58	64.17	0.555	0.734	61.29	Plagioclase	200 - 100
1267	2172.6	349.5	161.25	41.90	0.260	0.473	46.61	Plagioclase	200 - 100
74	126.9	52.4	19.80	11.79	0.595	0.762	11.26	Plagioclase	200 - 100
628	1076.9	174.6	72.44	32.74	0.452	0.666	32.82	Orthopyroxene	200 - 100
2429	4165.2	295.4	109.76	64.17	0.585	0.774	64.54	Plagioclase	200 - 100
675	1157.5	196.1	84.35	27.50	0.326	0.615	34.02	Plagioclase	200 - 100
6586	11293.5	555.8	228.48	121.78	0.533	0.678	106.27	Glass	200 - 100
368	631.0	134.0	55.68	26.19	0.470	0.664	25.12	Olivine	200 - 100
946	1622.2	251.1	110.93	47.14	0.425	0.569	40.28	Orthopyroxene	200 - 100
12	20.6	15.3	3.82	2.62	0.686	1.054	4.54	Orthopyroxene	200 - 100
25	42.9	39.1	17.03	5.24	0.308	0.594	6.55	Orthopyroxene	200 - 100
990	1697.6	215.8	88.78	32.74	0.369	0.677	41.20	Plagioclase	200 - 100
6982	11972.5	541.9	215.35	102.14	0.474	0.716	109.42	Plagioclase	200 - 100
14285	24495.5	948.4	415.19	187.26	0.451	0.585	156.51	Olivine	200 - 100
2105	3609.6	335.3	142.31	53.69	0.377	0.635	60.08	Plagioclase	200 - 100
2080	3566.7	305.5	123.98	51.07	0.412	0.693	59.72	Plagioclase	200 - 100
1815	3112.3	259.9	98.29	56.31	0.573	0.761	55.79	Plagioclase	200 - 100
4767	8174.3	513.8	219.67	108.69	0.495	0.624	90.41	Plagioclase	200 - 100
629	1078.6	229.3	104.32	27.50	0.264	0.508	32.84	Orthopyroxene	200 - 100
1877	3218.6	306.7	128.24	61.55	0.480	0.656	56.73	Olivine	200 - 100
5249	9000.8	855.4	405.50	121.78	0.300	0.393	94.87	Orthopyroxene	200 - 100
2195	3763.9	293.4	113.53	56.31	0.496	0.741	61.35	Plagioclase	200 - 100
2449	4199.5	325.2	130.36	70.71	0.542	0.706	64.80	Plagioclase	200 - 100
25	42.9	24.6	6.16	5.24	0.851	0.942	6.55	Glass	200 - 100
3889	6668.7	432.3	178.86	89.05	0.498	0.670	81.66	Plagioclase	200 - 100
6098	10456.7	495.9	194.05	125.71	0.648	0.731	102.26	Plagioclase	200 - 100
1342	2301.2	388.9	181.78	22.26	0.122	0.437	47.97	Plagioclase	200 - 100

2271	3894.2	282.2	103.45	75.95	0.734	0.784	62.40	Plagioclase	200 - 100
36	61.7	33.5	11.24	6.55	0.583	0.832	7.86	Orthopyroxene	200 - 100
11	18.9	15.9	3.97	2.62	0.660	0.969	4.34	Glass	200 - 100
1411	2419.5	238.8	93.54	53.69	0.574	0.730	49.19	Plagioclase	200 - 100
4804	8237.8	505.9	214.54	91.66	0.427	0.636	90.76	Plagioclase	200 - 100
2121	3637.0	254.1	83.43	69.40	0.832	0.842	60.31	Plagioclase	200 - 100
6	10.3	7.9	1.96	2.62	1.337	1.447	3.21	Quartz	200 - 100
4848	8313.2	566.6	250.07	81.19	0.325	0.570	91.18	Glass	200 - 100
342	586.5	197.7	92.48	43.21	0.467	0.434	24.22	Glass	200 - 100
19	32.6	18.2	4.55	5.24	1.152	1.112	5.71	Plagioclase	200 - 100
1751	3002.6	356.6	159.46	57.62	0.361	0.545	54.80	Plagioclase	200 - 100
114	195.5	82.2	35.62	10.48	0.294	0.603	13.98	Plagioclase	200 - 100
1374	2356.1	228.2	87.02	36.67	0.421	0.754	48.54	Orthopyroxene	200 - 100
94	161.2	65.8	26.89	9.17	0.341	0.684	12.70	Glass	200 - 100
1567	2687.0	274.2	113.39	31.43	0.277	0.670	51.84	Plagioclase	200 - 100
12104	20755.6	728.3	293.39	150.59	0.513	0.701	144.07	Plagioclase	200 - 100
3268	5603.9	402.0	167.57	79.88	0.477	0.660	74.86	Olivine	200 - 100
5187	8894.5	628.7	282.89	99.52	0.352	0.532	94.31	Glass	200 - 100
555	951.7	172.4	73.21	37.98	0.519	0.634	30.85	Olivine	200 - 100
1843	3160.3	276.3	109.22	49.76	0.456	0.721	56.22	Olivine	200 - 100
3280	5624.5	351.9	133.99	74.64	0.557	0.755	75.00	Plagioclase	200 - 100
3696	6337.8	373.2	141.92	91.66	0.646	0.756	79.61	Plagioclase	200 - 100
624	1070.0	163.3	65.24	30.12	0.462	0.710	32.71	Plagioclase	200 - 100
141	241.8	82.5	34.17	20.95	0.613	0.668	15.55	Plagioclase	200 - 100
6	10.3	8.7	2.18	1.31	0.601	1.306	3.21	Plagioclase	200 - 100
2477	4247.5	343.9	142.04	82.50	0.581	0.672	65.17	Plagioclase	200 - 100
1430	2452.1	269.3	112.93	39.28	0.348	0.652	49.52	Glass	200 - 100
2548	4369.2	392.0	170.34	51.07	0.300	0.598	66.10	Clinopyroxene	200 - 100
2094	3590.7	308.7	125.78	43.21	0.344	0.688	59.92	Glass	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Glass	200 - 100
4232	7256.9	437.3	177.84	65.47	0.368	0.691	85.19	Plagioclase	200 - 100
30	51.4	38.0	15.71	5.24	0.334	0.669	7.17	Clinopyroxene	200 - 100
9	15.4	12.4	3.10	3.93	1.268	1.122	3.93	Plagioclase	200 - 100
3068	5260.9	530.2	243.51	72.02	0.296	0.485	72.53	Albite	200 - 100
4395	7536.4	417.4	162.26	99.52	0.613	0.737	86.81	Plagioclase	200 - 100
73	125.2	49.7	17.82	10.48	0.588	0.798	11.19	Plagioclase	200 - 100
657	1126.6	154.9	58.01	28.81	0.497	0.768	33.56	Plagioclase	200 - 100
1819	3119.2	277.9	110.78	60.24	0.544	0.712	55.85	Plagioclase	200 - 100
58	99.5	47.3	18.20	7.86	0.432	0.747	9.97	Plagioclase	200 - 100
1382	2369.8	250.9	102.26	49.76	0.487	0.688	48.68	Plagioclase	200 - 100
3944	6763.1	386.9	147.61	92.97	0.630	0.754	82.24	Plagioclase	200 - 100
1548	2654.5	242.8	92.79	52.38	0.565	0.752	51.52	Plagioclase	200 - 100
1791	3071.2	286.3	116.89	44.52	0.381	0.686	55.42	Plagioclase	200 - 100
1481	2539.6	399.9	186.32	55.00	0.295	0.447	50.39	Glass	200 - 100
21	36.0	21.4	5.34	5.24	0.981	0.996	6.00	Orthopyroxene	200 - 100
1305	2237.8	225.8	87.28	53.69	0.615	0.743	47.31	Glass	200 - 100
5597	9597.6	454.7	171.33	112.62	0.657	0.764	97.97	Glass	200 - 100
2140	3669.6	291.5	113.38	56.31	0.497	0.737	60.58	Plagioclase	200 - 100
7	12.0	9.7	2.43	2.62	1.078	1.265	3.46	Plagioclase	200 - 100
381	653.3	207.7	97.10	23.57	0.243	0.436	25.56	Orthopyroxene	200 - 100
11	18.9	13.4	3.35	3.93	1.173	1.148	4.34	Orthopyroxene	200 - 100
54	92.6	41.3	14.09	7.86	0.558	0.826	9.62	Plagioclase	200 - 100
830	1423.3	274.4	125.87	27.50	0.218	0.487	37.73	Plagioclase	200 - 100
3721	6380.7	371.9	140.56	86.43	0.615	0.761	79.88	Plagioclase	200 - 100
2146	3679.9	266.9	94.55	61.55	0.651	0.806	60.66	Olivine	200 - 100
670	1148.9	148.0	51.81	36.67	0.708	0.812	33.90	Plagioclase	200 - 100
2235	3832.5	354.3	151.90	48.45	0.319	0.619	61.91	Plagioclase	200 - 100

3852	6605.3	420.9	172.09	73.33	0.426	0.684	81.27	Orthopyroxene	200 - 100
417	715.1	124.9	47.33	26.19	0.553	0.759	26.74	Glass	200 - 100
1717	2944.3	253.9	96.39	61.55	0.639	0.758	54.26	Plagioclase	200 - 100
302	517.9	100.1	35.39	26.19	0.740	0.806	22.76	Orthopyroxene	200 - 100
63	108.0	42.5	12.87	11.79	0.916	0.866	10.39	Plagioclase	200 - 100
6499	11144.3	525.3	209.44	100.83	0.481	0.712	105.57	Plagioclase	200 - 100
422	723.6	151.0	64.25	23.57	0.367	0.631	26.90	Glass	200 - 100
1551	2659.6	267.1	109.19	70.71	0.648	0.684	51.57	Plagioclase	200 - 100
2399	4113.7	386.1	168.68	44.52	0.264	0.589	64.14	Orthopyroxene	200 - 100
2271	3894.2	308.4	122.40	61.55	0.503	0.717	62.40	Orthopyroxene	200 - 100
3074	5271.2	427.0	184.98	79.88	0.432	0.603	72.60	Plagioclase	200 - 100
3620	6207.5	356.0	130.38	90.35	0.693	0.785	78.79	Plagioclase	200 - 100
2318	3974.8	342.5	143.58	47.14	0.328	0.652	63.05	Olivine	200 - 100
7680	13169.4	716.4	316.62	121.78	0.385	0.568	114.76	Orthopyroxene	200 - 100
8	13.7	18.3	7.28	3.93	0.540	0.716	3.70	Plagioclase	200 - 100
1880	3223.8	381.7	172.13	68.09	0.396	0.527	56.78	Glass	200 - 100
504	864.2	163.2	69.06	23.57	0.341	0.639	29.40	Plagioclase	200 - 100
1913	3280.4	255.9	92.45	58.93	0.637	0.793	57.27	Orthopyroxene	200 - 100
1793	3074.6	269.8	105.87	61.55	0.581	0.728	55.45	Chlorite	200 - 100
1930	3309.5	285.0	113.27	53.69	0.474	0.716	57.53	Plagioclase	200 - 100
2057	3527.3	271.6	100.83	74.64	0.740	0.775	59.39	Plagioclase	200 - 100
13	22.3	17.5	4.38	3.93	0.897	0.956	4.72	Glass	200 - 100
854	1464.4	319.9	150.22	52.38	0.349	0.424	38.27	Glass	200 - 100
4385	7519.3	428.9	170.32	81.19	0.477	0.717	86.71	Olivine	200 - 100
4509	7731.9	618.5	281.84	61.55	0.218	0.504	87.93	Glass	200 - 100
5202	8920.2	466.7	185.20	112.62	0.608	0.717	94.45	Plagioclase	200 - 100
186	319.0	94.8	39.26	17.02	0.434	0.668	17.86	Plagioclase	200 - 100
2272	3896.0	518.6	243.26	47.14	0.194	0.427	62.42	Plagioclase	200 - 100
647	1109.5	164.3	65.10	37.98	0.583	0.719	33.31	Olivine	200 - 100
11	18.9	14.2	3.54	3.93	1.110	1.086	4.34	Quartz	200 - 100
297	509.3	181.5	84.75	22.26	0.263	0.441	22.57	Plagioclase	200 - 100
7	12.0	12.0	3.00	2.62	0.873	1.023	3.46	Quartz	200 - 100
4102	7034.0	375.6	136.15	96.90	0.712	0.791	83.87	Clinopyroxene	200 - 100
22	37.7	24.0	5.99	3.93	0.656	0.909	6.14	Glass	200 - 100
923	1582.7	214.6	89.66	41.90	0.467	0.657	39.78	Plagioclase	200 - 100
2919	5005.4	434.0	190.73	79.88	0.419	0.578	70.75	Glass	200 - 100
9	15.4	12.7	3.16	3.93	1.244	1.101	3.93	Quartz	200 - 100
146	250.4	78.6	31.30	19.64	0.627	0.714	15.82	Clinopyroxene	200 - 100
1529	2621.9	265.2	108.43	52.38	0.483	0.684	51.20	Clinopyroxene	200 - 100
2037	3493.0	367.0	161.93	53.69	0.332	0.571	59.10	Plagioclase	200 - 100
6646	11396.4	654.5	287.62	116.54	0.405	0.578	106.75	Plagioclase	200 - 100
1606	2753.9	247.3	94.54	48.45	0.512	0.752	52.48	Plagioclase	200 - 100
18	30.9	28.4	11.53	3.93	0.341	0.693	5.56	Apatite	200 - 100
3679	6308.6	375.7	144.07	83.81	0.582	0.749	79.43	Olivine	200 - 100
88	150.9	51.6	16.79	14.40	0.858	0.845	12.28	Orthopyroxene	200 - 100
81	138.9	55.2	20.99	11.79	0.562	0.757	11.79	Orthopyroxene	200 - 100
2670	4578.4	509.2	235.12	82.50	0.351	0.471	67.66	Glass	200 - 100
6951	11919.4	793.4	363.95	104.76	0.288	0.488	109.18	FeOx	200 - 100
3972	6811.1	596.3	273.20	110.00	0.403	0.491	82.53	Plagioclase	200 - 100
107	183.5	74.8	31.58	14.40	0.456	0.642	13.55	Plagioclase	200 - 100
14	24.0	21.1	7.25	3.93	0.542	0.822	4.90	Plagioclase	200 - 100
8514	14599.6	651.0	271.80	128.33	0.472	0.658	120.83	Plagioclase	200 - 100
4564	7826.2	413.1	156.59	112.62	0.719	0.759	88.47	Plagioclase	200 - 100
786	1347.8	177.6	69.38	30.12	0.434	0.733	36.71	Plagioclase	200 - 100
1014	1738.8	233.9	99.46	34.05	0.342	0.632	41.70	Plagioclase	200 - 100
4425	7587.9	378.4	131.52	98.21	0.747	0.816	87.11	Albite	200 - 100
5472	9383.2	474.0	186.77	86.43	0.463	0.724	96.87	Plagioclase	200 - 100

4185	7176.3	432.7	175.41	100.83	0.575	0.694	84.71	Orthopyroxene	200 - 100
547	938.0	142.5	53.78	35.36	0.657	0.762	30.63	FeOx	200 - 100
2243	3846.2	445.9	204.12	41.90	0.205	0.493	62.02	Plagioclase	200 - 100
6852	11749.6	696.4	310.32	134.88	0.435	0.552	108.40	Ilmenite	200 - 100
414	709.9	151.5	64.81	35.36	0.546	0.623	26.64	Plagioclase	200 - 100
992	1701.1	247.6	108.07	56.31	0.521	0.590	41.24	Plagioclase	200 - 100
17044	29226.5	1047.0	459.93	195.11	0.424	0.579	170.96	Glass	200 - 100
1693	2903.1	258.4	100.23	57.62	0.575	0.739	53.88	Glass	200 - 100
996	1707.9	240.5	103.82	49.76	0.479	0.609	41.33	Plagioclase	200 - 100
733	1256.9	172.5	67.66	41.90	0.619	0.729	35.45	Plagioclase	200 - 100
7215	12372.1	497.2	179.81	138.81	0.772	0.793	111.23	Plagioclase	200 - 100
150	257.2	79.4	31.51	18.33	0.582	0.716	16.04	Orthopyroxene	200 - 100
9051	15520.4	704.5	300.60	123.09	0.409	0.627	124.58	Plagioclase	200 - 100
1847	3167.2	259.4	97.09	66.78	0.688	0.769	56.28	Plagioclase	200 - 100
179	306.9	80.8	30.28	18.33	0.605	0.768	17.52	Orthopyroxene	200 - 100
4432	7599.9	391.4	142.27	106.07	0.746	0.790	87.18	Plagioclase	200 - 100
10840	18588.1	587.0	201.02	157.14	0.782	0.823	136.34	Plagioclase	200 - 100
927	1589.6	195.7	77.26	45.83	0.593	0.722	39.87	Orthopyroxene	200 - 100
2153	3691.9	374.0	164.57	47.14	0.286	0.576	60.76	Plagioclase	200 - 100
3687	6322.4	424.9	176.66	75.95	0.430	0.663	79.51	Glass	200 - 100
2826	4845.9	393.7	168.03	58.93	0.351	0.627	69.61	Glass	200 - 100
9383	16089.7	585.8	219.64	120.47	0.548	0.768	126.85	Plagioclase	200 - 100
1043	1788.5	291.9	132.47	27.50	0.208	0.514	42.29	Apatite	200 - 100
2118	3631.9	279.1	104.96	70.71	0.674	0.765	60.27	Plagioclase	200 - 100
175	300.1	80.7	30.49	20.95	0.687	0.761	17.32	Plagioclase	200 - 100
2996	5137.5	405.2	172.91	95.59	0.553	0.627	71.68	Plagioclase	200 - 100
97	166.3	56.0	19.47	11.79	0.606	0.816	12.90	Plagioclase	200 - 100
2665	4569.9	387.9	166.52	73.33	0.440	0.618	67.60	Plagioclase	200 - 100
490	840.2	176.9	77.61	24.88	0.321	0.581	28.99	Plagioclase	200 - 100
5574	9558.1	490.0	196.30	91.66	0.467	0.707	97.77	Glass	200 - 100
2533	4343.5	347.1	143.22	68.09	0.475	0.673	65.91	Plagioclase	200 - 100
724	1241.5	184.6	75.97	32.74	0.431	0.677	35.23	Plagioclase	200 - 100
3364	5768.5	446.4	193.37	95.59	0.494	0.603	75.95	Plagioclase	200 - 100
42	72.0	43.7	17.79	6.55	0.368	0.689	8.49	Olivine	200 - 100
3461	5934.8	344.0	124.19	75.95	0.612	0.794	77.04	Glass	200 - 100
1018	1745.6	269.7	120.32	31.43	0.261	0.549	41.78	Olivine	200 - 100
715	1226.1	169.3	66.10	34.05	0.515	0.733	35.02	Glass	200 - 100
1600	2743.6	270.1	110.14	45.83	0.416	0.687	52.38	Olivine	200 - 100
123	210.9	61.4	20.27	13.09	0.646	0.839	14.52	Plagioclase	200 - 100
1587	2721.3	303.5	130.94	62.86	0.480	0.609	52.17	Plagioclase	200 - 100
1884	3230.6	268.5	102.86	56.31	0.547	0.750	56.84	Glass	200 - 100
1327	2275.5	252.6	104.54	34.05	0.326	0.669	47.70	Plagioclase	200 - 100
3995	6850.5	450.4	188.95	92.97	0.492	0.651	82.77	Plagioclase	200 - 100
990	1697.6	223.0	93.30	40.59	0.435	0.655	41.20	Glass	200 - 100
599	1027.2	148.6	55.92	37.98	0.679	0.765	32.05	Plagioclase	200 - 100
2527	4333.2	289.8	102.70	66.78	0.650	0.805	65.83	Plagioclase	200 - 100
1638	2808.8	232.2	81.70	62.86	0.769	0.809	53.00	Orthopyroxene	200 - 100
4909	8417.8	574.0	253.84	106.07	0.418	0.567	91.75	Glass	200 - 100
3079	5279.8	316.8	110.73	82.50	0.745	0.813	72.66	Plagioclase	200 - 100
135	231.5	69.8	26.02	10.48	0.403	0.772	15.21	Plagioclase	200 - 100
6824	11701.6	831.4	385.35	151.90	0.394	0.461	108.17	Glass	200 - 100
6	10.3	11.1	2.77	2.62	0.946	1.025	3.21	Plagioclase	200 - 100
307	526.4	127.8	54.16	23.57	0.435	0.637	22.94	Plagioclase	200 - 100
9728	16681.3	763.8	331.57	167.62	0.506	0.599	129.16	Plagioclase	200 - 100
409	701.3	158.2	68.90	30.12	0.437	0.594	26.48	Glass	200 - 100
64	109.8	60.8	26.19	7.86	0.300	0.611	10.48	Plagioclase	200 - 100
9534	16348.6	954.5	440.12	132.26	0.301	0.475	127.86	Orthopyroxene	200 - 100

4137	7094.0	486.1	209.12	90.35	0.432	0.614	84.23	Glass	200 - 100
8477	14536.1	578.3	224.38	133.57	0.595	0.739	120.57	Orthopyroxene	200 - 100
2751	4717.3	354.9	144.88	58.93	0.407	0.686	68.68	Plagioclase	200 - 100
6	10.3	11.6	2.89	3.93	1.360	0.984	3.21	Plagioclase	200 - 100
1799	3084.9	341.1	149.97	39.28	0.262	0.577	55.54	Orthopyroxene	200 - 100
202	346.4	114.6	50.44	23.57	0.467	0.576	18.61	Orthopyroxene	200 - 100
8624	14788.2	563.6	212.03	138.81	0.655	0.765	121.61	Plagioclase	200 - 100
1367	2344.1	314.4	140.52	48.45	0.345	0.546	48.42	Plagioclase	200 - 100
3840	6584.7	576.7	263.34	53.69	0.204	0.499	81.15	Clinopyroxene	200 - 100
21	36.0	35.9	15.65	5.24	0.335	0.593	6.00	Clinopyroxene	200 - 100
10226	17535.2	790.0	344.02	171.54	0.499	0.594	132.42	Plagioclase	200 - 100
7	12.0	11.9	2.97	2.62	0.882	1.034	3.46	Plagioclase	200 - 100
1869	3204.9	319.2	136.04	57.62	0.424	0.629	56.61	Plagioclase	200 - 100
365	625.9	141.6	60.46	19.64	0.325	0.626	25.02	Plagioclase	200 - 100
1021	1750.8	267.2	118.85	47.14	0.397	0.555	41.84	Plagioclase	200 - 100
2382	4084.6	314.8	124.64	57.62	0.462	0.720	63.91	Plagioclase	200 - 100
49	84.0	60.9	27.40	5.24	0.191	0.533	9.17	Plagioclase	200 - 100
2823	4840.8	305.4	107.80	74.64	0.692	0.808	69.58	Orthopyroxene	200 - 100
47	80.6	51.4	22.06	9.17	0.416	0.619	8.98	Plagioclase	200 - 100
7	12.0	10.0	2.51	3.93	1.566	1.224	3.46	Glass	200 - 100
845	1449.0	202.0	83.71	35.36	0.422	0.668	38.07	Plagioclase	200 - 100
80	137.2	44.6	11.15	13.09	1.174	0.931	11.71	Plagioclase	200 - 100
836	1433.6	231.2	101.44	44.52	0.439	0.581	37.86	Plagioclase	200 - 100
1267	2172.6	232.0	92.50	64.17	0.694	0.712	46.61	Plagioclase	200 - 100
1209	2073.2	340.0	156.76	43.21	0.276	0.475	45.53	Glass	200 - 100
6712	11509.5	454.2	150.77	115.24	0.764	0.837	107.28	Chlorite	200 - 100
4164	7140.3	409.2	159.99	89.05	0.557	0.732	84.50	Plagioclase	200 - 100
4630	7939.4	427.3	165.77	112.62	0.679	0.739	89.10	Glass	200 - 100
320	548.7	177.1	81.83	13.09	0.160	0.469	23.42	Plagioclase	200 - 100
1899	3256.4	248.2	86.43	53.69	0.621	0.815	57.06	Plagioclase	200 - 100
1862	3192.9	331.0	143.19	48.45	0.338	0.605	56.51	Plagioclase	200 - 100
5008	8587.6	503.0	210.76	92.97	0.441	0.653	92.67	Clinopyroxene	200 - 100
5325	9131.2	683.7	312.66	107.38	0.343	0.495	95.56	Glass	200 - 100
1438	2465.8	217.7	76.73	52.38	0.683	0.808	49.66	Olivine	200 - 100
4798	8227.5	435.1	168.81	89.05	0.528	0.739	90.71	Orthopyroxene	200 - 100
5227	8963.1	417.9	148.69	94.28	0.634	0.803	94.67	Plagioclase	200 - 100
8991	15417.5	630.0	254.40	91.66	0.360	0.699	124.17	Orthopyroxene	200 - 100
79	135.5	48.5	15.49	13.09	0.845	0.851	11.64	Plagioclase	200 - 100
3074	5271.2	334.7	125.30	92.97	0.742	0.769	72.60	Plagioclase	200 - 100
5654	9695.3	462.0	175.88	89.05	0.506	0.755	98.46	Plagioclase	200 - 100
6726	11533.5	665.4	293.37	103.45	0.353	0.572	107.39	Glass	200 - 100
77	132.0	65.0	27.73	7.86	0.283	0.627	11.49	Plagioclase	200 - 100
1551	2659.6	292.3	124.84	37.98	0.304	0.625	51.57	Plagioclase	200 - 100
821	1407.8	183.5	72.26	44.52	0.616	0.725	37.52	Plagioclase	200 - 100
2889	4954.0	353.1	141.57	68.09	0.481	0.707	70.38	Glass	200 - 100
431	739.1	142.0	58.33	23.57	0.404	0.679	27.19	Plagioclase	200 - 100
20	34.3	22.6	5.64	2.62	0.465	0.921	5.86	Plagioclase	200 - 100
57	97.7	45.4	16.93	9.17	0.542	0.772	9.89	Plagioclase	200 - 100
3086	5291.8	411.8	175.80	61.55	0.350	0.626	72.74	Plagioclase	200 - 100
21	36.0	19.7	4.93	6.55	1.329	1.078	6.00	Plagioclase	200 - 100
7167	12289.8	556.2	222.95	111.31	0.499	0.707	110.86	Plagioclase	200 - 100
3383	5801.1	378.8	150.99	86.43	0.572	0.713	76.16	Plagioclase	200 - 100
340	583.0	117.1	45.82	17.02	0.371	0.731	24.15	Plagioclase	200 - 100
40	68.6	39.0	14.87	3.93	0.264	0.754	8.28	Glass	200 - 100
42	72.0	38.4	14.09	10.48	0.744	0.783	8.49	Plagioclase	200 - 100
15	25.7	19.4	4.85	5.24	1.080	0.926	5.07	Glass	200 - 100
2266	3885.7	409.8	183.75	48.45	0.264	0.539	62.34	Orthopyroxene	200 - 100

359	615.6	195.6	91.06	18.33	0.201	0.450	24.81	Clinopyroxene	200 - 100
2390	4098.3	303.6	116.70	56.31	0.483	0.747	64.02	Plagioclase	200 - 100
2613	4480.7	447.1	201.29	69.40	0.345	0.531	66.94	Glass	200 - 100
2593	4446.4	430.0	191.80	48.45	0.253	0.550	66.68	Plagioclase	200 - 100
2067	3544.4	275.9	103.80	61.55	0.593	0.765	59.54	Plagioclase	200 - 100
59	101.2	43.8	15.27	11.79	0.772	0.814	10.06	Plagioclase	200 - 100
79	135.5	48.4	15.42	9.17	0.595	0.852	11.64	Plagioclase	200 - 100
1048	1797.1	204.4	79.60	61.55	0.773	0.735	42.39	Plagioclase	200 - 100
3647	6253.8	371.7	141.71	85.12	0.601	0.754	79.08	Plagioclase	200 - 100
2716	4657.3	297.3	103.75	72.02	0.694	0.814	68.24	Glass	200 - 100
19	32.6	19.5	4.88	3.93	0.805	1.038	5.71	sphene?	200 - 100
20	34.3	24.8	8.26	7.86	0.952	0.836	5.86	Glass	200 - 100
1862	3192.9	272.1	105.87	72.02	0.680	0.736	56.51	Orthopyroxene	200 - 100
753	1291.2	174.0	68.01	34.05	0.501	0.732	35.93	Plagioclase	200 - 100
3499	6000.0	373.6	145.62	73.33	0.504	0.735	77.46	Plagioclase	200 - 100
536	919.1	142.1	54.04	28.81	0.533	0.756	30.32	Glass	200 - 100
4353	7464.4	410.0	157.65	92.97	0.590	0.747	86.40	Plagioclase	200 - 100
3196	5480.4	318.2	108.65	85.12	0.783	0.825	74.03	Glass	200 - 100
216	370.4	109.1	46.58	11.79	0.253	0.626	19.25	Olivine	200 - 100
3623	6212.6	409.1	167.45	72.02	0.430	0.683	78.82	Plagioclase	200 - 100
127	217.8	65.0	23.02	13.09	0.569	0.805	14.76	Plagioclase	200 - 100
582	998.0	183.7	79.27	32.74	0.413	0.610	31.59	Glass	200 - 100
11	18.9	17.9	5.53	1.31	0.237	0.861	4.34	Plagioclase	200 - 100
3059	5245.5	430.2	187.08	58.93	0.315	0.597	72.43	Plagioclase	200 - 100
402	689.3	131.4	52.62	17.02	0.323	0.708	26.26	Plagioclase	200 - 100
545	934.6	170.6	72.40	30.12	0.416	0.635	30.57	Plagioclase	200 - 100
8802	15093.4	559.7	206.89	155.83	0.753	0.778	122.86	Plagioclase	200 - 100
4443	7618.7	418.9	162.60	106.07	0.652	0.739	87.29	Plagioclase	200 - 100
8424	14445.2	644.4	268.35	119.16	0.444	0.661	120.19	Plagioclase	200 - 100
4254	7294.6	360.9	119.32	96.90	0.812	0.839	85.41	Plagioclase	200 - 100
4232	7256.9	504.9	219.36	110.00	0.501	0.598	85.19	Plagioclase	200 - 100
8065	13829.6	619.1	255.39	113.93	0.446	0.673	117.60	Orthopyroxene	200 - 100
287	492.1	102.6	38.55	23.57	0.611	0.766	22.18	Glass	200 - 100
4894	8392.1	432.7	165.73	99.52	0.600	0.750	91.61	Plagioclase	200 - 100
125	214.4	64.5	22.86	15.71	0.687	0.805	14.64	Plagioclase	200 - 100
138	236.6	65.8	22.29	14.40	0.646	0.828	15.38	Epidote	200 - 100
50	85.7	50.6	21.24	10.48	0.493	0.649	9.26	Glass	200 - 100
1421	2436.7	243.3	96.37	48.45	0.503	0.719	49.36	Chlorite	200 - 100
2926	5017.4	390.3	164.65	79.88	0.485	0.643	70.83	Plagioclase	200 - 100
5972	10240.6	491.9	192.83	75.95	0.394	0.729	101.20	Plagioclase	200 - 100
17	29.2	20.7	5.17	5.24	1.014	0.925	5.40	Chlorite	200 - 100
473	811.1	133.0	50.43	27.50	0.545	0.759	28.48	Glass	200 - 100
460	788.8	177.5	78.74	32.74	0.416	0.561	28.09	Plagioclase	200 - 100
3841	6586.4	430.3	178.17	100.83	0.566	0.669	81.16	Calcite	200 - 100
166	284.7	81.9	32.06	14.40	0.449	0.730	16.87	Plagioclase	200 - 100
779	1335.8	190.7	78.26	23.57	0.301	0.680	36.55	Plagioclase	200 - 100
1400	2400.7	233.3	89.99	49.76	0.553	0.744	49.00	Epidote	200 - 100
14	24.0	25.7	10.61	2.62	0.247	0.675	4.90	Plagioclase	200 - 100
414	709.9	137.2	55.93	30.12	0.539	0.688	26.64	Orthopyroxene	200 - 100
10305	17670.7	872.9	391.29	142.73	0.365	0.540	132.93	Glass	200 - 100
742	1272.4	201.1	85.68	34.05	0.397	0.629	35.67	Albite	200 - 100
23	39.4	25.3	6.98	3.93	0.563	0.881	6.28	Plagioclase	200 - 100
640	1097.5	193.2	83.44	28.81	0.345	0.608	33.13	Clinopyroxene	200 - 100
286	490.4	134.0	58.61	15.71	0.268	0.586	22.15	Olivine	200 - 100
379	649.9	139.1	58.45	22.26	0.381	0.649	25.49	Plagioclase	200 - 100
12	20.6	17.1	4.28	3.93	0.918	0.939	4.54	Plagioclase	200 - 100
11	18.9	13.4	3.35	2.62	0.782	1.148	4.34	Plagioclase	200 - 100

379	649.9	109.0	36.90	24.88	0.674	0.829	25.49	Clinopyroxene	200 - 100
4060	6962.0	357.5	121.37	86.43	0.712	0.827	83.44	Glass	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Plagioclase	200 - 100
4193	7190.0	380.3	138.08	107.38	0.778	0.790	84.79	Orthopyroxene	200 - 100
643	1102.6	171.3	69.84	39.28	0.562	0.687	33.21	Chlorite	200 - 100
1935	3318.1	382.6	172.01	85.12	0.495	0.534	57.60	Glass	200 - 100
24	41.2	30.8	11.99	2.62	0.219	0.737	6.41	Plagioclase	200 - 100
3294	5648.5	377.7	151.57	73.33	0.484	0.705	75.16	Plagioclase	200 - 100
12	20.6	17.9	4.47	5.24	1.172	0.899	4.54	Clinopyroxene	200 - 100
2428	4163.5	559.8	264.15	81.19	0.307	0.409	64.52	Plagioclase	200 - 100
8	13.7	14.2	3.54	3.93	1.110	0.926	3.70	Orthopyroxene	200 - 100
139	238.4	71.2	26.65	18.33	0.688	0.769	15.44	Clinopyroxene	200 - 100
841	1442.1	241.5	107.33	35.36	0.329	0.557	37.98	Plagioclase	200 - 100
2551	4374.4	334.1	134.52	66.78	0.496	0.702	66.14	Plagioclase	200 - 100
119	204.1	64.4	23.52	17.02	0.724	0.786	14.28	Clinopyroxene	200 - 100
42	72.0	36.0	11.97	9.17	0.766	0.836	8.49	Plagioclase	200 - 100
9369	16065.7	671.3	277.83	106.07	0.382	0.669	126.75	Plagioclase	200 - 100
5355	9182.6	444.0	167.05	98.21	0.588	0.765	95.83	Glass	200 - 100
322	552.2	102.6	35.97	23.57	0.655	0.812	23.50	Plagioclase	200 - 100
1748	2997.4	300.6	126.62	44.52	0.352	0.646	54.75	Plagioclase	200 - 100
3100	5315.8	365.5	146.44	57.62	0.393	0.707	72.91	Plagioclase	200 - 100
1444	2476.1	284.7	122.09	48.45	0.397	0.620	49.76	Clinopyroxene	200 - 100
169	289.8	90.9	37.81	23.57	0.623	0.664	17.02	Glass	200 - 100
25	42.9	31.7	12.40	7.86	0.634	0.732	6.55	Glass	200 - 100
689	1181.5	159.6	60.13	32.74	0.544	0.764	34.37	Plagioclase	200 - 100
1158	1985.7	219.4	86.85	48.45	0.558	0.720	44.56	Plagioclase	200 - 100
7	12.0	13.2	3.29	3.93	1.195	0.932	3.46	Glass	200 - 100
3779	6480.1	471.8	204.18	64.17	0.314	0.605	80.50	Plagioclase	200 - 100
53	90.9	41.9	14.78	9.17	0.620	0.807	9.53	Orthopyroxene	200 - 100
1199	2056.0	226.4	90.46	47.14	0.521	0.710	45.34	Plagioclase	200 - 100
162	277.8	100.9	44.18	22.26	0.504	0.585	16.67	Glass	200 - 100
939	1610.2	201.5	80.82	45.83	0.567	0.706	40.13	Plagioclase	200 - 100
16	27.4	21.6	6.70	3.93	0.587	0.860	5.24	Plagioclase	200 - 100
173	296.7	74.0	25.26	22.26	0.881	0.825	17.22	Plagioclase	200 - 100
833	1428.4	245.8	109.92	49.76	0.453	0.545	37.79	Glass	200 - 100
3355	5753.1	529.7	240.97	48.45	0.201	0.508	75.85	Plagioclase	200 - 100
2062	3535.9	352.4	153.12	74.64	0.487	0.598	59.46	Glass	200 - 100
9549	16374.3	540.9	178.99	141.43	0.790	0.839	127.96	Glass	200 - 100
2149	3685.0	279.8	104.69	57.62	0.550	0.769	60.70	Plagioclase	200 - 100
5548	9513.6	584.8	255.11	123.09	0.482	0.591	97.54	Plagioclase	200 - 100
34	58.3	36.2	13.93	6.55	0.470	0.747	7.64	Plagioclase	200 - 100
607	1040.9	140.1	48.65	43.21	0.888	0.816	32.26	Plagioclase	200 - 100
4563	7824.5	482.2	202.48	62.86	0.310	0.650	88.46	Plagioclase	200 - 100
1646	2822.5	333.3	147.51	73.33	0.497	0.565	53.13	Plagioclase	200 - 100
5916	10144.6	482.5	186.98	108.69	0.581	0.740	100.72	Olivine	200 - 100
1633	2800.2	259.4	102.36	41.90	0.409	0.723	52.92	Glass	200 - 100
91	156.0	59.0	22.59	9.17	0.406	0.751	12.49	Olivine	200 - 100
11	18.9	13.2	3.29	3.93	1.195	1.168	4.34	Plagioclase	200 - 100
3650	6258.9	352.1	126.64	91.66	0.724	0.796	79.11	Glass	200 - 100
140	240.1	74.8	29.20	13.09	0.448	0.734	15.49	Olivine	200 - 100
1665	2855.1	258.9	101.26	60.24	0.595	0.732	53.43	Plagioclase	200 - 100
3889	6668.7	344.7	113.67	82.50	0.726	0.840	81.66	Plagioclase	200 - 100
458	785.4	198.6	90.64	20.95	0.231	0.500	28.02	Glass	200 - 100
2506	4297.2	336.9	137.08	64.17	0.468	0.690	65.55	Orthopyroxene	200 - 100
123	210.9	69.2	26.67	14.40	0.540	0.745	14.52	Plagioclase	200 - 100
1403	2405.8	302.6	133.24	35.36	0.265	0.575	49.05	Olivine	200 - 100
1760	3018.0	288.4	118.79	56.31	0.474	0.675	54.94	Plagioclase	200 - 100

411	704.8	135.2	54.74	19.64	0.359	0.696	26.55	Plagioclase	200 - 100
2156	3697.0	347.8	149.11	47.14	0.316	0.620	60.80	Plagioclase	200 - 100
3561	6106.3	404.9	165.57	72.02	0.435	0.684	78.14	Glass	200 - 100
1540	2640.8	267.7	109.79	36.67	0.334	0.681	51.39	Chlorite	200 - 100
495	848.8	151.3	61.95	22.26	0.359	0.683	29.13	Plagioclase	200 - 100
647	1109.5	169.9	68.82	36.67	0.533	0.695	33.31	Olivine	200 - 100
1055	1809.1	200.7	76.81	39.28	0.511	0.751	42.53	Plagioclase	200 - 100
401	687.6	121.7	45.87	24.88	0.542	0.764	26.22	Glass	200 - 100
354	607.0	138.5	58.97	28.81	0.489	0.631	24.64	Quartz	200 - 100
1561	2676.8	221.2	74.84	68.09	0.910	0.829	51.74	Plagioclase	200 - 100
4832	8285.8	409.9	149.51	104.76	0.701	0.787	91.03	Plagioclase	200 - 100
3123	5355.2	358.4	141.31	79.88	0.565	0.724	73.18	Plagioclase	200 - 100
3490	5984.6	407.0	167.85	96.90	0.577	0.674	77.36	Plagioclase	200 - 100
11149	19118.0	866.9	383.59	132.26	0.345	0.565	138.27	Plagioclase	200 - 100
4008	6872.8	376.9	139.01	66.78	0.480	0.780	82.90	Plagioclase	200 - 100
2834	4859.7	340.5	134.00	85.12	0.635	0.726	69.71	Glass	200 - 100
2552	4376.1	286.3	98.87	77.26	0.781	0.819	66.15	Plagioclase	200 - 100
1226	2102.3	272.4	118.45	30.12	0.254	0.597	45.85	Clinopyroxene	200 - 100
3207	5499.3	327.1	116.25	79.88	0.687	0.804	74.16	Glass	200 - 100
7495	12852.2	715.0	316.93	123.09	0.388	0.562	113.37	Plagioclase	200 - 100
11293	19364.9	1301.3	619.39	161.07	0.260	0.379	139.16	Glass	200 - 100
570	977.4	128.0	38.78	31.43	0.810	0.866	31.26	Plagioclase	200 - 100
2358	4043.4	301.0	115.52	74.64	0.646	0.749	63.59	Glass	200 - 100
30	51.4	37.2	15.19	9.17	0.604	0.684	7.17	Plagioclase	200 - 100
3467	5945.1	364.3	139.54	81.19	0.582	0.750	77.10	Glass	200 - 100
53	90.9	43.8	16.33	5.24	0.321	0.772	9.53	Plagioclase	200 - 100
408	699.6	156.0	67.67	35.36	0.523	0.601	26.45	Glass	200 - 100
165	282.9	95.9	41.04	11.79	0.287	0.622	16.82	Plagioclase	200 - 100
5338	9153.4	504.8	208.49	104.76	0.502	0.672	95.67	Plagioclase	200 - 100
3923	6727.0	413.6	166.33	89.05	0.535	0.703	82.02	Orthopyroxene	200 - 100
13229	22684.7	1128.9	520.90	182.02	0.349	0.473	150.61	Ilmenite	200 - 100
11646	19970.2	675.3	261.16	179.40	0.687	0.742	141.32	Plagioclase	200 - 100
2338	4009.1	285.6	104.40	65.47	0.627	0.786	63.32	Plagioclase	200 - 100
1008	1728.5	191.4	71.55	37.98	0.531	0.770	41.58	Plagioclase	200 - 100
2225	3815.4	257.9	82.91	68.09	0.821	0.849	61.77	Glass	200 - 100
186	319.0	122.0	55.23	7.86	0.142	0.519	17.86	Glass	200 - 100
3899	6685.9	497.9	218.35	77.26	0.354	0.582	81.77	Plagioclase	200 - 100
1768	3031.7	275.5	110.25	56.31	0.511	0.709	55.06	Plagioclase	200 - 100
10	17.2	15.0	3.76	2.62	0.697	0.977	4.14	Glass	200 - 100
1282	2198.3	237.9	96.05	45.83	0.477	0.699	46.89	Olivine	200 - 100
5535	9491.3	441.1	161.94	112.62	0.695	0.783	97.42	Plagioclase	200 - 100
729	1250.1	192.3	80.66	39.28	0.487	0.652	35.36	Plagioclase	200 - 100
5375	9216.9	918.8	438.35	129.64	0.296	0.370	96.00	Orthopyroxene	200 - 100
2585	4432.7	302.5	111.49	78.57	0.705	0.780	66.58	Olivine	200 - 100
4260	7304.9	544.6	242.15	104.76	0.433	0.556	85.47	Olivine	200 - 100
10	17.2	14.2	3.54	2.62	0.740	1.035	4.14	Glass	200 - 100
3097	5310.6	367.1	147.54	74.64	0.506	0.704	72.87	Plagioclase	200 - 100
6	10.3	8.7	2.18	3.93	1.803	1.306	3.21	Glass	200 - 100
7649	13116.3	790.1	358.45	141.43	0.395	0.514	114.53	Glass	200 - 100
2389	4096.6	457.7	209.28	45.83	0.219	0.496	64.00	Plagioclase	200 - 100
4818	8261.8	584.1	260.33	95.59	0.367	0.552	90.89	Plagioclase	200 - 100
2341	4014.3	271.9	92.63	61.55	0.664	0.826	63.36	Plagioclase	200 - 100
1780	3052.3	262.8	101.24	58.93	0.582	0.745	55.25	Plagioclase	200 - 100
1398	2397.3	287.8	124.64	44.52	0.357	0.603	48.96	Orthopyroxene	200 - 100
6636	11379.2	499.8	190.03	130.95	0.689	0.757	106.67	Plagioclase	200 - 100
2658	4557.9	335.4	133.57	49.76	0.373	0.714	67.51	Olivine	200 - 100
11026	18907.1	1005.2	461.64	130.95	0.284	0.485	137.50	Plagioclase	200 - 100

6098	10456.7	727.8	332.45	78.57	0.236	0.498	102.26	Plagioclase	200 - 100
2511	4305.8	311.9	120.09	56.31	0.469	0.746	65.62	Orthopyroxene	200 - 100
311	533.3	95.7	30.17	26.19	0.868	0.856	23.09	Plagioclase	200 - 100
1121	1922.3	254.9	109.95	24.88	0.226	0.610	43.84	Glass	200 - 100
3490	5984.6	474.4	208.48	77.26	0.371	0.578	77.36	Plagioclase	200 - 100
4460	7647.9	400.3	148.72	81.19	0.546	0.774	87.45	Glass	200 - 100
896	1536.4	164.6	53.63	36.67	0.684	0.844	39.20	Plagioclase	200 - 100
1692	2901.4	494.0	234.62	81.19	0.346	0.387	53.86	Quartz	200 - 100
542	929.4	141.9	53.64	31.43	0.586	0.761	30.49	Plagioclase	200 - 100
9055	15527.2	722.6	311.46	150.59	0.483	0.611	124.61	Plagioclase	200 - 100
946	1622.2	196.2	77.04	37.98	0.493	0.728	40.28	Orthopyroxene	200 - 100
358	613.9	131.0	54.18	22.26	0.411	0.670	24.78	Plagioclase	200 - 100
232	397.8	90.2	33.03	28.81	0.872	0.784	19.95	Plagioclase	200 - 100
23690	40622.9	1701.0	799.72	175.47	0.219	0.420	201.55	Plagioclase	200 - 100
1584	2716.2	398.0	184.26	32.74	0.178	0.464	52.12	Orthopyroxene	200 - 100
8452	14493.2	647.7	270.18	102.14	0.378	0.659	120.39	Orthopyroxene	200 - 100
9022	15470.7	968.4	449.78	155.83	0.346	0.455	124.38	Orthopyroxene	200 - 100
187	320.7	97.6	40.99	15.71	0.383	0.650	17.91	Plagioclase	200 - 100
1788	3066.0	262.1	100.53	48.45	0.482	0.749	55.37	Orthopyroxene	200 - 100
33	56.6	33.6	12.11	7.86	0.649	0.794	7.52	Glass	200 - 100
385	660.2	160.6	70.99	18.33	0.258	0.567	25.69	Plagioclase	200 - 100
952	1632.5	218.1	91.16	44.52	0.488	0.657	40.40	Glass	200 - 100
1771	3036.9	363.6	163.17	73.33	0.449	0.537	55.11	Glass	200 - 100
1229	2107.5	291.8	129.62	53.69	0.414	0.558	45.91	Olivine	200 - 100
78	133.8	57.3	22.79	11.79	0.517	0.715	11.57	Plagioclase	200 - 100
2736	4691.6	316.1	118.41	79.88	0.675	0.768	68.50	Glass	200 - 100
353	605.3	109.1	39.04	19.64	0.503	0.799	24.60	Plagioclase	200 - 100
527	903.7	178.6	77.65	32.74	0.422	0.597	30.06	Plagioclase	200 - 100
1451	2488.1	225.2	82.39	52.38	0.636	0.785	49.88	Plagioclase	200 - 100
22	37.7	19.4	4.85	5.24	1.080	1.121	6.14	Glass	200 - 100
8432	14458.9	956.2	445.68	172.85	0.388	0.446	120.25	Plagioclase	200 - 100
1634	2801.9	295.8	125.58	41.90	0.334	0.634	52.93	Olivine	200 - 100
3836	6577.9	524.7	234.24	64.17	0.274	0.548	81.10	Glass	200 - 100
4173	7155.7	364.8	125.29	92.97	0.742	0.822	84.59	Olivine	200 - 100
2384	4088.0	342.5	142.56	73.33	0.514	0.662	63.94	Plagioclase	200 - 100
705	1208.9	175.4	70.54	28.81	0.408	0.703	34.77	Plagioclase	200 - 100
467	800.8	149.5	61.79	24.88	0.403	0.671	28.30	Plagioclase	200 - 100
2893	4960.8	406.3	174.75	83.81	0.480	0.615	70.43	Orthopyroxene	200 - 100
1342	2301.2	222.6	83.86	51.07	0.609	0.764	47.97	Plagioclase	200 - 100
2044	3505.0	336.1	143.67	47.14	0.328	0.624	59.20	Glass	200 - 100
4864	8340.6	437.6	169.60	75.95	0.448	0.740	91.33	Glass	200 - 100
114	195.5	80.0	34.27	13.09	0.382	0.620	13.98	Plagioclase	200 - 100
4857	8328.6	479.2	197.38	106.07	0.537	0.675	91.26	Glass	200 - 100
548	939.7	154.2	61.95	32.74	0.528	0.705	30.65	Plagioclase	200 - 100
2018	3460.4	305.1	124.80	48.45	0.388	0.684	58.83	Plagioclase	200 - 100
266	456.1	99.4	37.56	19.64	0.523	0.762	21.36	Plagioclase	200 - 100
29	49.7	30.3	10.33	7.86	0.761	0.826	7.05	Orthopyroxene	200 - 100
145	248.6	67.8	23.14	14.40	0.622	0.825	15.77	Orthopyroxene	200 - 100
11	18.9	13.4	3.35	2.62	0.782	1.148	4.34	Plagioclase	200 - 100
3037	5207.8	391.6	164.08	69.40	0.423	0.653	72.16	Glass	200 - 100
112	192.1	64.9	24.64	18.33	0.744	0.757	13.86	Orthopyroxene	200 - 100
371	636.2	122.1	47.71	27.50	0.576	0.732	25.22	Plagioclase	200 - 100
2178	3734.8	263.4	90.33	64.17	0.710	0.823	61.11	Clinopyroxene	200 - 100
7	12.0	11.6	2.89	2.62	0.907	1.062	3.46	Plagioclase	200 - 100
1889	3239.2	249.1	87.55	61.55	0.703	0.810	56.91	Plagioclase	200 - 100
8789	15071.1	1284.5	617.83	178.09	0.288	0.339	122.76	Plagioclase	200 - 100
282	483.6	100.7	37.42	18.33	0.490	0.774	21.99	Olivine	200 - 100

2251	3860.0	274.3	97.58	57.62	0.590	0.803	62.13	Plagioclase	200 - 100
1939	3324.9	304.6	125.90	77.26	0.614	0.671	57.66	Olivine	200 - 100
4231	7255.2	408.2	158.28	112.62	0.712	0.740	85.18	Plagioclase	200 - 100
37	63.5	36.4	13.49	6.55	0.486	0.776	7.97	Orthopyroxene	200 - 100
2519	4319.5	331.9	133.60	70.71	0.529	0.702	65.72	Plagioclase	200 - 100
6701	11490.7	452.1	148.85	116.54	0.783	0.841	107.19	Chlorite	200 - 100
9	15.4	12.4	3.10	2.62	0.845	1.122	3.93	Plagioclase	200 - 100
1408	2414.4	262.0	108.80	43.21	0.397	0.665	49.14	Plagioclase	200 - 100
3310	5675.9	403.7	168.10	83.81	0.499	0.662	75.34	Plagioclase	200 - 100
124	212.6	62.4	21.17	13.09	0.618	0.828	14.58	Olivine	200 - 100
20794	35656.9	2112.0	1021.09	208.21	0.204	0.317	188.83	Plagioclase	200 - 100
1002	1718.2	212.1	86.11	37.98	0.441	0.693	41.45	Plagioclase	200 - 100
1441	2471.0	313.9	139.17	66.78	0.480	0.561	49.71	Plagioclase	200 - 100
3300	5658.7	383.8	155.49	75.95	0.488	0.695	75.22	Plagioclase	200 - 100
918	1574.2	296.0	136.47	34.05	0.250	0.475	39.68	Olivine	200 - 100
1212	2078.3	240.7	99.47	32.74	0.329	0.671	45.59	Plagioclase	200 - 100
3201	5489.0	351.2	134.93	69.40	0.514	0.748	74.09	Olivine	200 - 100
2506	4297.2	372.0	158.97	81.19	0.511	0.625	65.55	Plagioclase	200 - 100
188	322.4	92.4	37.65	15.71	0.417	0.689	17.95	Plagioclase	200 - 100
3706	6354.9	408.3	165.84	91.66	0.553	0.692	79.72	Glass	200 - 100
1192	2044.0	204.5	75.02	45.83	0.611	0.784	45.21	Plagioclase	200 - 100
1184	2030.3	247.9	104.55	60.24	0.576	0.644	45.06	Plagioclase	200 - 100
1325	2272.1	331.9	150.88	66.78	0.443	0.509	47.67	Plagioclase	200 - 100
2087	3578.7	410.7	186.11	45.83	0.246	0.516	59.82	Glass	200 - 100
10399	17831.9	1051.3	489.19	172.85	0.353	0.450	133.54	Plagioclase	200 - 100
4716	8086.9	390.9	135.98	90.35	0.664	0.816	89.93	Plagioclase	200 - 100
1947	3338.7	306.7	127.05	52.38	0.412	0.668	57.78	Olivine	200 - 100
1714	2939.1	273.1	109.76	58.93	0.537	0.704	54.21	Glass	200 - 100
5125	8788.2	533.9	228.49	83.81	0.367	0.622	93.75	Olivine	200 - 100
1279	2193.2	254.1	106.45	52.38	0.492	0.653	46.83	Orthopyroxene	200 - 100
842	1443.8	182.3	70.73	35.36	0.500	0.739	38.00	Plagioclase	200 - 100
5031	8627.0	574.4	253.09	116.54	0.460	0.573	92.88	Plagioclase	200 - 100
1478	2534.4	299.0	129.98	44.52	0.343	0.597	50.34	Plagioclase	200 - 100
2494	4276.6	307.9	117.56	86.43	0.735	0.753	65.40	Plagioclase	200 - 100
2878	4935.1	312.1	112.00	87.74	0.783	0.798	70.25	Glass	200 - 100
4425	7587.9	396.2	146.17	110.00	0.753	0.779	87.11	Plagioclase	200 - 100
735	1260.4	181.9	73.88	35.36	0.479	0.692	35.50	Plagioclase	200 - 100
22	37.7	27.1	9.65	3.93	0.407	0.803	6.14	Plagioclase	200 - 100
1439	2467.6	248.5	99.41	64.17	0.646	0.709	49.67	Plagioclase	200 - 100
2931	5026.0	427.5	186.83	69.40	0.371	0.588	70.89	Plagioclase	200 - 100
1690	2898.0	324.8	142.02	56.31	0.396	0.587	53.83	Plagioclase	200 - 100
30534	52358.8	2802.1	1362.64	335.23	0.246	0.289	228.82	Plagioclase	200 - 100
439	752.8	181.7	81.64	27.50	0.337	0.535	27.44	Olivine	200 - 100
4521	7752.5	466.4	193.01	87.74	0.455	0.669	88.05	Plagioclase	200 - 100
1872	3210.1	266.0	101.28	49.76	0.491	0.755	56.66	Plagioclase	200 - 100
2778	4763.6	375.6	157.57	85.12	0.540	0.651	69.02	Plagioclase	200 - 100
846	1450.7	177.4	67.07	40.59	0.605	0.761	38.09	Olivine	200 - 100
1450	2486.4	250.4	100.42	32.74	0.326	0.706	49.86	Plagioclase	200 - 100
2313	3966.3	302.0	117.14	43.21	0.369	0.739	62.98	Plagioclase	200 - 100
4582	7857.1	375.1	124.35	82.50	0.663	0.838	88.64	Glass	200 - 100
273	468.1	108.7	43.62	19.64	0.450	0.706	21.64	Glass	200 - 100
2948	5055.1	344.7	134.87	75.95	0.563	0.731	71.10	Plagioclase	200 - 100
923	1582.7	176.3	63.02	45.83	0.727	0.800	39.78	Glass	200 - 100
5992	10274.9	1097.1	529.11	178.09	0.337	0.328	101.37	Plagioclase	200 - 100
1523	2611.6	363.5	166.04	32.74	0.197	0.498	51.10	Olivine	200 - 100
48	82.3	39.8	14.01	9.17	0.655	0.809	9.07	Glass	200 - 100
3200	5487.3	328.0	117.13	79.88	0.682	0.801	74.08	Glass	200 - 100

7870	13495.2	777.2	350.04	150.59	0.430	0.530	116.17	Plagioclase	200 - 100
1637	2807.1	248.4	94.48	45.83	0.485	0.756	52.98	Clinopyroxene	200 - 100
4508	7730.2	367.5	118.51	104.76	0.884	0.848	87.92	Chlorite	200 - 100
9476	16249.2	766.6	334.75	159.76	0.477	0.589	127.47	Plagioclase	200 - 100
8	13.7	10.0	2.51	5.24	2.088	1.309	3.70	Plagioclase	200 - 100
40	68.6	37.7	13.93	5.24	0.376	0.779	8.28	Plagioclase	200 - 100
530	908.8	152.6	61.53	30.12	0.490	0.700	30.15	Chlorite	200 - 100
280	480.1	99.6	36.70	27.50	0.749	0.780	21.91	Plagioclase	200 - 100
2193	3760.5	267.9	93.88	78.57	0.837	0.812	61.32	Orthopyroxene	200 - 100
2025	3472.4	272.9	102.61	57.62	0.562	0.765	58.93	Glass	200 - 100
1897	3252.9	256.4	93.38	58.93	0.631	0.788	57.03	Chlorite	200 - 100
4526	7761.1	372.3	123.09	103.45	0.840	0.839	88.10	Plagioclase	200 - 100
6392	10960.8	680.1	303.97	163.69	0.539	0.546	104.69	Glass	200 - 100
2726	4674.5	472.8	214.59	62.86	0.293	0.513	68.37	Plagioclase	200 - 100
3463	5938.3	350.9	129.64	81.19	0.626	0.778	77.06	Plagioclase	200 - 100
3587	6150.9	512.8	229.59	110.00	0.479	0.542	78.43	Plagioclase	200 - 100
255	437.3	117.6	50.09	15.71	0.314	0.630	20.91	Plagioclase	200 - 100
2587	4436.1	323.5	126.75	52.38	0.413	0.730	66.60	Plagioclase	200 - 100
1361	2333.8	242.9	97.52	58.93	0.604	0.705	48.31	Ilmenite	200 - 100
6762	11595.3	464.9	159.95	103.45	0.647	0.821	107.68	Albite	200 - 100
6	10.3	8.7	2.18	2.62	1.202	1.306	3.21	Plagioclase	200 - 100
2433	4172.0	296.1	110.16	74.64	0.678	0.773	64.59	Plagioclase	200 - 100
1047	1795.4	272.6	121.52	40.59	0.334	0.551	42.37	Plagioclase	200 - 100
4317	7402.7	614.6	280.93	115.24	0.410	0.496	86.04	Glass	200 - 100
612	1049.4	147.8	54.70	35.36	0.646	0.777	32.40	Olivine	200 - 100
91	156.0	61.2	24.16	11.79	0.488	0.723	12.49	Olivine	200 - 100
7035	12063.4	577.7	238.21	112.62	0.473	0.674	109.83	Glass	200 - 100
8370	14352.6	627.7	258.30	96.90	0.375	0.677	119.80	Orthopyroxene	200 - 100
80	137.2	57.7	22.82	10.48	0.459	0.720	11.71	Glass	200 - 100
5972	10240.6	447.5	159.59	99.52	0.624	0.802	101.20	Orthopyroxene	200 - 100
49	84.0	56.7	25.01	5.24	0.210	0.573	9.17	Plagioclase	200 - 100
303	519.6	123.5	51.67	20.95	0.405	0.654	22.79	Olivine	200 - 100
8	13.7	12.4	3.10	3.93	1.268	1.058	3.70	Glass	200 - 100
1205	2066.3	215.3	82.66	51.07	0.618	0.748	45.46	Plagioclase	200 - 100
5069	8692.2	423.7	156.16	91.66	0.587	0.780	93.23	Clinopyroxene	200 - 100
443	759.6	155.8	66.50	30.12	0.453	0.627	27.56	Plagioclase	200 - 100
567	972.3	221.9	101.34	45.83	0.452	0.498	31.18	Glass	200 - 100
765	1311.8	210.0	90.51	30.12	0.333	0.611	36.22	Plagioclase	200 - 100
2062	3535.9	355.7	155.02	37.98	0.245	0.593	59.46	Plagioclase	200 - 100
92	157.8	66.0	27.22	10.48	0.385	0.674	12.56	Plagioclase	200 - 100
81	138.9	70.2	30.57	9.17	0.300	0.595	11.79	Glass	200 - 100
3353	5749.6	358.0	137.04	66.78	0.487	0.751	75.83	Plagioclase	200 - 100
324	555.6	130.3	55.07	20.95	0.380	0.641	23.57	Glass	200 - 100
20	34.3	27.6	10.53	7.86	0.746	0.753	5.86	Glass	200 - 100
24	41.2	27.2	9.07	5.24	0.578	0.836	6.41	Chlorite	200 - 100
10	17.2	12.7	3.16	3.93	1.244	1.161	4.14	Glass	200 - 100
98	168.1	62.9	24.60	19.64	0.798	0.731	12.96	Chlorite	200 - 100
1956	3354.1	258.6	93.39	68.09	0.729	0.794	57.91	Plagioclase	200 - 100
1859	3187.8	241.9	82.11	65.47	0.797	0.827	56.46	Albite	200 - 100
282	483.6	96.5	34.05	23.57	0.692	0.808	21.99	Orthopyroxene	200 - 100
253	433.8	130.4	57.66	23.57	0.409	0.566	20.83	Glass	200 - 100
5881	10084.6	687.3	311.27	87.74	0.282	0.518	100.42	Plagioclase	200 - 100
521	893.4	179.8	78.51	36.67	0.467	0.589	29.89	Orthopyroxene	200 - 100
2081	3568.4	288.5	112.57	74.64	0.663	0.734	59.74	Plagioclase	200 - 100
2829	4851.1	278.7	71.84	77.26	1.075	0.886	69.65	Plagioclase	200 - 100
340	583.0	117.6	46.16	28.81	0.624	0.728	24.15	Glass	200 - 100
1919	3290.6	347.6	152.19	62.86	0.413	0.585	57.36	Plagioclase	200 - 100

3995	6850.5	542.8	243.25	82.50	0.339	0.541	82.77	Orthopyroxene	200 - 100
78	133.8	50.8	17.95	7.86	0.438	0.807	11.57	Plagioclase	200 - 100
1393	2388.7	250.2	101.57	60.24	0.593	0.693	48.87	Plagioclase	200 - 100
113	193.8	98.4	44.91	7.86	0.175	0.501	13.92	Plagioclase	200 - 100
1445	2477.8	234.0	89.22	56.31	0.631	0.754	49.78	Olivine	200 - 100
5701	9775.9	605.1	265.74	123.09	0.463	0.579	98.87	Orthopyroxene	200 - 100
2176	3731.3	287.1	109.49	62.86	0.574	0.754	61.08	Glass	200 - 100
1038	1779.9	240.1	102.72	30.12	0.293	0.623	42.19	Plagioclase	200 - 100
176	301.8	93.0	38.70	15.71	0.406	0.662	17.37	Plagioclase	200 - 100
2506	4297.2	346.6	143.30	62.86	0.439	0.670	65.55	Olivine	200 - 100
37	63.5	39.8	15.94	6.55	0.411	0.709	7.97	Olivine	200 - 100
110	188.6	72.3	29.81	10.48	0.352	0.674	13.73	Glass	200 - 100
5675	9731.3	563.1	241.19	102.14	0.423	0.621	98.65	Plagioclase	200 - 100
3736	6406.4	392.1	154.61	77.26	0.500	0.724	80.04	Glass	200 - 100
5978	10250.9	746.1	343.18	115.24	0.336	0.481	101.25	Plagioclase	200 - 100
2321	3980.0	287.3	106.19	65.47	0.617	0.778	63.09	Plagioclase	200 - 100
25	42.9	23.5	5.88	5.24	0.891	0.987	6.55	Glass	200 - 100
456	781.9	125.0	45.24	28.81	0.637	0.793	27.96	Plagioclase	200 - 100
1640	2812.2	251.9	96.92	55.00	0.567	0.746	53.03	Plagioclase	200 - 100
9065	15544.4	747.8	326.28	111.31	0.341	0.591	124.68	Plagioclase	200 - 100
416	713.3	121.9	45.15	28.81	0.638	0.777	26.71	Plagioclase	200 - 100
209	358.4	79.9	26.39	20.95	0.794	0.839	18.93	Glass	200 - 100
400	685.9	152.6	65.87	26.19	0.398	0.609	26.19	Plagioclase	200 - 100
626	1073.5	151.4	56.79	36.67	0.646	0.767	32.76	Clinopyroxene	200 - 100
115	197.2	71.3	28.79	17.02	0.591	0.698	14.04	Glass	200 - 100
3142	5387.8	318.8	110.72	104.76	0.946	0.816	73.40	Plagioclase	200 - 100
4127	7076.9	527.3	233.33	92.97	0.398	0.566	84.12	Plagioclase	200 - 100
2538	4352.1	317.1	123.25	64.17	0.521	0.737	65.97	Olivine	200 - 100
838	1437.0	172.1	63.38	44.52	0.702	0.781	37.91	Glass	200 - 100
8952	15350.6	564.5	208.73	115.24	0.552	0.778	123.90	Glass	200 - 100
88	150.9	53.5	18.64	13.09	0.702	0.814	12.28	Plagioclase	200 - 100
6481	11113.4	508.4	198.12	130.95	0.661	0.735	105.42	Plagioclase	200 - 100
11	18.9	14.6	3.65	2.62	0.718	1.054	4.34	Plagioclase	200 - 100
51	87.5	60.4	26.97	3.93	0.146	0.549	9.35	Glass	200 - 100
6017	10317.8	573.0	244.23	103.45	0.424	0.628	101.58	Orthopyroxene	200 - 100
940	1611.9	164.0	49.33	37.98	0.770	0.868	40.15	Orthopyroxene	200 - 100
3187	5465.0	443.1	193.30	79.88	0.413	0.591	73.93	Albite	200 - 100
1655	2837.9	305.8	131.28	49.76	0.379	0.618	53.27	Plagioclase	200 - 100
215	368.7	87.9	32.67	22.26	0.681	0.774	19.20	Glass	200 - 100
292	500.7	109.3	43.02	24.88	0.578	0.726	22.38	Orthopyroxene	200 - 100
314	538.4	123.8	51.41	23.57	0.458	0.665	23.20	Plagioclase	200 - 100
3900	6687.6	384.4	146.58	86.43	0.590	0.754	81.78	Glass	200 - 100
57	97.7	42.8	14.77	9.17	0.621	0.819	9.89	Orthopyroxene	200 - 100
127	217.8	117.0	54.50	10.48	0.192	0.447	14.76	Plagioclase	200 - 100
2185	3746.8	424.1	192.62	52.38	0.272	0.512	61.21	Orthopyroxene	200 - 100
2323	3983.4	427.3	192.99	64.17	0.333	0.524	63.11	Glass	200 - 100
1642	2815.7	233.1	82.40	56.31	0.683	0.807	53.06	Plagioclase	200 - 100
70	120.0	48.7	17.47	15.71	0.899	0.798	10.96	Plagioclase	200 - 100
7757	13301.5	887.5	411.43	174.16	0.423	0.461	115.33	Plagioclase	200 - 100
7774	13330.6	780.0	352.12	136.19	0.387	0.525	115.46	Plagioclase	200 - 100
1192	2044.0	233.1	95.02	35.36	0.372	0.688	45.21	Clinopyroxene	200 - 100
1417	2429.8	239.6	93.94	43.21	0.460	0.729	49.29	Olivine	200 - 100
9853	16895.6	591.0	218.03	151.90	0.697	0.780	129.98	Olivine	200 - 100
4229	7251.8	412.1	161.04	98.21	0.610	0.732	85.16	Plagioclase	200 - 100
1304	2236.1	246.4	101.05	45.83	0.454	0.680	47.29	Plagioclase	200 - 100
6533	11202.6	516.0	202.77	120.47	0.594	0.727	105.84	Glass	200 - 100
6	10.3	12.1	3.02	3.93	1.301	0.941	3.21	Plagioclase	200 - 100

2136	3662.8	323.7	134.65	53.69	0.399	0.663	60.52	Orthopyroxene	200 - 100
308	528.2	159.2	72.28	14.40	0.199	0.512	22.98	Plagioclase	200 - 100
421	721.9	128.6	49.79	26.19	0.526	0.741	26.87	Plagioclase	200 - 100
6073	10413.8	730.2	333.91	128.33	0.384	0.495	102.05	Plagioclase	200 - 100
7438	12754.5	884.3	411.10	124.40	0.303	0.453	112.94	Plagioclase	200 - 100
2078	3563.3	342.6	147.09	48.45	0.329	0.618	59.69	Plagioclase	200 - 100
1969	3376.4	342.5	148.51	55.00	0.370	0.601	58.11	Plagioclase	200 - 100
111	190.3	60.5	21.32	13.09	0.614	0.808	13.80	Plagioclase	200 - 100
5200	8916.8	437.6	164.61	108.69	0.660	0.765	94.43	Plagioclase	200 - 100
84	144.0	47.7	11.93	11.79	0.988	0.892	12.00	Plagioclase	200 - 100
1370	2349.2	234.3	91.46	47.14	0.515	0.733	48.47	Plagioclase	200 - 100
796	1365.0	157.4	52.92	32.74	0.619	0.832	36.95	Plagioclase	200 - 100
8283	14203.4	541.8	199.80	120.47	0.603	0.780	119.18	Olivine	200 - 100
2483	4257.8	426.1	190.71	70.71	0.371	0.543	65.25	TiO2	200 - 100
2510	4304.1	327.7	130.97	90.35	0.690	0.710	65.61	Glass	200 - 100
314	538.4	133.1	57.10	18.33	0.321	0.618	23.20	Plagioclase	200 - 100
1383	2371.5	208.0	70.23	53.69	0.764	0.830	48.70	Plagioclase	200 - 100
1244	2133.2	234.1	94.50	41.90	0.443	0.699	46.19	Orthopyroxene	200 - 100
942	1615.3	190.9	73.49	49.76	0.677	0.746	40.19	Plagioclase	200 - 100
1702	2918.5	224.2	70.96	51.07	0.720	0.854	54.02	Glass	200 - 100
155	265.8	76.7	29.25	13.09	0.448	0.754	16.30	Plagioclase	200 - 100
3356	5754.8	464.0	203.75	73.33	0.360	0.580	75.86	Plagioclase	200 - 100
30	51.4	24.2	6.05	7.86	1.299	1.050	7.17	Plagioclase	200 - 100
1805	3095.2	260.0	98.61	69.40	0.704	0.759	55.63	Plagioclase	200 - 100
2374	4070.9	301.1	115.20	64.17	0.557	0.751	63.80	Plagioclase	200 - 100
645	1106.0	163.4	64.58	37.98	0.588	0.721	33.26	Plagioclase	200 - 100
944	1618.7	246.1	108.10	41.90	0.388	0.579	40.23	Plagioclase	200 - 100
8	13.7	12.4	3.10	3.93	1.268	1.058	3.70	Glass	200 - 100
2201	3774.2	253.8	79.29	69.40	0.875	0.858	61.43	Glass	200 - 100
1202	2061.2	229.6	92.49	49.76	0.538	0.701	45.40	Plagioclase	200 - 100
1643	2817.4	297.0	126.18	48.45	0.384	0.633	53.08	Plagioclase	200 - 100
1976	3388.4	319.6	134.61	60.24	0.448	0.646	58.21	Plagioclase	200 - 100
1348	2311.5	203.2	67.15	53.69	0.800	0.839	48.08	Ilmenite	200 - 100
3382	5799.4	388.0	157.11	65.47	0.417	0.696	76.15	Plagioclase	200 - 100
10	17.2	14.2	3.54	2.62	0.740	1.036	4.14	Plagioclase	200 - 100
618	1059.7	140.6	48.43	34.05	0.703	0.821	32.55	Plagioclase	200 - 100
2721	4665.9	349.4	141.78	69.40	0.489	0.693	68.31	Orthopyroxene	200 - 100
9645	16539.0	1032.1	481.71	151.90	0.315	0.442	128.60	Glass	200 - 100
6060	10391.5	468.7	174.95	113.93	0.651	0.771	101.94	Plagioclase	200 - 100
792	1358.1	187.6	75.90	35.36	0.466	0.696	36.85	Plagioclase	200 - 100
306	524.7	119.9	49.30	26.19	0.531	0.677	22.91	Plagioclase	200 - 100
6032	10343.5	477.2	181.65	120.47	0.663	0.756	101.70	Glass	200 - 100
652	1118.0	188.8	80.53	27.50	0.341	0.628	33.44	Plagioclase	200 - 100
2763	4737.9	416.2	182.06	53.69	0.295	0.586	68.83	Orthopyroxene	200 - 100
1522	2609.9	212.5	67.67	60.24	0.890	0.852	51.09	Plagioclase	200 - 100
770	1320.4	201.8	85.44	26.19	0.307	0.638	36.34	Plagioclase	200 - 100
856	1467.8	207.0	86.53	40.59	0.469	0.656	38.31	Plagioclase	200 - 100
9506	16300.6	620.2	242.99	153.21	0.631	0.730	127.67	Glass	200 - 100
6026	10333.2	689.2	311.42	110.00	0.353	0.523	101.65	Plagioclase	200 - 100
1722	2952.8	249.0	92.60	60.24	0.651	0.774	54.34	Chlorite	200 - 100
37215	63815.2	2534.4	1214.67	358.80	0.295	0.353	252.62	Plagioclase	200 - 100
1295	2220.6	221.5	84.47	49.76	0.589	0.754	47.12	Plagioclase	200 - 100
1352	2318.4	242.4	97.36	41.90	0.430	0.704	48.15	Feldspar	200 - 100
3979	6823.1	540.2	241.87	56.31	0.233	0.542	82.60	Olivine	200 - 100
1757	3012.9	329.9	144.02	66.78	0.464	0.590	54.89	Glass	200 - 100
7562	12967.1	839.4	386.10	137.50	0.356	0.481	113.87	Glass	200 - 100
10	17.2	14.3	3.57	2.62	0.734	1.029	4.14	Glass	200 - 100

215	368.7	78.2	23.18	22.26	0.960	0.871	19.20	Glass	200 - 100
1873	3211.8	255.7	93.53	66.78	0.714	0.786	56.67	Glass	200 - 100
1684	2887.7	295.9	124.83	65.47	0.524	0.644	53.74	Glass	200 - 100
341	584.7	136.7	58.34	23.57	0.404	0.627	24.18	Glass	200 - 100
4873	8356.1	601.3	269.68	110.00	0.408	0.539	91.41	Plagioclase	200 - 100
660	1131.8	180.9	75.42	35.36	0.469	0.659	33.64	Plagioclase	200 - 100
1344	2304.7	225.3	85.77	49.76	0.580	0.755	48.01	Orthopyroxene	200 - 100
865	1483.3	194.4	78.24	34.05	0.435	0.702	38.51	Plagioclase	200 - 100
340	583.0	123.6	50.15	22.26	0.444	0.693	24.15	Plagioclase	200 - 100
26	44.6	32.1	12.45	3.93	0.316	0.738	6.68	Olivine	200 - 100
1599	2741.9	285.9	120.15	51.07	0.425	0.649	52.36	Albite	200 - 100
1842	3158.6	378.9	170.97	48.45	0.283	0.526	56.20	Plagioclase	200 - 100
7973	13671.9	919.5	427.81	129.64	0.303	0.451	116.93	Plagioclase	200 - 100
351	601.9	105.1	35.65	23.57	0.661	0.828	24.53	Olivine	200 - 100
235	403.0	131.9	59.15	22.26	0.376	0.539	20.07	Olivine	200 - 100
7	12.0	12.7	3.16	1.31	0.415	0.971	3.46	Orthopyroxene	200 - 100
553	948.3	157.1	63.68	28.81	0.452	0.695	30.79	Glass	200 - 100
14	24.0	19.7	5.51	3.93	0.713	0.880	4.90	Plagioclase	200 - 100
3893	6675.6	526.4	234.78	52.38	0.223	0.550	81.70	Orthopyroxene	200 - 100
4685	8033.7	378.3	124.70	90.35	0.725	0.840	89.63	Olivine	200 - 100
15	25.7	19.5	4.88	5.24	1.074	0.922	5.07	Plagioclase	200 - 100
54	92.6	52.0	21.77	9.17	0.421	0.656	9.62	Plagioclase	200 - 100
3354	5751.3	349.4	130.70	85.12	0.651	0.769	75.84	Olivine	200 - 100
4902	8405.8	423.3	158.64	95.59	0.603	0.768	91.68	Olivine	200 - 100
947	1623.9	221.1	93.10	37.98	0.408	0.646	40.30	Plagioclase	200 - 100
19762	33887.3	1000.3	419.33	234.40	0.559	0.652	184.09	Plagioclase	200 - 100
326	559.0	117.0	46.50	26.19	0.563	0.716	23.64	Plagioclase	200 - 100
3108	5329.5	346.1	132.93	78.57	0.591	0.748	73.00	Plagioclase	200 - 100
6170	10580.1	689.3	310.57	89.05	0.287	0.529	102.86	Plagioclase	200 - 100
195	334.4	99.0	41.43	15.71	0.379	0.655	18.29	Clinopyroxene	200 - 100
4083	7001.4	426.5	172.74	99.52	0.576	0.695	83.67	Plagioclase	200 - 100
18	30.9	21.3	5.31	3.93	0.740	0.926	5.56	Quartz	200 - 100
468	802.5	185.0	82.79	32.74	0.395	0.543	28.33	Plagioclase	200 - 100
2775	4758.5	307.1	110.50	57.62	0.521	0.796	68.98	Olivine	200 - 100
1148	1968.6	274.9	121.22	41.90	0.346	0.572	44.37	Plagioclase	200 - 100
23	39.4	28.4	10.41	2.62	0.252	0.784	6.28	Plagioclase	200 - 100
1424	2441.8	218.8	78.14	41.90	0.536	0.801	49.41	Plagioclase	200 - 100
1560	2675.0	274.1	113.46	49.76	0.439	0.669	51.72	Plagioclase	200 - 100
903	1548.4	197.7	79.32	36.67	0.462	0.706	39.35	Plagioclase	200 - 100
3945	6764.8	386.0	147.00	89.05	0.606	0.755	82.25	Orthopyroxene	200 - 100
3747	6425.2	351.2	123.66	79.88	0.646	0.809	80.16	Plagioclase	200 - 100
2614	4482.4	284.4	95.07	69.40	0.730	0.834	66.95	Plagioclase	200 - 100
4525	7759.3	599.3	271.00	85.12	0.314	0.521	88.09	Plagioclase	200 - 100
1842	3158.6	339.2	148.29	35.36	0.238	0.587	56.20	Plagioclase	200 - 100
4139	7097.4	397.1	151.80	91.66	0.604	0.752	84.25	Plagioclase	200 - 100
7573	12986.0	731.4	325.85	151.90	0.466	0.552	113.96	Plagioclase	200 - 100
8	13.7	13.4	3.35	3.93	1.173	0.979	3.70	Glass	200 - 100
29	49.7	29.8	9.88	7.86	0.796	0.838	7.05	Plagioclase	200 - 100
6	10.3	10.6	2.64	1.31	0.496	1.077	3.21	Plagioclase	200 - 100
1240	2126.3	257.0	108.97	51.07	0.469	0.636	46.11	Plagioclase	200 - 100
232	397.8	109.1	45.88	14.40	0.314	0.648	19.95	Plagioclase	200 - 100
509	872.8	146.4	58.22	35.36	0.607	0.715	29.54	Plagioclase	200 - 100
9	15.4	15.6	3.90	1.31	0.336	0.894	3.93	Plagioclase	200 - 100
80	137.2	46.5	11.63	13.09	1.126	0.892	11.71	Plagioclase	200 - 100
788	1351.2	250.9	113.54	28.81	0.254	0.519	36.76	Orthopyroxene	200 - 100
1486	2548.2	230.9	85.74	49.76	0.580	0.775	50.48	Pyrite	200 - 100
186	319.0	106.6	46.41	20.95	0.451	0.594	17.86	Plagioclase	200 - 100

2846	4880.2	292.1	94.27	83.81	0.889	0.848	69.86	Plagioclase	200 - 100
55	94.3	51.6	21.37	6.55	0.307	0.668	9.71	Plagioclase	200 - 100
2762	4736.2	328.5	126.90	72.02	0.568	0.743	68.82	Plagioclase	200 - 100
18	30.9	27.1	10.68	5.24	0.491	0.726	5.56	Calcite	200 - 100
617	1058.0	165.3	66.84	34.05	0.509	0.697	32.53	Glass	200 - 100
20	34.3	24.5	7.95	5.24	0.659	0.847	5.86	Glass	200 - 100
893	1531.3	198.7	80.24	39.28	0.490	0.698	39.13	Plagioclase	200 - 100
173	296.7	91.9	38.20	13.09	0.343	0.664	17.22	Plagioclase	200 - 100
7627	13078.6	871.7	403.42	161.07	0.399	0.465	114.36	Glass	200 - 100
11100	19034.0	1097.5	511.55	197.73	0.387	0.446	137.96	Orthopyroxene	200 - 100
1075	1843.4	220.1	89.46	37.98	0.425	0.691	42.93	Plagioclase	200 - 100
3051	5231.8	394.6	165.72	62.86	0.379	0.650	72.33	Plagioclase	200 - 100
47	80.6	35.5	8.88	9.17	1.033	0.896	8.98	Glass	200 - 100
1630	2795.1	321.1	140.68	60.24	0.428	0.584	52.87	Calcite	200 - 100
10730	18399.5	1032.4	477.67	161.07	0.337	0.466	135.64	Orthopyroxene	200 - 100
2545	4364.1	302.5	112.45	86.43	0.769	0.774	66.06	Plagioclase	200 - 100
1193	2045.7	223.1	88.41	58.93	0.667	0.719	45.23	Orthopyroxene	200 - 100
153	262.4	103.6	46.10	13.09	0.284	0.554	16.20	Chlorite	200 - 100
3635	6233.2	354.6	128.93	87.74	0.681	0.789	78.95	Plagioclase	200 - 100
6370	10923.1	499.8	193.44	111.31	0.575	0.741	104.51	Plagioclase	200 - 100
1406	2411.0	267.2	112.06	49.76	0.444	0.652	49.10	Orthopyroxene	200 - 100
625	1071.7	175.8	73.25	31.43	0.429	0.660	32.74	Clinopyroxene	200 - 100
6344	10878.5	495.3	190.55	100.83	0.529	0.747	104.30	Plagioclase	200 - 100
6	10.3	8.9	2.24	1.31	0.585	1.272	3.21	Orthopyroxene	200 - 100
2859	4902.5	266.4	66.60	79.88	1.199	0.932	70.02	Glass	200 - 100
1133	1942.8	214.9	84.43	39.28	0.465	0.727	44.08	Orthopyroxene	200 - 100
2378	4077.7	308.4	120.28	78.57	0.653	0.734	63.86	Plagioclase	200 - 100
3943	6761.3	372.6	136.92	103.45	0.756	0.782	82.23	Clinopyroxene	200 - 100
24	41.2	31.1	12.14	5.24	0.432	0.732	6.41	Glass	200 - 100
7	12.0	10.8	2.70	2.62	0.970	1.138	3.46	Chlorite	200 - 100
383	656.8	117.0	43.35	32.74	0.755	0.776	25.63	Orthopyroxene	200 - 100
3859	6617.3	394.0	154.01	86.43	0.561	0.732	81.35	Glass	200 - 100
6320	10837.4	462.6	165.98	124.40	0.749	0.798	104.10	Plagioclase	200 - 100
2488	4266.4	283.8	98.63	82.50	0.836	0.816	65.32	Quartz	200 - 100
11	18.9	21.6	8.60	2.62	0.305	0.713	4.34	Quartz	200 - 100
1122	1924.0	191.4	66.98	37.98	0.567	0.812	43.86	Chlorite	200 - 100
12	20.6	19.7	6.85	2.62	0.382	0.816	4.54	Plagioclase	200 - 100
2937	5036.3	451.9	200.88	39.28	0.196	0.557	70.97	Plagioclase	200 - 100
2327	3990.3	271.8	92.95	74.64	0.803	0.824	63.17	Orthopyroxene	200 - 100
3533	6058.3	337.8	117.25	77.26	0.659	0.817	77.83	Plagioclase	200 - 100
446	764.8	152.3	64.24	22.26	0.347	0.644	27.65	Glass	200 - 100
103	176.6	113.3	53.32	13.09	0.245	0.416	13.29	Plagioclase	200 - 100
152	260.7	75.3	28.51	13.09	0.459	0.760	16.14	Plagioclase	200 - 100
1353	2320.1	255.0	105.49	48.45	0.459	0.670	48.17	Orthopyroxene	200 - 100
39	66.9	38.4	14.62	3.93	0.269	0.755	8.18	Glass	200 - 100
2391	4100.0	295.7	110.89	72.02	0.649	0.768	64.03	Plagioclase	200 - 100
1670	2863.7	248.5	93.67	61.55	0.657	0.763	53.51	Plagioclase	200 - 100
10	17.2	13.2	3.29	3.93	1.195	1.114	4.14	Plagioclase	200 - 100
6736	11550.7	515.6	200.09	96.90	0.484	0.739	107.47	Glass	200 - 100
1841	3156.9	242.7	83.54	57.62	0.690	0.821	56.19	Olivine	200 - 100
53	90.9	50.9	21.15	6.55	0.310	0.664	9.53	Plagioclase	200 - 100
2077	3561.6	275.9	103.55	73.33	0.708	0.767	59.68	Glass	200 - 100
4393	7533.0	562.1	251.07	87.74	0.349	0.547	86.79	Chlorite	200 - 100
8515	14601.3	562.2	212.36	110.00	0.518	0.762	120.84	Plagioclase	200 - 100
130	222.9	74.4	29.70	11.79	0.397	0.711	14.93	Glass	200 - 100
5154	8837.9	447.1	172.22	95.59	0.555	0.745	94.01	Glass	200 - 100
1924	3299.2	242.9	80.45	55.00	0.684	0.838	57.44	Glass	200 - 100

32	54.9	24.7	6.19	7.86	1.270	1.061	7.41	Plagioclase	200 - 100
785	1346.1	361.0	172.72	22.26	0.129	0.360	36.69	Plagioclase	200 - 100
685	1174.6	198.3	85.40	31.43	0.368	0.613	34.27	Orthopyroxene	200 - 100
6	10.3	10.6	2.64	2.62	0.992	1.077	3.21	Glass	200 - 100
4687	8037.1	567.8	252.02	85.12	0.338	0.560	89.65	Orthopyroxene	200 - 100
3879	6651.6	381.0	144.42	86.43	0.598	0.759	81.56	Plagioclase	200 - 100
4102	7034.0	400.2	154.60	77.26	0.500	0.743	83.87	Olivine	200 - 100
2222	3810.2	290.3	110.72	70.71	0.639	0.754	61.73	Plagioclase	200 - 100
11297	19371.8	1170.9	550.23	212.14	0.386	0.421	139.18	Plagioclase	200 - 100
424	727.1	152.3	64.95	34.05	0.524	0.628	26.96	Clinopyroxene	200 - 100
1663	2851.7	309.6	133.45	41.90	0.314	0.611	53.40	Plagioclase	200 - 100
581	996.3	122.7	30.68	27.50	0.896	0.912	31.56	Plagioclase	200 - 100
605	1037.4	166.4	67.91	31.43	0.463	0.686	32.21	Glass	200 - 100
3969	6805.9	375.3	138.51	73.33	0.529	0.779	82.50	Plagioclase	200 - 100
887	1521.0	256.6	115.10	34.05	0.296	0.539	39.00	Plagioclase	200 - 100
2497	4281.8	377.8	162.58	65.47	0.403	0.614	65.44	Clinopyroxene	200 - 100
4407	7557.0	427.1	168.77	95.59	0.566	0.722	86.93	Plagioclase	200 - 100
1925	3300.9	280.3	110.20	68.09	0.618	0.727	57.45	Glass	200 - 100
2442	4187.5	475.6	218.64	56.31	0.258	0.482	64.71	Plagioclase	200 - 100
3867	6631.0	356.2	125.09	82.50	0.660	0.810	81.43	Glass	200 - 100
8851	15177.4	702.0	300.49	172.85	0.575	0.622	123.20	Glass	200 - 100
1361	2333.8	244.1	98.34	40.59	0.413	0.701	48.31	Glass	200 - 100
161	276.1	74.3	26.84	15.71	0.585	0.793	16.62	Plagioclase	200 - 100
986	1690.8	178.0	61.54	45.83	0.745	0.819	41.12	Plagioclase	200 - 100
6323	10842.5	515.2	204.61	103.45	0.506	0.716	104.13	Orthopyroxene	200 - 100
2815	4827.1	355.8	144.47	60.24	0.417	0.692	69.48	Glass	200 - 100
49	84.0	45.1	17.84	9.17	0.514	0.720	9.17	Plagioclase	200 - 100
164	281.2	65.0	16.25	17.02	1.047	0.915	16.77	Chlorite	200 - 100
11	18.9	16.0	4.01	3.93	0.980	0.960	4.34	Plagioclase	200 - 100
7871	13497.0	622.5	259.15	96.90	0.374	0.662	116.18	Plagioclase	200 - 100
1514	2596.2	242.6	93.52	43.21	0.462	0.745	50.95	Orthopyroxene	200 - 100
1249	2141.8	205.0	73.23	40.59	0.554	0.800	46.28	Plagioclase	200 - 100
3152	5405.0	344.0	130.64	73.33	0.561	0.758	73.52	Plagioclase	200 - 100
528	905.4	165.7	69.91	18.33	0.262	0.644	30.09	Plagioclase	200 - 100
91	156.0	55.1	19.61	13.09	0.668	0.803	12.49	Plagioclase	200 - 100
12252	21009.4	1067.2	490.80	163.69	0.334	0.481	144.95	Plagioclase	200 - 100
2146	3679.9	308.1	124.50	64.17	0.515	0.698	60.66	Glass	200 - 100
437	749.4	119.6	41.90	31.43	0.750	0.812	27.37	Clinopyroxene	200 - 100
9624	16503.0	1042.3	487.27	179.40	0.368	0.437	128.46	Plagioclase	200 - 100
5645	9679.9	621.4	275.58	120.47	0.437	0.561	98.39	Plagioclase	200 - 100
39	66.9	35.4	12.26	9.17	0.748	0.818	8.18	Glass	200 - 100
4410	7562.1	497.9	213.56	73.33	0.343	0.619	86.96	Plagioclase	200 - 100
7	12.0	12.7	3.16	1.31	0.415	0.971	3.46	Plagioclase	200 - 100
1010	1731.9	223.7	93.31	34.05	0.365	0.659	41.62	Glass	200 - 100
683	1171.2	186.9	78.54	43.21	0.550	0.649	34.22	Olivine	200 - 100
1796	3079.7	296.3	123.14	45.83	0.372	0.664	55.50	Plagioclase	200 - 100
7200	12346.4	740.5	333.20	128.33	0.385	0.532	111.11	Plagioclase	200 - 100
4874	8357.8	371.3	108.94	104.76	0.962	0.873	91.42	Glass	200 - 100
2574	4413.8	294.9	105.71	62.86	0.595	0.799	66.44	Plagioclase	200 - 100
63	108.0	46.4	16.75	6.55	0.391	0.794	10.39	Plagioclase	200 - 100
198	339.5	126.5	57.34	17.02	0.297	0.516	18.43	Plagioclase	200 - 100
188	322.4	89.8	35.90	18.33	0.511	0.709	17.95	Plagioclase	200 - 100
76	130.3	49.6	17.23	10.48	0.608	0.816	11.42	Plagioclase	200 - 100
5646	9681.6	483.4	191.02	90.35	0.473	0.722	98.40	Plagioclase	200 - 100
1716	2942.6	347.8	154.90	39.28	0.254	0.553	54.25	Plagioclase	200 - 100
1419	2433.3	214.4	74.54	45.83	0.615	0.816	49.33	Glass	200 - 100
3424	5871.4	340.2	121.95	94.28	0.773	0.798	76.62	Clinopyroxene	200 - 100

1204	2064.6	257.0	109.65	43.21	0.394	0.627	45.44	Plagioclase	200 - 100
479	821.4	209.8	96.37	28.81	0.299	0.484	28.66	Clinopyroxene	200 - 100
21	36.0	24.3	7.00	5.24	0.749	0.876	6.00	Plagioclase	200 - 100
2173	3726.2	322.1	133.06	75.95	0.571	0.672	61.04	Plagioclase	200 - 100
97	166.3	65.9	26.73	10.48	0.392	0.694	12.90	Clinopyroxene	200 - 100
9073	15558.1	1010.5	472.28	138.81	0.294	0.438	124.73	Glass	200 - 100
2186	3748.5	308.1	123.79	65.47	0.529	0.704	61.22	Plagioclase	200 - 100
35	60.0	27.4	6.84	7.86	1.149	1.004	7.75	Plagioclase	200 - 100
649	1112.9	182.9	76.97	36.67	0.476	0.647	33.36	Plagioclase	200 - 100
145	248.6	83.4	34.50	15.71	0.455	0.670	15.77	Glass	200 - 100
3558	6101.2	444.9	190.39	74.64	0.392	0.622	78.11	Orthopyroxene	200 - 100
1873	3211.8	270.2	104.32	55.00	0.527	0.743	56.67	Plagioclase	200 - 100
3049	5228.3	385.3	159.98	81.19	0.508	0.665	72.31	Glass	200 - 100
4654	7980.5	747.7	351.14	117.85	0.336	0.424	89.33	Plagioclase	200 - 100
23	39.4	22.7	5.67	6.55	1.155	0.982	6.28	Glass	200 - 100
3184	5459.8	325.8	115.68	86.43	0.747	0.804	73.89	Plagioclase	200 - 100
15	25.7	19.7	4.93	6.55	1.329	0.911	5.07	Plagioclase	200 - 100
13731	23545.5	1012.0	454.15	182.02	0.401	0.538	153.45	Olivine	200 - 100
4751	8146.9	723.9	337.83	79.88	0.236	0.442	90.26	Plagioclase	200 - 100
1689	2896.3	240.2	86.72	51.07	0.589	0.794	53.82	Plagioclase	200 - 100
4784	8203.5	552.8	242.55	85.12	0.351	0.581	90.57	Olivine	200 - 100
8948	15343.8	759.1	333.55	142.73	0.428	0.578	123.87	Glass	200 - 100
2759	4731.1	418.6	183.54	58.93	0.321	0.582	68.78	Plagioclase	200 - 100
11	18.9	21.0	8.22	6.55	0.797	0.732	4.34	Plagioclase	200 - 100
24	41.2	24.7	6.17	3.93	0.637	0.921	6.41	Plagioclase	200 - 100
6771	11610.7	517.4	200.92	128.33	0.639	0.738	107.75	Glass	200 - 100
7191	12330.9	661.4	287.86	155.83	0.541	0.595	111.04	Plagioclase	200 - 100
3036	5206.0	386.7	161.02	72.02	0.447	0.661	72.15	Plagioclase	200 - 100
194	332.7	95.2	39.07	14.40	0.369	0.679	18.24	Orthopyroxene	200 - 100
1966	3371.2	378.1	169.12	44.52	0.263	0.544	58.06	Plagioclase	200 - 100
6559	11247.2	471.3	169.15	133.57	0.790	0.798	106.05	Plagioclase	200 - 100
1250	2143.5	274.5	119.29	31.43	0.263	0.598	46.30	Plagioclase	200 - 100
3196	5480.4	368.9	147.22	83.81	0.569	0.711	74.03	Orthopyroxene	200 - 100
1949	3342.1	303.3	124.86	62.86	0.503	0.676	57.81	Plagioclase	200 - 100
28	48.0	24.0	5.99	6.55	1.093	1.025	6.93	Plagioclase	200 - 100
204	349.8	113.6	49.78	19.64	0.395	0.584	18.70	Glass	200 - 100
2894	4962.6	348.1	138.12	69.40	0.502	0.717	70.45	Plagioclase	200 - 100
1004	1721.6	193.6	73.32	32.74	0.447	0.760	41.49	Plagioclase	200 - 100
1432	2455.6	242.1	95.26	51.07	0.536	0.726	49.55	Glass	200 - 100
2694	4619.6	334.7	132.51	62.86	0.474	0.720	67.97	Plagioclase	200 - 100
1937	3321.5	351.6	154.28	64.17	0.416	0.581	57.63	Plagioclase	200 - 100
14	24.0	31.4	14.00	2.62	0.187	0.553	4.90	Glass	200 - 100
3732	6399.5	500.2	221.15	106.07	0.480	0.567	80.00	Plagioclase	200 - 100
11	18.9	12.7	3.16	5.24	1.658	1.217	4.34	Glass	200 - 100
407	697.9	143.1	59.92	30.12	0.503	0.654	26.42	Plagioclase	200 - 100
714	1224.4	182.7	75.00	27.50	0.367	0.679	34.99	Glass	200 - 100
2278	3906.3	299.1	115.82	51.07	0.441	0.741	62.50	Plagioclase	200 - 100
6	10.3	11.2	2.81	2.62	0.932	1.013	3.21	Plagioclase	200 - 100
7	12.0	11.3	2.83	2.62	0.926	1.084	3.46	Glass	200 - 100
1027	1761.1	206.7	81.86	28.81	0.352	0.720	41.97	Plagioclase	200 - 100
639	1095.7	165.5	66.22	36.67	0.554	0.709	33.10	Plagioclase	200 - 100
2728	4677.9	300.7	106.37	81.19	0.763	0.806	68.40	Olivine	200 - 100
26338	45163.6	1820.4	857.54	235.71	0.275	0.414	212.52	Chlorite	200 - 100
9594	16451.5	976.3	451.72	113.93	0.252	0.466	128.26	Plagioclase	200 - 100
3402	5833.7	519.9	235.15	96.90	0.412	0.521	76.38	Plagioclase	200 - 100
3227	5533.6	367.9	146.04	66.78	0.457	0.717	74.39	Plagioclase	200 - 100
1578	2705.9	285.6	120.33	40.59	0.337	0.646	52.02	Plagioclase	200 - 100

1654	2836.2	403.3	186.45	70.71	0.379	0.468	53.26	Plagioclase	200 - 100
864	1481.6	156.1	45.54	49.76	1.093	0.874	38.49	Plagioclase	200 - 100
4810	8248.0	650.7	297.65	75.95	0.255	0.495	90.82	Plagioclase	200 - 100
190	325.8	87.3	34.11	20.95	0.614	0.733	18.05	Clinopyroxene	200 - 100
3663	6281.2	402.4	162.56	69.40	0.427	0.698	79.25	Plagioclase	200 - 100
74	126.9	50.4	18.25	9.17	0.502	0.792	11.26	Plagioclase	200 - 100
5835	10005.7	546.1	229.41	77.26	0.337	0.649	100.03	Plagioclase	200 - 100
1935	3318.1	322.1	136.76	61.55	0.450	0.634	57.60	Orthopyroxene	200 - 100
3204	5494.1	350.4	134.30	94.28	0.702	0.750	74.12	Plagioclase	200 - 100
162	277.8	73.7	26.26	15.71	0.598	0.802	16.67	Olivine	200 - 100
120	205.8	71.8	28.74	14.40	0.501	0.708	14.34	Plagioclase	200 - 100
3198	5483.8	505.0	228.52	100.83	0.441	0.520	74.05	Plagioclase	200 - 100
4295	7364.9	382.9	138.11	89.05	0.645	0.795	85.82	Plagioclase	200 - 100
3609	6188.6	389.0	154.45	73.33	0.475	0.717	78.67	Orthopyroxene	200 - 100
995	1706.2	348.6	163.86	65.47	0.400	0.420	41.31	Plagioclase	200 - 100
1495	2563.6	257.3	103.99	60.24	0.579	0.698	50.63	Plagioclase	200 - 100
11	18.9	19.6	7.18	3.93	0.547	0.785	4.34	Glass	200 - 100
12815	21974.8	1089.0	500.62	183.33	0.366	0.483	148.24	Plagioclase	200 - 100
24	41.2	31.6	12.50	6.55	0.524	0.720	6.41	Plagioclase	200 - 100
1598	2740.2	318.8	139.78	39.28	0.281	0.582	52.35	Plagioclase	200 - 100
307	526.4	107.3	40.69	20.95	0.515	0.758	22.94	Plagioclase	200 - 100
9	15.4	11.6	2.89	2.62	0.907	1.205	3.93	Plagioclase	200 - 100
1559	2673.3	256.6	102.15	56.31	0.551	0.714	51.70	Olivine	200 - 100
156	267.5	80.5	31.88	20.95	0.657	0.720	16.36	Plagioclase	200 - 100
1929	3307.8	342.8	149.21	60.24	0.404	0.595	57.51	Olivine	200 - 100
1482	2541.3	316.6	140.16	44.52	0.318	0.564	50.41	Plagioclase	200 - 100
3726	6389.2	603.0	278.56	70.71	0.254	0.470	79.93	Plagioclase	200 - 100
3559	6102.9	338.1	116.78	83.81	0.718	0.819	78.12	Clinopyroxene	200 - 100
770	1320.4	175.5	68.45	31.43	0.459	0.734	36.34	Plagioclase	200 - 100
540	926.0	150.5	59.75	30.12	0.504	0.717	30.43	Olivine	200 - 100
72	123.5	62.9	26.82	10.48	0.391	0.627	11.11	Olivine	200 - 100
83	142.3	51.7	17.89	10.48	0.586	0.818	11.93	Olivine	200 - 100
6674	11444.4	443.2	139.66	113.93	0.816	0.856	106.98	Plagioclase	200 - 100
8966	15374.6	864.8	393.33	140.12	0.356	0.508	123.99	Plagioclase	200 - 100
5894	10106.9	515.9	209.77	100.83	0.481	0.691	100.53	Glass	200 - 100
1881	3225.5	259.4	96.16	75.95	0.790	0.776	56.79	Glass	200 - 100
11862	20340.6	1332.9	634.40	130.95	0.206	0.379	142.62	Glass	200 - 100
1707	2927.1	277.1	112.51	48.45	0.431	0.692	54.10	Plagioclase	200 - 100
1713	2937.4	367.4	166.02	35.36	0.213	0.523	54.20	Glass	200 - 100
9	15.4	15.7	3.93	2.62	0.667	0.887	3.93	Orthopyroxene	200 - 100
35	60.0	25.1	6.26	6.55	1.046	1.096	7.75	Plagioclase	200 - 100
185	317.2	98.0	41.32	18.33	0.444	0.644	17.81	Plagioclase	200 - 100
2648	4540.7	307.0	113.51	75.95	0.669	0.778	67.38	Orthopyroxene	200 - 100
1169	2004.6	178.3	44.56	45.83	1.029	0.890	44.77	Glass	200 - 100
2365	4055.4	339.9	141.25	56.31	0.399	0.664	63.68	Plagioclase	200 - 100
1100	1886.3	221.0	89.41	48.45	0.542	0.697	43.43	Plagioclase	200 - 100
1552	2661.3	291.3	124.25	61.55	0.495	0.628	51.59	Plagioclase	200 - 100
658	1128.3	184.8	77.90	27.50	0.353	0.644	33.59	Plagioclase	200 - 100
6	10.3	10.8	2.70	2.62	0.970	1.054	3.21	Plagioclase	200 - 100
29	49.7	40.7	17.49	6.55	0.374	0.615	7.05	Plagioclase	200 - 100
248	425.3	107.5	44.13	26.19	0.593	0.680	20.62	Chlorite	200 - 100
39	66.9	42.5	17.40	5.24	0.301	0.682	8.18	Plagioclase	200 - 100
1394	2390.4	308.5	136.75	43.21	0.316	0.562	48.89	Glass	200 - 100
265	454.4	140.5	63.05	13.09	0.208	0.538	21.32	Plagioclase	200 - 100
157	269.2	80.6	31.87	14.40	0.452	0.721	16.41	Ilmenite	200 - 100
17	29.2	24.0	8.64	2.62	0.303	0.796	5.40	Plagioclase	200 - 100
10761	18452.6	938.3	425.79	130.95	0.308	0.513	135.84	Plagioclase	200 - 100

6807	11672.4	513.5	197.69	108.69	0.550	0.746	108.04	Plagioclase	200 - 100
5810	9962.8	427.7	145.30	102.14	0.703	0.827	99.81	Plagioclase	200 - 100
4221	7238.1	417.6	164.94	99.52	0.603	0.722	85.08	Plagioclase	200 - 100
120	205.8	72.5	29.22	15.71	0.538	0.701	14.34	Plagioclase	200 - 100
10	17.2	15.8	3.95	5.24	1.327	0.929	4.14	Plagioclase	200 - 100
3508	6015.4	560.3	256.70	104.76	0.408	0.491	77.56	Plagioclase	200 - 100
4573	7841.6	559.4	248.11	75.95	0.306	0.561	88.55	Albite	200 - 100
1874	3213.5	231.5	69.47	61.55	0.886	0.868	56.69	Plagioclase	200 - 100
2556	4383.0	305.2	114.21	70.71	0.619	0.769	66.20	Olivine	200 - 100
1471	2522.4	350.9	159.67	66.78	0.418	0.507	50.22	Glass	200 - 100
6	10.3	10.8	2.70	1.31	0.485	1.054	3.21	Al2O3	200 - 100
5028	8621.9	636.9	288.59	111.31	0.386	0.517	92.85	Glass	200 - 100
101	173.2	65.7	26.22	9.17	0.350	0.711	13.16	Plagioclase	200 - 100
30	51.4	32.2	11.66	5.24	0.449	0.791	7.17	Plagioclase	200 - 100
4825	8273.8	502.2	212.06	79.88	0.377	0.642	90.96	Orthopyroxene	200 - 100
449	769.9	142.7	58.08	28.81	0.496	0.689	27.75	Plagioclase	200 - 100
7	12.0	14.2	4.30	3.93	0.914	0.866	3.46	Brass	200 - 100
1458	2500.1	230.5	86.29	52.38	0.607	0.769	50.00	Plagioclase	200 - 100
1870	3206.6	243.6	83.30	64.17	0.770	0.824	56.63	Glass	200 - 100
10430	17885.1	897.3	404.43	137.50	0.340	0.528	133.73	Plagioclase	200 - 100
383	656.8	115.2	41.95	30.12	0.718	0.789	25.63	Glass	200 - 100
5568	9547.8	430.0	152.27	100.83	0.662	0.806	97.71	Plagioclase	200 - 100
7444	12764.8	491.4	171.10	100.83	0.589	0.815	112.98	Ilmenite	200 - 100
6799	11658.7	657.5	288.33	142.73	0.495	0.582	107.98	Orthopyroxene	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Orthopyroxene	200 - 100
6	10.3	8.2	2.04	3.93	1.926	1.392	3.21	Plagioclase	200 - 100
142	243.5	69.5	24.99	18.33	0.733	0.796	15.60	Plagioclase	200 - 100
6	10.3	10.3	2.58	1.31	0.508	1.101	3.21	Clinopyroxene	200 - 100
44	75.5	35.8	11.04	5.24	0.475	0.861	8.69	Quartz	200 - 100
9	15.4	11.3	2.83	3.93	1.389	1.229	3.93	Glass	200 - 100
2834	4859.7	331.8	127.90	73.33	0.573	0.745	69.71	Plagioclase	200 - 100
508	871.1	209.0	95.35	19.64	0.206	0.501	29.51	Glass	200 - 100
271	464.7	93.0	31.94	20.95	0.656	0.822	21.56	Chlorite	200 - 100
3881	6655.0	356.7	125.16	96.90	0.774	0.811	81.58	Plagioclase	200 - 100
13	22.3	16.1	4.03	3.93	0.975	1.038	4.72	Plagioclase	200 - 100
4668	8004.6	407.8	150.83	78.57	0.521	0.778	89.47	Plagioclase	200 - 100
4835	8290.9	739.2	345.63	75.95	0.220	0.437	91.05	Plagioclase	200 - 100
193	331.0	77.6	26.16	14.40	0.550	0.831	18.19	Plagioclase	200 - 100
14	24.0	17.7	4.41	5.24	1.188	0.984	4.90	Glass	200 - 100
324	555.6	190.1	88.80	23.57	0.265	0.440	23.57	Glass	200 - 100
1569	2690.5	252.8	99.33	70.71	0.712	0.727	51.87	Plagioclase	200 - 100
2296	3937.1	278.4	99.74	65.47	0.656	0.799	62.75	Glass	200 - 100
3555	6096.0	362.2	136.38	73.33	0.538	0.764	78.08	Albite	200 - 100
21	36.0	23.1	5.78	5.24	0.907	0.920	6.00	Plagioclase	200 - 100
2366	4057.2	297.3	112.60	65.47	0.581	0.760	63.70	Plagioclase	200 - 100
1072	1838.2	217.4	87.78	49.76	0.567	0.699	42.87	Plagioclase	200 - 100
9	15.4	14.3	3.57	2.62	0.734	0.976	3.93	Plagioclase	200 - 100
670	1148.9	177.1	72.75	34.05	0.468	0.679	33.90	Plagioclase	200 - 100
1273	2182.9	215.1	80.40	57.62	0.717	0.770	46.72	Chlorite	200 - 100
2572	4410.4	295.7	106.43	66.78	0.627	0.796	66.41	Plagioclase	200 - 100
2112	3621.6	321.9	133.89	56.31	0.421	0.663	60.18	Plagioclase	200 - 100
13	22.3	20.1	6.70	3.93	0.587	0.835	4.72	Plagioclase	200 - 100
14	24.0	17.1	4.28	5.24	1.224	1.015	4.90	Plagioclase	200 - 100
3471	5952.0	387.1	155.17	82.50	0.532	0.707	77.15	Plagioclase	200 - 100
266	456.1	156.7	72.02	17.02	0.236	0.483	21.36	Plagioclase	200 - 100
133	228.1	76.5	30.85	19.64	0.637	0.700	15.10	Plagioclase	200 - 100
31	53.2	48.9	22.06	5.24	0.238	0.528	7.29	Plagioclase	200 - 100

2514	4310.9	329.0	131.80	68.09	0.517	0.707	65.66	Plagioclase	200 - 100
8326	14277.2	812.9	367.59	179.40	0.488	0.521	119.49	Orthopyroxene	200 - 100
4019	6891.7	369.4	132.76	68.09	0.513	0.797	83.02	Olivine	200 - 100
11173	19159.1	1199.0	565.63	184.64	0.326	0.409	138.42	Glass	200 - 100
219	375.5	91.8	35.25	18.33	0.520	0.748	19.38	Albite	200 - 100
2545	4364.1	326.0	129.21	61.55	0.476	0.718	66.06	Glass	200 - 100
1364	2339.0	301.3	133.06	44.52	0.335	0.569	48.36	Plagioclase	200 - 100
1157	1984.0	209.3	79.76	36.67	0.460	0.755	44.54	Albite	200 - 100
2341	4014.3	331.9	136.56	57.62	0.422	0.677	63.36	Plagioclase	200 - 100
178	305.2	63.0	15.74	15.71	0.998	0.983	17.47	Plagioclase	200 - 100
4186	7178.0	455.3	189.82	83.81	0.442	0.660	84.72	Plagioclase	200 - 100
232	397.8	118.7	51.64	15.71	0.304	0.596	19.95	Glass	200 - 100
6	10.3	10.0	2.51	3.93	1.566	1.134	3.21	Glass	200 - 100
992	1701.1	221.0	92.03	35.36	0.384	0.661	41.24	Plagioclase	200 - 100
609	1044.3	163.5	65.91	30.12	0.457	0.701	32.32	Plagioclase	200 - 100
12152	20837.9	1115.1	517.28	176.78	0.342	0.459	144.35	Glass	200 - 100
237	406.4	86.6	29.57	17.02	0.576	0.825	20.16	Plagioclase	200 - 100
461	790.5	174.9	77.20	17.02	0.220	0.570	28.12	Glass	200 - 100
3561	6106.3	341.8	120.03	79.88	0.666	0.810	78.14	Plagioclase	200 - 100
4911	8421.2	574.9	254.34	125.71	0.494	0.566	91.77	Olivine	200 - 100
1208	2071.4	210.4	78.97	56.31	0.713	0.767	45.51	Plagioclase	200 - 100
17	29.2	32.5	14.20	2.62	0.185	0.589	5.40	Plagioclase	200 - 100
2823	4840.8	359.8	146.93	86.43	0.588	0.686	69.58	Plagioclase	200 - 100
2362	4050.3	301.4	115.72	57.62	0.498	0.748	63.64	Olivine	200 - 100
830	1423.3	187.7	74.83	36.67	0.490	0.712	37.73	Plagioclase	200 - 100
62	106.3	61.6	26.85	6.55	0.244	0.593	10.31	Plagioclase	200 - 100
3797	6511.0	362.4	131.83	91.66	0.695	0.789	80.69	Plagioclase	200 - 100
10633	18233.2	865.9	385.69	128.33	0.333	0.553	135.03	Glass	200 - 100
7	12.0	14.2	4.30	2.62	0.609	0.866	3.46	Glass	200 - 100
1787	3064.3	293.3	121.42	45.83	0.377	0.669	55.36	Plagioclase	200 - 100
54	92.6	39.6	12.24	9.17	0.749	0.861	9.62	Orthopyroxene	200 - 100
924	1584.5	205.5	83.86	39.28	0.468	0.687	39.81	Plagioclase	200 - 100
46	78.9	44.8	18.02	5.24	0.291	0.703	8.88	Plagioclase	200 - 100
387	663.6	140.6	59.08	23.57	0.399	0.649	25.76	Plagioclase	200 - 100
1018	1745.6	193.4	72.65	37.98	0.523	0.766	41.78	Glass	200 - 100
4456	7641.0	429.6	169.78	99.52	0.586	0.721	87.41	Orthopyroxene	200 - 100
6470	11094.6	976.7	464.46	100.83	0.217	0.382	105.33	Plagioclase	200 - 100
3923	6727.0	379.3	142.45	89.05	0.625	0.766	82.02	Plagioclase	200 - 100
59	101.2	40.6	11.47	7.86	0.685	0.879	10.06	Orthopyroxene	200 - 100
87	149.2	76.9	34.04	11.79	0.346	0.563	12.21	Plagioclase	200 - 100
63	108.0	47.6	17.68	9.17	0.519	0.774	10.39	Glass	200 - 100
2100	3601.0	227.6	56.89	65.47	1.151	0.935	60.01	Glass	200 - 100
26	44.6	33.5	13.45	5.24	0.390	0.706	6.68	Glass	200 - 100
2923	5012.3	386.1	162.16	75.95	0.468	0.650	70.80	Glass	200 - 100
14	24.0	15.3	3.82	5.24	1.372	1.138	4.90	Glass	200 - 100
2617	4487.6	367.1	154.53	64.17	0.415	0.647	66.99	Plagioclase	200 - 100
338	579.6	162.9	73.56	27.50	0.374	0.524	24.07	Olivine	200 - 100
8492	14561.8	511.5	170.15	153.21	0.900	0.836	120.67	Orthopyroxene	200 - 100
1109	1901.7	187.0	63.55	43.21	0.680	0.827	43.61	Plagioclase	200 - 100
11610	19908.5	1113.2	518.18	195.11	0.377	0.449	141.10	Glass	200 - 100
109	186.9	72.6	30.09	11.79	0.392	0.667	13.67	Plagioclase	200 - 100
1814	3110.6	324.5	140.02	57.62	0.412	0.609	55.77	Glass	200 - 100
577	989.4	144.8	54.08	35.36	0.654	0.770	31.46	Plagioclase	200 - 100
2414	4139.5	377.0	163.10	43.21	0.265	0.605	64.34	Glass	200 - 100
85	145.8	69.1	29.64	13.09	0.442	0.619	12.07	Plagioclase	200 - 100
143	245.2	61.1	15.28	14.40	0.942	0.908	15.66	Plagioclase	200 - 100
1601	2745.4	263.9	106.04	51.07	0.482	0.704	52.40	Plagioclase	200 - 100

2071	3551.3	260.0	90.97	61.55	0.677	0.812	59.59	Plagioclase	200 - 100
6310	10820.2	606.7	262.06	141.43	0.540	0.608	104.02	Plagioclase	200 - 100
3644	6248.6	345.6	121.23	82.50	0.681	0.811	79.05	Plagioclase	200 - 100
1448	2483.0	227.4	84.18	57.62	0.684	0.777	49.83	Plagioclase	200 - 100
59	101.2	69.6	31.58	6.55	0.207	0.513	10.06	Olivine	200 - 100
2900	4972.8	319.1	117.07	75.95	0.649	0.783	70.52	Plagioclase	200 - 100
7058	12102.9	910.5	426.88	120.47	0.282	0.428	110.01	Orthopyroxene	200 - 100
1052	1803.9	204.8	79.81	43.21	0.541	0.735	42.47	Plagioclase	200 - 100
2188	3751.9	303.6	120.71	66.78	0.553	0.715	61.25	Glass	200 - 100
177	303.5	90.0	36.71	14.40	0.392	0.687	17.42	Orthopyroxene	200 - 100
2130	3652.5	263.5	92.11	58.93	0.640	0.813	60.44	Plagioclase	200 - 100
2486	4262.9	378.4	163.07	53.69	0.329	0.612	65.29	Olivine	200 - 100
2551	4374.4	376.6	161.17	57.62	0.358	0.623	66.14	Plagioclase	200 - 100
3214	5511.3	307.8	97.17	78.57	0.809	0.855	74.24	Olivine	200 - 100
6405	10983.1	476.2	175.50	140.12	0.798	0.780	104.80	Plagioclase	200 - 100
8345	14309.8	763.8	339.81	86.43	0.254	0.555	119.62	Plagioclase	200 - 100
5092	8731.6	412.0	146.32	94.28	0.644	0.804	93.44	Plagioclase	200 - 100
1561	2676.8	244.7	93.82	60.24	0.642	0.750	51.74	Plagioclase	200 - 100
932	1598.2	210.1	86.58	48.45	0.560	0.675	39.98	Plagioclase	200 - 100
4219	7234.6	378.0	135.70	91.66	0.675	0.798	85.06	Plagioclase	200 - 100
4821	8266.9	516.7	220.92	83.81	0.379	0.624	90.92	Plagioclase	200 - 100
2475	4244.1	285.4	100.46	81.19	0.808	0.809	65.15	Plagioclase	200 - 100
7	12.0	12.7	3.16	2.62	0.829	0.971	3.46	Plagioclase	200 - 100
44	75.5	48.1	20.34	6.55	0.322	0.640	8.69	Plagioclase	200 - 100
8	13.7	16.8	6.18	2.62	0.424	0.782	3.70	Plagioclase	200 - 100
1601	2745.4	246.2	93.81	49.76	0.530	0.755	52.40	Clinopyroxene	200 - 100
3909	6703.0	386.3	147.82	87.74	0.594	0.751	81.87	Glass	200 - 100
24	41.2	26.4	8.17	6.55	0.802	0.861	6.41	Plagioclase	200 - 100
77	132.0	63.0	26.52	9.17	0.346	0.647	11.49	Plagioclase	200 - 100
591	1013.4	140.5	50.00	35.36	0.707	0.803	31.83	Orthopyroxene	200 - 100
37	63.5	45.3	19.39	7.86	0.405	0.623	7.97	Plagioclase	200 - 100
2386	4091.4	317.7	126.52	73.33	0.580	0.714	63.96	Plagioclase	200 - 100
248	425.3	103.8	41.70	18.33	0.440	0.704	20.62	Plagioclase	200 - 100
1707	2927.1	266.3	105.36	49.76	0.472	0.720	54.10	Plagioclase	200 - 100
7021	12039.4	604.0	254.72	140.12	0.550	0.644	109.72	Plagioclase	200 - 100
1604	2750.5	245.3	93.08	56.31	0.605	0.758	52.45	Plagioclase	200 - 100
2217	3801.7	313.8	126.92	47.14	0.371	0.697	61.66	Plagioclase	200 - 100
4541	7786.8	366.7	116.50	100.83	0.865	0.853	88.24	Plagioclase	200 - 100
7269	12464.7	683.8	300.42	127.02	0.423	0.579	111.65	Glass	200 - 100
2596	4451.5	323.6	126.67	86.43	0.682	0.731	66.72	Plagioclase	200 - 100
1135	1946.3	234.4	97.17	39.28	0.404	0.667	44.12	Plagioclase	200 - 100
2093	3589.0	325.0	136.15	74.64	0.548	0.653	59.91	Plagioclase	200 - 100
1097	1881.1	222.9	90.71	37.98	0.419	0.690	43.37	Plagioclase	200 - 100
170	291.5	74.5	26.03	14.40	0.553	0.813	17.07	Glass	200 - 100
10	17.2	12.7	3.16	2.62	0.829	1.161	4.14	Plagioclase	200 - 100
1732	2970.0	244.3	88.68	52.38	0.591	0.791	54.50	Chlorite	200 - 100
135	231.5	92.7	40.64	13.09	0.322	0.582	15.21	Olivine	200 - 100
1439	2467.6	250.4	100.69	45.83	0.455	0.703	49.67	Plagioclase	200 - 100
1889	3239.2	274.7	107.08	56.31	0.526	0.735	56.91	Plagioclase	200 - 100
1971	3379.8	334.1	143.51	39.28	0.274	0.617	58.14	Plagioclase	200 - 100
9087	15582.1	861.6	390.91	141.43	0.362	0.514	124.83	Plagioclase	200 - 100
1765	3026.6	232.7	77.05	65.47	0.850	0.838	55.01	Plagioclase	200 - 100
1300	2229.2	210.2	75.64	55.00	0.727	0.796	47.21	Plagioclase	200 - 100
356	610.5	139.1	59.21	30.12	0.509	0.630	24.71	Plagioclase	200 - 100
18	30.9	20.8	5.21	3.93	0.754	0.946	5.56	Plagioclase	200 - 100
6335	10863.1	649.5	286.86	104.76	0.365	0.569	104.23	Olivine	200 - 100
2879	4936.8	324.9	121.99	85.12	0.698	0.767	70.26	Plagioclase	200 - 100

1435	2460.7	259.4	106.64	32.74	0.307	0.678	49.61	Glass	200 - 100
2497	4281.8	388.5	168.87	47.14	0.279	0.597	65.44	Plagioclase	200 - 100
4237	7265.5	352.5	110.53	95.59	0.865	0.857	85.24	Glass	200 - 100
632	1083.7	184.1	78.21	27.50	0.352	0.634	32.92	Plagioclase	200 - 100
2549	4371.0	362.6	152.65	52.38	0.343	0.646	66.11	Glass	200 - 100
63	108.0	70.9	32.06	14.40	0.449	0.520	10.39	Glass	200 - 100
8	13.7	13.2	3.29	3.93	1.195	0.996	3.70	Glass	200 - 100
2523	4326.4	382.3	164.90	55.00	0.334	0.610	65.78	Plagioclase	200 - 100
18	30.9	20.8	5.21	6.55	1.257	0.946	5.56	Orthopyroxene	200 - 100
563	965.4	171.9	72.64	31.43	0.433	0.641	31.07	Plagioclase	200 - 100
6213	10653.9	532.7	217.30	99.52	0.458	0.687	103.22	Plagioclase	200 - 100
2894	4962.6	342.1	134.01	61.55	0.459	0.730	70.45	Orthopyroxene	200 - 100
269	461.3	112.1	46.06	18.33	0.398	0.679	21.48	Plagioclase	200 - 100
4913	8424.7	402.8	142.12	91.66	0.645	0.808	91.79	Plagioclase	200 - 100
3805	6524.7	380.8	145.60	90.35	0.621	0.752	80.78	Plagioclase	200 - 100
1892	3244.4	245.7	84.37	64.17	0.761	0.822	56.96	Plagioclase	200 - 100
443	759.6	151.6	63.89	39.28	0.615	0.645	27.56	Plagioclase	200 - 100
7118	12205.7	572.1	233.84	102.14	0.437	0.685	110.48	Plagioclase	200 - 100
1258	2157.2	228.7	90.49	47.14	0.521	0.720	46.45	Plagioclase	200 - 100
3920	6721.9	384.7	146.47	103.45	0.706	0.755	81.99	Plagioclase	200 - 100
628	1076.9	218.9	98.51	39.28	0.399	0.531	32.82	Glass	200 - 100
23	39.4	20.2	5.04	5.24	1.040	1.104	6.28	Chlorite	200 - 100
1189	2038.9	230.2	93.25	45.83	0.491	0.695	45.15	Plagioclase	200 - 100
879	1507.3	232.4	101.32	30.12	0.297	0.592	38.82	Plagioclase	200 - 100
2916	5000.3	498.9	227.48	92.97	0.409	0.502	70.71	Plagioclase	200 - 100
8	13.7	16.6	5.99	2.62	0.437	0.792	3.70	Plagioclase	200 - 100
266	456.1	122.1	52.35	18.33	0.350	0.620	21.36	Plagioclase	200 - 100
2047	3510.1	280.8	107.89	77.26	0.716	0.748	59.25	Plagioclase	200 - 100
386	661.9	126.6	50.09	32.74	0.654	0.720	25.73	Plagioclase	200 - 100
3082	5284.9	334.0	124.59	85.12	0.683	0.772	72.70	Glass	200 - 100
7371	12639.6	636.7	271.83	125.71	0.462	0.626	112.43	Plagioclase	200 - 100
5889	10098.3	483.7	188.16	120.47	0.640	0.737	100.49	Clinopyroxene	200 - 100
3040	5212.9	318.2	112.97	74.64	0.661	0.804	72.20	Plagioclase	200 - 100
5726	9818.8	556.0	236.49	107.38	0.454	0.632	99.09	Plagioclase	200 - 100
60	102.9	36.3	9.07	11.79	1.300	0.991	10.14	Plagioclase	200 - 100
742	1272.4	191.4	79.72	30.12	0.378	0.661	35.67	Plagioclase	200 - 100
2418	4146.3	349.1	146.16	49.76	0.340	0.654	64.39	Plagioclase	200 - 100
3150	5401.5	422.8	181.63	72.02	0.397	0.616	73.50	Plagioclase	200 - 100
7513	12883.1	756.1	340.15	103.45	0.304	0.532	113.50	Plagioclase	200 - 100
1996	3422.7	251.6	86.00	65.47	0.761	0.824	58.50	Plagioclase	200 - 100
5201	8918.5	632.5	284.93	111.31	0.391	0.529	94.44	Plagioclase	200 - 100
1520	2606.5	288.0	122.76	34.05	0.277	0.628	51.05	Glass	200 - 100
3638	6238.3	330.8	107.16	87.74	0.819	0.847	78.98	Clinopyroxene	200 - 100
252	432.1	134.1	59.84	18.33	0.306	0.549	20.79	Olivine	200 - 100
6275	10760.2	767.0	353.00	142.73	0.404	0.479	103.73	Plagioclase	200 - 100
2121	3637.0	277.8	103.86	60.24	0.580	0.770	60.31	Glass	200 - 100
8703	14923.7	576.1	220.29	145.35	0.660	0.752	122.16	Plagioclase	200 - 100
1325	2272.1	328.9	149.24	61.55	0.412	0.514	47.67	Plagioclase	200 - 100
1384	2373.2	236.8	92.86	66.78	0.719	0.729	48.72	Plagioclase	200 - 100
18	30.9	29.2	12.04	3.93	0.326	0.674	5.56	Brass	200 - 100
3712	6365.2	376.8	144.30	79.88	0.554	0.751	79.78	Chlorite	200 - 100
956	1639.3	160.8	40.19	43.21	1.075	0.893	40.49	Plagioclase	200 - 100
1247	2138.3	198.0	67.16	52.38	0.780	0.828	46.24	Plagioclase	200 - 100
1987	3407.3	277.3	106.74	62.86	0.589	0.746	58.37	Glass	200 - 100
1114	1910.3	198.7	73.31	53.69	0.732	0.780	43.71	Plagioclase	200 - 100
2573	4412.1	331.9	132.68	58.93	0.444	0.710	66.42	Glass	200 - 100
2293	3932.0	286.3	106.06	56.31	0.531	0.776	62.71	Plagioclase	200 - 100

56	96.0	49.2	19.71	6.55	0.332	0.706	9.80	Olivine	200 - 100
722	1238.1	159.8	58.85	40.59	0.690	0.781	35.19	Glass	200 - 100
18	30.9	18.3	4.58	5.24	1.144	1.075	5.56	Glass	200 - 100
24786	42502.3	2157.2	1037.63	289.40	0.279	0.339	206.16	Plagioclase	200 - 100
387	663.6	136.5	56.50	28.81	0.510	0.669	25.76	Calcite	200 - 100
1256	2153.8	262.5	112.00	56.31	0.503	0.627	46.41	Plagioclase	200 - 100
735	1260.4	160.2	58.61	28.81	0.492	0.785	35.50	Albite	200 - 100
458	785.4	120.9	41.56	31.43	0.756	0.822	28.02	Olivine	200 - 100
2283	3914.8	295.9	113.44	62.86	0.554	0.750	62.57	Ilmenite	200 - 100
763	1308.4	156.2	53.72	39.28	0.731	0.821	36.17	Glass	200 - 100
2537	4350.4	446.1	201.46	64.17	0.319	0.524	65.96	Plagioclase	200 - 100
2379	4079.4	279.4	98.15	73.33	0.747	0.810	63.87	Plagioclase	200 - 100
206	353.2	100.7	41.94	22.26	0.531	0.661	18.79	Plagioclase	200 - 100
3263	5595.3	334.6	121.08	85.12	0.703	0.793	74.80	Plagioclase	200 - 100
6800	11660.4	494.5	183.82	123.09	0.670	0.774	107.98	Glass	200 - 100
4066	6972.3	474.2	202.70	70.71	0.349	0.624	83.50	Plagioclase	200 - 100
2577	4419.0	297.9	108.02	73.33	0.679	0.791	66.48	Plagioclase	200 - 100
11649	19975.4	1037.9	477.07	137.50	0.288	0.483	141.33	Chlorite	200 - 100
9434	16177.1	775.0	339.91	89.05	0.262	0.582	127.19	Plagioclase	200 - 100
1990	3412.4	276.5	106.10	60.24	0.568	0.749	58.42	Plagioclase	200 - 100
2331	3997.1	343.5	144.01	70.71	0.491	0.652	63.22	Glass	200 - 100
6980	11969.1	892.8	417.74	137.50	0.329	0.434	109.40	Plagioclase	200 - 100
308	528.2	100.1	34.88	26.19	0.751	0.814	22.98	Clinopyroxene	200 - 100
3511	6020.6	536.8	243.71	85.12	0.349	0.512	77.59	Plagioclase	200 - 100
2843	4875.1	287.8	89.34	68.09	0.762	0.860	69.82	Plagioclase	200 - 100
545	934.6	131.9	45.33	30.12	0.664	0.822	30.57	Glass	200 - 100
2631	4511.6	347.1	141.68	74.64	0.527	0.686	67.17	Plagioclase	200 - 100
755	1294.7	152.8	51.06	37.98	0.744	0.835	35.98	Orthopyroxene	200 - 100
1754	3007.7	283.8	115.93	57.62	0.497	0.685	54.84	Orthopyroxene	200 - 100
3129	5365.5	338.5	127.02	72.02	0.567	0.767	73.25	Clinopyroxene	200 - 100
8	13.7	15.0	4.23	2.62	0.619	0.878	3.70	Plagioclase	200 - 100
430	737.4	138.0	55.76	28.81	0.517	0.698	27.15	Plagioclase	200 - 100
2106	3611.3	268.8	97.26	69.40	0.714	0.793	60.09	Plagioclase	200 - 100
359	615.6	113.5	42.12	27.50	0.653	0.775	24.81	Clay	200 - 100
1048	1797.1	205.9	80.67	40.59	0.503	0.730	42.39	Olivine	200 - 100
1471	2522.4	219.3	76.80	57.62	0.750	0.812	50.22	Plagioclase	200 - 100
1115	1912.0	238.7	100.28	40.59	0.405	0.649	43.73	Plagioclase	200 - 100
1728	2963.1	262.0	101.90	43.21	0.424	0.737	54.43	Plagioclase	200 - 100
501	859.1	160.0	67.21	26.19	0.390	0.649	29.31	Plagioclase	200 - 100
4803	8236.0	448.4	177.91	87.74	0.493	0.717	90.75	Plagioclase	200 - 100
5794	9935.4	639.4	284.82	127.02	0.446	0.553	99.68	Plagioclase	200 - 100
1184	2030.3	226.4	90.82	45.83	0.505	0.706	45.06	Plagioclase	200 - 100
2842	4873.4	284.6	84.85	75.95	0.895	0.870	69.81	Glass	200 - 100
7457	12787.0	726.3	323.66	147.97	0.457	0.552	113.08	Plagioclase	200 - 100
9164	15714.2	857.5	388.28	161.07	0.415	0.518	125.36	Ilmenite	200 - 100
853	1462.7	153.1	39.84	35.36	0.888	0.885	38.25	Glass	200 - 100
481	824.8	146.4	59.30	22.26	0.375	0.695	28.72	Clinopyroxene	200 - 100
2545	4364.1	299.3	109.97	72.02	0.655	0.782	66.06	Glass	200 - 100
2674	4585.3	396.3	171.41	41.90	0.244	0.606	67.71	Glass	200 - 100
4539	7783.3	550.9	243.46	124.40	0.511	0.568	88.22	Calcite	200 - 100
10974	18817.9	735.9	306.59	171.54	0.560	0.661	137.18	Glass	200 - 100
563	965.4	156.4	62.85	34.05	0.542	0.704	31.07	Glass	200 - 100
164	281.2	71.6	24.13	17.02	0.705	0.831	16.77	Glass	200 - 100
3804	6523.0	382.4	146.75	98.21	0.669	0.749	80.77	Plagioclase	200 - 100
6745	11566.1	723.6	326.35	112.62	0.345	0.527	107.55	Chlorite	200 - 100
6	10.3	11.6	2.89	3.93	1.360	0.984	3.21	Plagioclase	200 - 100
2013	3451.8	270.6	101.20	65.47	0.647	0.770	58.75	Plagioclase	200 - 100

15	25.7	21.6	7.21	3.93	0.545	0.834	5.07	Plagioclase	200 - 100
939	1610.2	246.4	108.31	52.38	0.484	0.577	40.13	Plagioclase	200 - 100
3416	5857.7	541.0	246.75	62.86	0.255	0.502	76.54	Orthopyroxene	200 - 100
419	718.5	205.9	95.42	22.26	0.233	0.461	26.80	Glass	200 - 100
3473	5955.4	376.2	147.82	62.86	0.425	0.727	77.17	Plagioclase	200 - 100
1770	3035.1	266.0	103.74	48.45	0.467	0.734	55.09	Plagioclase	200 - 100
48	82.3	41.0	14.98	9.17	0.612	0.785	9.07	Plagioclase	200 - 100
1021	1750.8	256.3	112.60	39.28	0.349	0.579	41.84	Plagioclase	200 - 100
300	514.4	126.1	53.44	14.40	0.269	0.637	22.68	Glass	200 - 100
5140	8813.9	574.6	252.39	104.76	0.415	0.579	93.88	Glass	200 - 100
876	1502.1	174.6	63.73	34.05	0.534	0.787	38.76	Plagioclase	200 - 100
32	54.9	35.6	13.85	6.55	0.473	0.737	7.41	Plagioclase	200 - 100
11270	19325.5	1040.8	480.14	117.85	0.245	0.473	139.02	Olivine	200 - 100
223	382.4	113.1	48.70	15.71	0.323	0.613	19.55	Plagioclase	200 - 100
2843	4875.1	296.5	99.06	74.64	0.753	0.835	69.82	Plagioclase	200 - 100
3419	5862.8	557.0	255.53	74.64	0.292	0.487	76.57	Glass	200 - 100
2487	4264.6	365.5	155.26	58.93	0.380	0.633	65.30	Clinopyroxene	200 - 100
4760	8162.3	677.5	312.63	136.19	0.436	0.473	90.35	Plagioclase	200 - 100
3622	6210.9	614.5	285.48	99.52	0.349	0.455	78.81	Glass	200 - 100
2620	4492.7	331.7	131.75	83.81	0.636	0.716	67.03	Plagioclase	200 - 100
13	22.3	18.3	4.57	3.93	0.860	0.916	4.72	Plagioclase	200 - 100
8	13.7	15.0	4.39	3.93	0.895	0.874	3.70	Glass	200 - 100
2615	4484.1	302.9	111.09	70.71	0.637	0.784	66.96	Plagioclase	200 - 100
29	49.7	30.1	10.11	6.55	0.648	0.832	7.05	Plagioclase	200 - 100
20	34.3	26.5	9.72	5.24	0.539	0.783	5.86	Plagioclase	200 - 100
2018	3460.4	244.9	78.24	65.47	0.837	0.851	58.83	Plagioclase	200 - 100
1324	2270.4	267.5	113.77	58.93	0.518	0.632	47.65	Glass	200 - 100
586	1004.9	158.3	63.24	30.12	0.476	0.710	31.70	Orthopyroxene	200 - 100
1661	2848.2	364.9	165.19	31.43	0.190	0.519	53.37	Plagioclase	200 - 100
2264	3882.2	285.3	106.07	58.93	0.556	0.774	62.31	Plagioclase	200 - 100
4421	7581.0	377.7	130.97	91.66	0.700	0.817	87.07	Clinopyroxene	200 - 100
192	329.2	74.2	22.46	17.02	0.758	0.866	18.14	Plagioclase	200 - 100
1778	3048.9	302.9	127.56	51.07	0.400	0.646	55.22	Plagioclase	200 - 100
4082	6999.7	402.8	156.73	83.81	0.535	0.736	83.66	Plagioclase	200 - 100
3751	6432.1	320.2	80.06	89.05	1.112	0.888	80.20	Glass	200 - 100
4482	7685.6	409.4	155.15	103.45	0.667	0.759	87.67	Plagioclase	200 - 100
2309	3959.4	342.6	143.74	52.38	0.364	0.651	62.92	Plagioclase	200 - 100
16	27.4	27.1	11.10	2.62	0.236	0.684	5.24	Clinopyroxene	200 - 100
4014	6883.1	414.1	165.42	81.19	0.491	0.710	82.96	Plagioclase	200 - 100
2859	4902.5	332.6	127.96	70.71	0.553	0.746	70.02	Plagioclase	200 - 100
112	192.1	73.8	30.64	10.48	0.342	0.665	13.86	Plagioclase	200 - 100
342	586.5	119.5	47.38	23.57	0.497	0.718	24.22	Plagioclase	200 - 100
3771	6466.4	331.4	102.78	83.81	0.815	0.860	80.41	Ilmenite	200 - 100
50	85.7	58.5	25.96	7.86	0.303	0.561	9.26	Clinopyroxene	200 - 100
1920	3292.4	308.2	128.46	44.52	0.347	0.660	57.38	Glass	200 - 100
2058	3529.0	255.3	87.12	64.17	0.737	0.825	59.41	Glass	200 - 100
374	641.3	220.5	104.10	13.09	0.126	0.407	25.32	Plagioclase	200 - 100
832	1426.7	225.3	98.08	28.81	0.294	0.594	37.77	Glass	200 - 100
192	329.2	94.9	39.00	19.64	0.504	0.678	18.14	Plagioclase	200 - 100
255	437.3	115.0	48.45	14.40	0.297	0.645	20.91	Plagioclase	200 - 100
160	274.4	90.1	37.81	22.26	0.589	0.651	16.56	Chlorite	200 - 100
16114	27631.8	1372.5	643.31	237.02	0.368	0.429	166.23	Olivine	200 - 100
72	123.5	65.5	28.42	11.79	0.415	0.601	11.11	Plagioclase	200 - 100
174	298.4	135.9	63.21	7.86	0.124	0.451	17.27	Clinopyroxene	200 - 100
950	1629.0	271.9	122.65	39.28	0.320	0.526	40.36	Plagioclase	200 - 100
1984	3402.1	254.1	88.71	62.86	0.709	0.814	58.33	Plagioclase	200 - 100
8	13.7	11.6	2.89	2.62	0.907	1.136	3.70	Plagioclase	200 - 100

2166	3714.2	307.7	123.88	48.45	0.391	0.702	60.94	Plagioclase	200 - 100
68	116.6	57.5	23.86	15.71	0.658	0.666	10.80	Glass	200 - 100
6021	10324.6	443.4	155.13	111.31	0.718	0.812	101.61	Plagioclase	200 - 100
1645	2820.8	245.3	91.96	47.14	0.513	0.768	53.11	Plagioclase	200 - 100
2563	4395.0	384.3	165.63	53.69	0.324	0.611	66.29	Plagioclase	200 - 100
1973	3383.2	351.3	153.60	51.07	0.332	0.587	58.17	Plagioclase	200 - 100
2816	4828.8	340.7	134.40	68.09	0.507	0.723	69.49	Plagioclase	200 - 100
3839	6583.0	348.7	119.08	83.81	0.704	0.825	81.14	Plagioclase	200 - 100
583	999.7	164.1	67.17	26.19	0.390	0.683	31.62	Plagioclase	200 - 100
410	703.1	131.3	52.20	20.95	0.401	0.716	26.52	Glass	200 - 100
1192	2044.0	279.4	123.12	26.19	0.213	0.574	45.21	Plagioclase	200 - 100
3094	5305.5	370.4	149.76	66.78	0.446	0.697	72.84	Plagioclase	200 - 100
1363	2337.2	275.5	117.94	43.21	0.366	0.622	48.34	Orthopyroxene	200 - 100
60	102.9	43.6	14.91	7.86	0.527	0.824	10.14	Plagioclase	200 - 100
5401	9261.5	634.0	284.43	82.50	0.290	0.538	96.24	Orthopyroxene	200 - 100
1526	2616.7	237.4	89.41	51.07	0.571	0.764	51.15	Olivine	200 - 100
1598	2740.2	270.3	110.33	55.00	0.499	0.686	52.35	Orthopyroxene	200 - 100
33	56.6	32.2	10.87	6.55	0.603	0.829	7.52	Glass	200 - 100
4548	7798.8	359.7	106.92	98.21	0.919	0.870	88.31	Glass	200 - 100
8165	14001.1	527.2	189.82	137.50	0.724	0.796	118.33	Plagioclase	200 - 100
1721	2951.1	289.5	120.18	53.69	0.447	0.665	54.32	Plagioclase	200 - 100
5056	8669.9	416.2	150.51	100.83	0.670	0.793	93.11	Plagioclase	200 - 100
1983	3400.4	281.1	109.51	40.59	0.371	0.735	58.31	Plagioclase	200 - 100
589	1010.0	160.8	64.81	35.36	0.546	0.701	31.78	Plagioclase	200 - 100
5340	9156.9	781.7	365.84	124.40	0.340	0.434	95.69	Clinopyroxene	200 - 100
186	319.0	74.4	23.77	18.33	0.771	0.851	17.86	Plagioclase	200 - 100
3368	5775.4	640.1	300.86	96.90	0.322	0.421	76.00	Glass	200 - 100
865	1483.3	168.3	59.03	47.14	0.799	0.811	38.51	Clinopyroxene	200 - 100
113	193.8	68.4	27.02	11.79	0.436	0.722	13.92	Plagioclase	200 - 100
55	94.3	49.9	20.33	7.86	0.387	0.689	9.71	Plagioclase	200 - 100
8434	14462.4	543.1	198.81	130.95	0.659	0.785	120.26	Plagioclase	200 - 100
1441	2471.0	235.6	90.51	51.07	0.564	0.748	49.71	Glass	200 - 100
65	111.5	47.9	17.60	10.48	0.595	0.782	10.56	Glass	200 - 100
5439	9326.6	713.5	328.37	92.97	0.283	0.480	96.57	Plagioclase	200 - 100
6	10.3	8.2	2.04	2.62	1.284	1.392	3.21	Glass	200 - 100
710	1217.5	183.3	75.52	20.95	0.277	0.675	34.89	Plagioclase	200 - 100
2887	4950.5	341.3	133.58	74.64	0.559	0.731	70.36	Orthopyroxene	200 - 100
2960	5075.7	385.2	161.12	65.47	0.406	0.656	71.24	Plagioclase	200 - 100
520	891.7	153.8	62.67	27.50	0.439	0.688	29.86	Olivine	200 - 100
2295	3935.4	382.1	167.55	75.95	0.453	0.582	62.73	Plagioclase	200 - 100
2033	3486.1	351.6	153.04	45.83	0.299	0.595	59.04	Plagioclase	200 - 100
107	183.5	56.7	18.31	14.40	0.786	0.847	13.55	Orthopyroxene	200 - 100
1535	2632.2	242.6	92.96	53.69	0.578	0.750	51.30	Glass	200 - 100
8455	14498.4	849.2	387.14	130.95	0.338	0.503	120.41	Plagioclase	200 - 100
2992	5130.6	320.5	116.01	73.33	0.632	0.792	71.63	Quartz	200 - 100
2153	3691.9	301.8	120.19	77.26	0.643	0.714	60.76	Plagioclase	200 - 100
1831	3139.7	365.2	163.37	37.98	0.232	0.544	56.03	Plagioclase	200 - 100
796	1365.0	175.4	67.46	30.12	0.446	0.747	36.95	Plagioclase	200 - 100
749	1284.4	211.9	92.00	22.26	0.242	0.599	35.84	Glass	200 - 100
66	113.2	42.1	10.52	11.79	1.121	0.896	10.64	Plagioclase	200 - 100
5593	9590.7	525.9	219.21	104.76	0.478	0.660	97.93	Plagioclase	200 - 100
2703	4635.0	326.0	126.30	68.09	0.539	0.740	68.08	Clinopyroxene	200 - 100
1924	3299.2	260.2	95.61	69.40	0.726	0.782	57.44	Plagioclase	200 - 100
812	1392.4	191.1	77.61	36.67	0.472	0.692	37.31	Glass	200 - 100
2478	4249.2	438.2	197.59	68.09	0.345	0.527	65.19	Plagioclase	200 - 100
8381	14371.5	757.7	336.10	142.73	0.425	0.561	119.88	Plagioclase	200 - 100
1293	2217.2	229.7	90.28	47.14	0.522	0.727	47.09	Plagioclase	200 - 100

2490	4269.8	315.2	122.86	69.40	0.565	0.735	65.34	Plagioclase	200 - 100
6205	10640.2	736.9	336.88	95.59	0.284	0.496	103.15	Plagioclase	200 - 100
1125	1929.1	283.0	126.23	45.83	0.363	0.550	43.92	Orthopyroxene	200 - 100
1379	2364.7	253.8	104.21	49.76	0.477	0.679	48.63	Olivine	200 - 100
1311	2248.1	199.9	65.81	57.62	0.876	0.841	47.41	Plagioclase	200 - 100
14253	24440.6	1314.5	617.68	254.04	0.411	0.422	156.33	Plagioclase	200 - 100
2920	5007.1	334.8	128.39	65.47	0.510	0.749	70.76	Plagioclase	200 - 100
26	44.6	31.5	12.06	3.93	0.326	0.751	6.68	Orthopyroxene	200 - 100
63	108.0	42.5	12.79	6.55	0.512	0.868	10.39	Quartz	200 - 100
6	10.3	9.8	2.45	3.93	1.604	1.162	3.21	Glass	200 - 100
1445	2477.8	250.4	100.57	52.38	0.521	0.705	49.78	Plagioclase	200 - 100
13539	23216.3	920.8	402.76	175.47	0.436	0.587	152.37	Plagioclase	200 - 100
318	545.3	192.6	90.26	26.19	0.290	0.430	23.35	Plagioclase	200 - 100
3007	5156.3	359.2	143.75	79.88	0.556	0.709	71.81	Plagioclase	200 - 100
5196	8910.0	530.7	225.89	95.59	0.423	0.631	94.39	Plagioclase	200 - 100
363	622.5	130.0	53.31	30.12	0.565	0.680	24.95	Plagioclase	200 - 100
3992	6845.4	389.5	148.73	91.66	0.616	0.753	82.74	Plagioclase	200 - 100
3843	6589.9	397.1	156.40	95.59	0.611	0.725	81.18	Plagioclase	200 - 100
1017	1743.9	158.3	39.58	44.52	1.125	0.935	41.76	Plagioclase	200 - 100
131	224.6	73.7	29.15	7.86	0.270	0.721	14.99	Plagioclase	200 - 100
5880	10082.9	514.0	208.66	95.59	0.458	0.693	100.41	Plagioclase	200 - 100
46	78.9	42.4	16.39	7.86	0.480	0.743	8.88	Plagioclase	200 - 100
25	42.9	23.1	5.78	5.24	0.907	1.004	6.55	Clinopyroxene	200 - 100
2239	3839.4	479.2	222.34	86.43	0.389	0.458	61.96	Plagioclase	200 - 100
1991	3414.1	248.2	82.95	57.62	0.695	0.834	58.43	Plagioclase	200 - 100
451	773.4	122.8	43.71	23.57	0.539	0.803	27.81	Plagioclase	200 - 100
166	284.7	79.0	30.03	15.71	0.523	0.757	16.87	Quartz	200 - 100
4463	7653.0	474.0	198.42	96.90	0.488	0.654	87.48	Plagioclase	200 - 100
38	65.2	36.8	13.59	6.55	0.482	0.778	8.07	Plagioclase	200 - 100
1813	3108.9	378.6	171.15	55.00	0.321	0.522	55.76	Plagioclase	200 - 100
660	1131.8	191.9	82.17	17.02	0.207	0.621	33.64	Plagioclase	200 - 100
3183	5458.1	351.8	135.66	75.95	0.560	0.744	73.88	Glass	200 - 100
1371	2351.0	226.2	85.66	52.38	0.611	0.760	48.49	Glass	200 - 100
18037	30929.3	1110.5	492.44	196.42	0.399	0.561	175.87	Orthopyroxene	200 - 100
299	512.7	145.7	64.93	26.19	0.403	0.551	22.64	Plagioclase	200 - 100
11650	19977.1	1030.7	473.13	155.83	0.329	0.486	141.34	Plagioclase	200 - 100
1142	1958.3	220.9	88.26	37.98	0.430	0.710	44.25	Plagioclase	200 - 100
2746	4708.8	301.5	106.54	64.17	0.602	0.807	68.62	Glass	200 - 100
447	766.5	152.8	64.51	22.26	0.345	0.642	27.69	Plagioclase	200 - 100
49	84.0	33.0	8.24	9.17	1.113	0.986	9.17	Plagioclase	200 - 100
7	12.0	10.3	2.58	3.93	1.523	1.189	3.46	Plagioclase	200 - 100
2511	4305.8	380.5	164.02	64.17	0.391	0.611	65.62	Orthopyroxene	200 - 100
92	157.8	48.4	12.10	11.79	0.974	0.920	12.56	Glass	200 - 100
12	20.6	16.0	4.01	3.93	0.980	1.003	4.54	Plagioclase	200 - 100
3834	6574.4	415.4	168.75	72.02	0.427	0.692	81.08	Plagioclase	200 - 100
7467	12804.2	554.7	218.85	91.66	0.419	0.723	113.16	Plagioclase	200 - 100
3439	5897.1	329.6	112.24	79.88	0.712	0.826	76.79	Plagioclase	200 - 100
5572	9554.7	542.9	229.86	96.90	0.422	0.638	97.75	Plagioclase	200 - 100
4997	8568.7	439.8	169.25	83.81	0.495	0.746	92.57	Plagioclase	200 - 100
2106	3611.3	340.4	145.37	68.09	0.468	0.626	60.09	Glass	200 - 100
15	25.7	25.3	10.10	3.93	0.389	0.711	5.07	Chlorite	200 - 100
26	44.6	29.4	10.46	3.93	0.376	0.804	6.68	Chlorite	200 - 100
455	780.2	180.0	80.28	23.57	0.294	0.550	27.93	Orthopyroxene	200 - 100
1368	2345.8	230.0	88.46	58.93	0.666	0.747	48.43	Glass	200 - 100
10141	17389.5	574.2	200.28	149.28	0.745	0.814	131.87	Plagioclase	200 - 100
1527	2618.5	436.8	205.65	35.36	0.172	0.415	51.17	Quartz	200 - 100
7887	13524.4	783.3	353.37	99.52	0.282	0.526	116.29	Plagioclase	200 - 100

8044	13793.6	1150.4	550.11	130.95	0.238	0.362	117.45	Quartz	200 - 100
2595	4449.8	328.7	130.14	77.26	0.594	0.719	66.71	Plagioclase	200 - 100
2064	3539.3	279.0	106.16	48.45	0.456	0.756	59.49	Plagioclase	200 - 100
3270	5607.3	361.0	140.62	83.81	0.596	0.735	74.88	Plagioclase	200 - 100
2659	4559.6	383.2	163.77	57.62	0.352	0.625	67.52	Plagioclase	200 - 100
1208	2071.4	243.9	101.53	43.21	0.426	0.662	45.51	Plagioclase	200 - 100
845	1449.0	169.5	60.96	36.67	0.602	0.796	38.07	Plagioclase	200 - 100
64	109.8	42.9	13.08	9.17	0.701	0.865	10.48	Plagioclase	200 - 100
235	403.0	96.4	37.42	14.40	0.385	0.738	20.07	Plagioclase	200 - 100
1563	2680.2	245.1	94.05	60.24	0.641	0.749	51.77	Orthopyroxene	200 - 100
652	1118.0	166.7	66.55	32.74	0.492	0.711	33.44	Plagioclase	200 - 100
5569	9549.6	452.1	169.84	77.26	0.455	0.766	97.72	Plagioclase	200 - 100
4864	8340.6	511.2	217.19	96.90	0.446	0.633	91.33	Plagioclase	200 - 100
6471	11096.3	534.8	216.01	129.64	0.600	0.698	105.34	Plagioclase	200 - 100
7829	13424.9	752.3	336.23	113.93	0.339	0.546	115.87	Plagioclase	200 - 100
2993	5132.3	460.9	205.47	73.33	0.357	0.551	71.64	Glass	200 - 100
932	1598.2	214.2	89.21	45.83	0.514	0.661	39.98	Plagioclase	200 - 100
163	279.5	121.0	55.48	9.17	0.165	0.490	16.72	Glass	200 - 100
248	425.3	99.9	39.07	24.88	0.637	0.732	20.62	Plagioclase	200 - 100
157	269.2	88.2	36.76	14.40	0.392	0.660	16.41	Plagioclase	200 - 100
7635	13092.3	532.2	200.92	111.31	0.554	0.762	114.42	Plagioclase	200 - 100
23	39.4	25.7	7.75	6.55	0.845	0.867	6.28	Plagioclase	200 - 100
1581	2711.1	269.2	109.94	40.59	0.369	0.686	52.07	Clinopyroxene	200 - 100
1299	2227.5	215.1	79.51	51.07	0.642	0.778	47.20	Plagioclase	200 - 100
1907	3270.1	281.5	111.36	62.86	0.564	0.720	57.18	Plagioclase	200 - 100
12012	20597.8	1201.0	563.99	149.28	0.265	0.424	143.52	Plagioclase	200 - 100
4401	7546.7	412.9	159.00	81.19	0.511	0.746	86.87	Plagioclase	200 - 100
1829	3136.3	337.2	147.29	73.33	0.498	0.589	56.00	Plagioclase	200 - 100
610	1046.0	138.6	47.07	32.74	0.696	0.827	32.34	Orthopyroxene	200 - 100
1020	1749.1	273.5	122.48	31.43	0.257	0.542	41.82	Plagioclase	200 - 100
1065	1826.2	224.3	92.36	41.90	0.454	0.675	42.73	Plagioclase	200 - 100
7046	12082.3	484.9	172.38	104.76	0.608	0.804	109.92	Plagioclase	200 - 100
7027	12049.7	652.9	283.99	124.40	0.438	0.596	109.77	Ilmenite	200 - 100
4363	7481.5	424.0	167.24	96.90	0.579	0.723	86.50	Plagioclase	200 - 100
18	30.9	24.2	8.45	6.55	0.775	0.814	5.56	Plagioclase	200 - 100
483	828.2	141.7	56.05	27.50	0.491	0.720	28.78	Plagioclase	200 - 100
2757	4727.6	308.7	112.23	58.93	0.525	0.790	68.76	Chlorite	200 - 100
3339	5725.6	349.0	130.71	70.71	0.541	0.769	75.67	Plagioclase	200 - 100
15404	26414.3	1418.7	669.92	167.62	0.250	0.406	162.52	Plagioclase	200 - 100
1172	2009.7	224.0	89.58	41.90	0.468	0.709	44.83	Glass	200 - 100
9	15.4	13.5	3.37	1.31	0.389	1.031	3.93	Clinopyroxene	200 - 100
3011	5163.2	581.8	271.90	110.00	0.405	0.438	71.86	Glass	200 - 100
2599	4456.7	279.9	90.93	81.19	0.893	0.846	66.76	Plagioclase	200 - 100
2933	5029.4	339.0	131.18	68.09	0.519	0.742	70.92	Plagioclase	200 - 100
985	1689.1	226.1	95.35	40.59	0.426	0.644	41.10	Glass	200 - 100
105	180.1	60.9	22.42	7.86	0.351	0.781	13.42	Plagioclase	200 - 100
1673	2868.8	428.4	199.83	45.83	0.229	0.443	53.56	Plagioclase	200 - 100
4223	7241.5	592.3	269.25	128.33	0.477	0.509	85.10	Plagioclase	200 - 100
2077	3561.6	307.2	125.14	52.38	0.419	0.689	59.68	Plagioclase	200 - 100
1039	1781.7	166.2	41.55	39.28	0.945	0.900	42.21	Plagioclase	200 - 100
2112	3621.6	272.1	99.74	73.33	0.735	0.784	60.18	Plagioclase	200 - 100
17	29.2	18.7	4.68	5.24	1.120	1.021	5.40	Glass	200 - 100
528	905.4	167.3	70.90	36.67	0.517	0.637	30.09	Plagioclase	200 - 100
15	25.7	19.8	4.95	3.93	0.794	0.908	5.07	Plagioclase	200 - 100
893	1531.3	193.4	76.74	41.90	0.546	0.717	39.13	Chlorite	200 - 100
411	704.8	155.3	67.16	23.57	0.351	0.606	26.55	Glass	200 - 100
1671	2865.4	250.7	95.30	47.14	0.495	0.757	53.53	Chlorite	200 - 100

19	32.6	18.4	4.60	5.24	1.139	1.098	5.71	Glass	200 - 100
69	118.3	45.8	14.97	9.17	0.613	0.843	10.88	Chlorite	200 - 100
1136	1948.0	194.1	68.66	49.76	0.725	0.806	44.14	Plagioclase	200 - 100
5962	10223.5	707.2	321.85	89.05	0.277	0.507	101.11	Plagioclase	200 - 100
307	526.4	97.8	32.94	23.57	0.716	0.831	22.94	Chlorite	200 - 100
3490	5984.6	379.7	149.92	70.71	0.472	0.722	77.36	Plagioclase	200 - 100
9633	16518.4	758.1	328.81	149.28	0.454	0.601	128.52	Plagioclase	200 - 100
1090	1869.1	186.7	64.30	47.14	0.733	0.821	43.23	Chlorite	200 - 100
558	956.8	173.3	73.68	30.12	0.409	0.633	30.93	Chlorite	200 - 100
402	689.3	125.7	48.72	26.19	0.538	0.740	26.26	Plagioclase	200 - 100
515	883.1	196.6	88.28	24.88	0.282	0.536	29.72	Olivine	200 - 100
1461	2505.3	260.4	106.75	56.31	0.527	0.681	50.05	Olivine	200 - 100
3233	5543.9	354.6	136.77	85.12	0.622	0.744	74.46	Plagioclase	200 - 100
2025	3472.4	298.8	120.63	49.76	0.413	0.699	58.93	Plagioclase	200 - 100
1440	2469.3	242.3	95.19	43.21	0.454	0.727	49.69	Plagioclase	200 - 100
2664	4568.2	396.0	171.32	41.90	0.245	0.605	67.59	Clinopyroxene	200 - 100
239	409.8	94.3	35.66	19.64	0.551	0.761	20.24	Plagioclase	200 - 100
1210	2074.9	262.9	113.09	34.05	0.301	0.614	45.55	Glass	200 - 100
3256	5583.3	442.4	192.16	96.90	0.504	0.599	74.72	Chlorite	200 - 100
2942	5044.9	324.0	119.93	57.62	0.480	0.777	71.03	Plagioclase	200 - 100
2423	4154.9	377.4	163.25	40.59	0.249	0.605	64.46	Plagioclase	200 - 100
18150	31123.1	1088.2	479.13	191.19	0.399	0.575	176.42	Clinopyroxene	200 - 100
1229	2107.5	228.7	91.24	60.24	0.660	0.712	45.91	Plagioclase	200 - 100
305	523.0	148.1	66.15	18.33	0.277	0.547	22.87	Plagioclase	200 - 100
8244	14136.6	603.1	243.46	133.57	0.549	0.699	118.90	Plagioclase	200 - 100
2218	3803.4	486.9	226.68	73.33	0.323	0.449	61.67	Plagioclase	200 - 100
4792	8217.2	445.5	176.11	86.43	0.491	0.721	90.65	Plagioclase	200 - 100
624	1070.0	154.6	59.21	31.43	0.531	0.750	32.71	Glass	200 - 100
137	234.9	90.1	39.01	17.02	0.436	0.603	15.33	Plagioclase	200 - 100
4213	7224.3	405.6	156.68	75.95	0.485	0.743	85.00	Olivine	200 - 100
2558	4386.4	479.2	219.60	78.57	0.358	0.490	66.23	Glass	200 - 100
3435	5890.2	441.5	189.71	96.90	0.511	0.616	76.75	Plagioclase	200 - 100
12	20.6	19.4	6.52	5.24	0.804	0.831	4.54	Plagioclase	200 - 100
698	1196.9	171.9	68.49	31.43	0.459	0.713	34.60	Plagioclase	200 - 100
24	41.2	25.0	6.25	5.24	0.838	0.910	6.41	Orthopyroxene	200 - 100
2151	3688.5	284.0	107.78	68.09	0.632	0.758	60.73	Plagioclase	200 - 100
4214	7226.0	396.9	150.37	91.66	0.610	0.759	85.01	Glass	200 - 100
1258	2157.2	267.2	114.82	52.38	0.456	0.616	46.45	Plagioclase	200 - 100
1374	2356.1	219.0	80.04	55.00	0.687	0.786	48.54	Olivine	200 - 100
4772	8182.9	384.8	128.91	111.31	0.863	0.833	90.46	Glass	200 - 100
2136	3662.8	287.7	110.80	62.86	0.567	0.746	60.52	Plagioclase	200 - 100
5442	9331.8	445.8	167.04	123.09	0.737	0.768	96.60	Glass	200 - 100
548	939.7	155.1	62.54	34.05	0.544	0.700	30.65	Plagioclase	200 - 100
3787	6493.8	502.1	221.76	87.74	0.396	0.569	80.58	Plagioclase	200 - 100
324	555.6	209.2	99.00	36.67	0.370	0.399	23.57	Plagioclase	200 - 100
209	358.4	79.8	26.20	20.95	0.800	0.841	18.93	Plagioclase	200 - 100
2764	4739.6	350.4	141.79	55.00	0.388	0.696	68.84	Clinopyroxene	200 - 100
3630	6224.6	388.5	153.79	87.74	0.571	0.720	78.90	Chlorite	200 - 100
13181	22602.4	1459.7	697.46	129.64	0.186	0.365	150.34	Plagioclase	200 - 100
5896	10110.3	514.8	209.04	107.38	0.514	0.692	100.55	Plagioclase	200 - 100
78	133.8	50.3	17.53	11.79	0.673	0.815	11.57	Plagioclase	200 - 100
2895	4964.3	453.1	201.97	79.88	0.396	0.551	70.46	Plagioclase	200 - 100
2321	3980.0	263.2	84.52	62.86	0.744	0.850	63.09	Plagioclase	200 - 100
1085	1860.5	204.8	78.82	49.76	0.631	0.746	43.13	Plagioclase	200 - 100
3167	5430.7	326.1	116.39	81.19	0.698	0.801	73.69	Plagioclase	200 - 100
4127	7076.9	464.9	196.45	102.14	0.520	0.641	84.12	Olivine	200 - 100
945	1620.5	221.3	93.30	40.59	0.435	0.645	40.25	Plagioclase	200 - 100

5183	8887.7	680.8	311.91	117.85	0.378	0.491	94.27	Plagioclase	200 - 100
3056	5240.3	387.0	160.95	61.55	0.382	0.663	72.39	Plagioclase	200 - 100
355	608.7	279.2	135.07	11.79	0.087	0.313	24.67	Plagioclase	200 - 100
4168	7147.2	381.1	139.24	78.57	0.564	0.786	84.54	Plagioclase	200 - 100
5646	9681.6	483.0	190.73	108.69	0.570	0.722	98.40	Plagioclase	200 - 100
17	29.2	19.8	4.94	3.93	0.796	0.969	5.40	Plagioclase	200 - 100
3747	6425.2	378.1	144.63	92.97	0.643	0.752	80.16	Plagioclase	200 - 100
1116	1913.7	215.5	85.31	47.14	0.553	0.720	43.75	Plagioclase	200 - 100
968	1659.9	209.9	85.54	35.36	0.413	0.688	40.74	Plagioclase	200 - 100
1545	2649.3	261.4	105.59	43.21	0.409	0.698	51.47	Clinopyroxene	200 - 100
9848	16887.1	1144.4	540.99	153.21	0.283	0.403	129.95	Plagioclase	200 - 100
1030	1766.2	229.0	96.13	34.05	0.354	0.651	42.03	Albite	200 - 100
1083	1857.1	261.6	114.57	48.45	0.423	0.584	43.09	Plagioclase	200 - 100
2042	3501.6	288.6	113.42	55.00	0.485	0.727	59.17	Orthopyroxene	200 - 100
10	17.2	17.9	6.16	1.31	0.213	0.821	4.14	Albite	200 - 100
470	805.9	151.2	62.73	26.19	0.418	0.666	28.39	Plagioclase	200 - 100
8420	14438.4	538.7	195.49	133.57	0.683	0.791	120.16	Plagioclase	200 - 100
588	1008.3	142.4	51.67	36.67	0.710	0.791	31.75	Albite	200 - 100
288	493.9	89.3	24.58	22.26	0.906	0.882	22.22	Plagioclase	200 - 100
927	1589.6	187.6	71.61	45.83	0.640	0.753	39.87	Plagioclase	200 - 100
56	96.0	37.1	9.26	9.17	0.990	0.937	9.80	Plagioclase	200 - 100
2067	3544.4	242.9	72.66	64.17	0.883	0.869	59.54	Plagioclase	200 - 100
5349	9172.3	495.0	202.13	99.52	0.492	0.686	95.77	Plagioclase	200 - 100
3119	5348.4	324.1	115.94	89.05	0.768	0.800	73.13	Plagioclase	200 - 100
3464	5940.0	337.9	119.06	91.66	0.770	0.809	77.07	Glass	200 - 100
3326	5703.3	377.9	151.22	68.09	0.450	0.708	75.52	Glass	200 - 100
779	1335.8	196.2	81.75	23.57	0.288	0.660	36.55	Plagioclase	200 - 100
5465	9371.2	426.9	151.65	106.07	0.699	0.804	96.81	Orthopyroxene	200 - 100
25	42.9	31.1	11.98	5.24	0.437	0.746	6.55	Plagioclase	200 - 100
1020	1749.1	211.1	84.95	52.38	0.617	0.702	41.82	Glass	200 - 100
1829	3136.3	452.0	211.17	45.83	0.217	0.439	56.00	Plagioclase	200 - 100
3701	6346.4	330.3	104.30	94.28	0.904	0.855	79.66	Plagioclase	200 - 100
2046	3508.4	281.4	108.31	44.52	0.411	0.746	59.23	Glass	200 - 100
1732	2970.0	292.4	121.81	55.00	0.452	0.661	54.50	Orthopyroxene	200 - 100
2068	3546.1	294.8	117.15	51.07	0.436	0.716	59.55	Plagioclase	200 - 100
332	569.3	110.6	41.63	23.57	0.566	0.765	23.86	Glass	200 - 100
2677	4590.4	371.7	156.55	74.64	0.477	0.646	67.75	Glass	200 - 100
1190	2040.6	256.1	109.42	36.67	0.335	0.625	45.17	Plagioclase	200 - 100
1904	3264.9	310.5	130.19	56.31	0.433	0.652	57.14	Plagioclase	200 - 100
4779	8194.9	458.4	184.84	73.33	0.397	0.700	90.53	Olivine	200 - 100
201	344.7	87.3	33.30	17.02	0.511	0.754	18.57	Clinopyroxene	200 - 100
4268	7318.6	446.4	183.23	56.31	0.307	0.679	85.55	Glass	200 - 100
4125	7073.4	366.4	127.88	107.38	0.840	0.814	84.10	Plagioclase	200 - 100
4072	6982.5	529.2	234.86	91.66	0.390	0.560	83.56	Plagioclase	200 - 100
4566	7829.6	566.2	252.05	111.31	0.442	0.554	88.49	Olivine	200 - 100
2979	5108.3	327.5	121.81	89.05	0.731	0.774	71.47	Orthopyroxene	200 - 100
3680	6310.4	356.5	129.52	92.97	0.718	0.790	79.44	Plagioclase	200 - 100
165	282.9	59.5	14.88	18.33	1.232	1.002	16.82	Orthopyroxene	200 - 100
5578	9565.0	706.0	323.43	72.02	0.223	0.491	97.80	Plagioclase	200 - 100
1552	2661.3	265.2	107.93	56.31	0.522	0.690	51.59	Plagioclase	200 - 100
375	643.0	119.4	45.57	27.50	0.603	0.753	25.36	Plagioclase	200 - 100
7702	13207.2	678.2	294.21	113.93	0.387	0.601	114.92	Olivine	200 - 100
4851	8318.4	420.3	157.28	83.81	0.533	0.769	91.20	Plagioclase	200 - 100
4873	8356.1	548.0	239.05	73.33	0.307	0.591	91.41	Olivine	200 - 100
483	828.2	126.6	44.80	32.74	0.731	0.806	28.78	Olivine	200 - 100
9006	15443.2	990.1	461.59	133.57	0.289	0.445	124.27	Olivine	200 - 100
7551	12948.2	756.2	340.02	138.81	0.408	0.533	113.79	Glass	200 - 100

210	360.1	137.5	63.02	13.09	0.208	0.489	18.98	Glass	200 - 100
1921	3294.1	286.8	114.68	72.02	0.628	0.709	57.39	Glass	200 - 100
1246	2136.6	342.0	157.41	44.52	0.283	0.479	46.22	Plagioclase	200 - 100
10306	17672.4	927.3	421.72	137.50	0.326	0.508	132.94	Plagioclase	200 - 100
3532	6056.6	349.4	127.02	83.81	0.660	0.790	77.82	Plagioclase	200 - 100
1437	2464.1	264.2	109.59	35.36	0.323	0.666	49.64	Chlorite	200 - 100
5271	9038.6	475.1	189.98	121.78	0.641	0.709	95.07	Glass	200 - 100
1185	2032.0	216.3	83.91	37.98	0.453	0.739	45.08	Plagioclase	200 - 100
2203	3777.6	324.9	134.35	44.52	0.331	0.671	61.46	Plagioclase	200 - 100
9	15.4	13.7	3.43	3.93	1.146	1.014	3.93	Glass	200 - 100
4142	7102.6	355.4	116.96	83.81	0.717	0.841	84.28	Plagioclase	200 - 100
1772	3038.6	285.4	116.64	45.83	0.393	0.685	55.12	Plagioclase	200 - 100
6502	11149.4	719.0	325.22	134.88	0.415	0.521	105.59	Plagioclase	200 - 100
9585	16436.1	731.2	313.07	144.04	0.460	0.622	128.20	FeOx	200 - 100
2757	4727.6	385.5	163.92	43.21	0.264	0.632	68.76	Plagioclase	200 - 100
66	113.2	54.0	21.83	9.17	0.420	0.698	10.64	Orthopyroxene	200 - 100
1120	1920.5	219.1	87.63	47.14	0.538	0.709	43.82	Plagioclase	200 - 100
481	824.8	133.2	50.15	27.50	0.548	0.764	28.72	Glass	200 - 100
714	1224.4	213.9	93.91	28.81	0.307	0.580	34.99	Plagioclase	200 - 100
5699	9772.5	426.5	146.59	115.24	0.786	0.822	98.86	Orthopyroxene	200 - 100
761	1304.9	185.6	75.54	26.19	0.347	0.690	36.12	Plagioclase	200 - 100
753	1291.2	216.5	94.59	26.19	0.277	0.588	35.93	Glass	200 - 100
613	1051.2	160.9	64.06	32.74	0.511	0.714	32.42	Plagioclase	200 - 100
5523	9470.7	470.1	183.40	104.76	0.571	0.734	97.32	Plagioclase	200 - 100
5045	8651.0	660.4	301.52	83.81	0.278	0.499	93.01	Glass	200 - 100
5513	9453.5	446.9	166.77	113.93	0.683	0.771	97.23	Glass	200 - 100
1269	2176.0	273.2	118.16	53.69	0.454	0.605	46.65	Plagioclase	200 - 100
819	1404.4	183.1	72.09	35.36	0.490	0.725	37.48	Apatite	200 - 100
2485	4261.2	341.7	140.54	77.26	0.550	0.677	65.28	Plagioclase	200 - 100
3598	6169.7	361.0	134.68	106.07	0.788	0.771	78.55	Orthopyroxene	200 - 100
3639	6240.1	449.7	192.39	82.50	0.429	0.623	78.99	Plagioclase	200 - 100
1679	2879.1	274.8	111.60	45.83	0.411	0.692	53.66	Plagioclase	200 - 100
4992	8560.1	491.8	203.93	127.02	0.623	0.667	92.52	Plagioclase	200 - 100
453	776.8	186.1	83.78	20.95	0.250	0.531	27.87	Orthopyroxene	200 - 100
5240	8985.4	479.4	193.17	90.35	0.468	0.701	94.79	Plagioclase	200 - 100
5925	10160.0	635.7	281.79	83.81	0.297	0.562	100.80	Olivine	200 - 100
998	1711.3	210.8	85.32	36.67	0.430	0.696	41.37	Plagioclase	200 - 100
7881	13514.1	751.6	335.52	106.07	0.316	0.548	116.25	Plagioclase	200 - 100
26	44.6	36.2	15.14	3.93	0.260	0.655	6.68	Plagioclase	200 - 100
1867	3201.5	251.2	90.01	53.69	0.596	0.799	56.58	Plagioclase	200 - 100
383	656.8	124.6	48.86	19.64	0.402	0.729	25.63	Plagioclase	200 - 100
1601	2745.4	221.4	73.22	55.00	0.751	0.839	52.40	Olivine	200 - 100
578	991.1	179.7	76.95	30.12	0.391	0.621	31.48	Plagioclase	200 - 100
12746	21856.5	1303.2	616.13	196.42	0.319	0.402	147.84	Plagioclase	200 - 100
2155	3695.3	230.4	57.61	66.78	1.159	0.935	60.79	Glass	200 - 100
1071	1836.5	198.3	74.51	39.28	0.527	0.766	42.85	Plagioclase	200 - 100
7772	13327.2	775.1	349.38	142.73	0.409	0.528	115.44	Glass	200 - 100
1642	2815.7	281.8	116.80	45.83	0.392	0.667	53.06	Glass	200 - 100
649	1112.9	150.0	54.59	34.05	0.624	0.789	33.36	Orthopyroxene	200 - 100
1194	2047.4	208.4	77.89	37.98	0.488	0.770	45.25	Glass	200 - 100
167	286.4	82.7	32.58	14.40	0.442	0.725	16.92	Plagioclase	200 - 100
6846	11739.3	676.0	298.71	157.14	0.526	0.568	108.35	Plagioclase	200 - 100
4638	7953.1	442.6	176.15	94.28	0.535	0.714	89.18	Plagioclase	200 - 100
12827	21995.4	1184.2	552.29	151.90	0.275	0.444	148.31	Glass	200 - 100
8735	14978.5	947.2	439.52	104.76	0.238	0.458	122.39	Clinopyroxene	200 - 100
2931	5026.0	286.1	80.97	69.40	0.857	0.878	70.89	Plagioclase	200 - 100
7052	12092.6	780.5	356.29	100.83	0.283	0.499	109.97	Plagioclase	200 - 100

5156	8841.4	779.9	365.79	116.54	0.319	0.427	94.03	Plagioclase	200 - 100
1410	2417.8	271.0	114.34	32.74	0.286	0.643	49.17	Plagioclase	200 - 100
1796	3079.7	313.4	133.63	72.02	0.539	0.628	55.50	Plagioclase	200 - 100
3236	5549.0	421.0	179.61	65.47	0.365	0.627	74.49	Plagioclase	200 - 100
1288	2208.6	249.0	103.07	30.12	0.292	0.669	47.00	Clinopyroxene	200 - 100
1906	3268.4	265.3	99.91	68.09	0.682	0.764	57.17	Plagioclase	200 - 100
87	149.2	63.3	25.90	7.86	0.303	0.684	12.21	Plagioclase	200 - 100
135	231.5	71.5	27.28	14.40	0.528	0.754	15.21	Plagioclase	200 - 100
191	327.5	104.9	45.22	10.48	0.232	0.611	18.10	Plagioclase	200 - 100
29	49.7	40.1	17.15	5.24	0.306	0.623	7.05	Plagioclase	200 - 100
134	229.8	95.7	42.41	11.79	0.278	0.562	15.16	Plagioclase	200 - 100
46	78.9	47.0	19.45	5.24	0.269	0.670	8.88	Glass	200 - 100
24	41.2	23.2	5.80	3.93	0.678	0.980	6.41	Glass	200 - 100
902	1546.7	216.5	91.34	35.36	0.387	0.644	39.33	Olivine	200 - 100
6206	10641.9	423.6	129.84	111.31	0.857	0.863	103.16	Orthopyroxene	200 - 100
6530	11197.5	985.2	468.73	129.64	0.277	0.381	105.82	Plagioclase	200 - 100
2539	4353.8	393.2	171.15	53.69	0.314	0.595	65.98	Plagioclase	200 - 100
176	301.8	73.2	24.00	13.09	0.545	0.842	17.37	Plagioclase	200 - 100
33	56.6	39.6	16.31	6.55	0.402	0.674	7.52	Glass	200 - 100
752	1289.5	180.2	72.25	35.36	0.489	0.706	35.91	Plagioclase	200 - 100
2788	4780.8	333.3	129.80	64.17	0.494	0.735	69.14	Plagioclase	200 - 100
908	1557.0	187.7	72.29	43.21	0.598	0.745	39.46	Plagioclase	200 - 100
537	920.8	186.7	82.16	20.95	0.255	0.576	30.35	Glass	200 - 100
3286	5634.7	329.1	115.96	81.19	0.700	0.809	75.06	Plagioclase	200 - 100
421	721.9	157.9	68.40	24.88	0.364	0.603	26.87	Plagioclase	200 - 100
3451	5917.7	331.2	113.44	82.50	0.727	0.823	76.93	Plagioclase	200 - 100
6151	10547.6	508.9	202.32	99.52	0.492	0.715	102.70	Plagioclase	200 - 100
6183	10602.4	981.8	468.23	138.81	0.296	0.372	102.97	Orthopyroxene	200 - 100
8952	15350.6	820.4	368.55	147.97	0.401	0.535	123.90	Clinopyroxene	200 - 100
421	721.9	118.7	42.28	32.74	0.774	0.802	26.87	Plagioclase	200 - 100
22	37.7	27.0	9.50	3.93	0.414	0.808	6.14	Plagioclase	200 - 100
871	1493.6	174.5	63.83	56.31	0.882	0.785	38.65	Plagioclase	200 - 100
3390	5813.1	366.4	142.36	86.43	0.607	0.738	76.24	Plagioclase	200 - 100
2827	4847.7	329.6	126.45	78.57	0.621	0.749	69.63	Plagioclase	200 - 100
3204	5494.1	337.5	124.67	61.55	0.494	0.779	74.12	Plagioclase	200 - 100
8319	14265.2	875.2	402.10	120.47	0.300	0.484	119.44	Orthopyroxene	200 - 100
1865	3198.1	391.2	177.60	83.81	0.472	0.512	56.55	Glass	200 - 100
1769	3033.4	254.4	95.38	57.62	0.604	0.768	55.08	Plagioclase	200 - 100
2267	3887.4	266.5	90.09	73.33	0.814	0.829	62.35	Plagioclase	200 - 100
462	792.2	147.2	60.52	27.50	0.454	0.678	28.15	Glass	200 - 100
94	161.2	84.8	38.19	6.55	0.172	0.531	12.70	Plagioclase	200 - 100
599	1027.2	152.0	58.40	24.88	0.426	0.748	32.05	Olivine	200 - 100
2431	4168.6	283.3	99.91	72.02	0.721	0.808	64.56	Olivine	200 - 100
1508	2585.9	367.7	168.52	69.40	0.412	0.490	50.85	Glass	200 - 100
4428	7593.0	753.3	355.27	124.40	0.350	0.410	87.14	Plagioclase	200 - 100
480	823.1	146.8	59.60	23.57	0.395	0.693	28.69	Plagioclase	200 - 100
1250	2143.5	281.4	123.33	41.90	0.340	0.583	46.30	Plagioclase	200 - 100
694	1190.1	164.9	63.82	37.98	0.595	0.741	34.50	Glass	200 - 100
177	303.5	91.7	37.80	17.02	0.450	0.674	17.42	Glass	200 - 100
2179	3736.5	356.1	153.73	45.83	0.298	0.609	61.13	Albite	200 - 100
969	1661.6	221.1	92.62	32.74	0.353	0.653	40.76	Plagioclase	200 - 100
5833	10002.3	443.2	158.46	87.74	0.554	0.800	100.01	Plagioclase	200 - 100
2106	3611.3	314.1	129.10	49.76	0.385	0.678	60.09	Plagioclase	200 - 100
97	166.3	61.3	23.57	11.79	0.500	0.746	12.90	Plagioclase	200 - 100
1557	2669.9	258.5	103.43	37.98	0.367	0.709	51.67	Plagioclase	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Plagioclase	200 - 100
4240	7270.6	427.0	170.99	82.50	0.482	0.708	85.27	Plagioclase	200 - 100

205	351.5	110.2	47.76	15.71	0.329	0.603	18.75	Plagioclase	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Glass	200 - 100
5265	9028.3	424.0	152.98	116.54	0.762	0.794	95.02	Orthopyroxene	200 - 100
9070	15553.0	963.5	446.93	136.19	0.305	0.459	124.71	Plagioclase	200 - 100
2844	4876.8	322.3	120.80	61.55	0.510	0.768	69.83	Calcite	200 - 100
12130	20800.2	548.1	137.02	167.62	1.223	0.933	144.22	Ilmenite	200 - 100
1618	2774.5	275.0	112.91	41.90	0.371	0.679	52.67	Plagioclase	200 - 100
192	329.2	109.2	47.70	18.33	0.384	0.589	18.14	Plagioclase	200 - 100
6900	11831.9	722.2	324.65	154.52	0.476	0.534	108.77	Plagioclase	200 - 100
7757	13301.5	680.8	295.35	158.45	0.536	0.601	115.33	Plagioclase	200 - 100
2606	4468.7	312.3	118.42	60.24	0.509	0.759	66.85	Plagioclase	200 - 100
736	1262.1	202.2	86.49	37.98	0.439	0.623	35.53	Plagioclase	200 - 100
2073	3554.7	292.4	115.39	60.24	0.522	0.723	59.62	Plagioclase	200 - 100
468	802.5	140.5	55.92	32.74	0.585	0.715	28.33	Albite	200 - 100
1271	2179.5	234.3	93.94	51.07	0.544	0.706	46.68	Glass	200 - 100
3753	6435.5	375.7	142.75	77.26	0.541	0.757	80.22	Plagioclase	200 - 100
6984	11976.0	528.7	206.28	134.88	0.654	0.734	109.43	Plagioclase	200 - 100
8016	13745.6	716.0	314.24	121.78	0.388	0.580	117.24	Plagioclase	200 - 100
5982	10257.8	561.9	237.80	89.05	0.374	0.639	101.28	Plagioclase	200 - 100
6334	10861.4	450.6	155.41	102.14	0.657	0.820	104.22	Plagioclase	200 - 100
384	658.5	140.7	59.25	20.95	0.354	0.646	25.66	Plagioclase	200 - 100
3772	6468.1	427.8	177.46	75.95	0.428	0.666	80.42	Glass	200 - 100
262	449.3	86.1	25.32	19.64	0.776	0.872	21.20	Plagioclase	200 - 100
631	1082.0	146.9	53.07	32.74	0.617	0.794	32.89	Orthopyroxene	200 - 100
870	1491.9	213.5	90.18	39.28	0.436	0.641	38.62	Plagioclase	200 - 100
458	785.4	136.8	53.81	28.81	0.535	0.726	28.02	Olivine	200 - 100
2140	3669.6	326.9	136.56	66.78	0.489	0.657	60.58	Plagioclase	200 - 100
5317	9117.4	646.5	292.03	104.76	0.359	0.524	95.49	Plagioclase	200 - 100
12068	20693.9	682.7	262.54	150.59	0.574	0.747	143.85	Glass	200 - 100
1110	1903.4	206.5	79.25	53.69	0.677	0.749	43.63	Plagioclase	200 - 100
2653	4549.3	307.8	114.00	86.43	0.758	0.777	67.45	Plagioclase	200 - 100
127	217.8	85.0	36.54	11.79	0.323	0.615	14.76	Chlorite	200 - 100
2681	4597.3	301.9	108.60	81.19	0.748	0.796	67.80	Plagioclase	200 - 100
1163	1994.3	207.2	78.04	47.14	0.604	0.764	44.66	Clinopyroxene	200 - 100
3405	5838.8	390.4	158.32	89.05	0.562	0.694	76.41	Glass	200 - 100
893	1531.3	187.9	72.95	44.52	0.610	0.738	39.13	Plagioclase	200 - 100
2998	5140.9	317.0	113.01	69.40	0.614	0.802	71.70	Plagioclase	200 - 100
3559	6102.9	421.0	175.79	53.69	0.305	0.658	78.12	Orthopyroxene	200 - 100
11640	19959.9	617.0	216.17	137.50	0.636	0.812	141.28	Plagioclase	200 - 100
4071	6980.8	435.7	178.84	70.71	0.395	0.680	83.55	Plagioclase	200 - 100
6178	10593.9	786.6	364.21	104.76	0.288	0.464	102.93	Glass	200 - 100
15	25.7	18.5	4.63	2.62	0.566	0.972	5.07	Glass	200 - 100
7	12.0	11.6	2.89	3.93	1.360	1.062	3.46	Glass	200 - 100
982	1683.9	213.2	87.33	39.28	0.450	0.682	41.04	Plagioclase	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Glass	200 - 100
1241	2128.0	295.1	131.36	35.36	0.269	0.554	46.13	Plagioclase	200 - 100
2087	3578.7	281.1	107.13	62.86	0.587	0.754	59.82	Ilmenite	200 - 100
475	814.5	132.2	49.70	31.43	0.632	0.765	28.54	Plagioclase	200 - 100
538	922.6	152.3	61.03	34.05	0.558	0.707	30.37	Plagioclase	200 - 100
3766	6457.8	397.1	157.57	83.81	0.532	0.717	80.36	Plagioclase	200 - 100
2751	4717.3	479.6	218.15	75.95	0.348	0.508	68.68	Glass	200 - 100
6	10.3	11.6	2.89	2.62	0.907	0.984	3.21	Glass	200 - 100
85	145.8	51.9	17.72	14.40	0.813	0.825	12.07	Clinopyroxene	200 - 100
2172	3724.5	277.0	101.98	69.40	0.681	0.781	61.03	Orthopyroxene	200 - 100
3512	6022.3	363.3	137.99	78.57	0.569	0.757	77.60	Plagioclase	200 - 100
4166	7143.7	377.5	136.32	96.90	0.711	0.794	84.52	Plagioclase	200 - 100
1200	2057.7	253.9	107.88	60.24	0.558	0.633	45.36	Plagioclase	200 - 100

4338	7438.7	532.5	234.51	78.57	0.335	0.574	86.25	Plagioclase	200 - 100
5497	9426.1	457.9	175.12	99.52	0.568	0.752	97.09	Plagioclase	200 - 100
1385	2375.0	231.6	89.18	55.00	0.617	0.746	48.73	Orthopyroxene	200 - 100
691	1184.9	156.0	57.35	39.28	0.685	0.782	34.42	Plagioclase	200 - 100
1720	2949.4	269.5	107.22	69.40	0.647	0.714	54.31	Plagioclase	200 - 100
8	13.7	12.4	3.10	3.93	1.268	1.058	3.70	Orthopyroxene	200 - 100
556	953.4	141.2	52.41	28.81	0.550	0.775	30.88	Plagioclase	200 - 100
3926	6732.2	376.9	140.51	103.45	0.736	0.772	82.05	Plagioclase	200 - 100
1458	2500.1	268.5	111.91	52.38	0.468	0.660	50.00	Glass	200 - 100
1395	2392.1	221.6	81.45	49.76	0.611	0.782	48.91	Plagioclase	200 - 100
4136	7092.3	505.8	220.78	100.83	0.457	0.590	84.22	Plagioclase	200 - 100
5774	9901.1	459.5	172.31	103.45	0.600	0.768	99.50	Plagioclase	200 - 100
53	90.9	46.6	18.32	9.17	0.501	0.726	9.53	Glass	200 - 100
4494	7706.2	411.6	156.61	106.07	0.677	0.756	87.78	Plagioclase	200 - 100
263	451.0	78.4	19.60	20.95	1.069	0.960	21.24	Plagioclase	200 - 100
2742	4701.9	319.0	120.50	73.33	0.609	0.762	68.57	Chlorite	200 - 100
7795	13366.6	540.6	205.16	124.40	0.606	0.758	115.61	Glass	200 - 100
2442	4187.5	358.6	151.69	53.69	0.354	0.640	64.71	Plagioclase	200 - 100
6	10.3	18.3	7.86	1.31	0.167	0.620	3.21	Plagioclase	200 - 100
1844	3162.0	236.5	77.40	57.62	0.744	0.843	56.23	Plagioclase	200 - 100
5251	9004.3	580.8	255.10	89.05	0.349	0.579	94.89	Plagioclase	200 - 100
5937	10180.6	515.2	208.87	100.83	0.483	0.694	100.90	Plagioclase	200 - 100
1831	3139.7	252.9	92.51	51.07	0.552	0.785	56.03	Orthopyroxene	200 - 100
32	54.9	31.4	10.40	9.17	0.882	0.838	7.41	Plagioclase	200 - 100
2641	4528.7	401.5	174.84	77.26	0.442	0.594	67.30	Glass	200 - 100
8238	14126.3	571.3	221.99	145.35	0.655	0.738	118.85	Glass	200 - 100
10	17.2	14.7	3.66	2.62	0.716	1.002	4.14	Plagioclase	200 - 100
5069	8692.2	418.5	152.10	106.07	0.697	0.790	93.23	Plagioclase	200 - 100
88	150.9	55.8	20.53	14.40	0.701	0.781	12.28	Plagioclase	200 - 100
1442	2472.7	243.0	95.63	48.45	0.507	0.726	49.73	Plagioclase	200 - 100
2812	4821.9	387.4	164.34	91.66	0.558	0.635	69.44	Plagioclase	200 - 100
1206	2068.0	221.3	86.85	44.52	0.513	0.728	45.48	Plagioclase	200 - 100
6674	11444.4	819.5	379.61	115.24	0.304	0.463	106.98	Plagioclase	200 - 100
303	519.6	119.0	48.86	17.02	0.348	0.679	22.79	Plagioclase	200 - 100
4240	7270.6	588.6	267.08	106.07	0.397	0.514	85.27	Ilmenite	200 - 100
1140	1954.8	257.4	111.09	32.74	0.295	0.609	44.21	Plagioclase	200 - 100
1619	2776.2	241.3	89.72	44.52	0.496	0.774	52.69	Plagioclase	200 - 100
599	1027.2	183.6	78.78	35.36	0.449	0.619	32.05	Glass	200 - 100
107	183.5	73.2	30.61	11.79	0.385	0.656	13.55	Plagioclase	200 - 100
100	171.5	76.0	32.74	7.86	0.240	0.611	13.10	Orthopyroxene	200 - 100
368	631.0	96.0	24.01	26.19	1.091	0.927	25.12	Chlorite	200 - 100
35	60.0	40.3	16.50	6.55	0.397	0.682	7.75	Glass	200 - 100
605	1037.4	186.9	80.54	24.88	0.309	0.611	32.21	Quartz	200 - 100
2345	4021.1	313.6	124.48	45.83	0.368	0.717	63.41	Orthopyroxene	200 - 100
1601	2745.4	295.4	125.90	35.36	0.281	0.629	52.40	Orthopyroxene	200 - 100
9147	15685.0	591.3	226.35	144.04	0.636	0.751	125.24	Glass	200 - 100
11845	20311.5	1066.5	491.97	201.66	0.410	0.474	142.52	Orthopyroxene	200 - 100
13	22.3	17.9	4.47	2.62	0.586	0.936	4.72	Plagioclase	200 - 100
1674	2870.5	260.1	101.84	55.00	0.540	0.730	53.58	Glass	200 - 100
3607	6185.2	387.0	153.08	74.64	0.488	0.720	78.65	Plagioclase	200 - 100
812	1392.4	221.4	96.23	35.36	0.367	0.597	37.31	Plagioclase	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Glass	200 - 100
279	478.4	99.3	36.58	24.88	0.680	0.781	21.87	Plagioclase	200 - 100
1091	1870.8	231.7	96.48	55.00	0.570	0.662	43.25	Plagioclase	200 - 100
6844	11735.9	463.9	157.39	115.24	0.732	0.828	108.33	Chlorite	200 - 100
12219	20952.8	1285.0	608.01	208.21	0.342	0.399	144.75	Olivine	200 - 100
2624	4499.6	418.3	184.81	49.76	0.269	0.568	67.08	Plagioclase	200 - 100

9772	16756.7	750.4	323.38	124.40	0.385	0.612	129.45	Plagioclase	200 - 100
3720	6379.0	393.2	155.58	72.02	0.463	0.720	79.87	Plagioclase	200 - 100
4351	7461.0	396.3	147.59	98.21	0.665	0.773	86.38	Plagioclase	200 - 100
837	1435.3	199.3	82.18	31.43	0.382	0.674	37.88	Plagioclase	200 - 100
40	68.6	33.5	9.66	7.86	0.814	0.876	8.28	Glass	200 - 100
2003	3434.7	273.2	103.41	60.24	0.583	0.760	58.61	Plagioclase	200 - 100
8087	13867.4	726.9	320.14	140.12	0.438	0.574	117.76	Olivine	200 - 100
2506	4297.2	263.4	72.18	74.64	1.034	0.882	65.55	Glass	200 - 100
4819	8263.5	476.7	196.21	85.12	0.434	0.676	90.90	Glass	200 - 100
7511	12879.6	731.9	326.50	129.64	0.397	0.550	113.49	Glass	200 - 100
2997	5139.2	340.7	131.14	65.47	0.499	0.746	71.69	Plagioclase	200 - 100
3884	6660.2	423.4	173.27	86.43	0.499	0.683	81.61	Plagioclase	200 - 100
8	13.7	12.9	3.21	1.31	0.408	1.022	3.70	Chlorite	200 - 100
3279	5622.7	379.2	152.83	73.33	0.480	0.701	74.98	Plagioclase	200 - 100
26	44.6	22.7	5.67	6.55	1.155	1.044	6.68	Orthopyroxene	200 - 100
4548	7798.8	419.4	161.35	98.21	0.609	0.747	88.31	Olivine	200 - 100
100	171.5	61.4	23.38	11.79	0.504	0.756	13.10	Plagioclase	200 - 100
1846	3165.5	262.1	99.09	58.93	0.595	0.761	56.26	Glass	200 - 100
13	22.3	20.5	7.12	2.62	0.368	0.816	4.72	Plagioclase	200 - 100
2276	3902.8	270.8	93.80	69.40	0.740	0.818	62.47	Plagioclase	200 - 100
541	927.7	262.8	123.90	18.33	0.148	0.411	30.46	Plagioclase	200 - 100
261	447.6	189.5	89.76	9.17	0.102	0.396	21.16	Glass	200 - 100
587	1006.6	175.3	74.06	32.74	0.442	0.642	31.73	Plagioclase	200 - 100
4677	8020.0	399.6	144.17	94.28	0.654	0.794	89.55	Glass	200 - 100
2219	3805.1	409.4	184.02	94.28	0.512	0.534	61.69	Plagioclase	200 - 100
4439	7611.9	526.7	230.29	119.16	0.517	0.587	87.25	Plagioclase	200 - 100
5127	8791.6	416.6	149.48	115.24	0.771	0.798	93.76	Plagioclase	200 - 100
2529	4336.7	348.8	144.37	55.00	0.381	0.669	65.85	Plagioclase	200 - 100
1987	3407.3	254.7	89.08	60.24	0.676	0.813	58.37	Glass	200 - 100
115	197.2	82.4	35.65	11.79	0.331	0.604	14.04	Apatite	200 - 100
7154	12267.5	532.9	207.28	85.12	0.411	0.737	110.76	Plagioclase	200 - 100
5225	8959.7	467.8	185.64	95.59	0.515	0.717	94.66	Glass	200 - 100
599	1027.2	175.8	74.01	27.50	0.372	0.646	32.05	Plagioclase	200 - 100
5432	9314.6	703.2	322.74	100.83	0.312	0.487	96.51	Orthopyroxene	200 - 100
3089	5296.9	343.1	131.17	66.78	0.509	0.752	72.78	Glass	200 - 100
1757	3012.9	293.9	122.29	58.93	0.482	0.662	54.89	Plagioclase	200 - 100
3921	6723.6	506.2	222.92	94.28	0.423	0.574	82.00	Glass	200 - 100
7987	13695.9	490.8	159.58	115.24	0.722	0.845	117.03	Orthopyroxene	200 - 100
1448	2483.0	219.6	77.97	49.76	0.638	0.804	49.83	Plagioclase	200 - 100
6	10.3	8.9	2.24	2.62	1.170	1.272	3.21	Plagioclase	200 - 100
120	205.8	83.3	35.92	13.09	0.364	0.610	14.34	Plagioclase	200 - 100
639	1095.7	166.6	66.95	27.50	0.411	0.704	33.10	Plagioclase	200 - 100
1274	2184.6	225.6	87.96	52.38	0.595	0.734	46.74	Glass	200 - 100
3518	6032.6	469.9	205.63	58.93	0.287	0.586	77.67	Clinopyroxene	200 - 100
165	282.9	64.1	16.02	15.71	0.981	0.931	16.82	Chlorite	200 - 100
3819	6548.7	466.6	200.68	89.05	0.444	0.615	80.92	Olivine	200 - 100
3987	6836.8	401.2	157.09	83.81	0.534	0.731	82.68	Glass	200 - 100
1330	2280.6	276.0	118.81	64.17	0.540	0.613	47.76	Plagioclase	200 - 100
1947	3338.7	293.4	118.55	77.26	0.652	0.698	57.78	Plagioclase	200 - 100
12027	20623.5	1253.9	592.14	165.00	0.279	0.406	143.61	Orthopyroxene	200 - 100
1314	2253.2	220.8	83.39	43.21	0.518	0.762	47.47	Clinopyroxene	200 - 100
116	198.9	77.4	32.62	13.09	0.401	0.646	14.10	Plagioclase	200 - 100
389	667.1	133.0	54.19	26.19	0.483	0.688	25.83	Clinopyroxene	200 - 100
1821	3122.6	296.5	122.85	56.31	0.458	0.668	55.88	Plagioclase	200 - 100
17	29.2	24.9	9.33	2.62	0.281	0.768	5.40	Plagioclase	200 - 100
2030	3481.0	272.1	101.86	68.09	0.668	0.769	59.00	Plagioclase	200 - 100
7378	12651.6	597.3	247.56	121.78	0.492	0.668	112.48	Glass	200 - 100

3512	6022.3	331.8	112.25	87.74	0.782	0.829	77.60	Plagioclase	200 - 100
869	1490.1	217.7	92.80	48.45	0.522	0.629	38.60	Plagioclase	200 - 100
1454	2493.3	418.9	196.77	64.17	0.326	0.423	49.93	Glass	200 - 100
105	180.1	51.8	12.94	15.71	1.214	0.919	13.42	Glass	200 - 100
9266	15889.1	814.2	363.39	108.69	0.299	0.549	126.05	Plagioclase	200 - 100
1418	2431.5	232.8	89.11	53.69	0.603	0.751	49.31	Plagioclase	200 - 100
6664	11427.2	542.4	219.05	128.33	0.586	0.699	106.90	Plagioclase	200 - 100
738	1265.5	207.3	89.53	28.81	0.322	0.608	35.57	Olivine	200 - 100
1684	2887.7	320.0	139.29	43.21	0.310	0.595	53.74	Plagioclase	200 - 100
4725	8102.3	469.8	192.91	119.16	0.618	0.679	90.01	Plagioclase	200 - 100
2009	3445.0	286.0	112.32	62.86	0.560	0.728	58.69	Plagioclase	200 - 100
1065	1826.2	222.6	91.32	45.83	0.502	0.680	42.73	Plagioclase	200 - 100
5347	9168.9	423.5	151.03	99.52	0.659	0.802	95.75	Glass	200 - 100
425	728.8	183.5	82.97	17.02	0.205	0.521	27.00	Plagioclase	200 - 100
501	859.1	149.1	60.28	40.59	0.673	0.697	29.31	Orthopyroxene	200 - 100
4520	7750.8	389.9	139.32	102.14	0.733	0.800	88.04	FeOx	200 - 100
329	564.2	161.9	73.26	18.33	0.250	0.520	23.75	Glass	200 - 100
279	478.4	113.6	46.54	28.81	0.619	0.682	21.87	Clinopyroxene	200 - 100
8815	15115.7	921.4	425.13	150.59	0.354	0.473	122.95	Ilmenite	200 - 100
57	97.7	42.7	14.74	11.79	0.800	0.820	9.89	Glass	200 - 100
2484	4259.5	350.4	146.06	86.43	0.592	0.660	65.26	Plagioclase	200 - 100
19	32.6	25.7	9.36	3.93	0.420	0.788	5.71	Olivine	200 - 100
1753	3006.0	264.4	103.01	66.78	0.648	0.735	54.83	Glass	200 - 100
2276	3902.8	379.4	166.24	48.45	0.291	0.584	62.47	Plagioclase	200 - 100
7229	12396.1	508.1	188.14	95.59	0.508	0.777	111.34	Clinopyroxene	200 - 100
4091	7015.1	573.2	259.55	89.05	0.343	0.518	83.76	Orthopyroxene	200 - 100
2052	3518.7	318.1	132.48	69.40	0.524	0.661	59.32	Plagioclase	200 - 100
6440	11043.1	588.9	250.34	145.35	0.581	0.633	105.09	Plagioclase	200 - 100
2944	5048.3	415.2	179.45	70.71	0.394	0.607	71.05	Plagioclase	200 - 100
806	1382.1	197.8	82.06	32.74	0.399	0.666	37.18	Orthopyroxene	200 - 100
5618	9633.6	549.2	233.29	68.09	0.292	0.634	98.15	Glass	200 - 100
3441	5900.5	314.7	95.72	90.35	0.944	0.865	76.81	Glass	200 - 100
3769	6463.0	497.1	219.05	83.81	0.383	0.573	80.39	Plagioclase	200 - 100
3971	6809.4	461.4	195.97	66.78	0.341	0.634	82.52	Plagioclase	200 - 100
2604	4465.3	377.4	160.94	64.17	0.399	0.628	66.82	Plagioclase	200 - 100
1309	2244.6	175.8	43.95	49.76	1.132	0.955	47.38	Glass	200 - 100
2241	3842.8	305.7	121.11	49.76	0.411	0.719	61.99	Plagioclase	200 - 100
3838	6581.3	388.8	150.74	79.88	0.530	0.740	81.13	Plagioclase	200 - 100
10	17.2	13.1	3.27	3.93	1.202	1.122	4.14	Orthopyroxene	200 - 100
1035	1774.8	212.7	85.62	49.76	0.581	0.702	42.13	Plagioclase	200 - 100
4213	7224.3	372.8	131.47	103.45	0.787	0.808	85.00	Plagioclase	200 - 100
595	1020.3	172.6	72.14	30.12	0.418	0.656	31.94	Plagioclase	200 - 100
4849	8314.9	887.1	423.95	119.16	0.281	0.364	91.19	Plagioclase	200 - 100
58	99.5	55.7	23.65	10.48	0.443	0.634	9.97	Orthopyroxene	200 - 100
3109	5331.2	322.0	114.36	66.78	0.584	0.804	73.02	Plagioclase	200 - 100
6492	11132.3	515.4	202.82	100.83	0.497	0.726	105.51	Plagioclase	200 - 100
707	1212.3	151.1	52.40	36.67	0.700	0.817	34.82	Olivine	200 - 100
1723	2954.6	318.2	137.64	55.00	0.400	0.606	54.36	Orthopyroxene	200 - 100
781	1339.2	242.7	109.07	19.64	0.180	0.535	36.60	Clinopyroxene	200 - 100
4581	7855.4	416.6	158.85	100.83	0.635	0.754	88.63	Plagioclase	200 - 100
723	1239.8	204.0	87.87	23.57	0.268	0.612	35.21	Plagioclase	200 - 100
134	229.8	65.4	22.49	15.71	0.699	0.821	15.16	Plagioclase	200 - 100
8	13.7	13.9	3.46	2.62	0.757	0.948	3.70	Albite	200 - 100
1579	2707.6	296.7	127.02	3.93	0.031	0.622	52.03	Plagioclase	200 - 100
4376	7503.8	410.5	157.62	81.19	0.515	0.748	86.62	Plagioclase	200 - 100
1340	2297.8	197.5	61.19	56.31	0.920	0.860	47.94	Orthopyroxene	200 - 100
8561	14680.2	681.2	289.95	134.88	0.465	0.631	121.16	Plagioclase	200 - 100

1825	3129.5	229.4	69.99	53.69	0.767	0.864	55.94	Plagioclase	200 - 100
3103	5320.9	338.5	127.49	96.90	0.760	0.764	72.94	Plagioclase	200 - 100
2953	5063.7	340.9	132.12	70.71	0.535	0.740	71.16	Clinopyroxene	200 - 100
2005	3438.1	273.2	103.34	68.09	0.659	0.761	58.64	Plagioclase	200 - 100
1448	2483.0	282.2	120.50	41.90	0.348	0.626	49.83	Orthopyroxene	200 - 100
452	775.1	177.1	78.69	27.50	0.349	0.557	27.84	Orthopyroxene	200 - 100
819	1404.4	224.6	97.97	31.43	0.321	0.591	37.48	Clinopyroxene	200 - 100
2070	3549.6	291.0	114.50	69.40	0.606	0.726	59.58	Plagioclase	200 - 100
5001	8575.6	609.7	273.46	85.12	0.311	0.538	92.60	Plagioclase	200 - 100
2139	3667.9	292.9	114.39	66.78	0.584	0.733	60.56	Clinopyroxene	200 - 100
1573	2697.3	323.7	142.98	35.36	0.247	0.569	51.94	Plagioclase	200 - 100
515	883.1	144.7	56.81	31.43	0.553	0.728	29.72	Plagioclase	200 - 100
17	29.2	18.7	4.68	6.55	1.400	1.021	5.40	Plagioclase	200 - 100
1833	3143.2	248.0	88.47	56.31	0.636	0.801	56.06	Albite	200 - 100
8287	14210.3	1144.0	545.96	149.28	0.273	0.369	119.21	Plagioclase	200 - 100
1608	2757.4	260.8	103.86	61.55	0.593	0.714	52.51	Plagioclase	200 - 100
6298	10799.6	458.5	162.98	111.31	0.683	0.804	103.92	Plagioclase	200 - 100
2140	3669.6	370.6	162.74	77.26	0.475	0.579	60.58	Plagioclase	200 - 100
5585	9577.0	459.4	174.97	123.09	0.703	0.755	97.86	Plagioclase	200 - 100
2031	3482.7	365.7	161.24	86.43	0.536	0.572	59.01	Plagioclase	200 - 100
313	536.7	162.5	74.00	13.09	0.177	0.505	23.17	Plagioclase	200 - 100
1325	2272.1	239.2	95.91	57.62	0.601	0.706	47.67	Glass	200 - 100
11	18.9	12.7	3.16	2.62	0.829	1.217	4.34	Glass	200 - 100
6713	11511.3	698.1	312.16	134.88	0.432	0.545	107.29	Plagioclase	200 - 100
595	1020.3	178.2	75.60	27.50	0.364	0.635	31.94	Plagioclase	200 - 100
2498	4283.5	342.7	140.96	74.64	0.530	0.677	65.45	Glass	200 - 100
11998	20573.8	1204.1	565.66	141.43	0.250	0.422	143.44	Glass	200 - 100
5512	9451.8	428.5	152.14	108.69	0.714	0.804	97.22	Chlorite	200 - 100
3421	5866.2	309.6	88.58	74.64	0.843	0.877	76.59	Glass	200 - 100
615	1054.6	244.5	112.89	18.33	0.162	0.471	32.47	Plagioclase	200 - 100
2612	4479.0	280.2	90.72	79.88	0.881	0.847	66.93	Orthopyroxene	200 - 100
13393	22965.9	725.5	281.06	179.40	0.638	0.740	151.55	Plagioclase	200 - 100
2089	3582.2	277.3	104.27	53.69	0.515	0.765	59.85	Clinopyroxene	200 - 100
936	1605.0	183.1	67.89	41.90	0.617	0.776	40.06	Plagioclase	200 - 100
3137	5379.2	383.2	157.42	86.43	0.549	0.679	73.34	Olivine	200 - 100
2860	4904.2	367.3	151.19	73.33	0.485	0.676	70.03	Plagioclase	200 - 100
317	543.6	130.4	55.40	23.57	0.425	0.634	23.31	Plagioclase	200 - 100
5872	10069.1	754.2	348.16	95.59	0.275	0.472	100.35	Plagioclase	200 - 100
5760	9877.1	451.7	166.53	121.78	0.731	0.780	99.38	Plagioclase	200 - 100
2692	4616.2	367.2	153.51	47.14	0.307	0.656	67.94	Plagioclase	200 - 100
649	1112.9	196.9	85.44	23.57	0.276	0.601	33.36	Glass	200 - 100
3715	6370.4	348.8	122.31	96.90	0.792	0.811	79.81	Plagioclase	200 - 100
1117	1915.4	190.2	66.17	36.67	0.554	0.816	43.77	Olivine	200 - 100
3823	6555.6	385.9	148.91	99.52	0.668	0.744	80.97	Plagioclase	200 - 100
26	44.6	26.8	7.34	3.93	0.535	0.882	6.68	Plagioclase	200 - 100
1339	2296.1	266.8	113.12	39.28	0.347	0.637	47.92	Plagioclase	200 - 100
5585	9577.0	570.2	246.23	85.12	0.346	0.608	97.86	Glass	200 - 100
1269	2176.0	201.2	69.14	55.00	0.795	0.822	46.65	Clinopyroxene	200 - 100
750	1286.1	204.4	87.52	32.74	0.374	0.622	35.86	Plagioclase	200 - 100
3399	5828.5	366.1	142.04	74.64	0.525	0.739	76.34	Plagioclase	200 - 100
4949	8486.4	549.5	239.28	90.35	0.378	0.594	92.12	Albite	200 - 100
5103	8750.5	616.5	276.62	107.38	0.388	0.538	93.54	Glass	200 - 100
3906	6697.9	383.8	146.04	89.05	0.610	0.756	81.84	Plagioclase	200 - 100
4096	7023.7	385.7	144.10	91.66	0.636	0.770	83.81	Plagioclase	200 - 100
1276	2188.1	230.4	91.19	30.12	0.330	0.720	46.78	Orthopyroxene	200 - 100
2205	3781.1	268.0	93.60	81.19	0.867	0.813	61.49	Plagioclase	200 - 100
12	20.6	16.9	4.22	2.62	0.621	0.953	4.54	Plagioclase	200 - 100

519	890.0	133.1	47.98	23.57	0.491	0.795	29.83	Ilmenite	200 - 100
4704	8066.3	412.5	153.78	91.66	0.596	0.772	89.81	Olivine	200 - 100
161	276.1	88.2	36.56	18.33	0.501	0.668	16.62	Clinopyroxene	200 - 100
5884	10089.7	445.8	159.70	115.24	0.722	0.799	100.45	Glass	200 - 100
11712	20083.4	744.3	306.66	150.59	0.491	0.675	141.72	Plagioclase	200 - 100
2172	3724.5	251.6	78.16	69.40	0.888	0.860	61.03	Glass	200 - 100
3374	5785.6	377.8	150.41	85.12	0.566	0.714	76.06	Plagioclase	200 - 100
4141	7100.9	685.2	320.45	130.95	0.409	0.436	84.27	Orthopyroxene	200 - 100
2818	4832.2	341.0	134.62	70.71	0.525	0.723	69.51	Plagioclase	200 - 100
4079	6994.6	445.2	184.73	77.26	0.418	0.666	83.63	Glass	200 - 100
159	272.7	71.4	24.65	14.40	0.584	0.820	16.51	Glass	200 - 100
2995	5135.7	331.2	124.24	68.09	0.548	0.767	71.66	Clinopyroxene	200 - 100
4909	8417.8	525.8	225.56	81.19	0.360	0.619	91.75	Plagioclase	200 - 100
1036	1776.5	199.0	76.19	37.98	0.498	0.751	42.15	Glass	200 - 100
6013	10310.9	694.9	314.68	96.90	0.308	0.518	101.54	Plagioclase	200 - 100
116	198.9	56.2	14.05	13.09	0.932	0.889	14.10	Plagioclase	200 - 100
184	315.5	68.5	17.12	18.33	1.071	0.920	17.76	Glass	200 - 100
2588	4437.8	310.2	117.22	68.09	0.581	0.761	66.62	Plagioclase	200 - 100
7615	13058.0	478.3	154.79	129.64	0.838	0.847	114.27	Plagioclase	200 - 100
1377	2361.2	248.9	101.09	43.21	0.427	0.692	48.59	Glass	200 - 100
67	114.9	44.2	13.67	10.48	0.767	0.861	10.72	Plagioclase	200 - 100
7741	13274.0	520.7	190.79	133.57	0.700	0.784	115.21	Plagioclase	200 - 100
56	96.0	42.4	14.62	9.17	0.627	0.820	9.80	Plagioclase	200 - 100
307	526.4	114.2	45.55	19.64	0.431	0.712	22.94	Plagioclase	200 - 100
5317	9117.4	491.7	200.34	79.88	0.399	0.688	95.49	Plagioclase	200 - 100
14976	25680.4	1223.8	566.57	136.19	0.240	0.464	160.25	Plagioclase	200 - 100
138	236.6	85.6	36.28	9.17	0.253	0.637	15.38	Plagioclase	200 - 100
7090	12157.7	462.4	150.35	112.62	0.749	0.845	110.26	Glass	200 - 100
11	18.9	15.0	3.74	2.62	0.701	1.030	4.34	Plagioclase	200 - 100
11415	19574.1	878.0	388.65	163.69	0.421	0.565	139.91	Plagioclase	200 - 100
272	466.4	101.1	38.43	19.64	0.511	0.757	21.60	Plagioclase	200 - 100
8840	15158.6	619.9	249.10	128.33	0.515	0.704	123.12	Plagioclase	200 - 100
7064	12113.1	654.0	284.40	127.02	0.447	0.597	110.06	Chlorite	200 - 100
3094	5305.5	411.8	175.68	73.33	0.417	0.627	72.84	Plagioclase	200 - 100
7	12.0	10.5	2.62	3.93	1.500	1.174	3.46	Plagioclase	200 - 100
71	121.8	56.5	22.94	7.86	0.343	0.692	11.03	Plagioclase	200 - 100
57	97.7	34.5	8.63	10.48	1.214	1.015	9.89	Glass	200 - 100
2475	4244.1	277.4	93.11	64.17	0.689	0.833	65.15	Olivine	200 - 100
1808	3100.3	268.6	104.69	48.45	0.463	0.735	55.68	Chlorite	200 - 100
6	10.3	10.0	2.51	3.93	1.566	1.134	3.21	Plagioclase	200 - 100
385	660.2	108.5	35.78	19.64	0.549	0.840	25.69	Glass	200 - 100
886	1519.3	260.0	117.00	20.95	0.179	0.531	38.98	Plagioclase	200 - 100
521	893.4	138.1	51.81	23.57	0.455	0.767	29.89	Apatite	200 - 100
3119	5348.4	393.1	163.91	78.57	0.479	0.660	73.13	Glass	200 - 100
810	1389.0	165.0	58.89	39.28	0.667	0.801	37.27	Plagioclase	200 - 100
5723	9813.6	540.7	227.15	111.31	0.490	0.649	99.06	Plagioclase	200 - 100
4547	7797.1	503.5	215.57	64.17	0.298	0.622	88.30	Chlorite	200 - 100
1383	2371.5	240.0	95.06	45.83	0.482	0.719	48.70	Glass	200 - 100
1568	2688.8	317.3	139.33	36.67	0.263	0.579	51.85	Plagioclase	200 - 100
128	219.5	62.4	20.47	14.40	0.703	0.842	14.82	Plagioclase	200 - 100
558	956.8	177.8	76.38	26.19	0.343	0.617	30.93	Orthopyroxene	200 - 100
2438	4180.6	298.3	111.70	57.62	0.516	0.769	64.66	Orthopyroxene	200 - 100
2924	5014.0	597.9	281.12	47.14	0.168	0.420	70.81	Plagioclase	200 - 100
8	13.7	10.8	2.70	2.62	0.970	1.217	3.70	Glass	200 - 100
4445	7622.2	439.8	176.79	81.19	0.459	0.704	87.30	Glass	200 - 100
14734	25265.4	1028.9	459.46	167.62	0.365	0.548	158.95	Olivine	200 - 100
5107	8757.3	453.0	177.05	70.71	0.399	0.732	93.58	Plagioclase	200 - 100

10924	18732.2	1008.6	463.90	108.69	0.234	0.481	136.87	Plagioclase	200 - 100
63	108.0	49.6	19.13	10.48	0.548	0.744	10.39	Plagioclase	200 - 100
874	1498.7	174.6	63.78	47.14	0.739	0.786	38.71	Orthopyroxene	200 - 100
3956	6783.6	478.8	206.53	106.07	0.514	0.610	82.36	Orthopyroxene	200 - 100
6534	11204.3	492.3	185.85	99.52	0.535	0.762	105.85	Plagioclase	200 - 100
1269	2176.0	202.4	70.17	52.38	0.746	0.817	46.65	Plagioclase	200 - 100
569	975.7	149.7	58.04	32.74	0.564	0.740	31.24	Quartz	200 - 100
2540	4355.5	307.4	116.25	69.40	0.597	0.761	66.00	Plagioclase	200 - 100
1175	2014.9	205.5	76.33	35.36	0.463	0.774	44.89	Plagioclase	200 - 100
2060	3532.4	297.0	118.74	69.40	0.584	0.709	59.43	Plagioclase	200 - 100
697	1195.2	144.2	46.30	30.12	0.651	0.850	34.57	Orthopyroxene	200 - 100
6860	11763.3	543.8	217.94	89.05	0.409	0.707	108.46	Plagioclase	200 - 100
3347	5739.3	360.1	138.68	83.81	0.604	0.746	75.76	Plagioclase	200 - 100
698	1196.9	200.8	86.60	22.26	0.257	0.611	34.60	Plagioclase	200 - 100
22	37.7	28.7	10.86	2.62	0.241	0.759	6.14	Chlorite	200 - 100
882	1512.4	223.8	96.19	36.67	0.381	0.616	38.89	Plagioclase	200 - 100
2848	4883.7	342.1	134.82	72.02	0.534	0.724	69.88	Olivine	200 - 100
808	1385.5	168.9	62.19	40.59	0.653	0.781	37.22	Chlorite	200 - 100
2962	5079.2	361.8	146.15	62.86	0.430	0.698	71.27	Plagioclase	200 - 100
658	1128.3	167.9	67.11	37.98	0.566	0.709	33.59	Plagioclase	200 - 100
95	162.9	82.0	36.51	7.86	0.215	0.552	12.76	Glass	200 - 100
801	1373.5	158.4	53.56	39.28	0.733	0.829	37.06	Plagioclase	200 - 100
2471	4237.2	306.4	116.98	81.19	0.694	0.753	65.09	Plagioclase	200 - 100
8254	14153.7	619.6	254.13	128.33	0.505	0.681	118.97	Plagioclase	200 - 100
464	795.7	139.1	55.09	26.19	0.475	0.719	28.21	Plagioclase	200 - 100
8685	14892.8	861.4	392.78	145.35	0.370	0.502	122.04	Glass	200 - 100
7607	13044.3	514.2	187.53	113.93	0.608	0.787	114.21	Plagioclase	200 - 100
733	1256.9	260.6	119.80	28.81	0.240	0.482	35.45	Plagioclase	200 - 100
1829	3136.3	268.8	104.33	55.00	0.527	0.739	56.00	Plagioclase	200 - 100
4107	7042.6	390.8	147.71	69.40	0.470	0.761	83.92	Plagioclase	200 - 100
2094	3590.7	301.8	121.30	81.19	0.669	0.704	59.92	Plagioclase	200 - 100
4438	7610.2	433.2	172.46	89.05	0.516	0.714	87.24	Plagioclase	200 - 100
30289	71887.4	1680.7	743.67	212.60	0.286	0.566	268.12	Plagioclase	100 - 35
569	1350.5	202.7	85.55	30.81	0.360	0.643	36.75	Glass	100 - 35
5961	14147.7	520.0	182.47	137.11	0.751	0.811	118.94	Plagioclase	100 - 35
9359	22212.5	673.4	246.65	167.92	0.681	0.785	149.04	Plagioclase	100 - 35
4391	10421.5	523.4	212.70	72.41	0.340	0.691	102.09	Plagioclase	100 - 35
8453	20062.2	640.7	234.94	174.09	0.741	0.784	141.64	Glass	100 - 35
59	140.0	64.5	27.08	10.78	0.398	0.650	11.83	Plagioclase	100 - 35
7899	18747.4	686.4	275.00	172.54	0.627	0.707	136.92	Olivine	100 - 35
11655	27661.8	808.5	317.00	144.81	0.457	0.729	166.32	Plagioclase	100 - 35
7217	17128.7	551.8	181.60	146.36	0.806	0.841	130.88	Plagioclase	100 - 35
35841	85064.5	1328.9	491.27	314.28	0.640	0.778	291.66	Glass	100 - 35
14522	34466.3	815.7	288.29	201.82	0.700	0.807	185.65	Glass	100 - 35
9630	22855.7	749.8	298.24	152.52	0.511	0.715	151.18	Plagioclase	100 - 35
258	612.3	116.9	44.79	27.73	0.619	0.750	24.75	Glass	100 - 35
9893	23479.9	985.8	439.49	235.71	0.536	0.551	153.23	Glass	100 - 35
6124	14534.6	588.0	231.12	135.57	0.587	0.727	120.56	Plagioclase	100 - 35
4743	11257.0	471.5	169.24	104.76	0.619	0.798	106.10	Chlorite	100 - 35
129	306.2	79.1	29.01	18.49	0.637	0.784	17.50	Quartz	100 - 35
8245	19568.6	822.9	356.56	206.44	0.579	0.603	139.89	Orthopyroxene	100 - 35
6312	14980.8	573.5	218.01	144.81	0.664	0.757	122.40	Plagioclase	100 - 35
164	389.2	84.3	28.47	20.03	0.704	0.830	19.73	Quartz	100 - 35
10203	24215.6	732.0	279.30	201.82	0.723	0.754	155.61	Plagioclase	100 - 35
1538	3650.3	332.1	139.96	66.24	0.473	0.645	60.42	Glass	100 - 35
332	788.0	132.6	50.81	27.73	0.546	0.750	28.07	Plagioclase	100 - 35
6199	14712.6	494.4	147.41	138.65	0.941	0.870	121.30	Plagioclase	100 - 35

17430	41368.1	1052.9	430.30	204.90	0.476	0.685	203.39	Plagioclase	100 - 35
10108	23990.2	747.6	291.49	163.30	0.560	0.734	154.89	Plagioclase	100 - 35
13553	32166.5	909.9	367.38	152.52	0.415	0.699	179.35	Plagioclase	100 - 35
12146	28827.1	1159.4	524.78	209.52	0.399	0.519	169.79	Glass	100 - 35
6127	14541.7	474.4	118.59	141.73	1.195	0.901	120.59	Glass	100 - 35
6503	15434.1	631.0	254.93	130.95	0.514	0.698	124.23	Plagioclase	100 - 35
2969	7046.6	372.5	133.40	100.14	0.751	0.799	83.94	Plagioclase	100 - 35
8266	19618.4	641.3	238.31	141.73	0.595	0.774	140.07	Plagioclase	100 - 35
14609	34672.8	851.3	315.90	207.98	0.658	0.775	186.21	Plagioclase	100 - 35
5361	12723.7	541.4	210.19	140.19	0.667	0.739	112.80	Glass	100 - 35
12351	29313.7	702.9	215.28	204.90	0.952	0.863	171.21	Olivine	100 - 35
12247	29066.8	1172.4	531.53	160.22	0.301	0.515	170.49	Plagioclase	100 - 35
8881	21078.0	655.8	240.10	135.57	0.565	0.785	145.18	Plagioclase	100 - 35
247	586.2	102.0	33.47	27.73	0.829	0.842	24.21	Plagioclase	100 - 35
5074	12042.6	636.4	274.32	115.54	0.421	0.611	109.74	Orthopyroxene	100 - 35
5889	13976.9	708.0	308.72	97.06	0.314	0.592	118.22	Plagioclase	100 - 35
3595	8532.3	473.6	192.49	130.95	0.680	0.691	92.37	Olivine	100 - 35
10881	25824.8	736.1	273.71	187.95	0.687	0.774	160.70	Olivine	100 - 35
1716	4072.7	388.5	170.32	30.81	0.181	0.582	63.82	Glass	100 - 35
4667	11076.6	470.8	170.42	114.00	0.669	0.792	105.25	Plagioclase	100 - 35
60	142.4	60.7	24.53	7.70	0.314	0.697	11.93	Orthopyroxene	100 - 35
3981	9448.4	504.2	206.29	73.95	0.358	0.683	97.20	Plagioclase	100 - 35
17741	42106.2	1128.0	475.45	203.36	0.428	0.645	205.20	Orthopyroxene	100 - 35
4960	11772.0	502.9	189.24	140.19	0.741	0.765	108.50	Plagioclase	100 - 35
602	1428.8	182.2	70.94	29.27	0.413	0.736	37.80	Plagioclase	100 - 35
10364	24597.8	761.2	298.11	169.46	0.568	0.730	156.84	Glass	100 - 35
4461	10587.7	542.3	223.82	86.27	0.385	0.673	102.90	Glass	100 - 35
10012	23762.3	737.1	285.23	161.76	0.567	0.741	154.15	Plagioclase	100 - 35
35	83.1	37.9	12.07	9.24	0.766	0.852	9.11	Quartz	100 - 35
25509	60542.7	1715.5	780.13	249.57	0.320	0.508	246.05	Plagioclase	100 - 35
6133	14556.0	552.5	205.38	117.08	0.570	0.774	120.65	Plagioclase	100 - 35
6510	15450.7	590.4	227.17	137.11	0.604	0.746	124.30	Olivine	100 - 35
14063	33376.9	1129.2	497.54	229.55	0.461	0.574	182.69	Plagioclase	100 - 35
22912	54379.0	1616.8	734.34	217.22	0.296	0.511	233.19	Plagioclase	100 - 35
2804	6655.0	432.5	179.10	73.95	0.413	0.669	81.58	Olivine	100 - 35
8549	20290.1	663.5	250.86	154.06	0.614	0.761	142.44	Plagioclase	100 - 35
12807	30395.9	1220.6	555.58	220.30	0.397	0.506	174.34	Plagioclase	100 - 35
3725	8840.9	489.4	200.62	78.57	0.392	0.681	94.03	Glass	100 - 35
645	1530.8	193.6	76.88	36.97	0.481	0.716	39.13	Plagioclase	100 - 35
6590	15640.6	630.6	253.61	114.00	0.450	0.703	125.06	Orthopyroxene	100 - 35
6859	16279.0	579.8	213.70	127.87	0.598	0.780	127.59	Plagioclase	100 - 35
7378	17510.8	605.1	224.54	121.71	0.542	0.775	132.33	Plagioclase	100 - 35
12686	30108.8	1275.2	586.25	238.79	0.407	0.482	173.52	Plagioclase	100 - 35
3233	7673.2	414.5	158.96	98.60	0.620	0.749	87.60	Plagioclase	100 - 35
5153	12230.1	507.1	188.73	117.08	0.620	0.773	110.59	Plagioclase	100 - 35
9978	23681.6	819.1	339.88	146.36	0.431	0.666	153.89	Plagioclase	100 - 35
10921	25919.7	724.7	264.30	161.76	0.612	0.787	161.00	Chlorite	100 - 35
4487	10649.4	468.6	172.62	103.22	0.598	0.781	103.20	Glass	100 - 35
4583	10877.2	712.6	322.59	107.84	0.334	0.519	104.29	Plagioclase	100 - 35
9143	21699.9	701.7	270.67	163.30	0.603	0.744	147.31	Orthopyroxene	100 - 35
7804	18521.9	617.9	227.54	143.27	0.630	0.781	136.10	Plagioclase	100 - 35
3726	8843.2	491.9	202.20	66.24	0.328	0.678	94.04	Plagioclase	100 - 35
5052	11990.3	511.1	193.65	104.76	0.541	0.759	109.50	Chlorite	100 - 35
472	1120.2	126.1	31.52	33.89	1.075	0.941	33.47	Plagioclase	100 - 35
1871	4440.6	332.8	133.00	69.33	0.521	0.710	66.64	Plagioclase	100 - 35
27	64.1	30.4	7.60	4.62	0.608	0.934	8.00	Quartz	100 - 35
6280	14904.9	689.7	294.16	127.87	0.435	0.628	122.09	Plagioclase	100 - 35

6711	15927.8	601.8	232.31	152.52	0.657	0.743	126.21	Orthopyroxene	100 - 35
3932	9332.2	436.1	159.57	112.46	0.705	0.785	96.60	Plagioclase	100 - 35
9073	21533.7	691.9	264.57	126.33	0.477	0.752	146.74	Orthopyroxene	100 - 35
10	23.7	24.7	9.94	3.08	0.310	0.701	4.87	Quartz	100 - 35
7	16.6	13.3	3.33	3.08	0.925	1.084	4.08	Quartz	100 - 35
9908	23515.5	727.7	279.82	189.49	0.677	0.747	153.35	Glass	100 - 35
20	47.5	32.8	12.67	6.16	0.486	0.744	6.89	Quartz	100 - 35
9	21.4	12.7	3.17	3.08	0.972	1.290	4.62	Glass	100 - 35
7	16.6	11.4	2.86	4.62	1.615	1.265	4.08	Quartz	100 - 35
25771	61164.5	1238.5	495.91	274.22	0.553	0.708	247.31	Quartz	100 - 35
303	719.1	120.2	43.64	30.81	0.706	0.791	26.82	Glass/Plag	100 - 35
457	1084.6	178.4	74.70	40.06	0.536	0.654	32.93	Glass	100 - 35
1991	4725.4	450.5	201.84	49.30	0.244	0.541	68.74	Plagioclase	100 - 35
21400	50790.4	1117.9	444.75	166.38	0.374	0.715	225.37	Plagioclase	100 - 35
10593	25141.3	762.1	296.17	177.17	0.598	0.738	158.56	Glass	100 - 35
53732	127526.7	2479.6	1126.60	260.36	0.231	0.511	357.11	Clinopyroxene	100 - 35
10876	25812.9	800.3	319.32	155.60	0.487	0.712	160.66	Glass	100 - 35
4874	11567.9	515.7	200.01	124.79	0.624	0.739	107.55	Plagioclase	100 - 35
2948	6996.7	476.5	203.93	92.43	0.453	0.622	83.65	Clinopyroxene	100 - 35
21312	50581.6	1419.0	629.08	231.09	0.367	0.562	224.90	Plagioclase	100 - 35
34996	83059.0	2082.3	954.11	277.30	0.291	0.491	288.20	Plagioclase	100 - 35
37493	88985.3	1487.7	594.03	348.17	0.586	0.711	298.30	Plagioclase	100 - 35
10871	25801.1	966.5	422.10	169.46	0.401	0.589	160.63	Olivine	100 - 35
9452	22433.2	667.8	240.71	140.19	0.582	0.795	149.78	Orthopyroxene	100 - 35
2274	5397.1	372.6	150.38	63.16	0.420	0.699	73.46	Plagioclase	100 - 35
8156	19357.3	613.6	217.99	160.22	0.735	0.804	139.13	Plagioclase	100 - 35
8879	21073.3	634.7	222.70	154.06	0.692	0.811	145.17	Glass	100 - 35
8515	20209.4	569.2	148.35	157.14	1.059	0.885	142.16	Glass	100 - 35
16	38.0	20.5	5.12	4.62	0.902	1.066	6.16	Quartz	100 - 35
4753	11280.7	473.1	170.28	124.79	0.733	0.796	106.21	Plagioclase	100 - 35
2257	5356.7	339.3	127.69	86.27	0.676	0.765	73.19	Glass	100 - 35
7231	17161.9	793.3	347.22	144.81	0.417	0.585	131.00	Plagioclase	100 - 35
212	503.2	146.4	65.50	18.49	0.282	0.543	22.43	Glass	100 - 35
18	42.7	37.6	16.17	6.16	0.381	0.616	6.54	Glass	100 - 35
6057	14375.6	685.5	293.84	127.87	0.435	0.620	119.90	Plagioclase	100 - 35
2911	6908.9	384.3	144.25	97.06	0.673	0.767	83.12	Plagioclase	100 - 35
88	208.9	86.8	37.90	10.78	0.284	0.590	14.45	Plagioclase	100 - 35
1228	2914.5	295.6	124.35	57.00	0.458	0.647	53.99	Plagioclase	100 - 35
4559	10820.3	557.6	232.22	80.11	0.345	0.661	104.02	Glass	100 - 35
9905	23508.4	743.8	291.15	129.41	0.444	0.731	153.32	Glass	100 - 35
27156	64451.6	2258.7	1069.07	343.55	0.321	0.398	253.87	Glass	100 - 35
8	19.0	14.6	3.65	3.08	0.844	1.058	4.36	Glass	100 - 35
17	40.4	22.9	5.72	9.24	1.615	0.985	6.35	Plagioclase	100 - 35
7069	16777.5	627.2	245.19	144.81	0.591	0.732	129.53	Plagioclase	100 - 35
1316	3123.4	265.8	102.41	66.24	0.647	0.745	55.89	Glass	100 - 35
4571	10848.7	438.5	143.86	117.08	0.814	0.842	104.16	Clinopyroxene	100 - 35
7179	17038.5	537.1	165.81	149.44	0.901	0.861	130.53	Plagioclase	100 - 35
42	99.7	45.8	17.05	6.16	0.361	0.773	9.98	Quartz	100 - 35
3113	7388.4	410.4	158.64	89.35	0.563	0.742	85.96	Plagioclase	100 - 35
4789	11366.1	604.0	257.92	78.57	0.305	0.626	106.61	Clinopyroxene	100 - 35
3598	8539.4	447.6	174.97	70.87	0.405	0.732	92.41	Plagioclase	100 - 35
4020	9541.0	497.2	201.18	83.19	0.414	0.696	97.68	Glass	100 - 35
9113	21628.7	692.4	264.41	138.65	0.524	0.753	147.07	Plagioclase	100 - 35
3762	8928.7	414.7	146.36	100.14	0.684	0.808	94.49	Olivine	100 - 35
4480	10632.8	535.1	218.99	129.41	0.591	0.683	103.12	Plagioclase	100 - 35
197	467.6	109.7	44.27	29.27	0.661	0.699	21.62	Plagioclase	100 - 35
6584	15626.4	698.3	296.46	106.30	0.359	0.635	125.01	Plagioclase	100 - 35

793	1882.1	272.1	120.43	44.68	0.371	0.565	43.38	Olivine	100 - 35
35139	83398.4	2394.9	1123.18	406.71	0.362	0.427	288.79	Plagioclase	100 - 35
9642	22884.2	1004.0	451.29	171.00	0.379	0.534	151.28	Olivine	100 - 35
162	384.5	125.1	55.62	21.57	0.388	0.556	19.61	Olivine	100 - 35
5213	12372.5	784.2	357.48	163.30	0.457	0.503	111.23	Glass	100 - 35
4714	11188.1	622.2	269.57	78.57	0.291	0.603	105.77	Plagioclase	100 - 35
20312	48208.2	1151.3	473.92	200.28	0.423	0.676	219.56	Plagioclase	100 - 35
3669	8708.0	551.9	239.61	72.41	0.302	0.599	93.32	Plagioclase	100 - 35
2596	6161.3	465.2	202.09	72.41	0.358	0.598	78.49	Olivine	100 - 35
6	14.2	11.2	2.79	3.08	1.104	1.200	3.77	Plagioclase	100 - 35
14	33.2	25.9	9.44	4.62	0.489	0.788	5.76	Plagioclase	100 - 35
10026	23795.6	717.8	271.13	184.87	0.682	0.762	154.26	Plagioclase	100 - 35
350	830.7	152.4	63.02	33.89	0.538	0.670	28.82	Ilmenite	100 - 35
22	52.2	34.2	13.10	7.70	0.588	0.749	7.23	Brass/Quartz	100 - 35
1082	2568.0	308.6	135.30	52.38	0.387	0.582	50.68	Glass/Plag	100 - 35
3199	7592.5	545.9	241.52	67.79	0.281	0.566	87.13	Plagioclase	100 - 35
3408	8088.5	388.3	133.59	106.30	0.796	0.821	89.94	Plagioclase	100 - 35
9077	21543.2	663.3	242.98	181.79	0.748	0.784	146.78	Plagioclase	100 - 35
4978	11814.7	496.2	183.86	117.08	0.637	0.776	108.70	Plagioclase	100 - 35
7559	17940.4	767.2	329.08	140.19	0.426	0.619	133.94	Olivine	100 - 35
8258	19599.4	842.8	368.17	192.57	0.523	0.589	140.00	Glass	100 - 35
4841	11489.6	613.5	263.10	132.49	0.504	0.619	107.19	Chlorite	100 - 35
4347	10317.1	542.5	225.47	67.79	0.301	0.664	101.57	Plagioclase	100 - 35
7180	17040.9	657.1	263.97	160.22	0.607	0.704	130.54	Plagioclase	100 - 35
6658	15802.0	595.5	228.66	132.49	0.579	0.748	125.71	Glass	100 - 35
10908	25888.9	920.9	394.86	115.54	0.293	0.619	160.90	Plagioclase	100 - 35
12454	29558.1	918.1	381.61	178.71	0.468	0.664	171.92	Plagioclase	100 - 35
5056	11999.8	555.1	224.00	129.41	0.578	0.700	109.54	Plagioclase	100 - 35
7	16.6	13.3	3.33	3.08	0.925	1.084	4.08	Quartz	100 - 35
38	90.2	42.1	15.04	9.24	0.614	0.800	9.50	Plagioclase	100 - 35
8521	20223.6	631.7	226.57	160.22	0.707	0.798	142.21	Plagioclase	100 - 35
1090	2587.0	299.5	129.79	40.06	0.309	0.602	50.86	Plagioclase	100 - 35
8153	19350.2	718.3	293.17	144.81	0.494	0.686	139.10	Plagioclase	100 - 35
7842	18612.1	559.6	170.84	166.38	0.974	0.864	136.43	Plagioclase	100 - 35
20653	49017.5	1070.2	417.76	228.01	0.546	0.733	221.40	Plagioclase	100 - 35
9718	23064.6	803.2	332.14	167.92	0.506	0.670	151.87	Glass	100 - 35
11222	26634.1	1083.7	487.20	150.98	0.310	0.534	163.20	Orthopyroxene	100 - 35
6805	16150.9	711.6	302.36	107.84	0.357	0.633	127.09	Glass	100 - 35
7907	18766.4	551.0	152.22	157.14	1.032	0.881	136.99	Plagioclase	100 - 35
999	2371.0	237.0	93.00	49.30	0.530	0.728	48.69	Plagioclase	100 - 35
11380	27009.1	735.6	266.38	177.17	0.665	0.792	164.34	Plagioclase	100 - 35
8057	19122.4	773.4	328.46	77.03	0.235	0.634	138.28	Plagioclase	100 - 35
18161	43103.0	1434.7	651.13	181.79	0.279	0.513	207.61	Glass	100 - 35
6074	14415.9	564.1	214.98	114.00	0.530	0.755	120.07	Plagioclase	100 - 35
5319	12624.0	542.2	211.35	112.46	0.532	0.735	112.36	Glass	100 - 35
38	90.2	37.7	9.43	10.78	1.143	0.893	9.50	Plagioclase	100 - 35
39465	93665.6	3234.7	1557.22	360.50	0.232	0.335	306.05	Plagioclase	100 - 35
5688	13499.8	536.1	200.86	124.79	0.621	0.768	116.19	Plagioclase	100 - 35
13546	32149.9	945.6	390.48	186.41	0.477	0.672	179.30	Plagioclase	100 - 35
2548	6047.4	455.2	196.85	52.38	0.266	0.606	77.76	Plagioclase	100 - 35
8675	20589.1	1115.3	517.90	157.14	0.303	0.456	143.49	Plagioclase	100 - 35
1193	2831.5	235.6	84.18	60.08	0.714	0.801	53.21	Plagioclase	100 - 35
10204	24218.0	946.6	414.92	137.11	0.330	0.583	155.62	Orthopyroxene	100 - 35
16257	38584.1	975.1	388.14	181.79	0.468	0.714	196.43	Plagioclase	100 - 35
681	1616.3	264.9	118.86	36.97	0.311	0.538	40.20	Clinopyroxene	100 - 35
3689	8755.4	413.7	147.50	92.43	0.627	0.802	93.57	Plagioclase	100 - 35
20069	47631.5	1366.2	604.27	214.14	0.354	0.566	218.25	Chlorite	100 - 35

4980	11819.5	478.1	169.19	112.46	0.665	0.806	108.72	Glass	100 - 35
21229	50384.6	1429.8	635.62	183.33	0.288	0.557	224.47	Glass	100 - 35
8523	20228.4	642.8	235.54	147.90	0.628	0.784	142.23	Orthopyroxene	100 - 35
5901	14005.3	505.3	170.49	126.33	0.741	0.830	118.34	Plagioclase	100 - 35
8837	20973.6	673.0	253.90	123.25	0.485	0.763	144.82	Clinopyroxene	100 - 35
7566	17957.0	509.5	127.38	147.90	1.161	0.932	134.00	Glass	100 - 35
11446	27165.8	1142.1	518.66	157.14	0.303	0.512	164.82	Plagioclase	100 - 35
6605	15676.2	647.2	264.29	127.87	0.484	0.686	125.20	Plagioclase	100 - 35
13093	31074.7	775.2	274.29	206.44	0.753	0.806	176.28	Plagioclase	100 - 35
6700	15901.7	579.9	216.52	120.17	0.555	0.771	126.10	Clinopyroxene	100 - 35
8498	20169.0	826.4	356.62	172.54	0.484	0.609	142.02	Plagioclase	100 - 35
3253	7720.6	465.4	192.59	70.87	0.368	0.669	87.87	Plagioclase	100 - 35
6352	15075.7	511.4	163.50	126.33	0.773	0.851	122.78	Glass	100 - 35
6575	15605.0	562.3	205.04	149.44	0.729	0.788	124.92	Plagioclase	100 - 35
5169	12268.0	516.9	195.81	110.92	0.566	0.760	110.76	Plagioclase	100 - 35
7048	16727.6	597.0	223.74	160.22	0.716	0.768	129.34	Glass	100 - 35
10786	25599.3	837.0	344.12	166.38	0.483	0.678	160.00	Olivine	100 - 35
5174	12279.9	529.0	204.40	138.65	0.678	0.743	110.81	Plagioclase	100 - 35
10973	26043.2	1101.2	498.31	183.33	0.368	0.520	161.38	Glass	100 - 35
36696	87093.7	1397.7	536.55	240.33	0.448	0.748	295.12	Glass	100 - 35
26872	63777.6	1645.4	736.04	254.20	0.345	0.544	252.54	Brass/Orthopyroxene	100 - 35
2742	6507.8	436.0	182.31	49.30	0.270	0.656	80.67	Plagioclase	100 - 35
7150	16969.7	680.8	279.76	143.27	0.512	0.678	130.27	Olivine	100 - 35
6359	15092.4	598.0	234.67	141.73	0.604	0.728	122.85	Plagioclase	100 - 35
4510	10704.0	479.2	180.18	115.54	0.641	0.765	103.46	Plagioclase	100 - 35
28803	68360.6	1881.7	861.49	215.68	0.250	0.493	261.46	Orthopyroxene	100 - 35
4825	11451.6	537.5	215.65	90.89	0.421	0.706	107.01	Chlorite	100 - 35
3368	7993.6	414.5	156.02	95.52	0.612	0.765	89.41	Plagioclase	100 - 35
22013	52245.3	1361.6	592.62	224.92	0.380	0.595	228.57	Plagioclase	100 - 35
61	144.8	59.2	23.42	12.32	0.526	0.721	12.03	Plagioclase	100 - 35
88	208.9	79.0	33.19	9.24	0.278	0.649	14.45	Plagioclase	100 - 35
8	19.0	12.4	3.11	4.62	1.486	1.244	4.36	Glass	100 - 35
4520	10727.7	434.7	141.53	124.79	0.882	0.845	103.57	Plagioclase	100 - 35
8015	19022.7	604.2	212.63	149.44	0.703	0.809	137.92	Plagioclase	100 - 35
1522	3612.3	294.1	115.90	73.95	0.638	0.724	60.10	Plagioclase	100 - 35
19172	45502.5	1325.7	585.06	297.33	0.508	0.570	213.31	Plagioclase	100 - 35
7909	18771.1	653.7	252.51	158.68	0.628	0.743	137.01	Plagioclase	100 - 35
997	2366.3	247.6	100.20	60.08	0.600	0.696	48.64	Glass	100 - 35
6158	14615.3	541.7	196.42	138.65	0.706	0.791	120.89	Orthopyroxene	100 - 35
7145	16957.8	577.1	206.38	143.27	0.694	0.800	130.22	Plagioclase	100 - 35
10	23.7	17.1	4.26	6.16	1.446	1.012	4.87	Al2O3	100 - 35
7066	16770.3	626.0	244.39	107.84	0.441	0.733	129.50	Plagioclase	100 - 35
25973	61643.9	2574.8	1237.59	283.47	0.229	0.342	248.28	Plagioclase	100 - 35
2238	5311.6	326.6	118.45	89.35	0.754	0.791	72.88	Albite	100 - 35
8185	19426.2	703.7	283.26	137.11	0.484	0.702	139.38	Glass	100 - 35
14055	33357.9	1144.7	506.51	167.92	0.332	0.566	182.64	Orthopyroxene	100 - 35
10309	24467.2	1112.6	508.13	194.11	0.382	0.498	156.42	Plagioclase	100 - 35
12527	29731.4	1036.3	452.44	197.19	0.436	0.590	172.43	Glass	100 - 35
1029	2442.2	328.1	147.49	33.89	0.230	0.534	49.42	Orthopyroxene	100 - 35
2257	5356.7	336.6	125.68	86.27	0.686	0.771	73.19	Glass	100 - 35
4144	9835.3	645.8	288.86	64.70	0.224	0.544	99.17	Olivine	100 - 35
472	1120.2	151.1	55.26	33.89	0.613	0.785	33.47	Plagioclase	100 - 35
28	66.5	45.3	19.21	7.70	0.401	0.637	8.15	Quartz	100 - 35
7	16.6	12.7	3.17	1.54	0.486	1.138	4.08	Plagioclase	100 - 35
7803	18519.5	688.5	277.51	124.79	0.450	0.701	136.09	Olivine	100 - 35
8568	20335.2	866.4	379.64	135.57	0.357	0.583	142.60	Plagioclase	100 - 35
3138	7447.7	463.3	193.09	63.16	0.327	0.660	86.30	Glass	100 - 35

6261	14859.8	664.7	279.10	167.92	0.602	0.650	121.90	Plagioclase	100 - 35
3331	7905.7	345.2	86.29	95.52	1.107	0.913	88.91	Glass	100 - 35
16107	38228.1	969.0	385.26	261.90	0.680	0.715	195.52	Plagioclase	100 - 35
6	14.2	10.5	2.63	3.08	1.171	1.272	3.77	Plagioclase	100 - 35
4924	11686.5	520.6	202.63	98.60	0.487	0.736	108.10	Plagioclase	100 - 35
9320	22119.9	688.7	258.90	155.60	0.601	0.766	148.73	Plagioclase	100 - 35
11878	28191.1	1056.3	467.88	204.90	0.438	0.563	167.90	Glass/Plag	100 - 35
2404	5705.6	679.0	321.75	115.54	0.359	0.394	75.54	Glass	100 - 35
8	19.0	13.6	3.40	4.62	1.359	1.136	4.36	Glass	100 - 35
1188	2819.6	234.4	83.34	49.30	0.592	0.803	53.10	Plagioclase	100 - 35
8003	18994.2	592.0	201.96	161.76	0.801	0.825	137.82	Glass	100 - 35
2058	4884.4	366.8	151.09	80.11	0.530	0.675	69.89	Plagioclase	100 - 35
7531	17874.0	582.8	203.65	147.90	0.726	0.813	133.69	Plagioclase	100 - 35
3397	8062.4	428.5	165.51	78.57	0.475	0.743	89.79	Plagioclase	100 - 35
14946	35472.6	941.9	376.80	243.41	0.646	0.709	188.34	Plagioclase	100 - 35
33	78.3	37.2	12.15	7.70	0.634	0.844	8.85	Plagioclase	100 - 35
6959	16516.4	610.7	235.11	115.54	0.491	0.746	128.52	Plagioclase	100 - 35
5984	14202.3	537.8	196.71	115.54	0.587	0.786	119.17	Plagioclase	100 - 35
9294	22058.2	844.4	361.10	154.06	0.427	0.624	148.52	Glass	100 - 35
7563	17949.9	670.2	268.14	141.73	0.529	0.709	133.98	Plagioclase	100 - 35
6827	16203.1	636.0	254.30	110.92	0.436	0.709	127.29	Glass	100 - 35
957	2271.3	178.7	44.68	53.92	1.207	0.945	47.66	Glass	100 - 35
7935	18832.8	730.2	302.95	143.27	0.473	0.666	137.23	Glass/Plag	100 - 35
1500	3560.1	242.8	71.89	63.16	0.879	0.871	59.67	Plagioclase	100 - 35
7192	17069.4	580.4	208.20	143.27	0.688	0.798	130.65	CaO	100 - 35
8088	19195.9	692.7	277.04	135.57	0.489	0.709	138.55	Glass	100 - 35
2114	5017.3	351.4	139.83	70.87	0.507	0.715	70.83	Plagioclase	100 - 35
8	19.0	13.6	3.40	4.62	1.359	1.136	4.36	Quartz	100 - 35
8446	20045.6	654.8	245.90	157.14	0.639	0.766	141.58	Plagioclase	100 - 35
1797	4265.0	329.6	132.65	83.19	0.627	0.702	65.31	Clinopyroxene	100 - 35
4784	11354.3	518.7	203.58	124.79	0.613	0.728	106.56	Chlorite	100 - 35
5784	13727.7	618.5	255.53	78.57	0.307	0.672	117.17	Plagioclase	100 - 35
8512	20202.3	684.3	266.30	138.65	0.521	0.736	142.13	Plagioclase	100 - 35
5632	13366.9	614.1	254.55	123.25	0.484	0.667	115.62	Clinopyroxene	100 - 35
20759	49269.1	969.9	340.06	251.11	0.738	0.811	221.97	Plagioclase	100 - 35
4976	11810.0	458.4	150.98	130.95	0.867	0.840	108.67	Glass/Plag	100 - 35
11799	28003.6	807.5	314.79	174.09	0.553	0.735	167.34	Olivine	100 - 35
10604	25167.4	749.2	286.84	161.76	0.564	0.751	158.64	Plagioclase	100 - 35
934	2216.7	252.6	105.25	33.89	0.322	0.661	47.08	Plagioclase	100 - 35
21	49.8	26.0	6.51	4.62	0.710	0.962	7.06	Plagioclase	100 - 35
7227	17152.5	601.3	224.11	135.57	0.605	0.772	130.97	Glass	100 - 35
1753	4160.5	342.4	141.86	70.87	0.500	0.668	64.50	Glass	100 - 35
1262	2995.2	348.4	154.84	55.46	0.358	0.557	54.73	Plagioclase	100 - 35
13334	31646.7	979.4	413.06	217.22	0.526	0.644	177.90	Glass	100 - 35
6502	15431.8	605.4	237.81	115.54	0.486	0.727	124.22	Plagioclase	100 - 35
13040	30948.9	877.6	350.52	212.60	0.607	0.711	175.92	Plagioclase	100 - 35
16703	39642.6	941.0	360.56	215.68	0.598	0.750	199.10	Olivine	100 - 35
8154	19352.6	575.0	179.91	158.68	0.882	0.858	139.11	Plagioclase	100 - 35
14908	35382.4	1275.9	576.58	172.54	0.299	0.523	188.10	Plagioclase	100 - 35
19306	45820.6	997.9	377.62	203.36	0.539	0.760	214.06	Glass	100 - 35
18	42.7	26.4	7.47	6.16	0.825	0.878	6.54	Plagioclase	100 - 35
8216	19499.7	608.8	212.75	138.65	0.652	0.813	139.64	Plagioclase	100 - 35
26011	61734.1	1168.7	445.93	272.68	0.611	0.754	248.46	Clinopyroxene	100 - 35
12752	30265.4	1063.7	467.04	164.84	0.353	0.580	173.97	Olivine	100 - 35
3600	8544.2	414.2	150.26	98.60	0.656	0.791	92.43	Plagioclase	100 - 35
5915	14038.6	585.5	232.34	97.06	0.418	0.717	118.48	Glass	100 - 35
9919	23541.6	697.8	257.43	184.87	0.718	0.780	153.43	Plagioclase	100 - 35

2405	5708.0	356.5	136.41	75.49	0.553	0.751	75.55	Plagioclase	100 - 35
16020	38021.6	1419.1	651.15	266.52	0.409	0.487	194.99	Glass	100 - 35
22465	53318.1	1020.2	363.32	246.49	0.678	0.802	230.91	Plagioclase	100 - 35
36535	86711.6	2826.4	1348.93	338.93	0.251	0.369	294.47	Glass	100 - 35
10614	25191.1	762.2	296.00	171.00	0.578	0.738	158.72	Plagioclase	100 - 35
2543	17442.6	812.9	357.70	172.85	0.483	0.576	132.07	Plagioclase	>35
11084	76026.1	1302.5	498.83	311.66	0.625	0.750	275.73	Plagioclase	>35
20908	143409.7	1950.4	794.74	442.61	0.557	0.688	378.69	Plagioclase	>35
7942	54474.8	1073.9	401.17	217.38	0.542	0.770	233.40	Plagioclase	>35
13759	94374.1	1632.5	676.78	350.94	0.519	0.667	307.20	Glass	>35
1522	10439.5	566.5	239.68	130.95	0.546	0.639	102.17	Plagioclase	>35
12	82.3	32.7	8.17	5.24	0.641	0.984	9.07	Plagioclase	>35
185	1268.9	219.4	96.54	20.95	0.217	0.576	35.62	Clinopyroxene	>35
4814	33019.6	852.0	324.10	238.33	0.735	0.756	181.71	Orthopyroxene	>35
34479	236494.3	3509.3	1607.51	549.99	0.342	0.491	486.31	Clinopyroxene	>35
43642	299344.0	2297.1	748.76	662.60	0.885	0.844	547.12	Clinopyroxene	>35
6355	43589.5	1219.1	526.79	180.71	0.343	0.607	208.78	Glass2/plag	>35
9621	65991.2	1235.2	480.20	254.04	0.529	0.737	256.89	Plagioclase	>35
14541	99737.9	1471.6	556.63	267.14	0.480	0.761	315.81	Plagioclase	>35
2482	17024.2	760.3	328.30	120.47	0.367	0.608	130.48	Plagioclase	>35
1900	13032.3	525.9	196.68	146.66	0.746	0.770	114.16	Plagioclase	>35
24519	168177.8	2324.7	992.99	369.28	0.372	0.625	410.09	Plagioclase	>35
35320	242262.7	2225.4	815.73	555.22	0.681	0.784	492.20	Glass	>35
4828	33115.6	825.5	303.72	214.76	0.707	0.781	181.98	Plagioclase	>35
456	3127.7	304.3	127.62	65.47	0.513	0.652	55.93	Glass	>35
178	1220.9	171.2	67.54	36.67	0.543	0.723	34.94	Orthopyroxene	>35
3441	23602.1	823.3	342.78	125.71	0.367	0.662	153.63	Olivine	>35
10	68.6	29.3	7.33	7.86	1.072	1.002	8.28	Orthopyroxene	>35
2109	14465.8	646.8	269.76	133.57	0.495	0.659	120.27	Plagioclase	>35
89	610.5	111.5	40.75	23.57	0.578	0.786	24.71	Orthopyroxene	>35
6237	42780.1	976.8	374.00	230.47	0.616	0.751	206.83	Plagioclase	>35
2843	19500.4	627.0	227.95	136.19	0.597	0.790	139.64	Plagioclase	>35
12289	84291.3	1417.7	557.73	392.85	0.704	0.726	290.33	Glass2/plag	>35
5443	37334.0	883.7	328.02	191.19	0.583	0.775	193.22	Plagioclase	>35
2547	17470.1	582.0	206.29	154.52	0.749	0.805	132.17	Plagioclase	>35
2032	13937.7	591.2	236.72	117.85	0.498	0.708	118.06	Plagioclase	>35
3139	21530.7	571.9	142.98	154.52	1.081	0.909	146.73	Glass	>35
4805	32957.9	918.4	370.15	196.42	0.531	0.701	181.54	Plagioclase	>35
8784	60250.2	1854.3	856.81	212.14	0.248	0.469	245.46	Plagioclase	>35
5301	36360.0	872.9	324.37	183.33	0.565	0.774	190.68	Chromite	>35
16961	116336.9	2738.8	1278.37	340.47	0.266	0.441	341.08	Plagioclase	>35
26421	181223.8	2208.2	903.53	455.70	0.504	0.683	425.70	Plagioclase	>35
10526	72198.7	1841.7	834.29	335.23	0.402	0.517	268.70	Plagioclase	>35
1939	13299.8	545.6	209.22	149.28	0.714	0.749	115.32	Glass	>35
2718	18643.0	863.3	382.98	175.47	0.458	0.561	136.54	Plagioclase	>35
7531	51655.7	1529.5	689.87	133.57	0.194	0.527	227.28	Glass	>35
11508	78934.3	1586.5	676.59	301.18	0.445	0.628	280.95	Plagioclase	>35
5162	35406.6	935.5	372.75	185.95	0.499	0.713	188.17	Plagioclase	>35
2389	16386.3	622.7	244.29	141.43	0.579	0.729	128.01	Plagioclase	>35
2942	20179.4	594.5	192.35	133.57	0.694	0.847	142.05	Plagioclase	>35
19704	135151.3	1807.2	714.40	356.18	0.499	0.721	367.63	Plagioclase	>35
3515	24109.7	886.0	379.47	165.00	0.435	0.621	155.27	Glass	>35
6333	43438.6	952.4	353.19	261.90	0.742	0.776	208.42	Orthopyroxene	>35
4288	29411.7	927.4	387.84	144.04	0.371	0.656	171.50	Chlorite	>35
5382	36915.6	959.3	383.34	240.95	0.629	0.710	192.13	Glass	>35
4341	29775.3	756.2	266.26	199.04	0.748	0.809	172.56	Plagioclase	>35
14	96.0	44.4	16.35	7.86	0.481	0.782	9.80	Plagioclase	>35

1000	6859.1	400.7	156.51	104.76	0.669	0.733	82.82	Glass	>35
11	75.5	35.7	11.03	5.24	0.475	0.862	8.69	Clinopyroxene	>35
37074	254293.6	2381.1	911.60	552.61	0.606	0.751	504.28	Glass	>35
3578	24541.8	693.6	247.69	167.62	0.677	0.801	156.66	Plagioclase	>35
30326	208008.5	2224.4	874.24	542.13	0.620	0.727	456.08	Glass	>35
1679	11516.4	430.7	116.38	123.09	1.058	0.883	107.31	Glass	>35
6	41.2	21.1	5.28	5.24	0.992	1.077	6.41	Brass	>35
3890	26681.8	911.0	386.45	196.42	0.508	0.636	163.35	Clinopyroxene	>35
8064	55311.6	1076.4	399.91	267.14	0.668	0.775	235.18	Plagioclase	>35
1507	10336.6	444.2	155.68	120.47	0.774	0.811	101.67	Plagioclase	>35
1795	12312.1	814.4	374.31	99.52	0.266	0.483	110.96	Plagioclase	>35
914	6269.2	444.2	188.91	73.33	0.388	0.632	79.18	Glass2/plag	>35
278	1906.8	242.8	102.85	34.05	0.331	0.638	43.67	Plagioclase	>35
827	5672.5	359.1	138.66	70.71	0.510	0.743	75.32	Plagioclase	>35
43	294.9	97.8	41.83	10.48	0.251	0.623	17.17	Clinopyroxene	>35
13749	94305.5	1569.4	636.51	306.42	0.481	0.694	307.09	Plagioclase	>35
116	795.7	178.6	79.23	18.33	0.231	0.560	28.21	Glass	>35
417	2860.2	224.6	73.24	62.86	0.858	0.844	53.48	Plagioclase	>35
19277	132222.5	2117.8	914.27	384.99	0.421	0.609	363.62	Plagioclase	>35
1216	8340.6	425.9	161.18	83.81	0.520	0.760	91.33	Plagioclase	>35
9128	62609.7	1097.1	386.62	288.09	0.745	0.808	250.22	Plagioclase	>35
20230	138759.2	2132.4	914.45	434.75	0.475	0.619	372.50	Plagioclase	>35
169	1159.2	147.7	51.19	36.67	0.716	0.817	34.05	Orthopyroxene	>35
250	1714.8	194.8	74.35	34.05	0.458	0.753	41.41	Plagioclase	>35
18	123.5	43.8	10.94	10.48	0.958	0.900	11.11	Glass	>35
13	89.2	38.4	11.28	7.86	0.697	0.872	9.44	Plagioclase	>35
206	1413.0	168.1	60.82	41.90	0.689	0.793	37.59	Glass2/plag	>35
15950	109402.3	1937.6	838.30	319.52	0.381	0.605	330.76	Plagioclase	>35
24532	168267.0	1998.5	784.85	390.23	0.497	0.728	410.20	Clinopyroxene	>35
17012	116686.7	2288.6	1031.14	324.75	0.315	0.529	341.59	Glass	>35
517	3546.1	261.8	92.64	65.47	0.707	0.806	59.55	Plagioclase	>35
2340	16050.3	539.6	181.26	128.33	0.708	0.832	126.69	Plagioclase	>35
553	3793.1	500.7	234.13	55.00	0.235	0.436	61.59	Glass	>35
14900	102200.3	1754.0	738.64	324.75	0.440	0.646	319.69	Glass	>35
2769	18992.8	673.4	265.01	180.71	0.682	0.726	137.81	Plagioclase	>35
11459	78598.2	1249.0	449.70	350.94	0.780	0.796	280.35	Plagioclase	>35
4841	33204.8	887.5	348.46	175.47	0.504	0.728	182.22	Plagioclase	>35
13858	95053.1	1795.7	775.21	212.14	0.274	0.609	308.31	Plagioclase	>35
38021	260789.1	2446.0	947.87	474.04	0.500	0.740	510.68	Plagioclase	>35
10254	70333.0	1313.1	521.77	309.04	0.592	0.716	265.20	Plagioclase	>35
4228	29000.2	876.8	357.20	154.52	0.433	0.689	170.29	Plagioclase	>35
11399	78186.7	1294.7	486.71	364.04	0.748	0.766	279.62	Plagioclase	>35
20635	141537.1	1906.4	769.21	377.13	0.490	0.700	376.21	Plagioclase	>35
11616	79675.1	1290.2	478.67	290.71	0.607	0.776	282.27	Plagioclase	>35
5503	37745.5	1236.0	549.28	104.76	0.191	0.557	194.28	Plagioclase	>35
35	240.1	56.3	14.07	13.09	0.930	0.976	15.49	Plagioclase	>35
9	61.7	23.1	5.78	7.86	1.360	1.205	7.86	Plagioclase	>35
6475	44412.6	1609.5	745.17	324.75	0.436	0.464	210.74	Glass	>35
17	116.6	38.5	9.63	10.48	1.088	0.993	10.80	FeOx	>35
8273	56745.2	1149.5	448.09	282.85	0.631	0.735	238.21	Plagioclase	>35
25765	176724.2	2411.1	1034.74	476.66	0.461	0.618	420.39	Plagioclase	>35
807	5535.3	390.5	160.86	60.24	0.374	0.675	74.40	Plagioclase	>35
15075	103400.7	1698.0	701.60	426.89	0.608	0.671	321.56	Plagioclase	>35
127	871.1	162.6	68.61	36.67	0.534	0.643	29.51	Plagioclase	>35
123	843.7	139.6	54.27	26.19	0.483	0.737	29.05	Plagioclase	>35
15328	105136.0	1471.0	541.26	314.28	0.581	0.781	324.25	Plagioclase	>35
15938	109320.0	1835.0	776.79	343.09	0.442	0.639	330.64	Plagioclase	>35

492	3374.7	326.8	139.16	52.38	0.376	0.630	58.09	Plagioclase	>35
36443	249965.5	2271.4	837.06	560.46	0.670	0.780	499.97	Plagioclase	>35
33758	231548.9	2471.4	1005.40	602.37	0.599	0.690	481.20	Plagioclase	>35
91	624.2	110.4	39.34	31.43	0.799	0.802	24.98	Glass	>35
5361	36771.5	795.6	251.72	219.99	0.874	0.854	191.76	Glass	>35
742	5089.4	452.4	200.86	49.76	0.248	0.559	71.34	Glass	>35
2579	17689.6	725.8	304.90	125.71	0.412	0.650	133.00	Plagioclase	>35
60336	413849.5	3522.6	1482.04	589.27	0.398	0.647	643.31	Plagioclase	>35
7158	49097.3	1066.6	414.96	191.19	0.461	0.736	221.58	Plagioclase	>35
53772	368826.5	4532.0	2089.48	597.13	0.286	0.475	607.31	Plagioclase	>35

APPENDIX C—TWO-DIMENSIONAL GEOMETRIC MODELING

Understanding the observed shape distributions is aided by comparison with simple geometric shapes. To be a useful figure, there are several considerations: (1) The area and perimeter of the figure should be readily computed, (2) the long axis and its orthogonal should be readily computed, and (3) a minimum number of parameters, preferably only one, is needed to vary the figure's shape. Points 1 and 2 allow the aspect ratio and Heywood factor to be easily obtained.

These model shapes are two dimensional, whereas the actual particle measurements are from three-dimensional entities reduced to two dimensions. The model shapes cannot be extruded into the third dimension to yield volumes with the same shape properties as the measured particles. It is computationally possible to investigate the probability distribution of aspect ratio and Heywood factor for random sections of solids (app. D) but that has not been done to the knowledge of the authors. The work by Hull and Houk is for the area of section only.[5]

Five classic shapes are reported here—isosceles triangles, right triangles, rectangles, ellipses, and rhombi. Other shapes have been investigated, specifically scalene triangles, Cassini ovals, and composite figures made by adding a semi-circle or semi-ellipse to opposite ends of a rectangle. Each of the five classic shapes used for this study can be varied by a single parameter, and the aspect ratio and Heywood factor readily computed. In figure 13, the maximum Feret diameter of each shape is indicated by "M." The orthogonal Feret diameter is indicated by "m." For right triangles and rectangles, the limit of shapes to be considered is limited by $0 < h \leq 1$. In these cases where $h > 1$, the shape factors are symmetrical with values of $h < 1$. In isosceles triangles, M shifts when $h > 1$, as indicated in figure 13. For ellipses and rhombi, the limit of consideration is $m \leq M$, again due to symmetry. Computations are simplified if unit lengths are assumed as indicated.

The range of aspect ratio and Heywood factor values for each of the shapes in figure 13 are shown in figure 14. Note that the traces shown in figure 14 continue at lower values of aspect ratio; this region was not plotted as the curves overlap at this scale. The trace of isosceles triangles is not symmetric because the position of the maximum Feret diameter shifts, as noted above. The highest aspect ratio possible for a right triangle is 0.5. Otherwise, the numerical difference between right triangles and isosceles triangles is minor. In addition to isosceles and right triangles, scalene triangles may also be used. However, the values for scalene triangles are effectively indistinguishable from those of isosceles triangles. It should also be noted that the values plotted in figure 14 are for ideal cases. In reality, shape data are obtained from pixelated images, which introduces both artifacts and limitations as discussed in appendix A.

The Heywood factor may be considered a measure of how efficiently a given perimeter encloses a region. It may be seen by inspection that, for all convex polygons, the least efficient shape is a triangle. Expressed in another way, for all aspect ratios <0.866, the convex shape with the lowest possible Heywood factor will be a triangle. The 0.866 limit, which is for an equilateral triangle, is the highest aspect ratio a triangle can have. Thus, if particles are observed with Heywood factor and aspect ratios below the gray shaded area in figure 14, they must be at least partially concave.

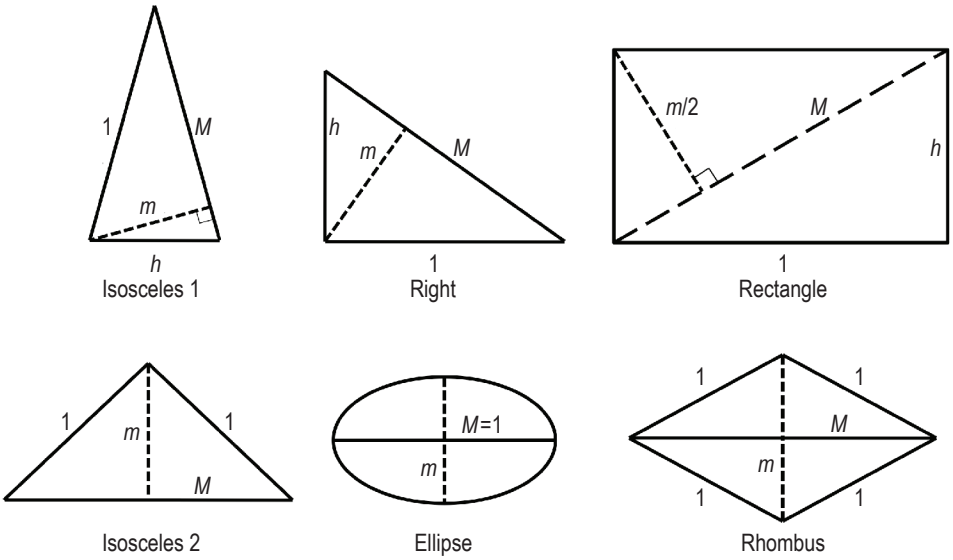

Figure 13. Two-dimensional figures used for understanding aspect ratio versus Heywood factor. See text for discussion.

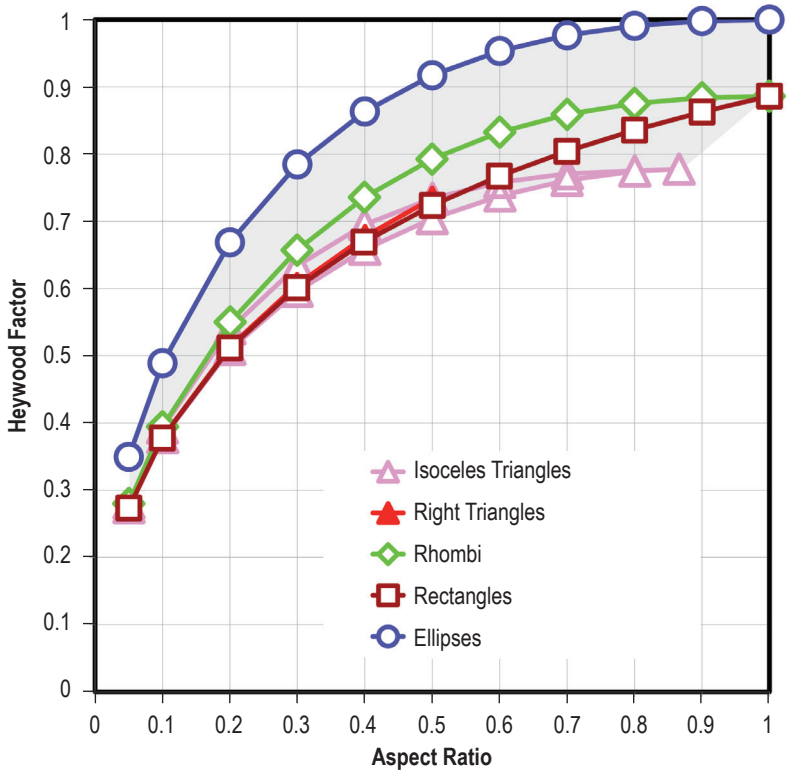

Figure 14. Aspect ratio versus Heywood factor for simple two-dimensional shapes. Shapes plotting within the shaded region may be convex. Shapes below this region must be concave. Values below aspect ratio 0.05 are not plotted due to convergence toward (0,0).

Comparison of the curves in figure 14 and the observed data for simulants shows that some portions of the observed shape data cannot be modeled using convex shapes. In principle, there is a very large number of possible convex shapes, but for modeling one wants something with a minimum of parameters that resemble observed particle outlines. A figure based on two pairs of isosceles triangles centered on a square was used for this work (see fig. 15). With this shape, only two parameters are needed to create shapes covering most of the aspect ratio-Heywood factor domain of interest. For this study, the size of the square (L) was held at 1 and the ratios of the isosceles triangle leg lengths varied. Other pairs of parameters may also be used. As can be seen from figure 16, this shaped can be either convex or concave.

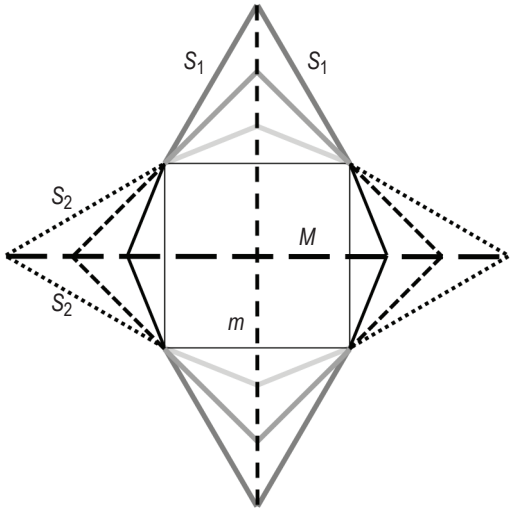

Figure 15. A two-parameter shape. The four points are formed from pairs of isosceles triangles, all having sides of a square as a base. S_1 and S_2 are the variable lengths of the isosceles triangles. The maximum Feret diameter is indicated by M. The orthogonal Feret diameter is indicated by m. The S_1 and S_2 lengths shown are 0.5, 0.54, 0.7071, and 1.

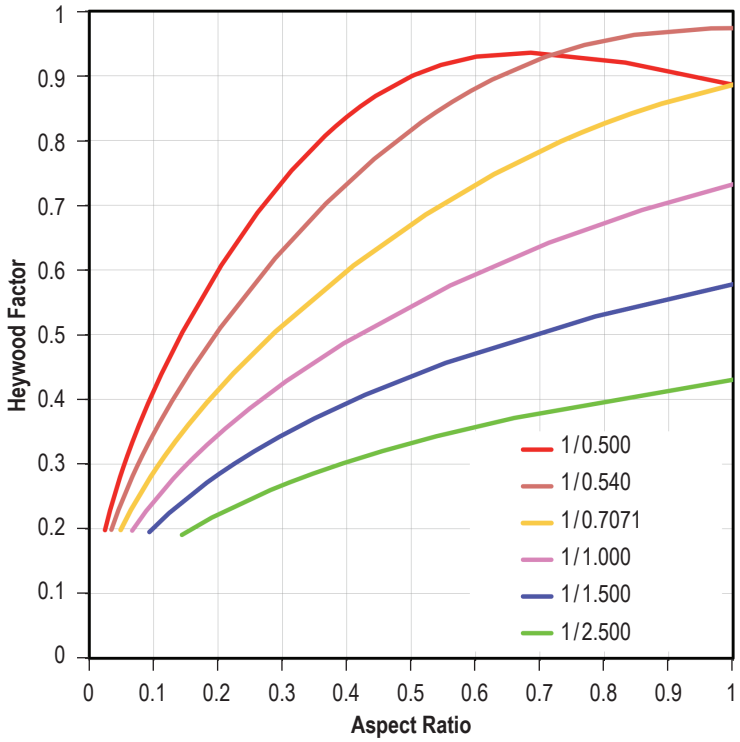

Figure 16. Traces for selected values of L/S_1 over the range $L/S_2 > 1/0.5$ and $\leq 1/20$ for the shape illustrated in figure 15. For each trace, only values where $m \leq M$ are shown.

APPENDIX D—MODELING PLANE OF SECTION VERSUS PLANE OF PROJECTION

It is possible to numerically relate the observed distributions of particle shapes obtained from plane of section methods to plane of projection methods. The method is based on the concept behind the work of Hull and Houk and the use of standard geometric shapes as developed in appendix C.[5]

Hull and Houk obtained the probability density function (PDF) of the area defined by the intersection of a randomly oriented plane and a cube. They did this by physically rotating a model through all possible angles and offsets. This work can now be replicated numerically. In addition to the area of intersection, the aspect ratio and the Heywood factor for each intersection can also be obtained numerically. Thus, PDFs for aspect ratio and Heywood factor can be developed for such intersections. Similar logic can also be used with other shapes.

Also, a single solid—if rotated with respect to the viewer—will yield a number of different silhouettes. The outlines of the silhouettes can be computed and a PDF for the solid measured in plane of projection determined. For spheres, this will be a point at (1,1) in aspect ratio-Heywood factor space. All other solids will have a nonpoint PDF.

Thus, a single, solid will result in a PDF in both plane of section and plane of projection views; and both probability density functions can be computed. Simulants are mixtures of many three-dimensional shapes. Each of those shapes will have an associated PDF in both plane of projection and plane of section. Therefore, in reality, the observed shape data, such as reported here, are the summation of numerous PDFs. In concept, if one knew the mixture of solid shapes present in the simulant, PDFs for both projections could be computed.

As stated, a single solid will yield a range of aspect ratio and Heywood factor values in both projections. Further, many different solids can yield the same values. Thus, observed shape distributions generally cannot be uniquely inverted to the source shapes. But, 90%–99% of the observed data from plane of projection measurements taken from actual simulants are within the region defined by two-dimensional convex shapes (fig. 14). Virtually all of that region may be modeled as mixtures of ellipses and rectangles. In turn, these two-dimensional shapes are readily related to ellipsoids and rectangular prisms. Therefore, one can conclude that the observed plane of projection data for simulants can be modeled by some mixture of ellipsoids and right prisms, and that mixture is constrained to equal the observed distribution. Further, in the case where plane of section data are also available, the model mixture must also reproduce that data.

While a unique determination of actual three-dimensional shapes cannot be obtained from either plane of projection or plane of section data, it is highly likely that the system is sufficiently constrained to provide answers satisfactory for many purposes.

The necessary programming to implement and demonstrate the above method has not been done.

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14. ABSTRACT

Particle shapes of the lunar regolith simulant NU-LHT-2M were analyzed by scanning electron microscope of polished sections. These data provide shape, size, and composition information on a particle by particle basis. 5,193 particles were measured, divided into four sized fractions: <200 mesh, 200–100 mesh, 100–35 mesh, and >35 mesh. 99.2% of all particles were monominerallic. Minor size versus composition effects were noted in minor and trace mineralogy. The two metrics used are aspect ratio and Heywood factor, plotted as normalized frequency distributions. Shape versus composition effects were noted for glass and possibly chlorite. To aid in analysis, the measured shape distributions are compared to data for ellipses and rectangles. Several other simple geometric shapes are also investigated as to how they plot in aspect ratio versus Heywood factor space. The bulk of the data previously reported, which were acquired in a plane of projection, are between the ellipse and rectangle lines. In contrast, these data, which were acquired in a plane of section, clearly show that a significant number of particles have concave hulls in this view. Appendices cover details of measurement error, use of geometric shapes for comparative analysis, and a logic for comparing data from plane of projection and plane of section measurements.

15. SUBJECT TERMS

lunar simulant, particle shape, particle composition, particle size, methods development

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