

PROVO PRESSURE PRODUCTS COMPANY

P.O. Box 33, Station I Provo, Utah

Gentlemen:

We have obtained a supply of Utah pipestone that is much superior to any specimens of Minnesota pipestone that we have seen.

Utah pipestone has been successfully used as a replacement for pyrophyllite (Tennessee Grade A Lava) in the tetrahedral anvil high pressure apparatus.

A sheet giving some of the properties of Utah pipestone is enclosed.

Should you care to experiment with this material, we are offering a 1½ lb. specimen, shipped postpaid within Continental U.S.A. for \$1.00.

Additional quantities are currently available in blocks weighing up to 25 lbs. at \$.75 per lb.

Incidentally, some specimens have extremely beautiful banding and coloring, and since the material is easily carved with a pen knife, make interesting media for artistic expression. Application of a little furniture wax to a carving will, with light rubbing, create a high lustre finish. Selected artistic "as mined" specimens are also available at \$.75 per pound, f.o.b. Provo.

It is our aim to eventually supply many items used in high pressure technology. In this connection we can now offer 0.020 inch diameter Bismuth wire (extruded from ASARCO 99.999% pure stock) at \$1.25 per foot.

We hope you will favor us with a trial order.

Very truly yours,

David P. Hall

SOME PROPERTIES OF UTAH PIPESTONE

Appearance: variable, but commonly light grey with dull red bands.

Feel: "waxy"

Machinability: excellent (machinability superior to grade A Lava.)

Hardness: Easily marked with fingernail.

Swelling in water: nil

Density: 2.18 g/cc (Grade A Lava density = 2.66 g/cc)

Shear Friction: As measured according to Bridgman, very similar

to that of Grade A Lava.

Compressibility: Very similar to Grade A Lava.

Weight Loss: After 1 hr. at 1700° C., 3.2%.

Refractoriness: Similar to Grade A Lava.

| Typical Chemical Composition: | SiO ₂ | 60.1% |
|-------------------------------|--------------------------------|------------------------|
| | Al ₂ 0 ₃ | 28.5 |
| | Fe ₂ 0 ₃ | 4.3 |
| | CaO | nil |
| | MgO | 0.2 |
| | Na ₂ 0 | 0.6 |
| | K20 | 0.4 |
| | Volatile | 3.2 (1 hr. at 1700 C.) |
| | | |
| | Total | 97.3% |

Borden's "Elmer's Glue-All" is recommended for gluing pieces of Utah pipestone together. When used with pipestone, lava, or similar materials, this glue "sets" quickly and does not interfere with most high pressure uses for these materials.