Testing physical properties of Natural glasses and flintlike materials.

Compare range of tollerences and variation as well as devation from normal or ideal by machine and laboratory tests to find the limitation of the manual techniques, as practiced by the aboriginal.

- 1. Geological recent as opposed to minerals geologicaly old.
- 2. Fatigue caused by tempature fluctuations.
- 3. Internal stress due to diastrophism.
- 4. Stress due to molecular in balance.
- 5. Water content.
- 6. Permability.
- 7. Geological context of silica mineral deposits.
- 8. Source and nature of silica mineral, eg. chalk, limestone, impurities, assosated mineral salts and distinctive colora tion, any identification characteristics, micro fossils, crystal pockets, vugs, varves and ect.
- 9. Bonding agent of quartzites.
- 10. Elasticity, conduct tests.
- 11. Brittelness
- 12. Structural strength
- 13. Toughness
- 14. Properties and color changes produced by artificial heating.
- 15. Time study of heat treated mineral to revert to original texture.
- 16. Degree of vitreousness
- 16. Determine hardness by using Brinell scale. before and after heating.

Minerals with the properties of isotrophism usefull for making flaked stone tools.

Determine the set of geological circumstances that is pertent to a particular mineral., replacement of soluable minerals by silica impregnation of permiableminerals by solica, fault zones, vesicules, voids and cavities filled by layers of silica, eg. opal, quartz, silica gel, and residual clays and note the layer frequency.

Persons interested and have conducted experiments on the properties of Lithics. François Bordes, Jacques Tixier, Gorgen Melgaard, Meuler-Beck, Mayer-Oaks, Barbara Purdy, Aleric Faulkner, Ken Falash, Cynthia Irwin Wiliams.