Route 1, Box 39 ' Kimberly,Idaho 83341

Dec. 28,1968

Mr. James H. Barr Arizona State Museum Library Tucson, Arizona 85721

Dear Jim:

I am ashamed to be so tardy in replying to your letter of Nov. 18th but have just returned from a very long trip to the East coast and then immediately had to go to the Marmes Rock shelter to participate in the forthcoming NBC news special "The First American". Weather was so bad there that I returned hom very ill with the flu. A very long bout, but enough excuses. I am delighted to hear of your opportunity to do the work at Berne. Am just jealous that I can not participate.

Jim, I am sorry that I can not quote actual references of the long overdue and neglected research in this field. Sources of actual material are by far more important than type specimens for material can only move in a direction away from its source. I have good reason to believe that man's quest for desirable material far surpassed his need for food and led him farther afield. Positive identification of materials by neutron activation or other means will ultimately prove the direction and movement of man in his quest and recovery of material. For instance, if a quarry site could be located in Siberia and corresponding material found in the New World many unanswered questions would be resolved. It would then not be essential to have a type speciman or a particular technique, but only the material discarded by possible sharpening or remodification. This could suffice. By the same token, it is not impossible that material could have gone from the New World to the Old.

Dr. Robert Heizier, University of California at Berkeley has probably done more on material sourcesthan anyone, although his work has been mainly with obsidian. He has traced monolithic materials of the lowlands of Mexico and other geographical areas. Also, Dr. James Griffin University of Michigan at Ann Arbor is doing this type of work on both obsidian and flint, but have not had a report from him in some time. Wormington has mentioned several material sources in her writings - Knife River flint, Alibates flint and others. Many have made mention of wellknown sources, Harrison County, Indiana flint; flint Ridge Ohio flint; Grand Pressigny and Bergeriac flint and others.

I think it would be worth while for you to write to Dr. Francois Bordes, University of Bordeaux, Talence, France and to Dr. Jacques Tixier, Museum National D'Histoire Naturelle, Prehistoire, Institut de Paleontologie Humaine, 1 Rue Rene Panhard, Paris, XIII, France. Both men correspond with me, both are flintknappers, both have been experimenting with the thermal treatment of flint and it is very possible that they have done a partial study on this very subject.

The study of materials and their sources is an almost unexplored facet of archaeology that will become a most useful tool. Any work done in this particular field will be a great contribution. Do hope you follow through in this study. It is badly needed by the profession and let me know if I can be of any further help. Please give my regards to Haury, Thompson, Jelinek, Ayres and Longacre.

Sincerely yours,