

Modification No. A001 (Cont'd)
Contract No. EW-78-S-07-1720

CONTRACTOR: UNIVERSITY OF ALASKA

APPENDIX A1

For the Contract Period September 1, 1978 through December 31, 1978.

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

(a) The scope of the work under this contract is unclassified, and the Contractor under this contract with the Department of Energy will evaluate three igneous bodies aligned in a northeast-southwest line extending 23 miles into central Alaska to determine the geologic history and if they possess value as geothermal resources. The three areas are: Sugar Loaf Mountain at 45 N. lat. 148 18 long., Jumbo Dome at 45 28 N. lat. 148 38 long., and two volcanic cinder cones at 64 3 N lat. 147 24 long.

The evaluation process shall include the following work:

The first stage will be an examination of the area by remote sensing data. This will include: (1) recent low level air photos (available); (2) LANDSAT image coverage (available); and (3) Infra-red coverage (which began in Spring 1978). The next step of the project will be a low level air reconnaissance of the area by fixed wing aircraft to locate suitable exposures, etc. This will be followed by a field check of the areas of interest by whatever transportation is available. This reconnaissance of the whole area will be followed by detailed mapping and sampling of the three domes. Particular attention will be paid to obtaining samples for dating studies, because if the intrusives are as young as they appear, they may indicate a relatively shallow high temperature source suitable for geothermal exploitation. The two dating techniques available at the University of Alaska are K-Ar and Carbon-14.

The three known occurrences, with any new occurrences, will be re-mapped and interpreted in terms of regional geology and tectonic history.

(b) The scope of work shall include such other studies, investigations, and services as may be mutually agreed upon.

Article A-II WAYS AND MEANS OF PERFORMANCE

(a) Items for which support will be provided as indicated in Article A-III:

081678

- C. ARTICLE III, "CONSIDERATION", paragraph (a), is hereby revised to increase the contract Support Ceiling to a total of One Hundred Twenty-Five Thousand Dollars (\$125,000.00) (this includes \$75,000.00 obligated by the original contract, \$25,000.00 obligated by letter dated May 23, 1978, and \$25,000.00 obligated by this Modification No. A001).
- D. ARTICLE A-II, "WAYS AND MEANS OF PERFORMANCE", of Appendix A to original contract, is amended to add paragraph (d) for the following additional funding for the original scope of work.

- (d) Items for which support may be provided as indicated in Article A-III:

Salaries

Principal Investigator, Donald L. Turner,	
Assoc. Prof. of Geology, 1 mo. @\$3,659	\$3,659
Student Assistant, 3-1/2 mo. @ \$1,031	3,608
Subtotal	7,267
Reserve for annual leave 12%	872
Holiday and sick leave 9.5%	690
Total Salaries	\$8,829

Staff Benefits

Hospitalization, Social Security, Retirement	
12% of total salaries	1,059

Overhead

57.9% of total salaries	5,112
-------------------------	-------

TOTAL BUDGET	\$15,000
--------------	----------

Except only to the extent modified by this Supplemental Agreement or to the extent rendered inconsistent herewith, all of the terms and provisions of said Contract No. EW-78-S-07-1720 shall remain unchanged and continue in full force and effect.