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MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DEPARTMENT OF CHEMISTRY
CAMBRIDGE, MASSACHUSETTS 02139

June 26, 1978

Robert W. Vostreys
National Space Science Data Center
Goddard Space Flight Center
Code 601
Greenbelt, Maryland 20771

Dear Mr. Vostreys:

Under separate cover we are sending six (6) magnetic tapes and two (2) microfilms representing the organic analysis portion of the Viking Molecular analysis data. This represents Items 1, 2, and 3 listed in the attachment of my letter of November 17, 1977 to you. Item 4, the atmospheric data, will be forthcoming shortly.

The data on microfilm are self-explanatory if used in conjunction with the attached example and key. A correlation of experiments and magnetic tape is also attached [entitled "Summary of Viking Molecular Analysis (GC-MS) EDR's]. The tapes are 9 track, IBM compatible, unlabelled, 800 bpi. For further information, prospective users of the data should contact Dr. James E. Biller, Department of Chemistry, Room 56-025, M.I.T., Cambridge, MA 02139, (617) [illegible]-7232. Detailed documentation of the tape and data formats will be sent under separate cover by Dr. Biller within a short time.

Very truly yours,

K. Biemann
Professor of Chemistry
Team Leader,
Viking Molecular Analysis Team

KB:mlg

xc: Dr. Conway Snyder
JPL

Identification number[a]	Date of Analysis	Oven Temperature (°C)	Mode	Oven Purge Gas	Time column held at 200° (minutes)	Oven No.	Tape No. Raw Data	Tape No. Proc. Data
	VL-1 Cruise Blank							
10008	Cruise	500°	Hydrous	$^{13}CO_2$	36	1	1	3
	VL-1 Sample 1 (Subsurface); acquired on Sol 8							
10015	Sol 17	200°	Hydrous	$^{13}CO_2$	18	1	1	3
10018	Sol 23	500°	Anhydrous	$^{13}CO_2$	36	1	1	3
	VL-1 Sample 2 (Surface); acquired on Sol 31							
10023	Sol 32	350°	Hydrous	$^{13}CO_2$	54	2	2	3
10024	Sol 37	500°	Hydrous	$^{13}CO_2$	54	2	2	3
10025	Sol 43	500°	Hydrous	$^{13}CO_2$	36	2	2	3

Identification number[a]	Date of Analysis	Oven Temperature (°C)	Mode	Oven Purge Gas	Time column held at 200° (minutes)	Oven No.	Tape No. Raw Data	Tape No. Proc. Data
	VL-2 Cruise Blank							
10007*	Cruise	500°	Hydrous	$^{13}CO_2$	36	2	4	6
	VL-2 Sample 1 (Bonneville Duracrust); acquired on Sol 21							
10032	Sol 24	200°	Hydrous	H_2	36	2	4	6
10033	Sol 26	350°	Hydrous	H_2	36	2	4	6
10034	Sol 35	500°	Hydrous	H_2	36	2	4	6
10035	Sol 37	500°	Hydrous	$^{13}CO_2$	36	2	4	6
	VL-2 Sample 2 (Under Badger Rock); acquired on Sol 37							
10036	Sol 41	50°	Hydrous	H_2	36	3	5	6
10037*	Sol 43	200°	Hydrous	H_2	36	3	5	6
10038	Sol 45	350°	Hydrous	H_2	36	3	5	6
10039	Sol 47	500°	Hydrous	H_2	36	3	5	6
10041	Sol 61	500°	Hydrous	$^{13}CO_2$	36	3	5	6

KEY TO PRESENTATION OF DATA ON MICROFILM

a. M.I.T. Identification Number

b. M.I.T. Scan Number (=c-282)

c. Mission Scan Number

d. Upper Spectrum---complete spectrum (normalized to most abundant ion)

e. Lower Spectrum---peaks below m/e47 deleted (normalized to most abundant ion > m/e 47)

f. m/e

g. Effluent Divider Status

h. Intensity of most abundant ion in arbitrary units (maximum 9,999,999 or 9.99 E + 06)

0368[b] 10035[a] 768,555[h] (0)[g] 7.68 E+05[h]

00650[c] 2,111 (0) 2.11 E+03