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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Analyses of samples from the Lava Creek mining district,
Blaine and Butte Counties, Idaho

By

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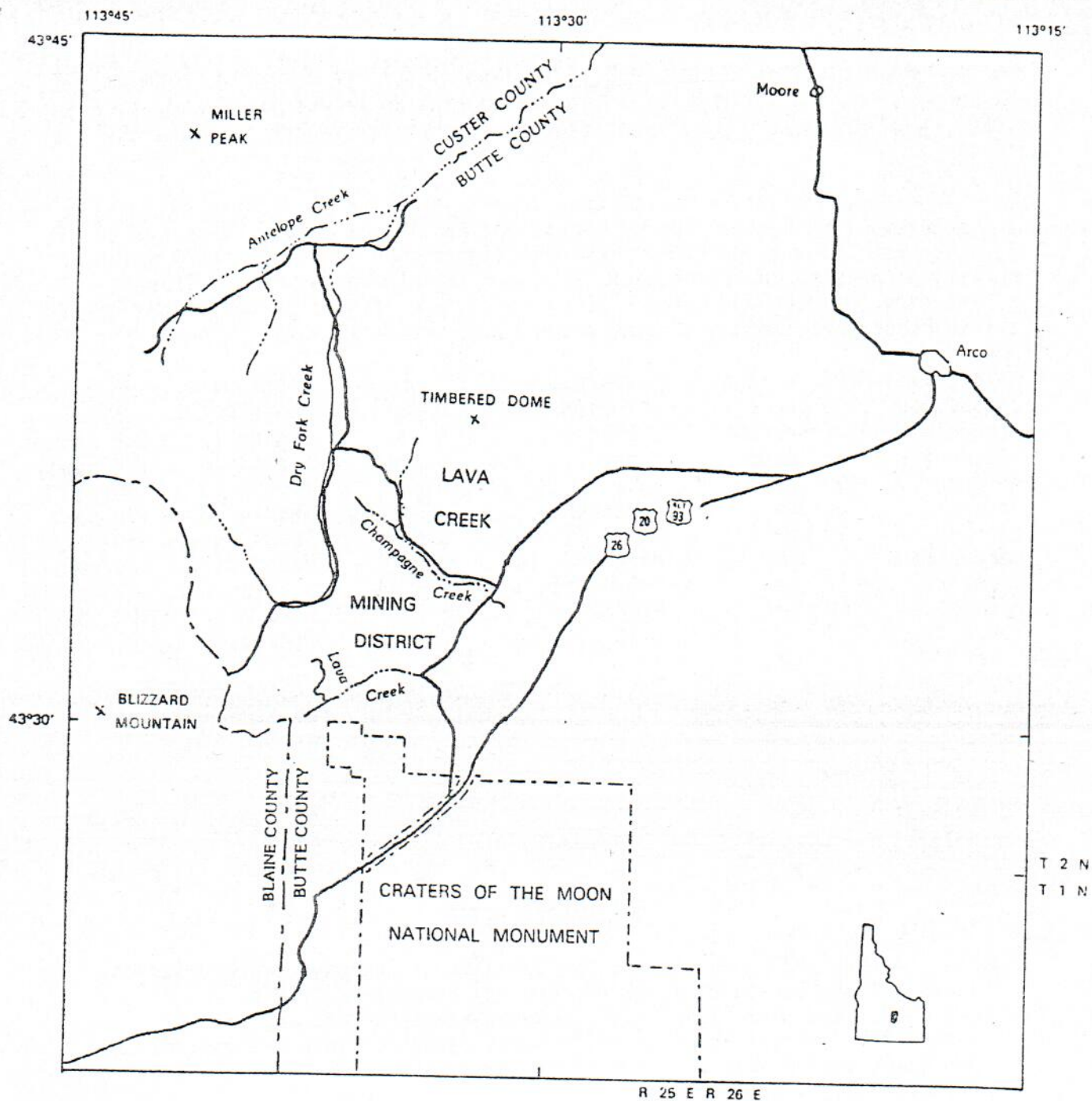


Figure 1. Index map showing the location of the Lava Creek mining district, Idaho

Table 1.--Analytical data for rock samples from the Lava Creek mining district, Idaho

[s, spectrographic analyses; aa, atomic-absorption analyses; inst, vapor-detector analyses; ppm, parts per million; pct., percent; <, detected, but below limit of determination or value shown; >, greater than value shown; N, not detected at level of detection. Spectrographic analyses by D. J. Grimes, atomic-absorption analyses of Au, Cd, Bi, and Zn by Robert Vaughn, atomic-absorption analyses of Sb by Belinda Arbogast, and vapor-detector analyses by Robert Vaughn]

Table 2.--Analytical data for samples of soils, stream sediments, and drill cuttings from the Lava Creek mining district, Idaho

[s, spectrographic analyses; aa, atomic-absorption analyses; inst, vapor-detector analyses; ppm, parts per million; pct., percent; <, detected but below limit of determination or value shown; N, not detected at level of detection]

Table 1. --Continued

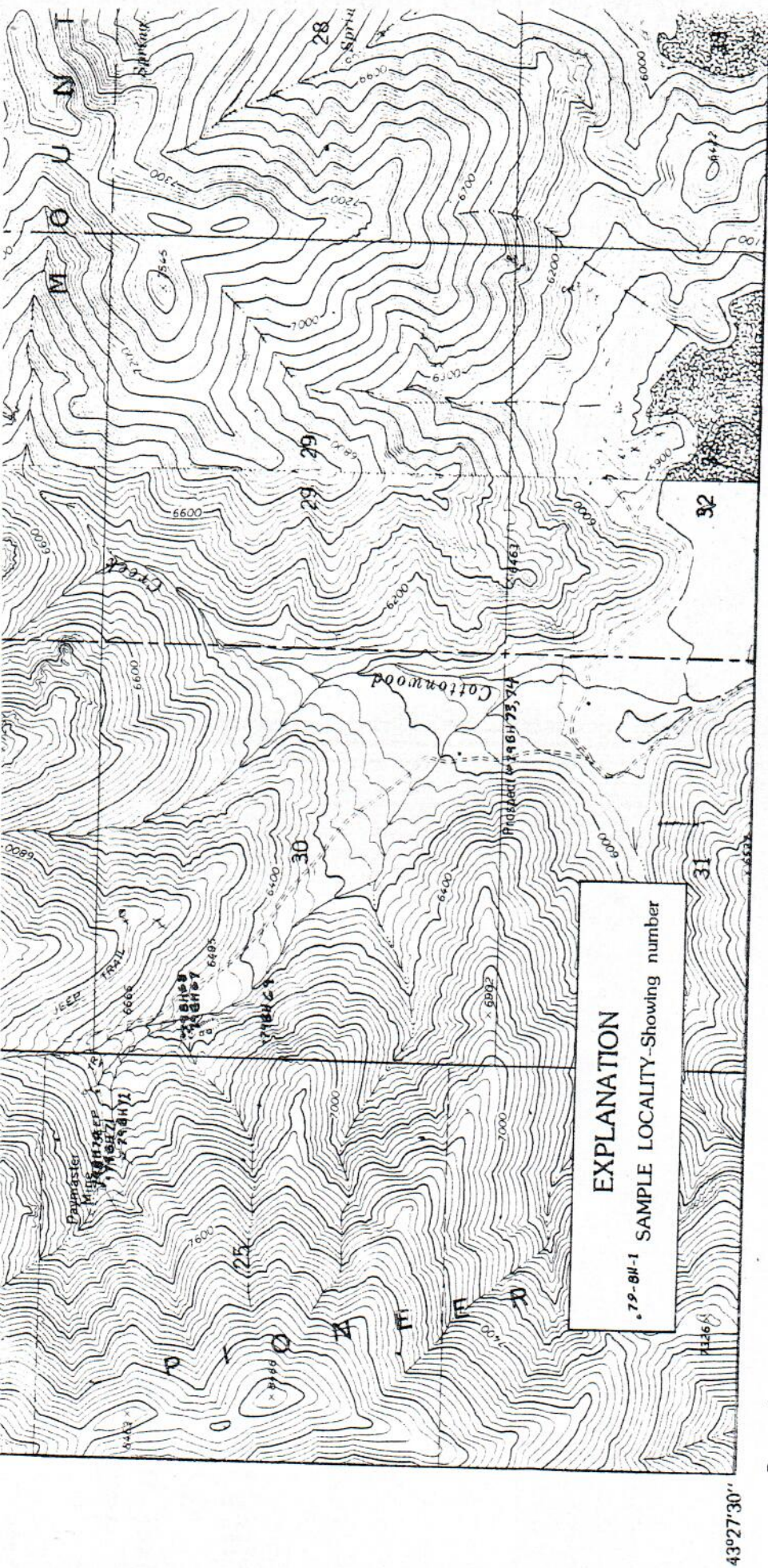
Sample	Be-ppm s	Li-ppm s	Cd-ppm s	Co-ppm s	Cr-ppm s	Cu-ppm s	La-ppm s	Mo-ppm s	Nb-ppm s	Ni-ppm s	Pb-ppm s	Sb-ppm s	Sc-ppm s
Rocks													
79BH1	1.5	N	N	<5	70	30	30	N	N	5	100	N	7
79BH2	<1.0	N	N	<5	150	300	50	5	N	<5	7,000	<100	15
79BH3	<1.0	10	N	<5	200	50	70	N	<20	N	200	N	10
79BH4	<1.0	N	20	7	50	100	30	N	N	10	2,000	<100	10
79BH5	<1.0	N	N	<5	70	300	50	N	N	<5	5,000	N	15
79BH6	N	N	30	<5	70	50	100	N	N	<5	3,000	N	15
79BH7	1.5	N	N	N	N	5	100	N	N	N	100	N	7
79BH8	2.0	N	N	7	<10	10	70	N	N	5	70	N	7
79BH10A	<1.0	20	N	5	100	50	30	7	N	5	200	<100	15
79BH10B	<1.0	30	N	20	70	300	50	15	N	50	500	100	15
79BH11	1.5	N	N	10	300	50	50	N	N	50	50	N	15
79BH12	1.0	N	70	30	20	70	<20	10	N	50	1,500	N	10
79BH13A	<1.0	<10	30	10	200	30	50	<5	N	15	3,000	<100	15
79BH13B	<1.0	150	N	<5	50	700	30	N	N	15	500	300	5
79BH14	1.5	N	N	15	10	20	30	N	N	7	50	N	10
79BH16	N	<10	N	7	50	70	50	20	N	<5	300	N	15
79BH18	1.5	N	N	10	100	70	30	N	N	20	30	N	15
79BH19	1.0	N	N	30	500	50	30	N	N	70	10	N	20
79BH20	1.0	N	N	N	10	N	50	<5	N	<5	100	N	5
79BH22	1.0	N	N	50	300	50	50	N	N	100	10	N	20
79BH24	1.0	N	N	30	300	100	30	N	N	70	30	N	15
79BH25	1.0	N	N	N	150	<5	50	N	N	N	150	N	15
79BH26	<1.0	N	N	N	150	150	70	N	N	<5	2,000	N	10
79BH27A	1.0	N	N	10	150	50	50	N	N	20	200	N	15
79BH27B	N	N	N	30	70	30	<20	N	N	50	100	N	30
79BH28	1.5	N	N	7	50	30	30	7	<20	<5	15	N	7
79BH29	1.0	N	N	20	15	20	30	N	N	30	20	N	10
79BH30A	N	N	>500	<5	<10	2,000	<20	N	N	N	>20,000	2,000	N
79BH30B	N	<10	20	20	200	100	50	N	N	70	2,000	N	15
79BH31	1.5	N	N	20	200	70	30	N	N	50	100	N	15
79BH32	1.0	N	N	15	300	70	30	N	N	70	100	N	15
79BH33	1.0	N	N	50	300	50	30	10	N	70	70	N	20
79BH34	N	700	20	30	150	10,000	30	15	N	70	>20,000	1,000	10
79BH35	<1.0	500	30	50	150	7,000	30	20	N	100	>20,000	1,500	10
79BH36	N	>1,000	300	10	20	3,000	<20	N	N	15	>20,000	1,500	<5
79BH37	N	10	>500	<5	30	5,000	20	N	N	10	>20,000	1,000	<5
79BH38	N	300	>500	7	30	1,500	<20	5	N	15	>20,000	500	5
79BH39	<1.0	700	>500	N	15	2,000	<20	10	N	<5	>20,000	1,500	N
79BH40	1.0	N	N	50	500	50	30	5	N	100	>20,000	700	30
79BH41	2.0	N	100	15	30	50	20	N	N	5	20,000	N	7

Table 1.--Continued

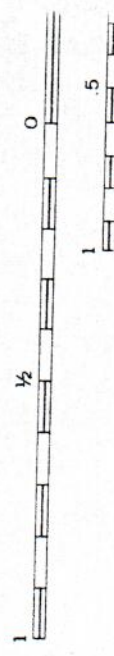
Sample	Latitude	Longitude	Fe-pct.	Mg-pct.	Ca-pct.	Ti-pct.	Mn-ppm	Ag-ppm	As-ppm	Au-ppm	B-ppm	Ba-ppm
79BH42	43 30 9	113 34 56	1.50	.50	.70	.300	1,000	1.5	N	N	10	1,500
79BH43	43 30 11	113 34 55	15.00	.15	.30	.150	500	5.0	N	N	50	700
79BH45	43 30 13	113 36 37	2.00	.50	.50	.300	500	.7	N	N	10	1,000
79BH46	43 30 5	113 36 52	2.00	.70	.10	.500	700	.7	N	N	10	700
79BH47	43 30 5	113 36 53	1.50	.10	.10	.200	1,000	1.0	N	N	10	500
79BH48A	43 30 6	113 36 49	1.00	.15	.05	.200	1,000	5.0	N	N	15	1,000
79BH48U	43 30 6	113 36 49	3.00	.10	<.05	.150	100	150.0	<200	N	10	700
79BH48C	43 30 6	113 36 49	.30	.15	<.05	.300	50	20.0	N	N	<10	1,000
79BH49	43 30 8	113 37 1	3.00	.70	5.00	.150	>5,000	200.0	<200	N	10	500
79BH50	43 30 15	113 34 57	1.00	.15	.10	.500	1,000	15.0	<200	N	<10	1,000
79BH51	43 30 8	113 35 17	1.50	.07	.07	.150	300	5.0	200	N	N	1,500
79BH52	43 30 0	113 35 28	1.50	.70	1.00	.500	500	<.5	N	N	10	700
79BH53	43 30 3	113 35 24	1.50	.50	1.00	.300	300	<.5	N	N	10	1,000
79BH54	43 31 36	113 36 30	.30	.07	.05	.070	20	1.0	700	N	30	150
79BH55	43 31 36	113 36 30	.20	.20	15.00	.030	150	.7	<200	N	N	200
79BH56	43 30 33	113 36 26	3.00	.30	.05	.300	200	5.0	200	N	50	500
79BH57	43 30 33	113 36 54	2.00	.30	1.50	.070	>5,000	1,000.0	300	N	20	150
79BH58	43 30 37	113 36 48	1.00	.07	.05	.050	>5,000	50.0	<200	N	10	200
79BH59	43 30 37	113 36 47	1.50	.30	.10	.300	700	2.0	200	N	70	300
79BH60	43 30 38	113 36 43	1.00	.20	.70	.150	500	.5	N	N	20	1,000
79BH61	43 30 43	113 36 49	3.00	.20	<.05	.300	500	7.0	1,000	N	30	700
79BH62	43 30 45	113 36 55	1.50	.50	.70	.200	300	N	N	N	10	1,000
79BH63	43 30 29	113 36 45	1.50	.30	.10	.200	200	N	N	N	10	700
79BH64	43 29 12	113 35 25	7.00	.70	2.00	.100	>5,000	200.0	5,000	<10	15	500
79BH65	43 29 13	113 35 21	1.00	.50	.15	.150	300	N	N	N	<10	700
79BH66	43 28 59	113 35 24	1.00	.30	.50	.200	200	N	N	N	15	1,000
79BH67	43 28 43	113 39 10	1.00	.20	.50	.100	300	.7	N	N	10	700
79BH68	43 28 43	113 39 11	1.50	.50	1.00	.300	500	<.5	N	N	<10	1,000
79BH69	43 28 33	113 39 11	.70	.15	<.05	.150	50	N	N	N	100	200
79BH70	43 28 53	113 39 38	1.50	.20	.20	.150	300	1.0	N	N	20	700
79BH71	43 28 53	113 39 36	10.00	.15	.05	.050	1,000	50.0	1,000	N	10	30
79BH72	43 28 51	113 39 32	15.00	.03	<.05	.015	1,000	70.0	200	N	15	50
79BH73	43 28 2	113 38 21	20.00	.03	.05	.015	700	70.0	2,000	N	<10	5,000
79BH74	43 28 2	113 38 21	1.00	.20	.10	.100	100	1.0	N	N	15	300
79BH75	43 35 36	113 39 53	1.50	.15	10.00	.050	>5,000	50.0	N	N	<10	150
79BH76	43 30 36	113 36 35	5.00	.03	.15	.010	200	30.0	1,500	N	<10	150
79BH77A	43 30 38	113 37 6	1.50	.10	.05	.100	>5,000	150.0	700	N	10	200
79BH77B	43 30 38	113 37 6	1.50	.05	.10	.015	>5,000	100.0	200	N	<10	150
79BH77C	43 30 38	113 37 6	2.00	.50	.70	.300	5,000	3.0	500	N	100	150
79BH78	43 30 43	113 38 18	.30	.20	<.05	.300	300	3.0	N	N	50	500
79BH79	43 30 43	113 38 18	1.50	.15	<.05	.200	200	150.0	300	N	15	300
79BH80	43 30 43	113 38 14	2.00	.20	.15	.150	500	3.0	300	N	20	500
79BH81	43 30 56	113 38 5	2.00	.30	.50	.300	2,000	2.0	3,000	N	30	700
79BH82	43 31 10	113 37 54	<.05	.20	20.00	.005	150	N	N	N	N	30
79BH83	43 31 10	113 37 51	1.50	.15	10.00	.030	>5,000	300.0	N	N	30	1,500
79BH84	43 30 40	113 37 16	2.00	.70	.15	.500	5,000	N	N	N	N	N

Table 1.--Cont Inued

Sample	Sn-ppm s	Sr-ppm s	V-ppm s	W-ppm s	Y-ppm s	Zn-ppm s	Zr-ppm s	Th-ppm s	Au-ppm aa	Hg-ppm inst	Zn-ppm aa	Co-ppm aa	Bi-ppm aa	St-ppm aa
79BH42	N	500	70	N	20	300	150	N	N	.30	250	2.20	2	7
79BH43	N	100	50	N	15	1,000	100	N	.15	.12	1,100	.55	N	7
79BH45	N	200	70	N	20	N	100	N	N	.12	75	.15	N	2
79BH46	N	100	70	N	20	700	100	N	N	2.50	520	2.00	1	2
79BH47	N	<100	50	N	15	200	100	N	N	.08	240	7.00	N	3
79BH48A	N	150	30	N	15	700	150	N	N	.04	470	9.50	N	2
79BH48B	N	100	30	N	10	700	100	N	N	.14	610	8.00	4	45
79BH48C	N	150	30	N	10	300	100	N	N	.04	200	6.50	1	3
79BH49	N	300	20	N	15	7,000	70	N	N	.06	7,500	10.00	60	45
79BH50	N	200	30	N	15	N	100	N	.05	.16	40	4.40	N	4
79BH51	N	150	30	N	15	300	100	N	.15	.30	290	8.00	N	13
79BH52	N	500	70	N	15	<200	100	N	N	.10	35	3.00	N	1
79BH53	N	500	50	N	15	N	100	N	N	.02	15	3.50	1	1
79BH54	N	N	50	N	20	N	50	N	N	.10	30	5.50	N	47
79BH55	N	300	20	N	15	N	15	N	N	.06	25	7.00	N	160
79BH56	N	100	30	N	15	300	100	N	N	.08	240	2.00	2	4
79BH57	N	N	20	N	15	2,000	70	N	.20	.14	2,200	10.00	N	87
79BH58	N	<100	15	N	10	500	50	N	<.05	.06	350	9.00	1	21
79BH59	N	N	30	N	15	N	150	N	N	.12	40	4.10	N	4
79BH60	N	150	20	N	20	N	100	N	N	.04	30	3.60	N	2
79BH61	N	300	50	N	20	700	100	N	N	.04	460	10.00	N	10
79BH62	N	300	50	N	15	N	100	N	N	.06	75	4.70	N	1
79BH63	N	300	30	N	20	N	100	N	N	.02	25	3.20	N	1
79BH64	N	100	20	N	15	7,000	30	N	4.00	.04	6,500	10.00	30	29
79BH65	N	150	30	N	10	200	50	N	N	.10	105	6.50	N	1
79BH66	N	300	30	N	15	N	150	N	N	.04	15	2.70	N	1
79BH67	N	200	20	N	10	N	50	N	N	.02	130	5.00	N	1
79BH68	N	500	70	N	15	N	100	N	N	.02	45	1.10	N	1
79BH69	N	N	100	N	10	N	150	N	N	.06	50	2.50	N	3
79BH70	N	200	20	N	20	200	70	N	N	.02	155	1.60	1	1
79BH71	N	300	30	N	15	N	150	N	N	.04	15	2.70	N	1
79BH72	N	200	20	N	10	N	50	N	N	.02	130	5.00	N	1
79BH73	N	500	70	N	15	N	100	N	N	.02	45	1.10	N	1
79BH74	N	N	100	N	10	N	150	N	N	.06	50	2.50	N	3
79BH75	20	300	20	N	15	500	20	N	N	.02	155	1.60	1	1
79BH76	N	N	30	N	10	>10,000	20	N	N	.06	32,000	85.00	38	13
79BH77A	N	<100	15	N	10	>10,000	<10	N	N	.08	42,000	180.00	60	2
79BH77B	N	200	30	N	<10	300	<10	N	.20	.10	160	4.50	55	72
79BH77C	N	<100	20	N	15	N	100	N	N	<.02	55	3.60	N	2
79BH78	N	N	20	N	15	500	20	N	N	.40	700	5.00	N	6
79BH79	N	N	30	N	30	N	10	N	N	.02	55	2.90	N	21
79BH80	N	N	20	N	<10	N	100	N	N	.06	55	3.50	N	33
79BH81	N	200	15	N	15	1,000	<10	N	N	.02	860	4.30	N	27
79BH82	N	<100	50	N	20	N	100	N	.55	.02	55	2.30	N	3
79BH83	N	N	30	N	20	N	150	N	N	.02	55	2.60	N	2
79BH84	N	N	30	N	15	500	150	N	<.05	.16	150	4.00	10	36
79BH85	N	N	30	N	15	1,500	100	N	N	.04	1,650	5.00	N	4
79BH86	N	500	100	N	20	500	150	N	.10	.04	450	5.00	1	29
79BH87	N	500	70	N	20	N	15	N	N	.04	50	4.00	N	1
79BH88	N	150	70	N	20	>200	100	N	N	.02	45	5.00	N	2



Base from U.S. Geological Survey, 1:24,000
Inferno Cone, 1972; Blizzard Mountain South,
1972; unedited advance prints, Mackay 4SE
and Mackay 4SW, 1960



SAMPLE LOCALITY MAP OF THE LAV

