

Table 1 Chemical composition of volcanic gas collected during the 7th workshop

Fumarole	Pipe	Date	Start	time min	Temp. (C)	Sample (g)	H2O (micro-mol/mol)	CO2	S	nS	H2S	SO2	HCl	HF	He	H2	O2	N2	Ar	CH4	CO	HBr	NH3
SI-L	C	35358	0.486806	6	GSJ	111	36.25	980030.3	2241.315	13727.37	1.687926	5289.782	8437.587	2205.515	1670.578	0.035707	79.00129	-	45.33745	0.280677	-	0.233798	
SI-L	L	35358	0.49375	5	GSJ	111	38.42	981450.1	2395.998	13087.99	1.679493	5061.797	8026.198	1450.986	1486.562	0.032326	78.74362	1.237359	47.76626	0.34206	-	0.234317	
SI-L	C	35356	0.525694	4	GSJ	111	38.88	980410.9	1517.4	12805.04	1.737338	4828.914	7976.126	2891.519	2211.936	0.039046	88.91976	-	73.36062	0.65989	-	0.239509	
SI-L	L	35356	0.529167	3	GSJ	111	32.54	978520.2	3276.888	13990.75	1.777272	5182.937	8807.809	1715.438	1709.145	0.038839	87.2895	-	692.261	7.550208	-	0.14625	
SI-L	L	35358	0.386111	14	IGNS		97.79	962867	6545	22514	3.7	968	21546	4972	2982	0.04	94.43	0.28	54.87	0.46	<0.05	<0.4	0.4
SI-L	R	35356	?	?	IGNS		98.23	966312	5319	21297	3.8	703	20594	3832	3059	0.04	107.72	<0.10	72.33	0.55	<0.05	<0.4	0.8
SI-L	?	?	?	?	VSI	111		969700	13900	11000	0.127273	7100	3900	4400	-	100	-	100	-	-	-	-	-
SI-L	?	35356	?	?	UF	111		965300	9300	22900	3.475983	2000	20900	1200	950	-	156	n.d.	120	1.4	0.0013	0.19	2.3 0.17
SI-L	L	35356	0.438889	8	UNAM	104	30.7	941900	7600	45800	3.9	800	45000	3020	2200	0.18	98	-	1430	-	n.d.	n.d.	
SI-L	L	35356	0.476389	2	TIT	111.5	20	962600	3730	29360	3.599455	1960	27400	3190	650	ns	78.7	-	356.4	2.27	n.d.	n.d.	
SI-L	R	35358	0.420833	13	TIT	114.6	20	963200	4570	29920	3.65508	1720	28200	1990	256	ns	70	-	75.4	0.526	n.d.	0.188	
SI-L	C	35358	0.383333	23	LANL	100	112.8	971514.3	2887.628	21029.96	3.820597	628.8075	20401.16	2442.992	1993.405	0.038901	40.19791	0.324177	87.00902	1.050332	0.453847	n.d.	2.01495 n.d.
SI-L	L	35358	0.442361	32	LANL	100	142.7	967730.5	2976.417	25288.4	3.867882	556.8407	24731.56	1725.887	2193.092	0.032723	46.38545	0.040904	35.3413	0.368139	n.d.	0.081809	3.8427 n.d.
SI-L	L	35358	?	14	UNM	100	63.49	970544.2	4736.457	17516.86	1.266907	7979.203	9537.658	3940.49	3123.971	0.043935	77.34174	<0.1	59.92078	0.523435	<0.003	0.173852	
SI-H	L	35356	0.471528	2	GSJ	818	12.93	974946	3995.537	9055.493	3.320993	1024.79	8030.703	7088.743	661.3051	ns	4164.513	-	68.68512	0.825891	-	18.86189	
SI-H	L	35356	0.472917	1	GSJ	818	12.19	977996.9	3315.078	7771.8	2.83002	1515.475	6256.325	6093.214	571.0523	ns	4166.26	-	66.82383	0.758654	-	18.06328	
SI-H	R	?	?	7	IGNS		29.72	972286	4376	10740	3.6	802	9938	7012	569	<0.01	4905	<0.10	86.4	0.76	0.27	23.11	1.8
SI-H	L	35356	0.475	8	IGNS		35.25	974182	4279	10659	3.6	762	9897	5960	535	<0.01	4301	0.3	75.5	0.76	<0.05	6.47	0.7
SI-H	R	35356	0.519444	4	VSI	818		968500	3700	1310	3.083969	200	1110	11500	-	4700	-	400	-	-	-	-	-
SI-H	L	35356	0.515972	4	UF	818		966100	15400	9200	3.43235	930	8900	2500	100	-	5800	n.d.	230	4.1	n.d.	13	4.5 0.26
SI-H	?	35356	?	?	UNAM	814	17.64	976400	6800	9200	3.1	1600	7600	3900	440	ns	3100	-	99	-	n.d.	13	
SI-H	L	35358	0.392361	7	UNAM	804	17.12	979600	5680	7430	3.2	1240	6190	3560	290	ns	3510	-	90	-	n.d.	15	
SI-H	R	35356	0.534028	2	TIT	818	20	979500	3140	7876	3.538344	606	7270	4480	2010	ns	2960	-	18.8	ns	n.d.	19.4	
SI-H	R	35356	0.535417	4	TIT	818	20	975800	3180	8456	3.541627	646	7810	4660	4430	ns	3430	-	60.8	ns	n.d.	23.5	
SI-H	R	35356	0.458333	10	LANL	815	48.5	986981.1	2678.848	5109.659	3.590724	348.5432	4761.116	3415.059	159.3214	n.d.	1607.519	0.495638	36.34679	0.826063	6.608507	n.d.	3.517896 n.d.
SI-H	L	35356	?	4	UNM	818	40.2	970540	2820	5430	3.715356	260	5180	2940	132	<0.013	1329	<0.1	31	0.44	<0.003	1.69	
Kuju	R	35361	0.515972	5	GSJ	143	53.51	990350.9	4323.883	5014.984	-1.02755	4202.178	812.8057	246.0372	-	0.029686	29.13211	-	32.08405	0.462099	2.523342	-	
Kuju	C	35361	0.53125	5	GSJ	143	52.36	990588.3	4172.087	4784.65	-1.2045	4150.285	634.3648	302.5195	-	0.025915	117.8767	-	31.79171	0.590936	2.15506	-	
Kuju	L	35361	0.465278	5	GSJ	143	63	990155.6	4622.559	5060.673	-1.09403	4296.538	764.1355	117.9324	-	0.029177	0.831492	-	38.91325	0.622798	2.701201	-	
Kuju	R	35361	0.486111	6	GSJ	143	56.52	990282.5	4211.519	5196.158	-0.95955	4295.099	901.0598	259.0756	-	0.030894	13.43368	-	33.89142	0.488595	2.888388	-	
Kuju	R	35361	0.475	19	IGNS		177.13	990647	4187	4863	-1.3	4275	589	247	3.2	0.02	19.6	<0.10	29	0.51	2.3	<0.4	0.2
Kuju	L	35361	0.465278	15	VSI	114		972400	6800	6200	-2	6200	-	13600	-	-	65	-	700	-	-	-	-
Kuju	L	35361	0.433333	6	TIT	143	20	988300	5380	6188	-1.42017	5590	598	68.9	4.22	0.01	0.534	-	33.6	0.483	1.14	n.d.	
Kuju	C	35361	0.482639	19	LANL	143	141.5	991685.1	3810.79	4203.198	0.26163	2618.851	1584.347	201.1677	n.d.	0.009974	73.60548	0.159578	23.43806	0.388972	1.246705	n.d.	n.d.
Kuju	R	35361	0.522917	18	LANL	143	125.6	991454.6	3622.06	4699.832	0.826739	2485.632	2214.2	168.6969	n.d.	0.005467	35.37293	0.038271	17.93249	0.289763	1.087977	n.d.	0.085537 n.d.
Kuju	R	35361	0.413194	8	UF	143		989500	6400	3540	-0.74576	2800	740	350	11	-	24	n.d.	54	1.6	1.3	0.0018	0.78 0.26
Kuju	R	35361	0.415278	15	UNAM	146	104.4	989000	5030	5600	-1.60357	5230	370	190	2.6	0.025	4.4	-	190	-	1.9	n.d.	
Kuju	R	35361	0.489583	27	UNAM	146	58.55	987900	5700	6200	-1.79677	5990	210	90	3.8	0.025	6.6	-	160	-	3.7	n.d.	
Kuju	R	35361	0.424306	19	UNM	143	66.7	985955.5	5356.139	8084.584	-1.34702	7204.735	879.8496	556.1756	5.945044	0.010905	18.74328	<0.1	21.48165	0.352555	1.034944	<0.0005	
Kuju-B		35361			LANL	101	116.2	994439.6	2830.346	2529.01	-0.01137	1690.801	838.2088	159.9294	n.d.	0.004114	3.283163	0.069942	35.9996	0.687078	0.822848	n.d.	n.d.
SW-I		35357			LANL	?		979211	16240.78	5.321965	3.92912	0.06287	5.259096	n.d.	n.d.	0.454289	5.451463	713.2331	3157.306	52.69748	608.7467	n.d.	n.d.

L, R, C: Left, Right and Center pipes