

Northwest Research Obsidian Studies Laboratory

Results of XRF Studies: San Martin Jilotepeque (Pachay) Obsidian Source, Guatemala

Site	Specimen		Trace Element Concentrations											Ratios		Geochemical Source
	No.	Catalog No.	Zn	Pb	Rb	Sr	Y	Zr	Nb	Ti	Mn	Ba	Fe ₂ O ₃ ^T	Fe:Mn	Fe:Ti	
Pachay River Gravels	1	C1	60 ± 7	22 3	123 3	201 7	17 3	115 7	6 2	837 97	509 47	1068 13	0.82 0.11	16.2	33.0	San Martin Jilotepeque
Pachay River Gravels	2	C2	42 ± 8	18 3	107 4	180 7	16 3	102 7	5 2	386 95	253 47	1201 16	0.33 0.11	16.5	32.0	San Martin Jilotepeque
Pachay River Gravels	3	C3	47 ± 7	21 2	112 3	181 7	16 3	106 7	11 1	992 97	503 48	1070 13	0.83 0.11	16.7	28.4	San Martin Jilotepeque
Pachay River Gravels	4	C4	42 ± 6	22 2	112 3	183 7	14 3	108 7	12 2	862 96	426 47	1180 14	0.69 0.11	17.0	27.5	San Martin Jilotepeque
Pachay River Gravels	5	C5	51 ± 6	25 3	119 3	197 7	15 3	114 7	9 2	806 96	425 47	1119 14	0.68 0.11	16.7	28.9	San Martin Jilotepeque
Pachay River Gravels	6	C6	44 ± 7	19 3	115 3	184 7	16 3	102 7	5 2	593 96	407 47	1136 14	0.66 0.11	17.0	37.8	San Martin Jilotepeque
Pachay	7	B1	41 ± 6	25 3	123 3	194 7	18 3	110 7	9 2	779 96	448 47	1117 14	0.72 0.11	16.5	31.3	San Martin Jilotepeque
Pachay	9	B3	35 ± 6	24 2	111 3	175 7	16 3	103 7	7 2	742 96	458 47	1148 14	0.73 0.11	16.4	33.5	San Martin Jilotepeque
Pachay	10	B4	43 ± 7	20 3	109 3	180 7	17 3	105 7	10 2	419 95	288 47	1126 16	0.39 0.11	16.4	34.2	San Martin Jilotepeque
Pachay	11	B5	42 ± 6	24 2	110 3	183 7	17 3	108 7	9 2	660 96	426 47	1094 14	0.70 0.11	17.2	36.3	San Martin Jilotepeque
Pachay	12	B6	36 ± 6	26 2	120 3	184 7	15 3	110 7	11 1	797 96	492 47	1018 13	0.82 0.11	16.8	34.6	San Martin Jilotepeque
Pachay	13	B7	40 ± 6	23 2	115 3	178 7	16 3	107 7	8 2	745 96	457 47	1146 14	0.79 0.11	17.6	35.6	San Martin Jilotepeque
Pachay	14	B8	44 ± 6	18 3	112 3	173 7	17 3	105 7	9 2	721 96	462 47	985 13	0.78 0.11	17.3	36.6	San Martin Jilotepeque
Pachay	15	B9	42 ± 6	26 2	112 3	187 7	18 3	106 7	9 2	665 96	439 47	1179 14	0.71 0.11	16.7	36.1	San Martin Jilotepeque

All trace element values reported in parts per million; ± = analytical uncertainty estimate (in ppm). Iron content reported as weight percent oxide.
 NA = Not available; ND = Not detected; NM = Not measured.; * = Small sample.