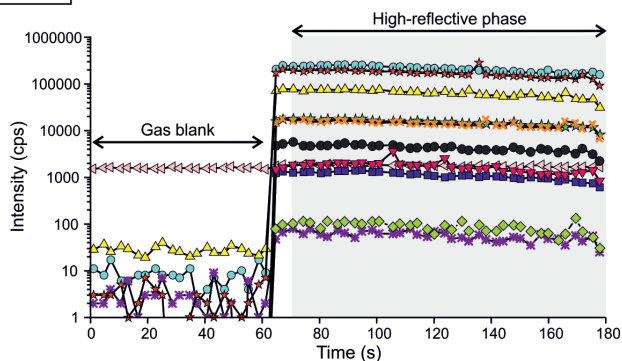
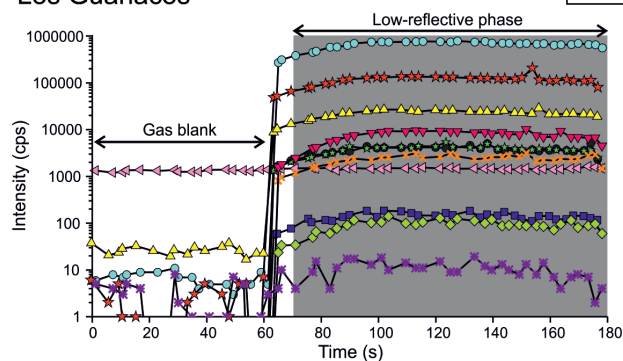


SUPPLEMENTARY TABLE 1. Results of repeated analysis of the BCR-2g and LCR-1 standard by laser ablation ICP-MS (New Wave UP 266) and comparison with literature values

	⁴⁵ Sc (ppm)	⁴⁷ Ti	⁵¹ V	⁵⁵ Mn	LCR-1-1	3.47	17323	2333	1825
⁵⁹ Co	⁶⁰ Ni	⁶⁵ Cu	⁶⁶ Zn	⁷¹ Ga	234	1124	30.22	712	37.97
⁷² Ge	¹¹⁸ Sn				2.54	2.18			
BCR-2g-1	33.82	13794	425	1551	LCR-1-2	3.37	16040	2325	1842
38.34	11.79	18.45	143	22.49	245	1235	29.80	733	39.06
3.06	2.54				2.48	2.32			
BCR-2g-2	32.44	12774	430	1531	LCR-1-3	3.30	15748	2326	1826
39.94	12.50	18.11	151	23.28	247	1227	31.09	754	41.29
2.58	2.41				2.36	2.28			
BCR-2g-3	33.61	12706	435	1567	LCR-1-4	3.35	15764	2335	1827
40.40	13.76	19.14	172	23.78	247	1209	29.90	754	38.70
2.55	2.66				2.47	2.28			
BCR-2g-4	33.25	12823	431	1551	LCR-1-5	3.44	17428	2350	1869
39.34	13.37	18.45	158	23.25	239	1143	30.01	688	39.20
2.95	2.53				2.83	2.52			
BCR-2g-5	33.14	13983	434	1560	LCR-1-6	3.36	16060	2326	1856
38.39	12.08	18.66	149	22.28	252	1249	30.83	776	40.41
2.8	2.51				3.16	2.17			
BCR-2g-6	31.79	12716	431	1551					
39.00	12.46	18.94	151	23.52	Minimum	3.30	15748	2325	1825
2.45	2.23				234	1124	29.80	688	37.97
					2.36	2.17			
Minimum	31.79	12706	425	1531	Maximum	3.47	17428	2350	1869
38.34	11.79	18.11	143	22.28	252	1249	31.09	776	41.29
2.45	2.23				3.16	2.52			
Maximum	33.82	13983	435	1567	Mean	3.38	16394	2332	1841
40.40	13.76	19.14	172	23.78	244	1198	30.31	736	39.44
3.06	2.66				2.64	2.29			
Mean	33.01	13133	431	1552	Median	3.37	16050	2329	1835
39.24	12.66	18.63	154	23.10	246	1218	30.12	743	39.13
2.73	2.48				2.51	2.28			
Median	33.20	12799	431	1551	Std. Dev.	0.06	772	9	18
39.17	12.48	18.56	151	23.27	7	52	0.53	32	1.21
2.69	2.52				0.30	0.13			
Std. Dev.	0.8	590	3.3	12.1	Rel. Dev. (%)	1.8	4.7	0.4	1.0
0.8	0.8	0.4	10.1	0.6	2.7	4.3	1.75	4.4	3.1
0.2	0.1				11.4	5.5			
Rel. Dev. (%)	2.3	4.5	0.8	0.8	Comparison of preferred published value and analyzed value				
2.1	6.0	2.0	6.6	2.6	Locmelis et al. (2011)	na	17117	2244	1803
8.9	5.9				234	1167	na	na	na
Comparison of preferred published value and analyzed value					na	na			
Norman et al. (1998)	33	13700	414	na ^a	Diff. publ. value & this study ^b	na	723	88	38
35.8	10.8	19.4	147	22.7	9.87	30.70	na	na	na
na	na				na	na			
Diff. publ. value & this study ^b	-0.01	567	17	na	Dev. publ. value & this study ⁱ	na	4.2	3.9	2.1
3.44	1.86	-0.77	7	-0.4	4.2	2.6	na	na	na
na	na				na	na			
Dev. publ. value & this study ^c	-0.0	4.1	4.1	na	<i>Note:</i> All of the NIST610 glass was used as internal standard.				
9.6	17.2	-4.0	4.7	-1.8	^a Not analyzed (na). ^b Difference between values published by Norman et al. (1998) and analyzed values. All values were determined by laser ablation ICP-MS.				
na	na				^c Deviation between values by Norman et al. (1998) and analyzed values. ^d USGS website, September 2015. ^e Difference between USGS reference values and analyzed values. ^f Deviation between USGS reference values and analyzed values.				
Comparison of USGS reference value and analyzed value					^g Ratio between USGS reference values and analyzed values. Ratios similar to 0 indicates good reproducibility and ratios near to ±1 indicates non-good reproducibility. ^h Difference between values published by Locmelis et al. (2011) and analyzed values. All values were determined by laser ablation ICP-MS. ⁱ Deviation between values by Locmelis et al. (2011) and analyzed values.				
USGS reference value ^d	33	13500	416	1520					
37	na	19	127	23					
na	na								
Diff. USGS value & this study ^e	-0.01	367.18	15	32					
-2.24	na	-0	27	-0.10					
na	na								
Dev. USGS value & this study ^f	-0.0	2.7	3.6	2.1					
-6.0	na	-2.0	21.2	-0.43					
na	na								
	⁴⁵ Sc (ppm)	⁴⁷ Ti	⁵¹ V	⁵⁵ Mn					
⁵⁹ Co	⁶⁰ Ni	⁶⁵ Cu	⁶⁶ Zn	⁷¹ Ga					
⁷² Ge	¹¹⁸ Sn								

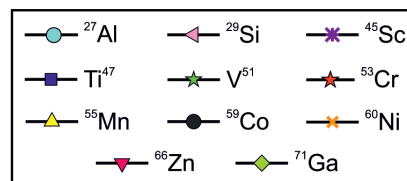
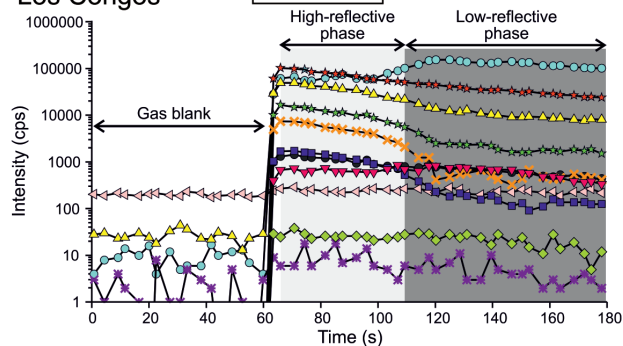
Los Guanacos

Type III



Los Congos

Type II



SUPPLEMENTARY FIGURE 1S. Counts signal vs time in LA-ICP-MS analysis of low-reflective and high reflective phases in Type III chromite from Los Guanacos and mixtures of low reflective and high-reflective phases in Type II chromite from Los Congos. Legend provided as inset in the figure.