



**Western Copper
Corporation**

Project Proposal
Carmacks Copper Project
Yukon Territory

Appendix E6

Leach Residue
Fine Fraction ABA Testing
(September 2006)



Western Copper Corporation

CARMACKS COPPER PROJECT

**LEACH RESIDUE
FINE FRACTION ABA TESTING**

September 2006

Context

Canmet Mining and Mineral Sciences Laboratories was commissioned by Environment Canada to provide a second opinion on the long term stability on the prospective spent ore from the Carmacks Copper project particularly with regard to silicate weathering. In order to do this Canmet conducted a detailed mineralogical examination on residue from column tests on ore that had been leached, rinsed and neutralized. The results of the examination are contained in the report dated 10 July 2006 by John Kwong.

One of the report conclusions was that in order to assess the “realistic” acid generating potential of the spent ore, ABA analysis should be conducted on the fine fraction of the spent ore instead of a pulverized bulk sample.

Testing

Accordingly in late August, 2006, samples of the same spent ore used by Canmet (Columns 3 and 9 of the series of small column tests performed by Vizon under the direction of West Coast Biotech) were sent to CEMI laboratories in Burnaby, BC for a standard suite of ABA tests on the fines fraction. Two sieve sizes were chosen, -2mm and 100 mesh. The results are shown on the attached pages.

Results

On 8th September, 2006, CEMI forwarded the results to Western Copper. The tests clearly showed that the small size fraction of the leach ore residue has significant neutralizing potential comparable to that of the whole sample and therefore no acid generating potential exists that is attributable to the small size fraction. The results are consistent with previous acid base accounting test work reported in Alexco, 2006 (Carmacks Copper Project Detoxification Rinsing and Test work Report, January 2006).

CLIENT : Western Copper
PROJECT : Carmack Heap Leach Residue
CEMI Project # : 0666
Test : Standard Sobek Acid-Base Accounting
Date : August 23, 2006

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(Elmental)	S(S-2) %	AP	NP	Net NP	Fizz Test
WS Column 9 Whole Sample	8.2	0.02	1.7	0.1	0.07	0.01	0.02	0.9	10.9	10.0	None
WS Column 9 -2mm	7.5	0.02	1.7	0.22	0.16	0.03	0.03	1.9	15.6	13.7	None
WS Column 9 -100 mesh	6.6	0.03	2.5	0.44	0.31	0.02	0.11	4.1	11.6	7.5	None
WS Column 3 Whole Sample	9.9	0.09	7.5	0.11	0.08	0.01	0.02	0.9	15.3	14.4	None
WS Column 3 -2mm	9.5	0.1	8.3	0.21	0.12	0.02	0.07	2.8	17.8	15.0	None
WS Column 3 -100 mesh	9.6	0.15	12.5	0.46	0.24	0.06	0.16	6.9	60.6	53.7	Moderate
Duplicates											
WS Column 9 Whole Sample	8.2								10.4		None
WS Column 9 -100 mesh						0.03					
WS Column 3 Whole Sample		0.08		0.11	0.06						

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from calculated sulphide sulphur content: $S(T) - S(SO_4) - S(So)$.

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET NP = NP - AP

Carbonate NP is calculated from TIC originating from carbonates and is expressed in kg CaCO3/tonne.

CLIENT : Western Copper
PROJECT : Carmack Heap Leach Residue
CEMI Project # : 0666
Test : Screen Assay
Date : August 23, 2006

Sample ID	Retained	Passing	Total Wts (g)
WS Column 3			
2 mm	276.6	116.8	393.4
Percent	70.3%	29.7%	
100 mesh (0.15 mm)	87.5	29.3	116.8
Percent	22.2%	7.4%	
WS Column 9			
2 mm	204	139.5	343.5
Percent	59.4%	40.6%	
100 mesh (0.15 mm)	104.7	34.8	139.5
Percent	30.5%	10.1%	