

August 23, 2011

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Mr. Paul West-Sells  
President & Chief Operating Officer  
Western Copper Corporation  
2060 - 1111 West Georgia Street  
Vancouver, BC  
V6E 4M3

**ANNUAL INSPECTION, JUNE 29, 2011  
CARMACKS COPPER PROJECT, CARMACKS, YUKON**

Dear Mr. West-Sells,

Golder Associates Ltd. (Golder) completed an inspection of the Carmacks Copper project site for Western Copper Corporation on June 29, 2011. The inspection of the proposed future site of the Carmacks Copper mine was completed as part of the requirement of the Quartz Mining License (QML – 0007) for an annual inspection. The inspection was to evaluate the condition and stability of the existing facilities in the area of the proposed new mine and the proposed facilities which will include a heap leach pad, an open pit mine area, a waste rock storage area, a processing plant and related facilities, ore preparation facilities, ore stockpiles, any water diversion structures and/or other related operations or facilities. The inspection was limited in that there are no structures on site at present with the exception of the mine exploration camp and there are no current activities currently at the site. An inspection was however, completed of the entire project area.

## **1.0 INSPECTION**

The inspection by Golder was completed by Ms. Fiona Esford along with Mr. Scott Casselman – a representative of Western Copper Corporation. The inspection focused on the existing site conditions and the limited site infrastructure. Photographs of the site at the time of the inspection are presented in Appendix A.

The project is in the advanced exploration stage and final permitting for the proposed future mine. As noted the only infrastructure on site, at present, is the exploration camp and a series of access roads to the proposed open pit mine area and other areas of the property. The access roads were developed to provide access for exploration activities.

The inspection of the camp area indicated the camp is well maintained and there is no erosion of sediments from the pad area into the surrounding natural area. The slope behind or west of the camp is stable and is not impacting or causing any safety issues with the camp structures or operations. There is minor slumping of small



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sections of the slope, but these are not impacting camp safety nor would they represent an issue to workers on the project.

In addition to the camp, the inspection included the area proposed for the heap leach facility, events pond, and the heap leach sediment pond. This portion of the site also includes the area planned for the process plant west of the heap leach embankment. None of these structures have been developed and site preparation in these areas has been limited to the clearing of trees and organic soils (complete in 1997-1998), development of a series of access roads, and drilling platforms established as part of the exploration programs. Since the initial clearing, vegetation re-growth has been occurring. Erosion and sediment control measures in this area were initially put into place in September 2008 and further maintained in September 2009 and August 2010. These include a series of ditches and berms to divert water into vegetated areas and to break up flow to reduce the potential for erosion, sediment catch basins, and silt fences. The inspection indicated that there has been some erosion of sediments along the access roads and that the sediment basins are trapping and containing the sediment adequately. Additional capacity remains within these catch basins.

Further down slope of the proposed HLF sediment pond, and within the floodplain of Williams Creek, a series of silt fences have been installed and the area seeded, where sediment from previous site erosion has accumulated. At the time of the inspection, it was observed that the silt fencing surrounding these areas is working effectively and there is no evidence of recent sediment movement. Grass seed used in 2009 to promote the re-establishment of vegetation and further stabilize the sediment has generally been effective. However, re-growth in one particular area has not progressed well as it seems water is periodically pooling thereby impacting growth. It is recommended that either small ditches be made to promote drainage from the area into other vegetated areas, or alternatively, the area is re-vegetated with woody plants (e.g. willow cuttings) that are better able to tolerate saturated soil conditions. No movement of sediment beyond the existing silt fences was observed, nor does it appear that sediment has entered Williams Creek. These erosion control measures are of a temporary nature that should be inspected annually and ongoing minor maintenance activities should be anticipated.

The area where the open pit is to be developed was inspected. The excavation slopes of the trenches developed as part of the effort to obtain bulk samples during exploration activities were observed to be in reasonable condition and there was no observed slumping of the excavation slopes or failures of these slopes. There were no visual signs of erosion observed in the area of the proposed open pit. Several of the closed drill pads were inspected and there did not appear to be any erosion noted from these areas that require attention.

The area of the proposed waste rock storage area and the present access road crossing at North Williams Creek was inspected. The waste rock storage area is still tree covered and the drill pads in the area of the proposed waste rock storage area did not have any signs of sediment movement into the surrounding area. The small sediment catch basins at the drill pads still have capacity to manage more sediment, if required. Small erosion of the access road which crosses the waste rock storage area was observed. Sediment from the access road is being naturally diverted to adjacent vegetated areas as a result of road grades and was not observed to be entering any waterways.

Minor erosion along the ditches of the access road on the north side of North Williams Creek was observed. A series of diversion ditches were created along the access road to divert water and sediment from the road into adjacent vegetated areas in 2010. These diversions appear to be working effectively; however, it is recommended that one additional ditch be added on the west side of the road further down slope, closer to

North Williams Creek. In addition the silt fence on the bank of North Williams Creek has deteriorated and therefore should be re-installed. Annual inspection and the requirement for minor maintenance of these sediment control measures should be anticipated.

The process plant and the crusher / truck shop areas were also inspected. The process plant site is partially cleared and the crusher / truck shop site is still tree covered. There was no apparent erosion along any of the access roads in these two areas or at the weather station located just to the west of the crusher / truck shop area.

The new camp site was inspected and it is still tree covered. The site adjacent to the camp where the new water wells were installed was also inspected and there is no apparent movement of sediment beyond the work pads around the wells.

The site access road crossing of Williams Creek has a single culvert. The sand bags that were previously placed surrounding the culvert entrance and exit have now deteriorated. We would recommend re-establishing the support of the fill material adjacent to the culvert. In addition, it appears that flow has passed over two segments of the road near the crossing. It is anticipated that this was a temporary condition, which likely occurred at the beginning of the freshet, potentially when the culvert was still frozen/blocked by snow. Some erosion of the roadbed material has occurred. At some point in the future if additional activities are to occur at the site, then upgrading the crossing would be recommended. In the interim, given the lack of activity at the site, it is recommended to re-establish the bank protection on the upstream and downstream side of the culvert and extend the protection to the location where flow has occurred across the access road. Further, a coarse gravel material should be placed across the road at the low points (where erosion occurred) so that future flows across the road do not result in new erosion of the road embankment.

The general site development has not started yet. Therefore, there are no stability concerns associated with the undeveloped facilities and no maintenance required. No permanent water diversion structures are in place. There are however, temporary water management diversion structures (*i.e.*, ditches and sediment catch basins) in place that are appropriate for the exploration stage of the property. It is recommended that they continue to be inspected annually and that ongoing maintenance be conducted, as deemed necessary.

## **2.0 ADDITIONAL HEAP LEACH GEOCHEMISTRY TEST RESULTS**

As part of the annual review, we summarize the ongoing geochemical testing of the leached ore obtained from columns using typical ore samples from the site.

Two samples of material were obtained from a large 8 m high column of leached, rinsed, and neutralized ore that was dismantled in the summer of 2010. The testing program includes: ABA, SFE, whole rock analysis, humidity cell testing, and residue testing following completion of the humidity cell testing. This work began in August 2010 and is still ongoing. The humidity cell testing is approaching week 56 and sample results appear consistent. It is anticipated that at the completion of week 56 this testing program will be terminated and the completion testing conducted. A report presenting the results of the testing will be completed at that time.

### 3.0 RECOMMENDED ACTIONS

The inspection of the proposed mine site for the Carmacks Copper was completed on June 29, 2011 and indicated that as the site development has not been started yet, there is limited infrastructure and limited requirements for maintenance or further investigations. It is understood that the recommended maintenance work will be carried out by Western Copper Corporation prior to the onset of winter conditions at the site.

We trust that this letter satisfies your requirements. If you require additional information, please do not hesitate to contact us.

Yours very truly,

**GOLDER ASSOCIATES LTD.**

**ORIGINAL SIGNED AND SEALED**

Fiona Esford, P.Eng.  
Senior Geotechnical Engineer

FE/JAH/fe/aw/cf

Attachments: Appendix A – Photographs

**ORIGINAL SIGNED**

John Hull, P.Eng. (BC, NWT, NU, YK)  
Principal

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## **APPENDIX A**

### **Photographs**





## APPENDIX A

### Photographs

#### Carmacks Copper Project Annual Inspection



*Photographs 1 - 5: Carmacks Exploration Camp Infrastructure, which includes an office, core shack, equipment shed, temporary trailers for accommodations and kitchen facilities, and drill core storage area.*

*Date Taken: June 29, 2011*





## APPENDIX A

### Photographs

#### Carmacks Copper Project Annual Inspection



*Photographs 6 - 7: Drill pad access road located north of Williams Creek and downstream of the area of the proposed heap leach facility sediment pond. Photographs show vegetation re-growth which has occurred and is assisting in stabilizing previously transported sediments.*

*Date Taken: June 29, 2011*



## APPENDIX A

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#### Carmacks Copper Project Annual Inspection



*Photographs 8 - 10: Silt fences located between the area of the proposed heap leach facility sediment pond and Williams Creek and area re-vegetated area. Re-establishment of grass vegetation in this area appears to be hampered by the periodic pooling of water. Therefore planting of woody vegetation (e.g. willow cuttings) which are more tolerant to saturated soil conditions is recommended.*

*Date Taken: June 29, 2011*





## APPENDIX A

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#### Carmacks Copper Project Annual Inspection



*Photograph 11: View of proposed heap leach facility and plant site area, taken from area of proposed open pit, looking southwest.*

*Date Taken: June 29, 2011*



*Photograph 12: View of proposed heap leach facility area taken from near the proposed plant area.*

*Date Taken: June 29, 2011*





## APPENDIX A

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#### Carmacks Copper Project Annual Inspection



*Photographs 13 - 14: Access roads within the proposed waste rock storage area.*

*Date Taken: June 29, 2011*





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*Photograph 15 (top):* Access road within the proposed waste rock storage area.

*Photograph 16 (bottom):* Sediment basin trap near drill pad in proposed waste rock storage area.

*Date Taken:* June 29, 2011





## APPENDIX A

### Photographs

#### Carmacks Copper Project Annual Inspection

Upstream view of culvert



Downstream view of culvert



Upstream view of culvert looking south



Photographs 17 - 19: View of culvert and access road crossing Williams Creek. Note sand bags used for embankment support on upstream and downstream side of the culvert which have deteriorated.

Date Taken: June 29, 2011.





## APPENDIX A

### Photographs

#### Carmacks Copper Project Annual Inspection



*Photographs 20 - 21: Access road near Williams Creek crossing where water appears to have flowed across and where some road bed material has eroded.*

*Date Taken: June 29, 2011*

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