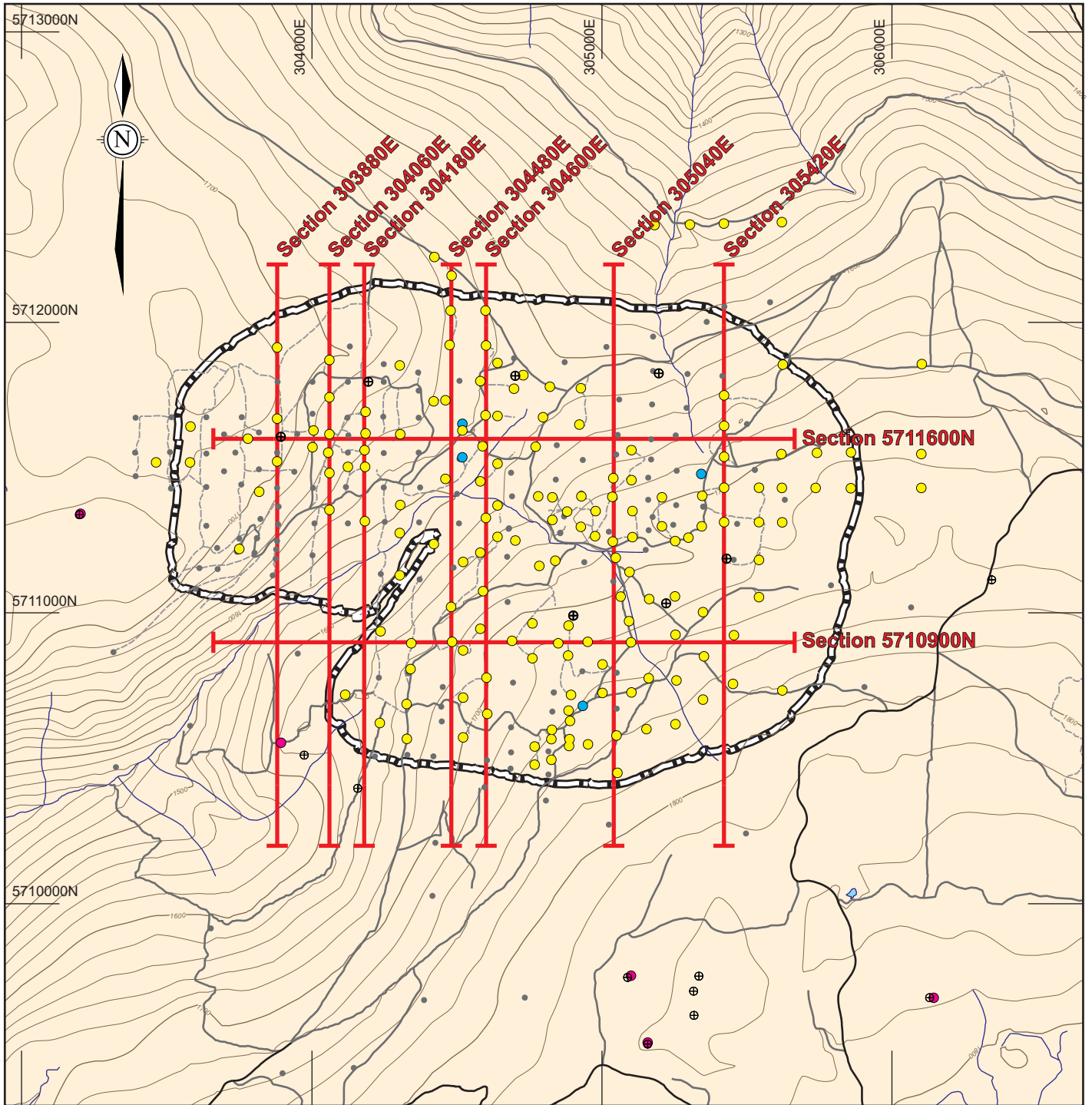


Appendix 5-H

Pit and Infrastructure Geological Cross Sections

HARPER CREEK PROJECT

**Application for an Environmental Assessment Certificate /
Environmental Impact Statement**



LEGEND

YMI Drilling (2006 - 2013)

- Resource and Exploration drill hole
- Condemnation drill hole
- Metallurgical drill hole
- ⊕ Geomechanical or Geotechnical drill hole

Non-YMI Drilling (1967 - 1996)

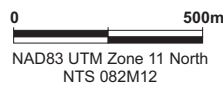
- Historical drill hole

Proposed infrastructure

- Pit (Nilsson, 2014)

Topography

- Watercourse
- Contour (20m interval)
- All-weather gravel road
- Rough road
- Access trail
- Waterbody
- Cross and long section reference lines



YELLOWHEAD MINING INC.

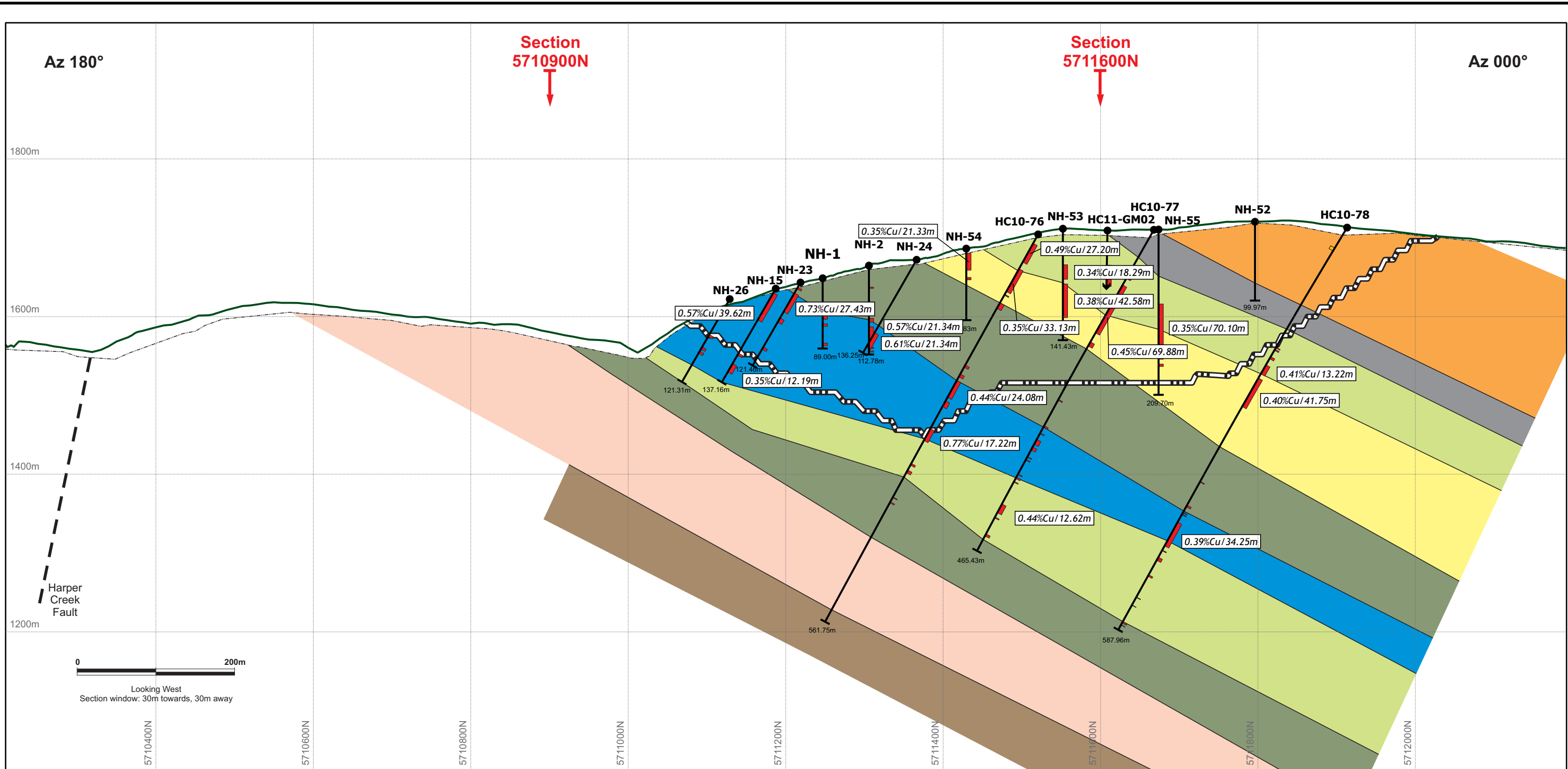
**GEOLOGICAL SECTIONS INDEX MAP
DEPOSIT AREA**

Harper Creek Project

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:20,000	Drawn:	TV
Figure:	1	Date:	January 2015





- LEGEND**
- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanics
 - Package Fa: Felsic to intermediate volcanics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

- SYMBOLS**
- Surface profile
 - Proposed open pit (Nilsson, 2014)
 - Depth of overburden (approximate)
 - Fault
 - Contact: defined, inferred
 - DDH collar and trace
 - ABA sample location
 - Significant intersection ($\geq 0.2\%$ Cu)
 - Trace entering/exiting section
 - Trace off-section (used for geological interpretation)
 - Selected copper grade over metres

YELLOWHEAD MINING INC.

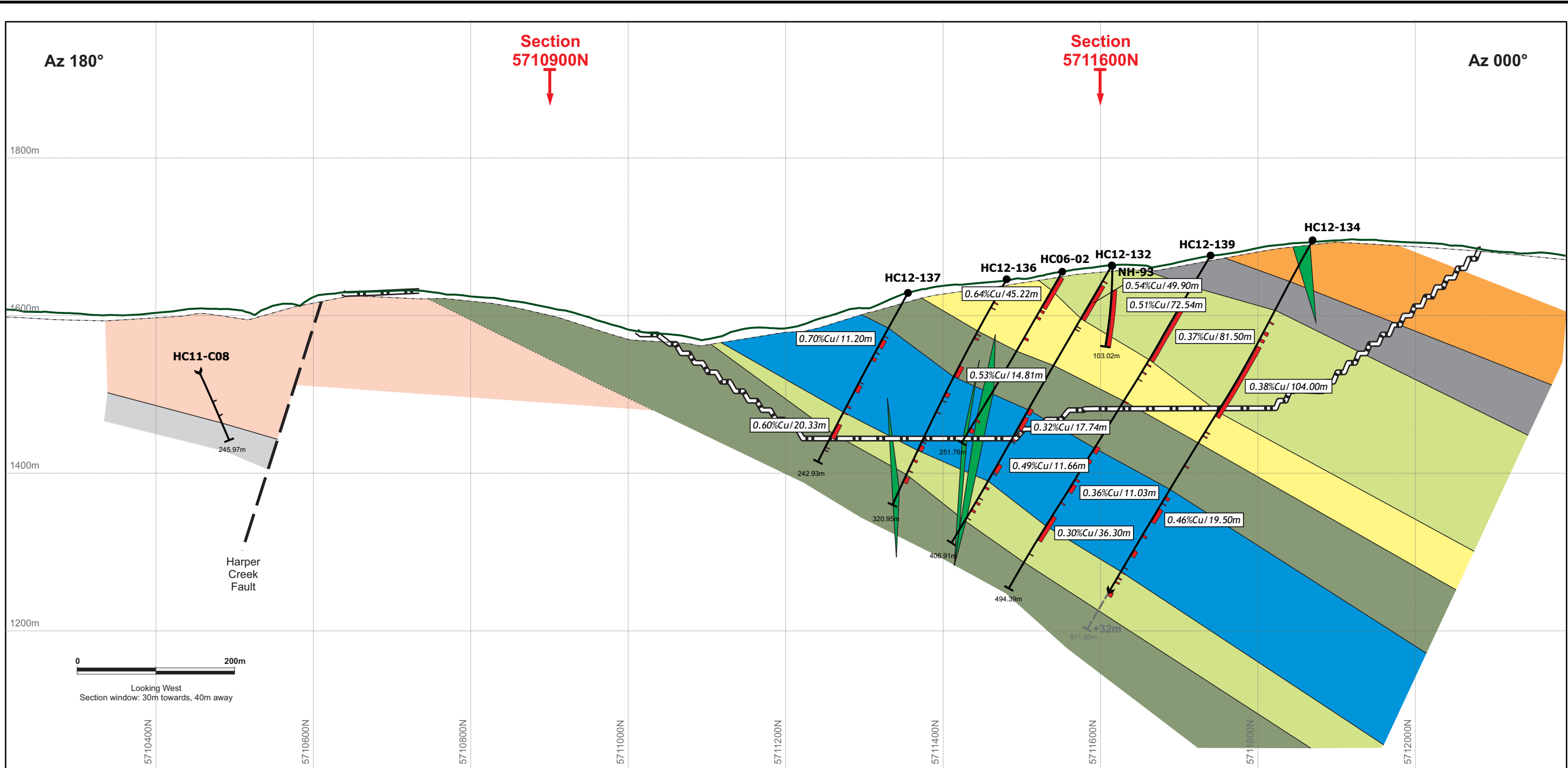
GEOLOGICAL CROSS SECTION SECTION 303880E

Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:5,000	Drawn:	TV
Figure:	S-1	Date:	January 2015

CME



LEGEND

- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanoclastics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanoclastics
 - Package Fa: Felsic to intermediate volcanoclastics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanoclastics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- ABA sample location
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (used for geological interpretation)
- 0.24%Cu/1.00m Selected copper grade over metres

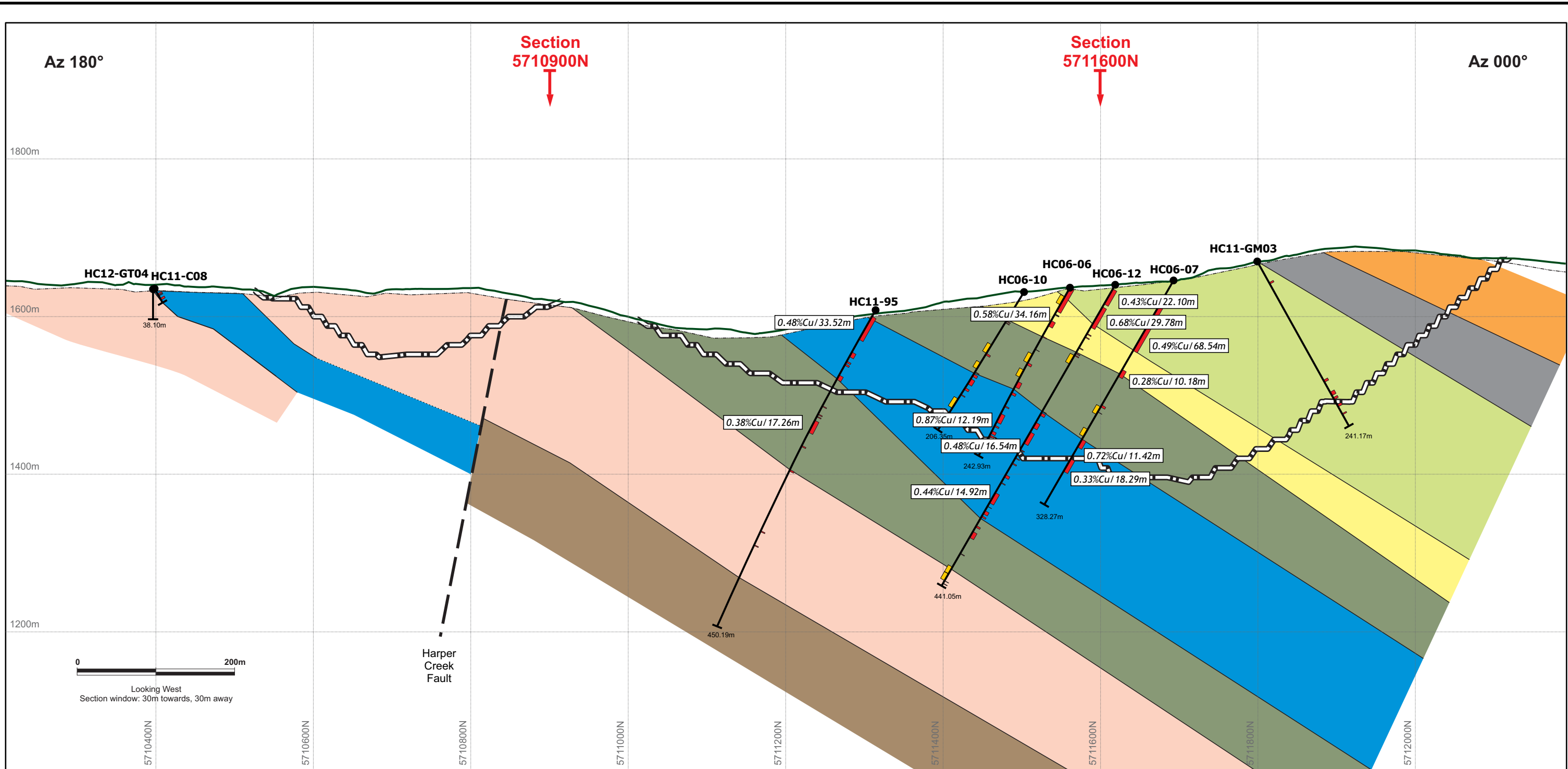
YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION
SECTION 304060E
Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: S-2	Date: January 2015

CME



- LEGEND**
- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanoclastics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanoclastics
 - Package Fa: Felsic to intermediate volcanoclastics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanoclastics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

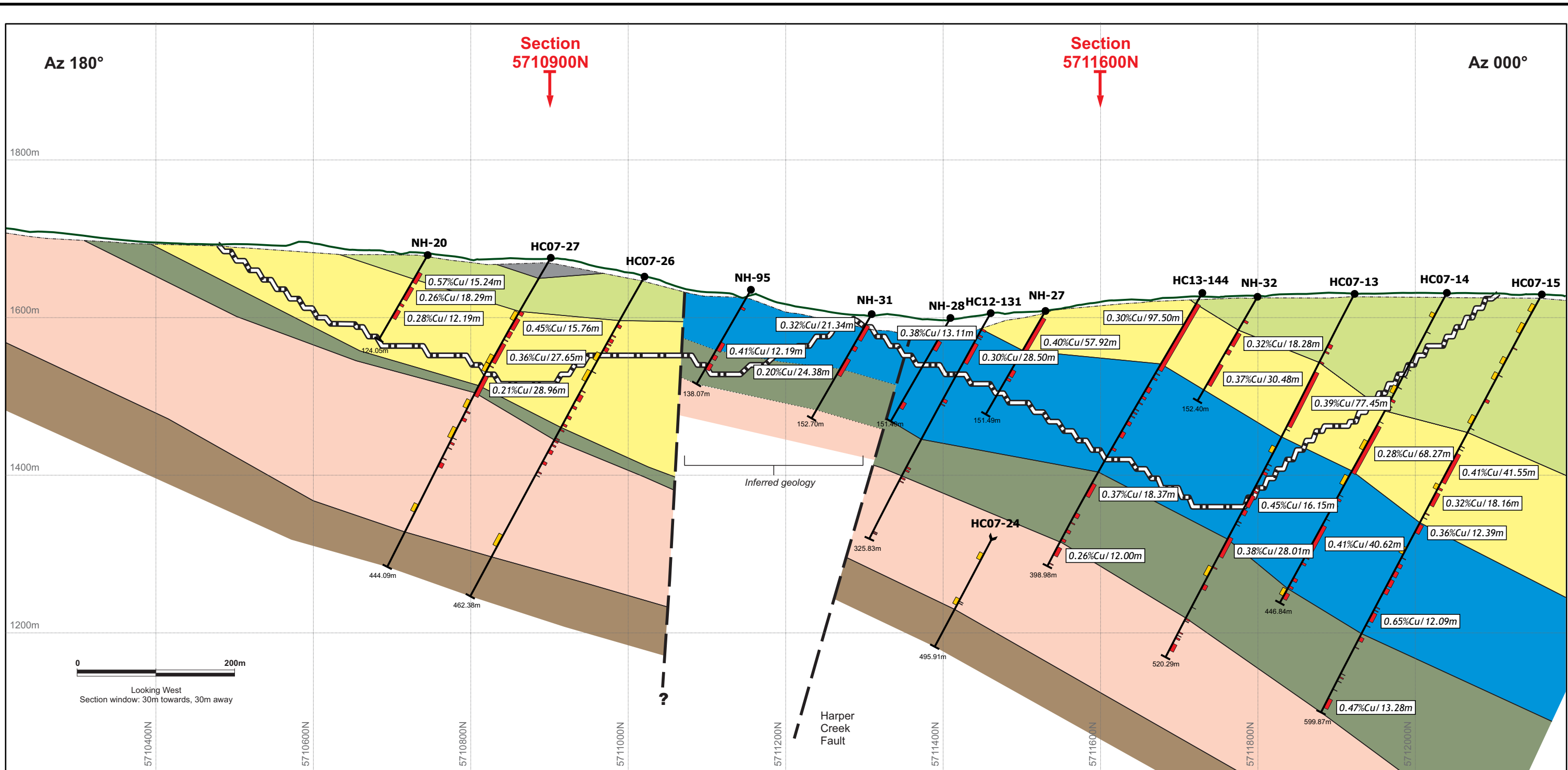
- SYMBOLS**
- Surface profile
 - Proposed open pit (Nilsson, 2014)
 - Depth of overburden (approximate)
 - Fault
 - Contact: defined, inferred
 - DDH collar and trace
 - ABA sample location
 - Significant intersection ($\geq 0.2\%$ Cu)
 - Trace entering/exiting section
 - Trace off-section (used for geological interpretation)
 - Selected copper grade over metres

YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION
SECTION 304180E
Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: S-3	Date: January 2015



LEGEND

- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanics
 - Package Fa: Felsic to intermediate volcanics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- ABA sample location
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (used for geological interpretation)
- Selected copper grade over metres

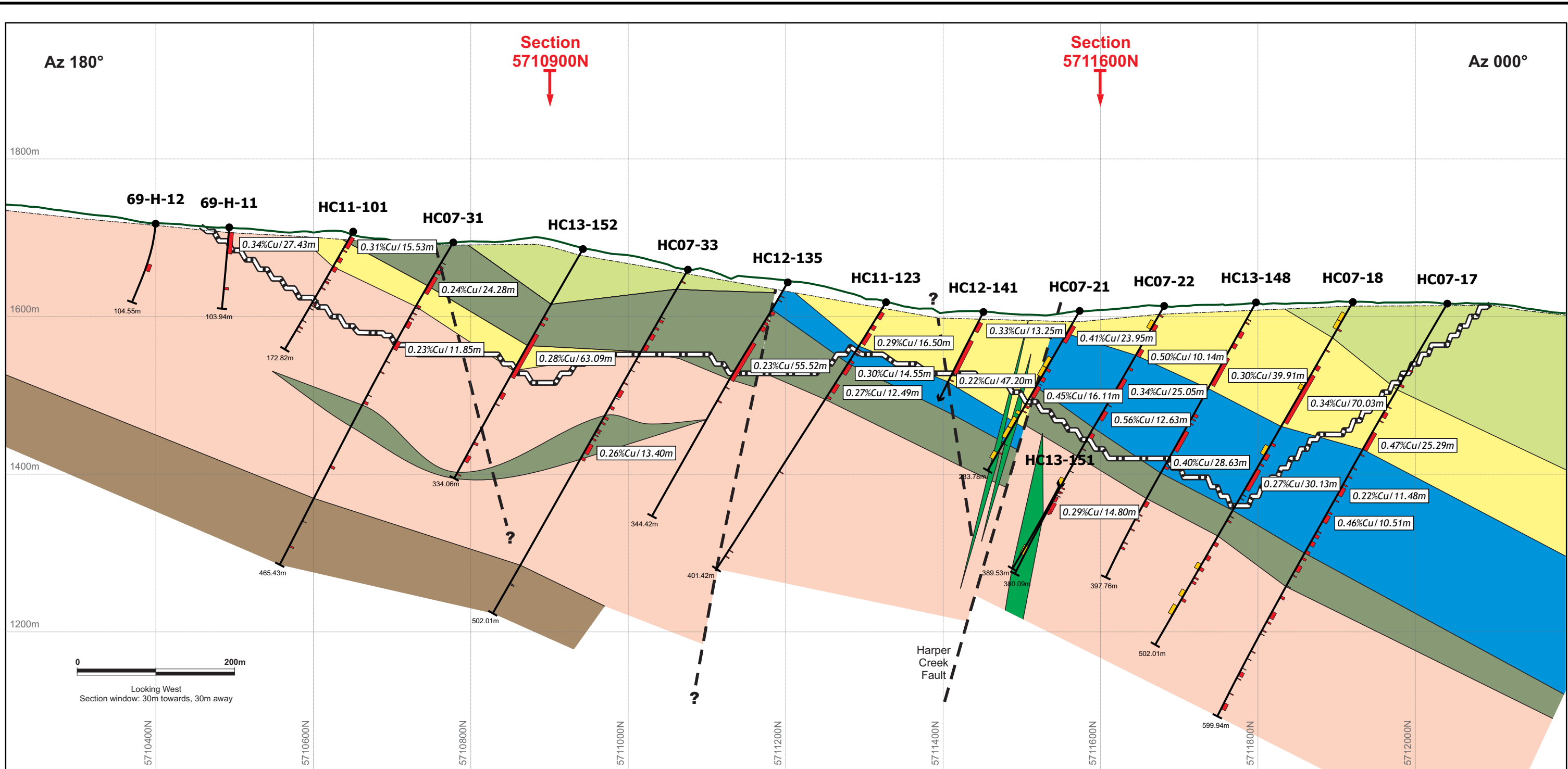
YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION
SECTION 304480E
Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:5,000	Drawn:	TV
Figure:	S-4	Date:	January 2015

CME



- LEGEND**
- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanics
 - Package Fa: Felsic to intermediate volcanics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

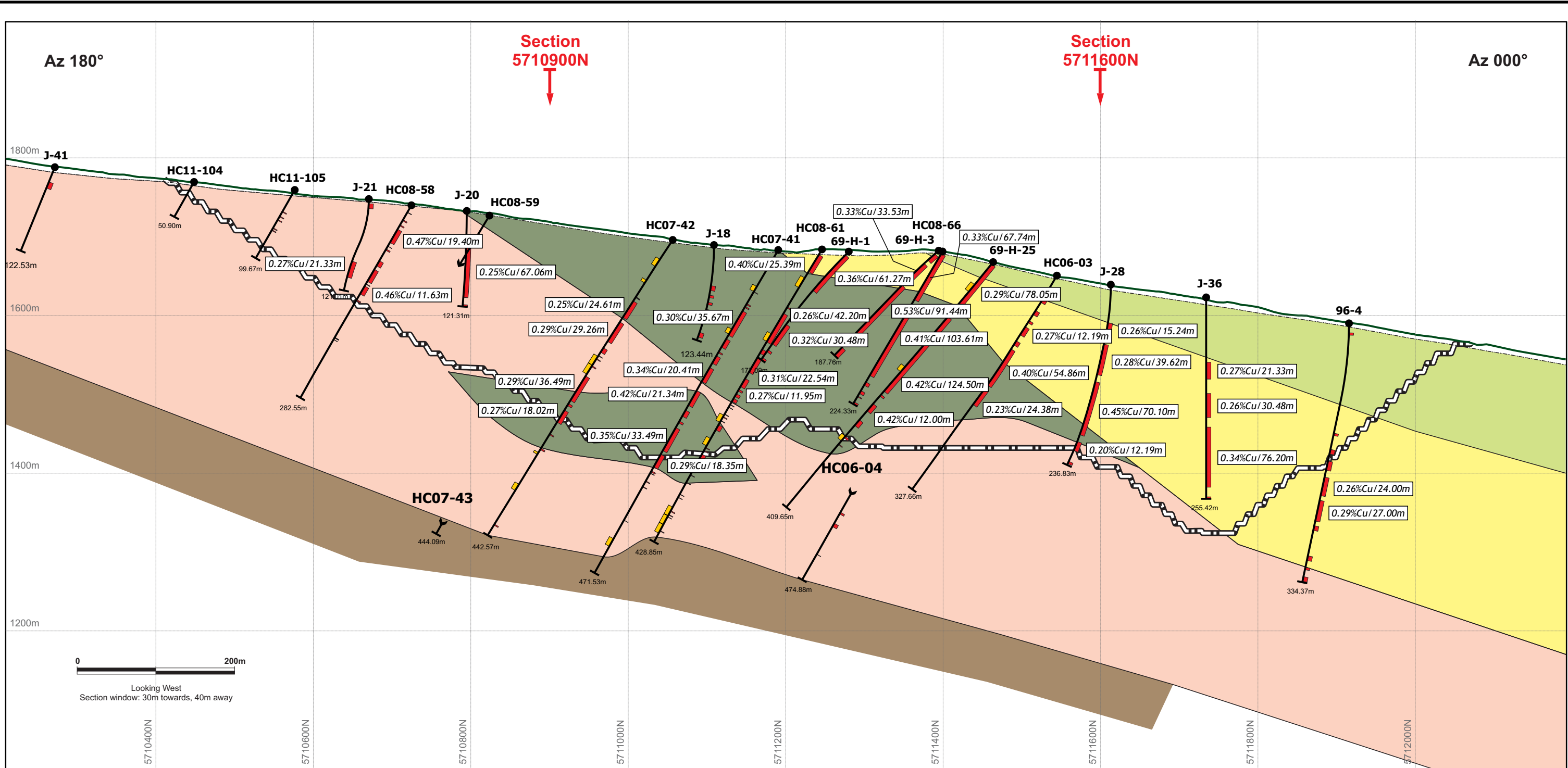
- SYMBOLS**
- Surface profile
 - Proposed open pit (Nilsson, 2014)
 - Depth of overburden (approximate)
 - Fault
 - Contact: defined, inferred
 - DDH collar and trace
 - ABA sample location
 - Significant intersection ($\geq 0.2\%$ Cu)
 - Trace entering/exiting section
 - Trace off-section (used for geological interpretation)
 - Selected copper grade over metres

YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION
SECTION 304600E
Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: S-5	Date: January 2015



LEGEND
GEOLOGY

- Andesite/lamprophyre dykes
- Package H: Mafic polymictic volcanics
- Package G: Graphitic horizon
- Package Fb: Intermediate to mafic polymictic volcanics
- Package Fa: Felsic to intermediate volcanics
- Package E: Mixed silicified and graphitic horizon
- Package D: Intermediate volcanics and fragmentals
- Package C: Graphitic horizon
- Package B: Sandy sediment dominated
- Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- ABA sample location
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (used for geological interpretation)
- Selected copper grade over metres

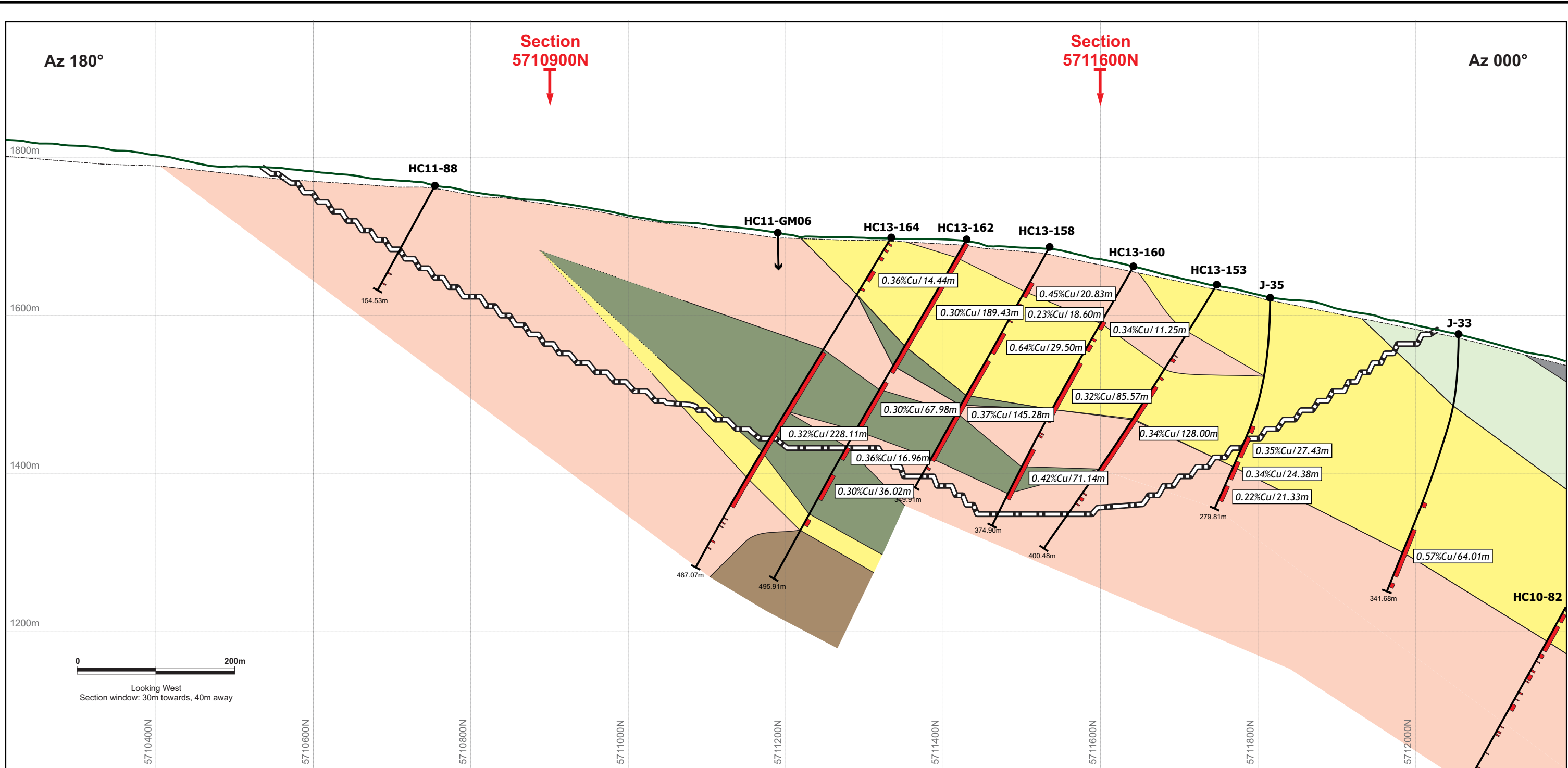
YELLOWHEAD MINING INC.

**GEOLOGICAL CROSS SECTION
SECTION 305040E
Harper Creek Deposit**

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: S-6	Date: January 2015





LEGEND

- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanoclastics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanoclastics
 - Package Fa: Felsic to intermediate volcanoclastics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanoclastics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- ABA sample location
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (used for geological interpretation)
- Selected copper grade over metres

YELLOWHEAD MINING INC.

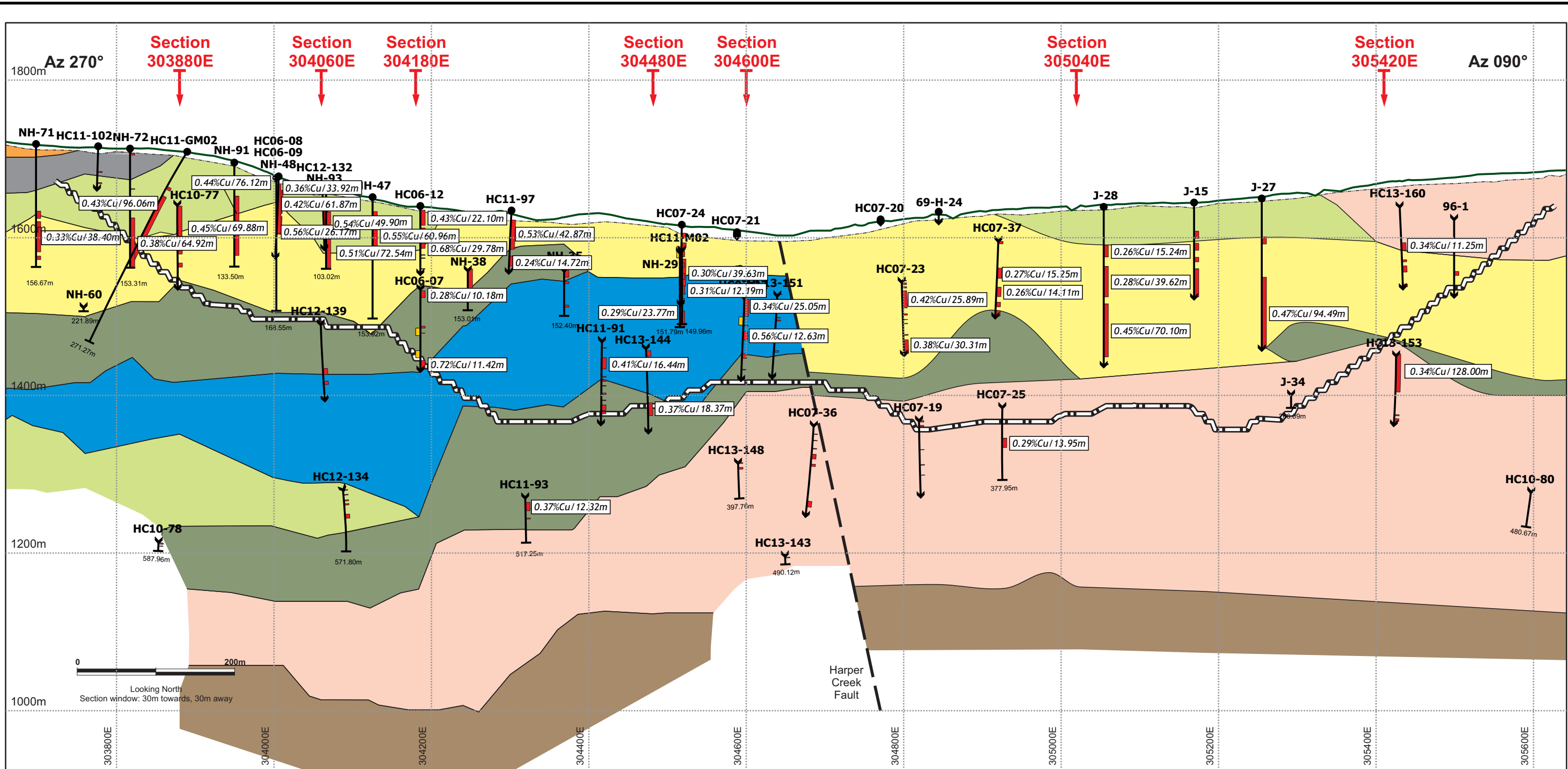
GEOLOGICAL CROSS SECTION SECTION 305420E

Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:5,000	Drawn:	TV
Figure:	S-7	Date:	January 2015

CME



LEGEND

- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanics
 - Package Fa: Felsic to intermediate volcanics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

SYMBOLS

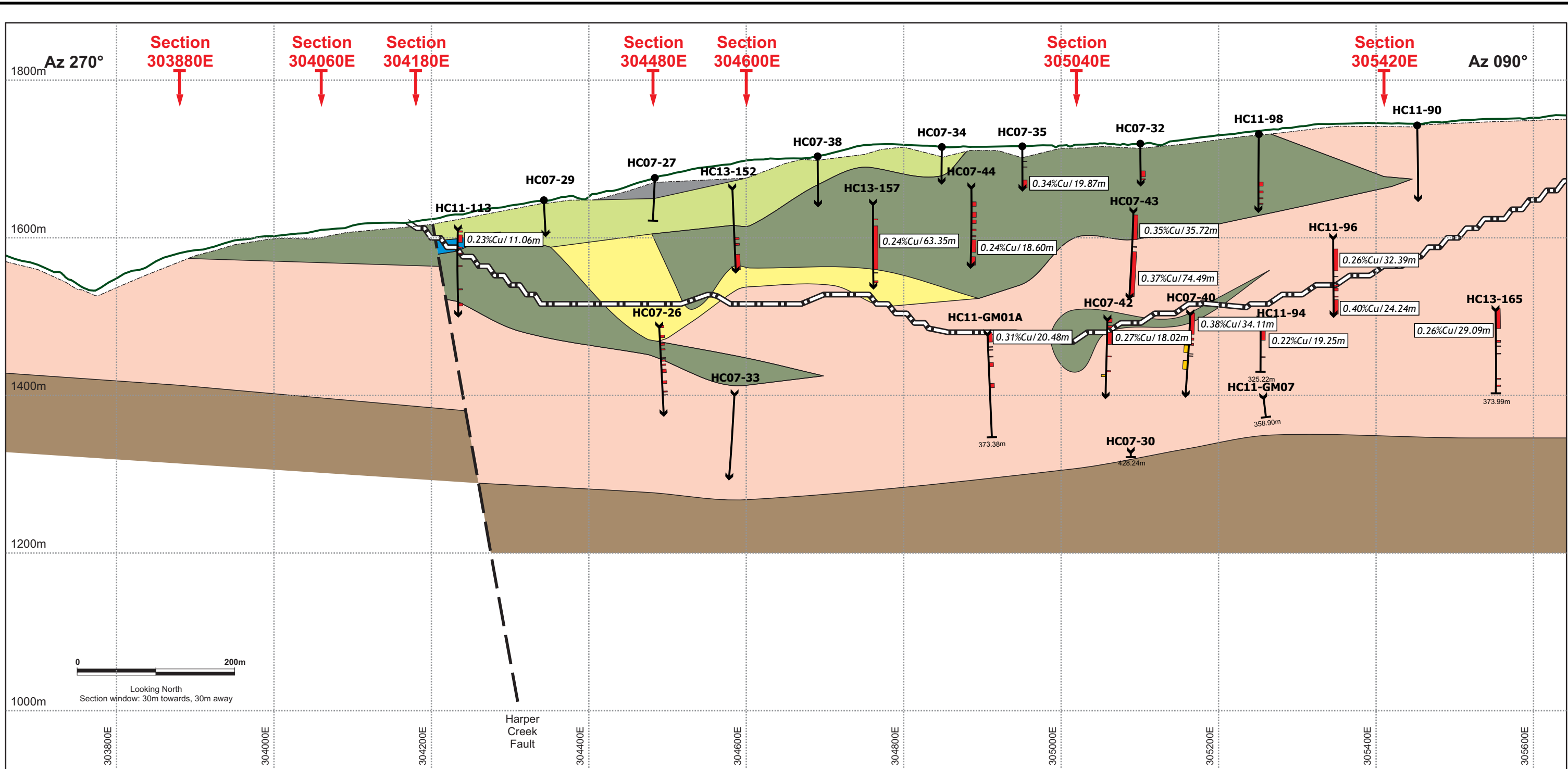
- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- ABA sample location
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (used for geological interpretation)
- Selected copper grade over metres

YELLOWHEAD MINING INC.

GEOLOGICAL LONG SECTION
SECTION 5711600N
Harper Creek Deposit

Harper Creek Project
 Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: L-1	Date: January 2015



LEGEND

- GEOLOGY**
- Andesite/lamprophyre dykes
 - Package H: Mafic polymictic volcanics
 - Package G: Graphitic horizon
 - Package Fb: Intermediate to mafic polymictic volcanics
 - Package Fa: Felsic to intermediate volcanics
 - Package E: Mixed silicified and graphitic horizon
 - Package D: Intermediate volcanics and fragmentals
 - Package C: Graphitic horizon
 - Package B: Sandy sediment dominated
 - Package A: Orthogneiss dominated

- SYMBOLS**
- Surface profile
 - Proposed open pit (Nilsson, 2014)
 - Depth of overburden (approximate)
 - Fault
 - Contact: defined, inferred
 - DDH collar and trace
 - ABA sample location
 - Significant intersection ($\geq 0.2\%$ Cu)
 - Trace entering/exiting section
 - Trace off-section (used for geological interpretation)
 - Selected copper grade over metres

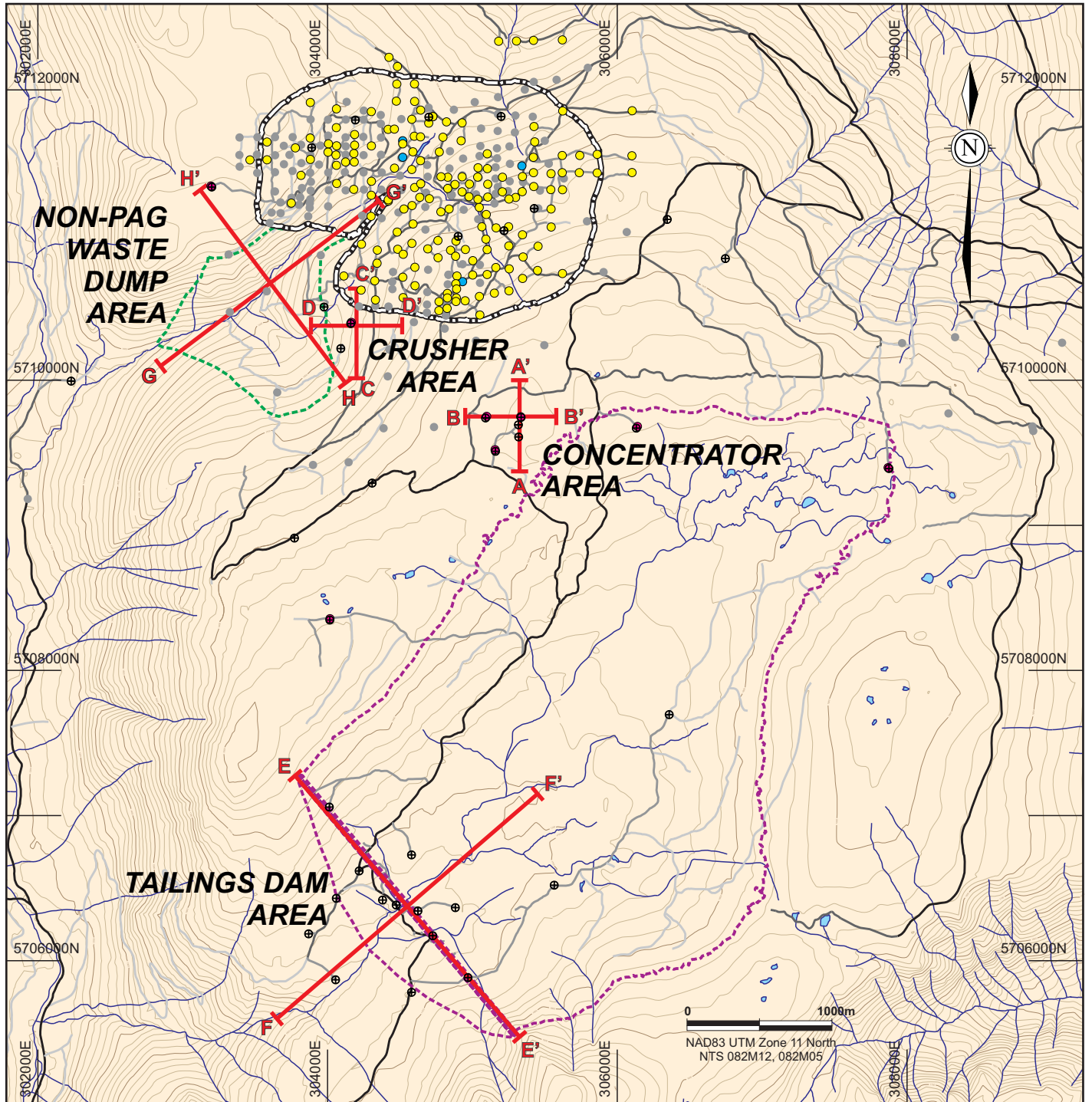
YELLOWHEAD MINING INC.

GEOLOGICAL LONG SECTION
SECTION 5710900N
Harper Creek Deposit

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No: C111-HC	By: CN
Scale: 1:5,000	Drawn: TV
Figure: L-2	Date: January 2015

CME



LEGEND

YMI Drilling (2006 - 2013)

- Resource and Exploration drill hole
- Condemnation drill hole
- Metallurgical drill hole
- ⊕ Geomechanical or Geotechnical drill hole

Non-YMI Drilling (1967 - 1996)

- Historical drill hole

Proposed infrastructure

- Pit (Nilsson, 2014)
- Tailings management facility (KP, 2014)
- Non-PAG waste dump (Nilsson, 2014)

Topography

- Watercourse
- Contour (20m interval)
- All-weather gravel road
- Rough road
- Access trail
- Waterbody

- Cross and long section reference lines

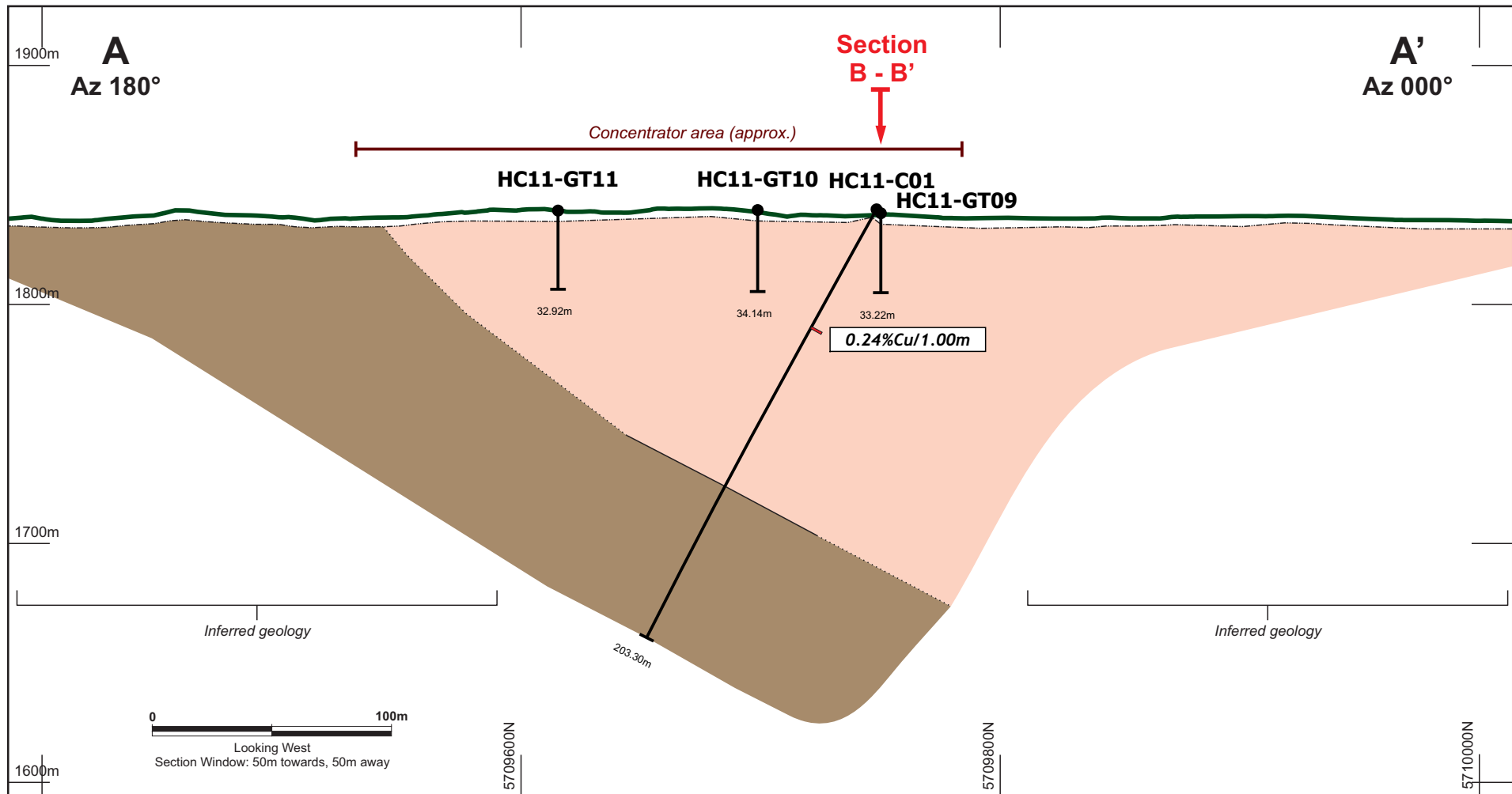
YELLOWHEAD MINING INC.

**GEOLOGICAL SECTIONS INDEX MAP
INFRASTRUCTURE
Harper Creek Project**

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:40,000	Drawn:	TV
Figure:	1	Date:	January 2015





LEGEND

GEOLOGY

- Package B: Sandy sediment-dominated
- Package A: Orthogneiss-dominated
- Overburden (approximate)

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\% \text{ Cu}$)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

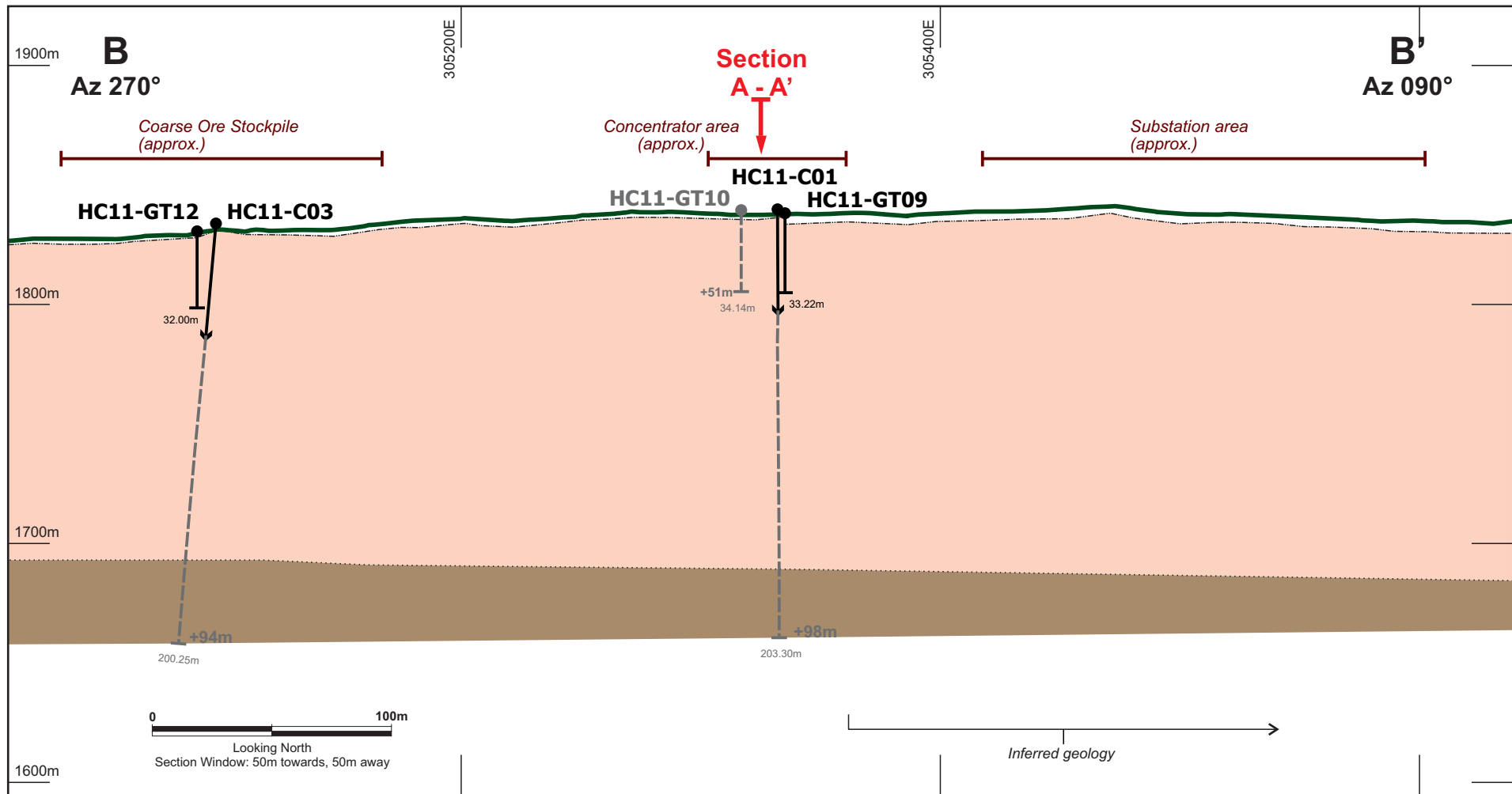
YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION SECTION A - A' Concentrator Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:2,500	Drawn:	TV
Figure:	2	Date:	January 2015





LEGEND

GEOLOGY

- Package B: Sandy sediment-dominated
- Package A: Orthogneiss-dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

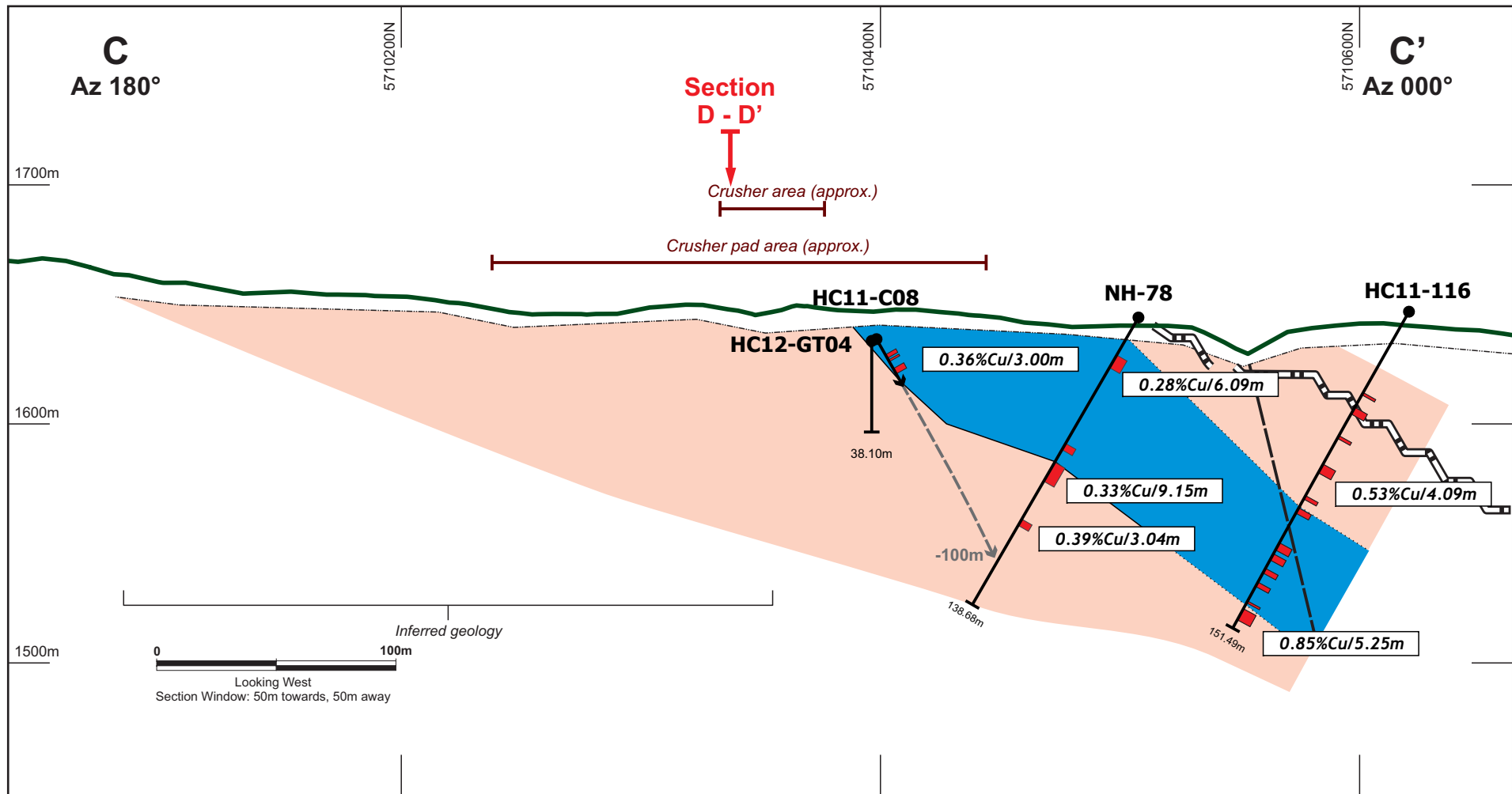
YELLOWHEAD MINING INC.

GEOLOGICAL LONG SECTION SECTION B - B' Concentrator Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:2,500	Drawn:	TV
Figure:	3	Date:	January 2015





LEGEND

GEOLOGY

- Package E: Mixed silicified and graphitic horizon
- Package B: Sandy sediment dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- Selected copper grade over metres

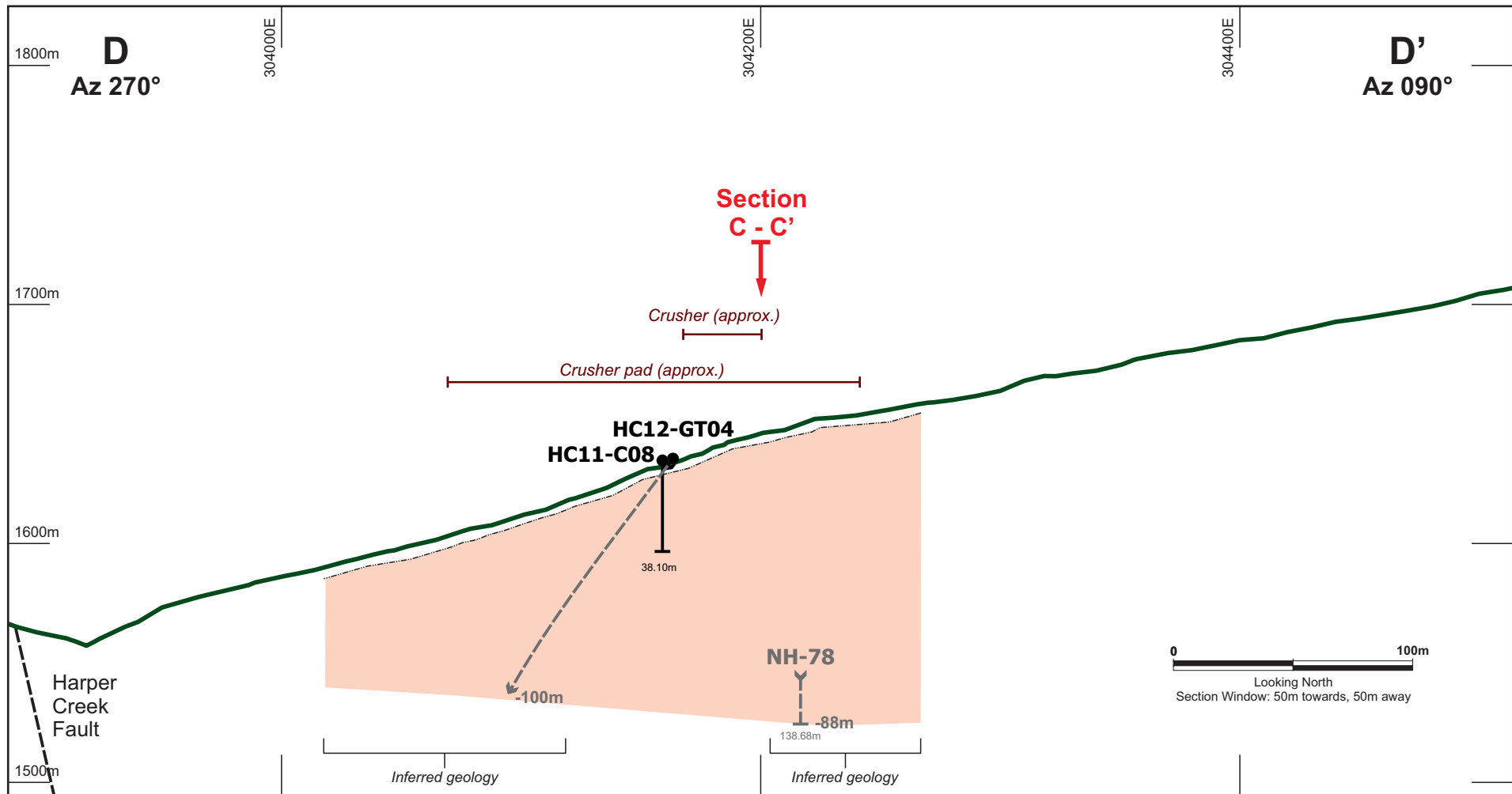
YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION SECTION C - C' Crusher Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:2,500	Drawn:	TV
Figure:	4	Date:	January 2015





LEGEND
GEOLOGY

- Package E: Mixed silicified and graphitic horizon
- Package B: Sandy sediment dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

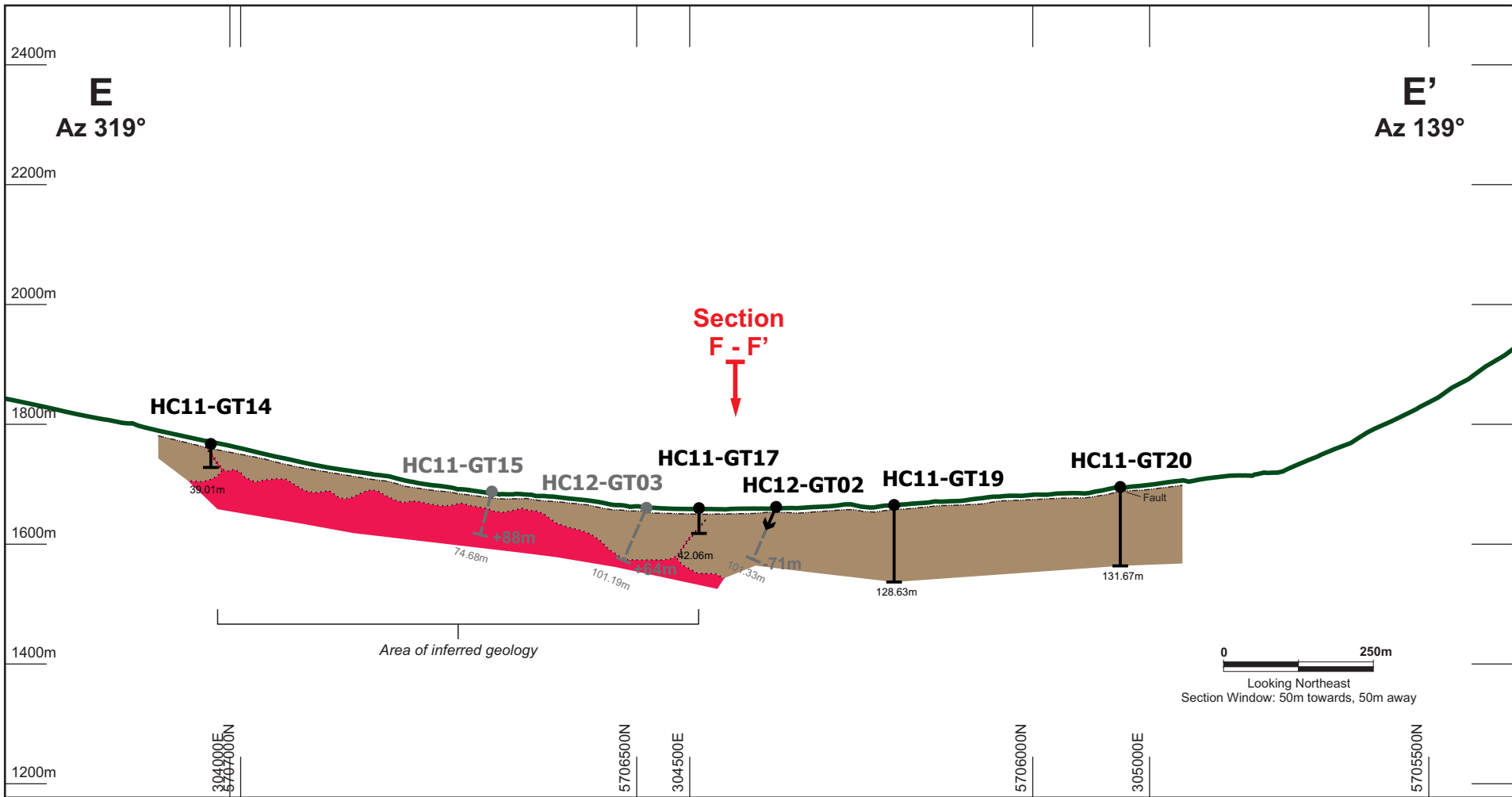
YELLOWHEAD MINING INC.

**GEOLOGICAL LONG SECTION
SECTION D - D'
Crusher Area**

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:2,500	Drawn:	TV
Figure:	5	Date:	January 2015





LEGEND

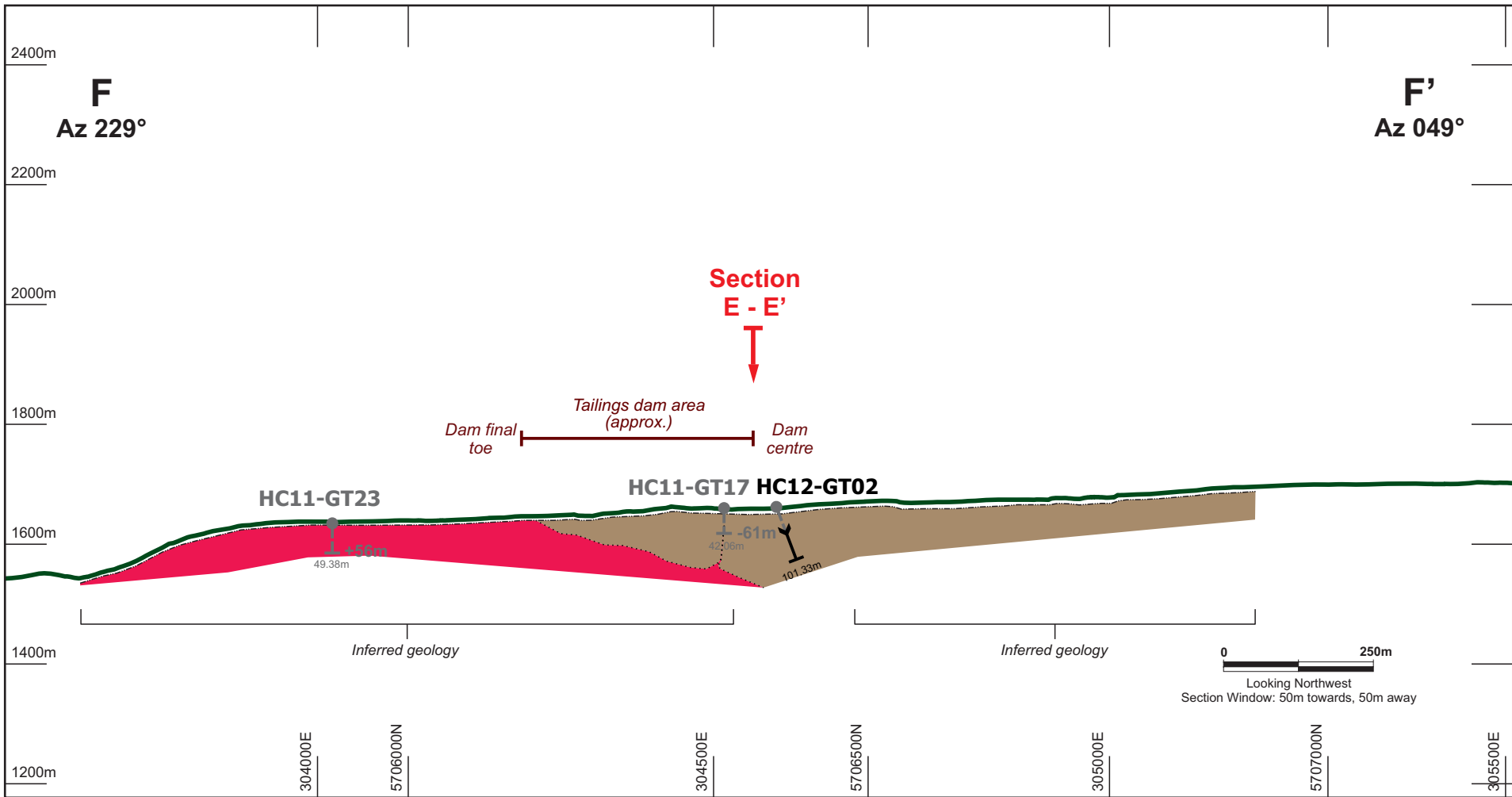
GEOLOGY

- Baldy batholith: Granodiorite
- Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

YELLOWHEAD MINING INC.	
GEOLOGICAL CROSS SECTION	
SECTION E - E'	
Tailings Dam Area	
Harper Creek Project Kamloops M.D., British Columbia, Canada	
Project No: C111-HC	By: CN
Scale: 1:10,000	Drawn: TV
Figure: 6	Date: Janaury 2015



LEGEND

GEOLOGY

- Baldy batholith: Granodiorite
- Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

YELLOWHEAD MINING INC.

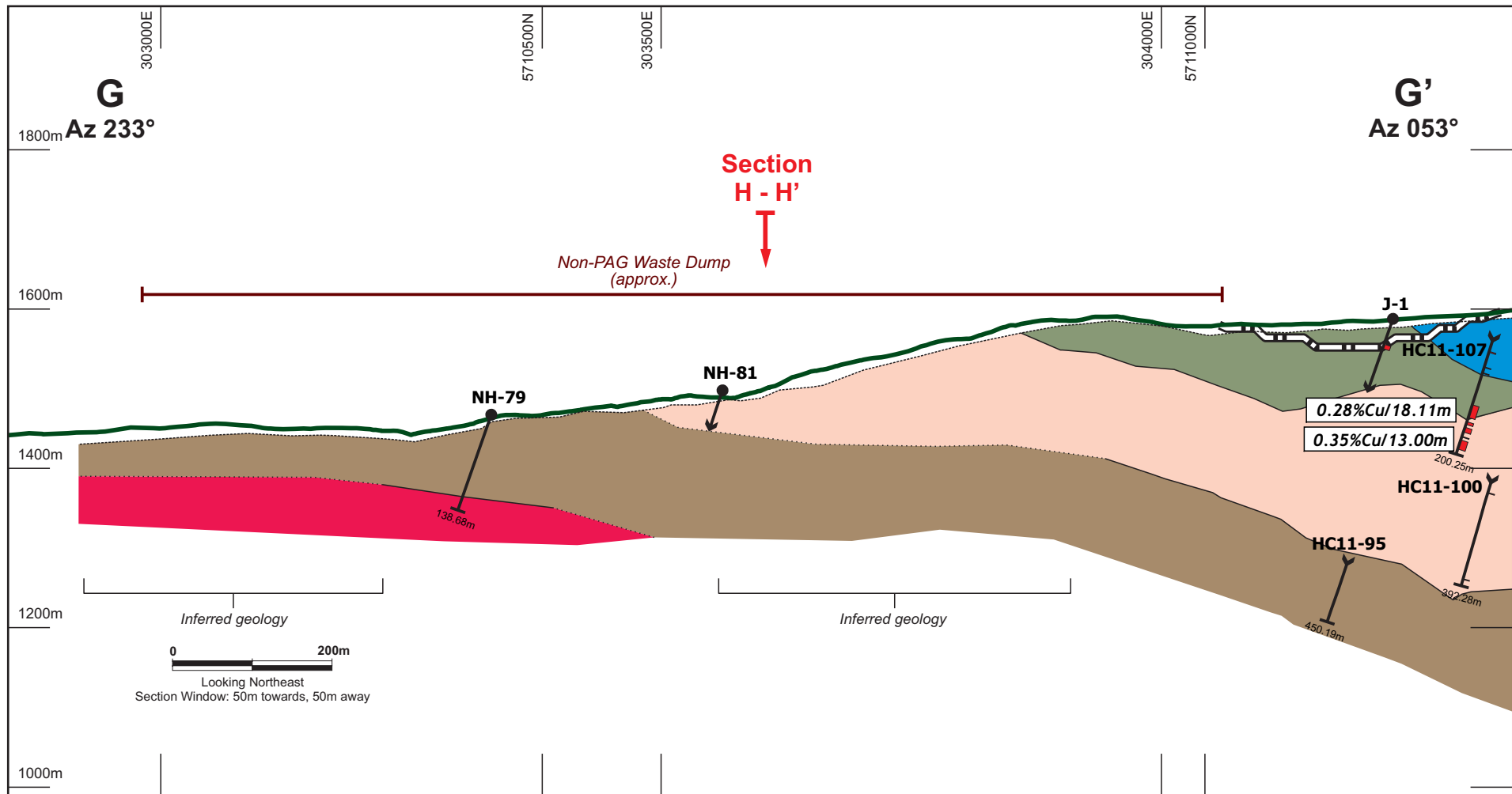
GEOLOGICAL LONG SECTION SECTION F - F'

Tailings Dam Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:10,000	Drawn:	TV
Figure:	7	Date:	January 2015





LEGEND

GEOLOGY

- Baldy batholith: Granite
- Package Fb: Intermediate to mafic polymictic volcanics
- Package Fa: Felsic to intermediate volcanics
- Package E: Mixed silicified and graphitic horizon
- Package D: Intermediate volcanics and fragmentals
- Package B: Sandy sediment dominated
- Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

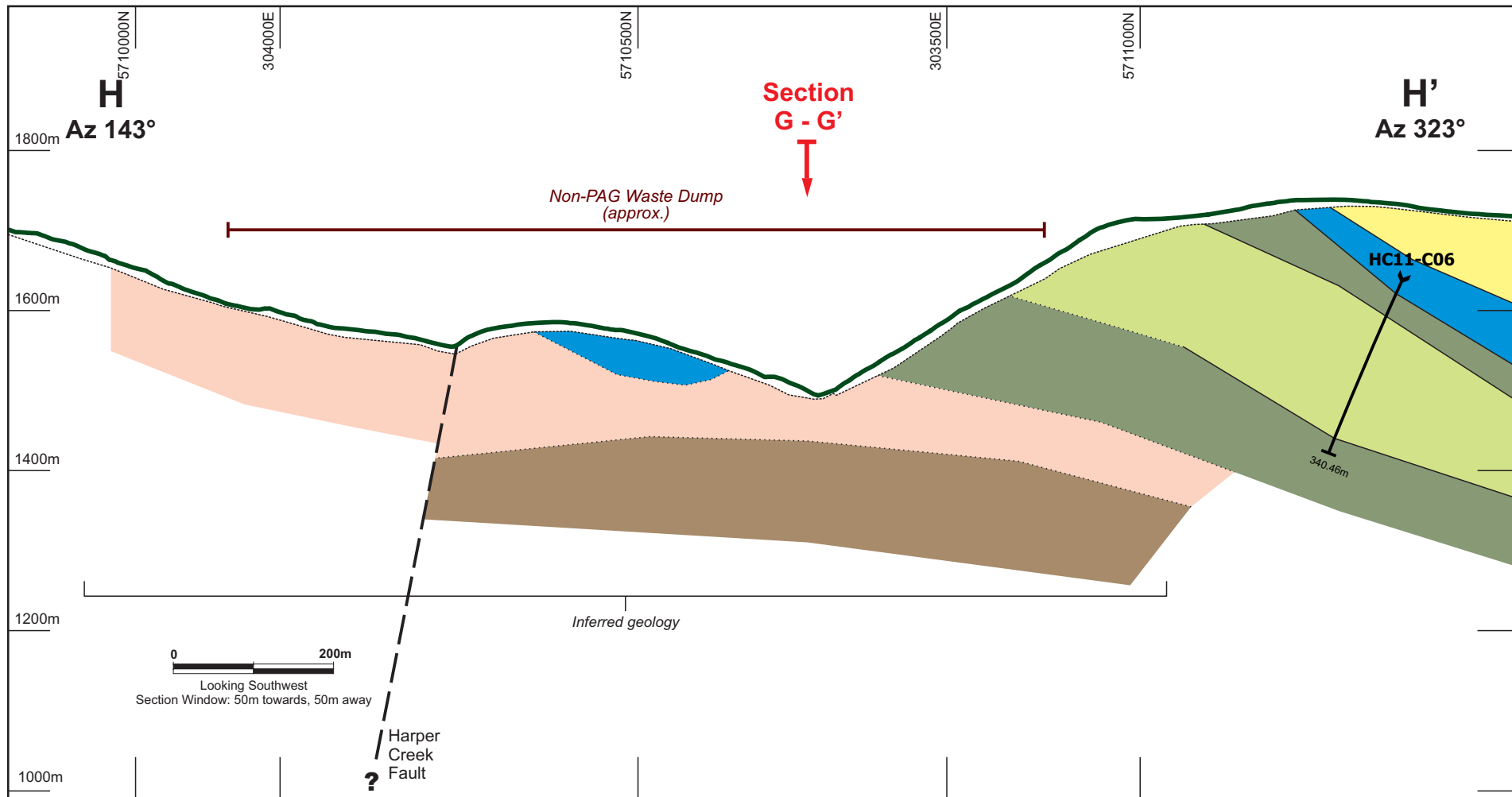
YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION SECTION G - G' Non-PAG Waste Dump Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:7,500	Drawn:	TV
Figure:	8	Date:	January 2015





LEGEND

GEOLOGY

- Baldy batholith: Granite
- Package Fb: Intermediate to mafic polymictic volcanics
- Package Fa: Felsic to intermediate volcanics
- Package E: Mixed silicified and graphitic horizon
- Package D: Intermediate volcanics and fragmentals
- Package B: Sandy sediment dominated
- Package A: Orthogneiss dominated

SYMBOLS

- Surface profile
- Proposed open pit (Nilsson, 2014)
- Depth of overburden (approximate)
- Fault
- Contact: defined, inferred
- DDH collar and trace
- Significant intersection ($\geq 0.2\%$ Cu)
- Trace entering/exiting section
- Trace off-section (for geological interpretation)
- Distance off section centre
- 0.24%Cu/1.00m Selected copper grade over metres

YELLOWHEAD MINING INC.

GEOLOGICAL CROSS SECTION SECTION H - H' Non-PAG Waste Dump Area

Harper Creek Project
Kamloops M.D., British Columbia, Canada

Project No:	C111-HC	By:	CN
Scale:	1:7,500	Drawn:	TV
Figure:	9	Date:	January 2015

