

## Minto Mine

# Heritage Resources Protection Plan

Prepared by:

Minto Explorations Ltd.

Minto Mine

April 2014

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#### 1 Introduction

The Heritage Resources Protection Plan (HRPP) is a requirement of Quartz Mining Licence QML-0001 (QML), which requires "a plan that describes measures to identify and protect historic sites, historic objects, and works of archaeological, paleontological, pre-historic, historic, scientific or aesthetic value." The HRPP must also include "a schedule for training all employees and contractors of the Licensee respecting its heritage awareness policy; and a protocol for the identification, reporting and protection of historic objects and human remains".

The content of this HRPP is derived from the *Plan Requirement Guidance for Quartz Mining Projects* (Yukon Government, 2013). In addition, the protocols outlined in the HRPP are to ensure compliance with the *Historic Resources Act* (Government of Yukon, 2002) and the *Archaeological Sites Regulations* (Government of Yukon, 2003). This HRPP is an update to the previous HRPP, submitted in April 2011 and approved in October 2011.

The purpose of the HRPP is to summarize the heritage resources at the Minto Mine sites, and to establish guidelines for how to identify and protect heritage resources in the project area. Employee and contractor training on the subject of heritage resource identification and action steps, as well as a summary of traditional knowledge reports and protocols that have been incorporated into the Minto Mine project development and operation are also included.

## 1.1 Project Description and Setting

Minto Mine is a high-grade copper and gold mine that is located 240 km north of Whitehorse, Yukon, operated exclusively by Minto Explorations (Minto), a subsidiary of Capstone Mining. Operations are ongoing at this time and began in October 2007. Mining operations currently consist of three open pits, an underground mine, a dry stack tailings facility, a waste rock dump, overburden dumps, a water storage pond, mill complex, camp site, and supporting facilities such as a 28 km access road, airstrip, and barge to cross the Yukon River. The Phase V/VI expansion, will include expansion of a current pit, development of three new open pits and expanded development of the underground mine plan. Expansion of the waste dumps, and overburden dumps will also be required to support the increased resource extraction activities.

The Minto Mine area consists of 164 quartz claims on the west side of the Yukon River within Selkirk First Nation (SFN) Category A Settlement Land Parcel R-6A (Survey 2000- 0112LTO Plan 83638 CSR), and is comprised of land surface leases with SFN. The North Klondike Highway is located on the east side of the Yukon River and the mine-site is accessed by crossing the Yukon River at Minto Landing (Figure 1-1). Minto and SFN are parties to a Cooperation Agreement originally dated September 16, 1997 and amended November 4, 2009. In addition to establishing cooperation with respect to permitting and environmental monitoring, this confidential document deals with other economic and social measures and communication between SFN and Minto.

The Minto Mine area is part of Selkirk traditional territory where activities such as hunting, trapping, berry picking and salmon fishing have taken place. Traditional fishing camps have been established on the Yukon and Pelly Rivers where trading occurred with other coastal First Nations, and later with non-First Nation people at the Hudson Bay Company post at Fort Selkirk. Oral history suggests that the Minto Mine area was used for hunting and berry picking.

## 1.2 Heritage Resource Protection Policy

Minto Mine's Heritage Resource Protection Policy is appended as Appendix A. As with all of the Company's policies, Minto's Heritage Resource Policy is communicated and explained to all staff and contractors. Additionally, employees and contractors are trained on the procedures to follow, should a heritage site or archeological remains be encountered on site.

The information and recommendations contained in the studies referenced in Table 1-2, and in the subsequent sections of this plan, provide clear direction to the first response to the discovery on site of any Heritage Resources.

## 1.3 Heritage Resource Assessments

The east side of Yukon River in the vicinity of Minto Landing four historic sites designated KdVc-2 (Minto Landing), KdVc-3 (Minto Resort), KdVc-4 (Old Tom's Cabin), and KdVD-1 (Minto Creek). Minto has commissioned several archaeological studies to acquire a thorough understanding of the heritage and historic resources in the Project area (1994, 2007 and 2009). A summary of the studies conducted and the results are provided in Table 1-2. Most recently in 2011, Matrix Research Limited was retained to complete a heritage resource overview assessment (HROA), and subsequent heritage resource impact assessment (HRIA). An overview of the areas of high heritage resource potential overlain on the Phase V/VI proposed infrastructure is provided in Figure 1-2. Recommendations for protection of the areas identified in Figure 1-2 are summarized in Section 3.

Table 1-1: Minto Mine Archaeological Studies and Study Results

Survey Date	Study Results	Issued Report
1994	<ul> <li>No archaeological sites were identified at the proposed Mine and mill site located at the headwaters of Minto Creek</li> <li>Identification of heritage sites KdVd-1 and KdVd-2 at Minto Landing</li> </ul>	Greer, 1994
2007	• Examination of site KdVd-1: Found a large bedrock outcrop and a terrace feature overlooking the Yukon River. From the hearth features found, and cultural remains present, the site appears to have been inhabited regularly over the last 4000	Thomas, 2008

Survey Date	Study Results	Issued Report
	years.	
2009	<ul> <li>Further examination of site KdVd-1:</li> <li>193 lithic artifacts and over 2500 animal bone fragments were recovered from two excavation areas</li> <li>Identified species include caribou, moose, muskrat, hare, ground squirrel, and beaver.</li> <li>Fire-cracked rocks from both excavation areas suggest that hearths are also associated with KdVd-1.</li> <li>The site witnessed recurrent and prolonged pre-contact habitation</li> <li>Further examination of site KdVd-2:</li> <li>Cultural materials found above and below a previously-dated layer of White River Ash (Smith et al. 2004) indicate occupations before and after AD 800.</li> <li>Recovery of 323 lithic artifacts including stone tools of precontact or proto-contact age.</li> <li>492 bone fragments consisting mostly of small, unidentifiable burned or calcined pieces.</li> <li>A buried hearth with associated lithic material was found below the layer of White River Ash and four possible cultural depressions were identified in the immediate area.</li> <li>Pre- and proto-contact artifact types at the site indicate general-purpose activities such as tool maintenance and use, and subsistence activities.</li> </ul>	Farnell, 2010
2011	<ul> <li>Impact assessment for the proposed Minto Mine expansion:</li> <li>Two heritage sites, KdVd-2 and KdVd-3, both consisting of pre-contact lithic artifacts, were identified within the Minto Mine claim area but outside of the Minto Mine Expansion area.</li> </ul>	Matrix, 2011

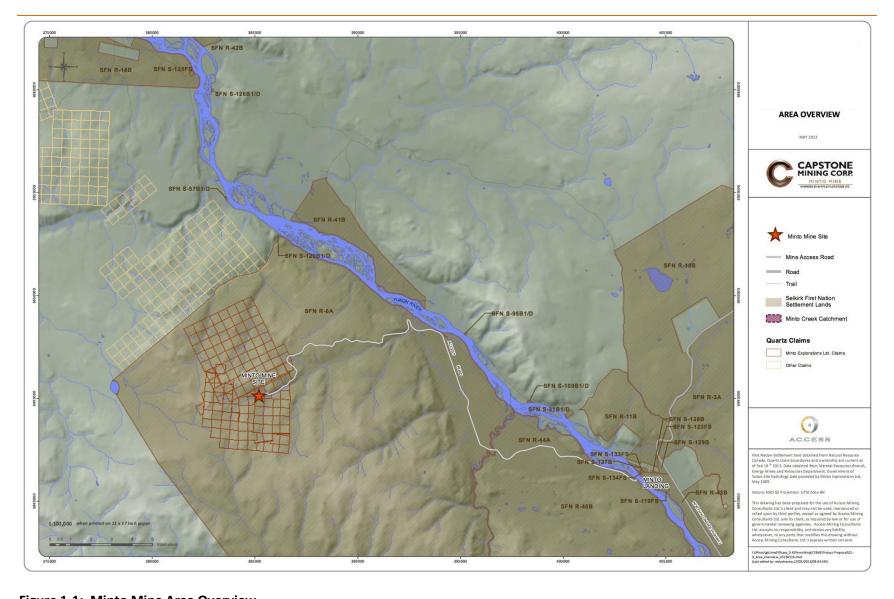


Figure 1-1: Minto Mine Area Overview

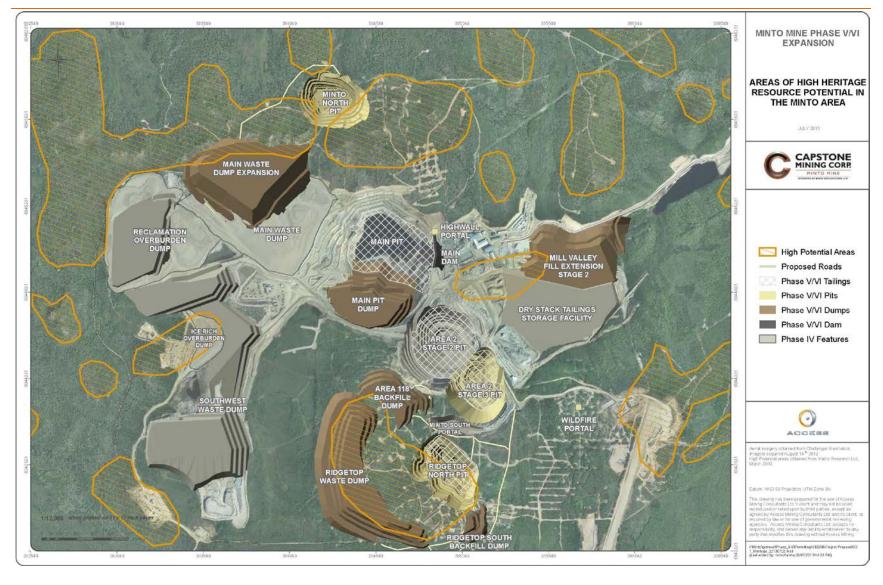


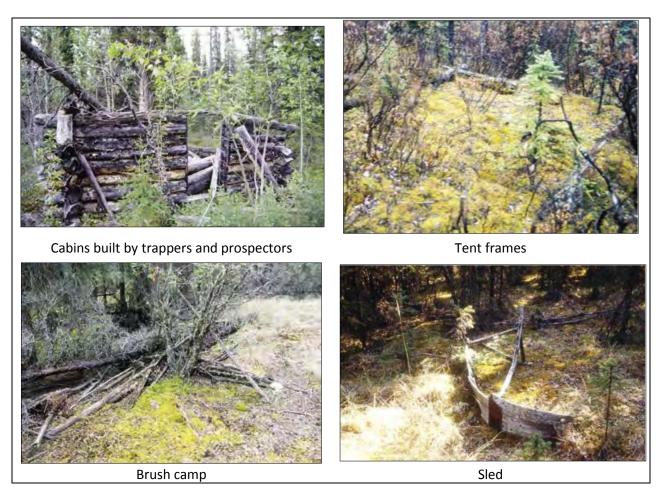
Figure 1-2: High Heritage Resource Potential Areas in the Minto Mine Area

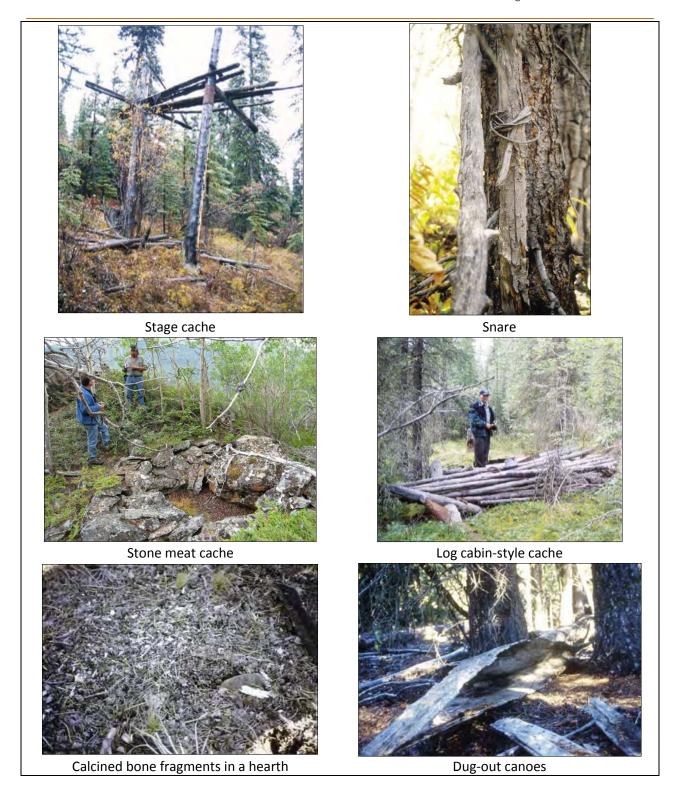
## 2 Identification of Heritage Resources

In this section, various methods of identifying heritage resources are summarized, as well as records and reporting that should be conducted, as derived from the *Handbook for the Identification of Heritage Sites and Features* (Department of Tourism and Culture, 2007).

## 2.1 Heritage Sites and Features

The kinds of heritage resource sites commonly found in the Yukon include cabins, tent frames, brush camps, caches, traps and snares, fire-cracked rock, fish camps, watercraft, stone adze-cut stumps, game drives and surrounds, trails, and graves, and examples of sites are shown below (from Department of Tourism and Culture, 2007).





## 2.2 Reporting Requirements

The Heritage Resource Site Observation Form is provided in Appendix B and should be completed in any instance where it is believed a heritage resources site has been encountered. These forms are held by

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the Environmental department, and will be filled out once the initial observer has reported that a potential heritage resource site has been located. If a potential heritage resource site is observed, it will be immediately reported to the Yukon Archaeologist and to the Selkirk First Nation Heritage Office (contacts provided in the *Observation Form* - Appendix B).

## 3 Heritage Resource Protection Plan

Heritage resources protection at the Minto Mine is an important component of successful mine construction and operation. Some of the key guiding principles for heritage resource protection at the Minto Mine include:

- Every effort shall be made to avoid disturbing a culturally important site;
- Traditional knowledge and views will be incorporated into the planning, development and operations of the Minto Mine;
- Heritage resource protection will be incorporated into all activities involving land disturbance; and
- All employees and contractors will be trained in heritage resource protection.

Following the assessment conducted in 2010 (Matrix Research Ltd., 2011), several high potential areas were identified (Figure 1-2), and two pre-contact heritage sites were identified within the area of potential disturbance (Figure 3-1). Site KdVd-1 was also identified at Minto Landing, at the barge crossing site. The following was recommended for the identified heritage sites:

- 1. Avoidance: If the site areas and appropriate buffers (100 m) can be avoided then no further heritage assessments are recommended.
- 2. If the site areas cannot be avoided, then further heritage work including detailed sites assessments, and possibly mitigative data recovery, is recommended.

Table 3-1 summarizes the responses required should an employee or contractor encounter a site with heritage resource values. Contact information for Minto Mine employees and external resources is provided in Table 3-2.

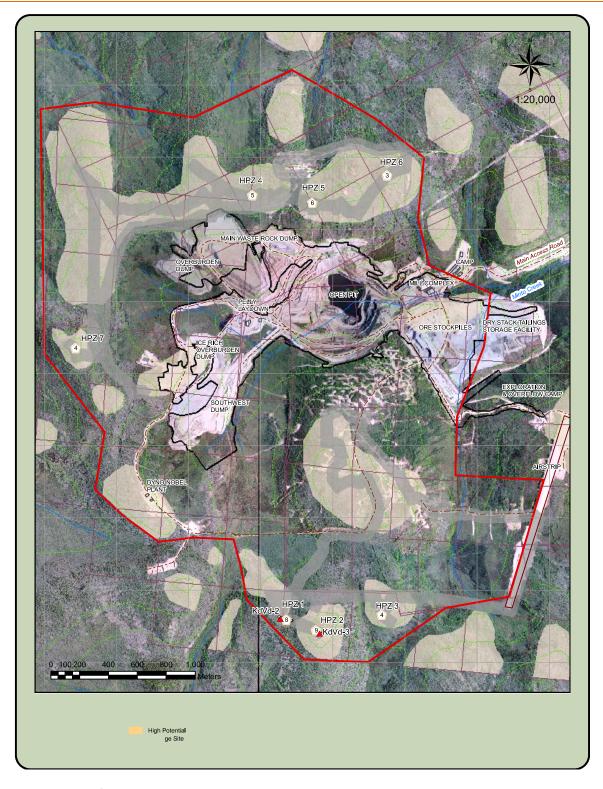


Figure 3-1: Identified Heritage Sites at the Minto Mine

**Table 3-1: Heritage Resource Protection Measures** 

Heritage Discovery	Appropriate Response		
Discovery of evidence	1.	Stop work immediately	
of human use (cabin remains, tools, arrow	2.	Contact supervisor and/or a member of the Environment department	
heads, etc.)	3.	Ensure that the area is secure	
	4.	Next steps: determine if the find is a heritage resource in discussion with SFN and Yukon Government (Department of Tourism and Culture, Yukon Archaeology) and develop suitable strategy for avoidance, removal or mitigation.	
Discovery of human	1.	Stop work immediately	
remains	2.	Contact Site Manager	
	3.	Next steps include notification to RCMP and actions in accordance with <i>Guidelines for Respecting the Discover of Human Remains and First nation Burial Sites in the Yukon</i> (Yukon Tourism Heritage Branch, 1999).	
Paleontological	1.	Stop work immediately	
Resource	2.	Contact supervisor and/or a member of the Environment department	
	3.	Ensure that the area is secure	
	4.	Next steps: contact SFN and Department of Tourism and Culture, Yukon Paleontology	

**Table 3-2: Contact Information for Minto Mine Personnel and External Agencies** 

Resource	Email	Contact Number
Minto Mine Communications Contact Info		
Safety Department		(604) 759-0860 ext. 4644
Ron Light, General Manager		(604) 759-0860 ext. 4639
Environmental Department		(604) 759-0860 ext. 4659
External Reporting and Emergency Phone Contacts		
Yukon Government, Department of Tourism & Culture, Yukon Paleontology	grant.zazula@gov.yk.ca	867-667-8089
Yukon Government, Department of Tourism & Culture, Yukon Archaeology	ruth.gotthardt@gov.yk.ca	897-667-5983
RCMP – Pelly Crossing		(867) 537-5555
RCMP – Whitehorse		(867) 667-5555

Resource	Email	Contact Number
Selkirk First Nation, Lands Director	sydneyw@selkirkfn.com	(867) 537-3331
Selkirk First Nation Heritage Office	Emma Alfred	(867) 537-3331

As part of the identification of heritage resources (Section 2), should a potential heritage resource site be identified, the Selkirk First Nations Heritage Office will be contacted immediately.

## 4 Employee and Contractor Awareness and Training

All employees and visitors to the Minto Mine site are required to complete orientation. In the case of long-term mine employees, they are also required to complete the "Big 6" training program. This training was updated in 2013 and is delivered regularly to contractors by the environmental department at site meetings.

#### 4.1.1 Orientation

Employees and visitors are required to sign off on the environmental policy as part of the orientation process. Employee, contractor and visitor orientations all include a summary of heritage resources and the steps to take should a heritage resource sites be identified.

#### **4.1.2** "Big 6" Training

As part of the orientation, all Minto employees receive further computer-based training, followed by written tests. The "Big 6" package is focused on some of the most common safety training required for site, which included WHMIS (Workplace Hazardous Material Information system), fall protection, confined spaces, lock out and hot work training. The sixth component to the program is specifically focussed on Environmental Awareness training. The environmental component of the training includes Selkirk First Nation and heritage resources education, wildlife awareness, spill prevention and response, and waste management training.

## 5 Traditional Knowledge

As part of the Environmental and socio-economic assessment conducted for the Phase IV and Phase V/VI mine expansions, Minto conducted a Traditional Knowledge Study in 2010.

While the contents of the report are confidential, some key areas of concern were identified by Selkirk First Nation (SFN) community members, including the following:

Abundance

Environmental changes

Environmental conditions

Environmental stresses

Habitat

Selkirk First Nation – community relations

The Land – places, landmarks & connections

Traditional use activity - fishing

Traditional use activity – hunting

Traditional use activity – trapping

- Health and quality
- Minto Mine area Phase V areas
- Minto Mine area traplines
- Traditional use activity medicinal plants
- Traditional use activity vegetation and food plants
- Traditional use activity vegetation
- Wildlife

The Traditional Knowledge study went into considerable depth about how the area was used in the past, important events that took place there, environmental changes observed by SFN members, and how SFN members perceive the impact of the mine on the land. SFN Lands & Resources staff regularly conduct mine site inspections and elders' groups and other citizens are welcomed to take tours of the mine area.

As further support to the protection of traditional knowledge, Minto also funds traditional games events in Pelly Crossing and sponsors SFN's Traditional Knowledge Awareness Program, which seeks to promote the continuity of traditional knowledge and cultural practise among SFN youth. Once a year, mine staff and SFN members travel together to Fort Selkirk, where Minto employees learn of the history and heritage of SFN.

#### 6 References

Department of Tourism and Culture. (2007). *Handbook for the Identification of Heritage Sites and Features*. From http://www.tc.gov.yk.ca/publications/Heritage\_Handbook\_2007(1).pdf

Farnell, G. 2010 Archaeological Investigations at Trouble Hill, Final Report, 09-3ASR. Cultural Services Branch, Department of Tourism and Culture. Whitehorse: Government of Yukon.

Government of Canada. (1985, January 18). Transporation of Dangerous Goods Act SOR/85/77.

Government of Yukon. (2003). Archaeological Sites Regulation. Yukon Regulations O.I.C. 2003/73.

Government of Yukon. (2002). Environment Act. Revised Statutes of the Yukon: Environment Act, RSY 2002, c.76.

Government of Yukon. (2002). Historic Resources Act. Revised Statutes of the Yukon 2002, Chapter 109.

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Yukon Government. (2013, August). *Plan Requirement Guidance for Quartz Mining Projects*. From http://www.yukonwaterboard.ca/forms/quartz/Plan%20Requirement%20Guideline%20for%20Quartz% 20Mining%20Projects%20-%20August%202013-kh.pdf

Yukon Government. (2003, March 25). Quartz Mining Land Use Regulations O.I.C. 2003/64. Whitehorse, Yukon.

Yukon Tourism Heritage Branch. (1999). Guidelines Respecting the Discovery of Human Remains and First Nation Burial Sites in the Yukon. Yukon Government.

# **Appendix A: Heritage Resources Protection Policy**



#### HERITAGE RESOURCES PROTECTION POLICY

#### 1. PURPOSE

The purpose of this policy is to define how Minto Explorations Ltd. ("the Company" or "Minto Mine") will strive to minimize the impact on any heritage resources in the area affected by the Company's activities.

#### 2. SCOPE

This policy applies to all employees and contractors of Minto Explorations Ltd.

#### 3. POLICY DETAILS

#### 3.1 Statement of Intent

The Company (a subsidiary of Capstone Mining Corporation) is committed to observing good practise with regard to the identification and protection of any Heritage Resources that may exist on the mine property, or areas affected by the mine operations.

#### 3.2 Guidelines:

In order to achieve this, the Company, along with its employees and contractors, shall:

- Ensure that all activities are in compliance with the relevant legislation, notably the *Territorial Lands Act*, the Quartz and Placer Land Use Regulations, *the Historic Resources Act* and the Archaeological Sites Regulation.
- Make all reasonable efforts to identify Heritage Resources present on the mine lease property and plan
  activities so as, where possible, to avoid all disturbance to those sites or, where not possible, to
  minimize impacts.
- Coordinate closely with Selkirk First Nation and Yukon Government's Heritage Resources Unit with regard to the protection of any Heritage Resources present on site.
- Train all relevant employees and contractors to understand their responsibilities as they pertain to the protection of Heritage Resources.
- Refer to Minto Mine's Heritage Resources Protection Plan for more information, if desired.

Date Issued: April 9 2014 Author

Date Revised: n/a

Authorized By:



#### 4. **RESPONSIBILITIES**

Table 1 summarizes the responses required should an employee or contractor encounter a site with heritage resource values.

**Table 1 : Heritage Resource Protection Measures** 

Heritage Discovery	Appropriate Response
Discovery of evidence of human use (cabin remains, tools, arrow heads, etc.)	<ol> <li>Stop work immediately</li> <li>Contact supervisor and/or a member of the Environment department</li> <li>Ensure that the area is secure</li> <li>Next steps: Environment Manager to determine if the find is a heritage resource in discussion with SFN and Yukon Government (Department of Tourism and Culture, Yukon Archaeology) and develop suitable strategy for avoidance, removal or mitigation.</li> </ol>
Discovery of human remains	<ol> <li>Stop work immediately</li> <li>Contact Site Manager</li> <li>Next steps include Environment Manager notification to RCMP and actions in accordance with Guidelines for Respecting the Discover of Human Remains and First nation Burial Sites in the Yukon (Yukon Tourism Heritage Branch, 1999).</li> </ol>
Paleontological Resource	<ol> <li>Stop work immediately</li> <li>Contact supervisor and/or a member of the Environment department</li> <li>Ensure that the area is secure</li> <li>Next steps: Environment Manager to contact SFN and Department of Tourism and Culture, Yukon Paleontology .</li> </ol>

#### 5. REFERENCES TO RELATED DOCUMENTS

Minto Mine Heritage Resources Protection Plan, Minto Mine April 2014.

Date Issued: April 9 2014

Date Revised: n/a

Authorized By:

# **Appendix B: Heritage Resource Site Observation Form**



# **Heritage Resource Site Observation Form**

Date:	Time (24hr):	Observer:
GPS Location:	Estimate of site featur	re extent:
Description of setting and access:	-	
Description of site and features:		
	-	

## **Prehistoric Site Checklist**

Site Type	Features	
Habitation	Housepit	
	Cave, rock shelter	
	Other	
Trail	Visible	
	Bent trees	
	Trail markers	
Campsite	Fire-cracked rock	
	Calcined bone	
	Lithics (stone axe,	90000
	artificial cobble	
	concentration)	-
	Culturally modified	
Burial	Ground depression	
	Mound	
	Cremation	
Cache	Ground cache	
	Boulder cache	
Subsistence	Caribou fence	
	Rock hunting blind	
	Fish trap	
	Net sinker stones	
Other		

## **Historic Site Checklist**

Site Type	Features	
Structure	Brush camp Tent frame Log building	
Structural traces	Building outline or berm Building foundation (log-based, stone-based, concrete-based)	
	Depression, rectangular Depression, other	
Cultural material	Tin cans Bottles Axe-cut stumps, culturally modified trees (bark	000
Burial	stripping, ringed) Grave house Grave fence Cross Unmarked or ground disturbance, depression	0000
Subsistence feature	Deadfall trap Hunting blind (brush or tree construction) Fish wheel Fish net Net sinker stones Traps (leg hold and "houses") Snares	
Mining	Placer workings "Glory holes" Mine adits Other (specify)	
Travel	Trail Blazed trees Wagon road Watercraft	



## **Heritage Resource Site Observation Form**

Photographs	
PHOTO 1: Description	PHOTO 2: Description
PHOTO 3: Description	PHOTO 4: Description

### **Environmental Department Should Report Observation to:**

**Ruth Gotthardt** 

Ruth. Gotthardt@gov.yk.ca

Archaeology Heritage Resources Unit, Cultural Services Branch Department of Tourism and Culture Government of Yukon Box 2703, Whitehorse, Yukon Y1A 2C6
Phone (867) 667-5983; Toll free 1-800-661-0408

Selkirk First Nation Heritage Office (867) 537-3331

Completed by:	_ Observer/Safety/Environment/Supervisor (circle one)