



## ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE:** Diamond Drilling Report on the **Rateria Property**

**TOTAL COST:** \$140,576.66

**AUTHOR(S):** Sassan Liaghat, Ph.D, David Blann, P.Eng

**SIGNATURE(S):** "sassan liaghat" "david blann"

**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):** (MX-4-402), (October 29, 2012)

**STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):** 5423562

**YEAR OF WORK:** 2012

**PROPERTY NAME:** Rateria

**CLAIM NAMES (on which work was done):** 513870, 522356,563796,572518,954808,954819

**COMMODITIES SOUGHT:** Copper, Molybdenum, Gold, Rhenium

**MINFILE NUMBERS:** 14675-20/1620473-2

**MINING DIVISION:** Kamloops

**NTS / BCGS:** 092I.036

**LATITUDE:** 50<sup>0</sup> 21' 59" North **LONGITUDE:** 120<sup>0</sup> 57' 27" West (at centre of work)

**UTM:** 645000E; 5582000N Zone 10

**OWNER(S):** Happy Creek Minerals Ltd. (FMC 203169)

**MAILING ADDRESS:** #460 – 789 West Pender St.; Vancouver, B.C.; V6C 1H2

**OPERATOR(S) [who paid for the work]:** Same as above

**MAILING ADDRESS:** Same as above

**REPORT KEYWORDS:** the Rateria property is underlain by granodiorite, quartz diorite, quartz monzonite, and crowded quartz feldspar porphyry dykes. These lithologies are tentatively assigned to the Bethsaida, Skeena and Chataway phases of the Upper Triassic - Lower Jurassic Guichon Creek batholith which hosts the Valley Copper and Lornex deposits to the northwest. The copper sulphide minerals are comprised predominantly of bornite, chalcocite and minor chalcopyrite within fracture controlled quartz-sericite and locally k-feldspar alteration. Pyrite is generally rare in all alteration assemblages.

**PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:** 1829, 1881, 3709, 9211, 10139, 26409, 27785, 28094, 28878, 30067, 30822

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
DRILLING (total metres, number of holes, size, storage location)	629.12 metres 2 holes NQ Core stored on site	513870	\$ 135,576.66
Geology /sampling of previous drill hole	Core logging/sampling	513870	\$5,000.00
		Total Cost	\$140,576.66

# ASSESSMENT REPORT OF DIAMOND DRILLING

on the

## RATERIA PROPERTY

Permit Number: MX-4-402

Event Number: 5423562

Kamloops Mining Division

British Columbia

BCGS: 092I.036

Map Sheet: 092I/036, 046

UTM East: 635500

UTM North: 5579300

UTM Zone 10N

Prepared for:

**HAPPY CREEK MINERALS LTD.**

**#460-789 W Pender St**

**Vancouver, BC, V6C 1H2**

By:

**Sassan Liaghat, Ph.D & David Blann, P.Eng.**

February 25, 2013

**BC Geological Survey  
Assessment Report  
33648**

## Summary

The Rateria property is situated within the Highland Valley copper belt, approximately 40 kilometres northwest of Merritt, B.C. The claims are accessible by good gravel roads from Lower Nicola or Merritt, B.C. The property is underlain by multiple phases of the Guichon Batholith that is Upper Triassic-Lower Jurassic in age. The younger phases of the Guichon Batholith host five large deposits. The oldest rocks are Border phase that are comprised of hornblende rich diorite, gabbro or pyroxenite and occur peripherally to younger phases of the Batholith. The Rateria property covers portions of the younger phases of the Batholith that includes from youngest to oldest, Bethsaida, Skeena, Bethlehem and Chataway-Guichon phases, respectively. These rocks vary from quartz monzonite to quartz diorite and granodiorite in composition. Syn to post-Bethsaida age dykes consist of fine to medium grained grey to pale green colored quartz feldspar phyrlic or porphyry, and orange-tan colored fine grained k-feldspar rich aplite.

Rock alteration varies from potassic (biotite, k-feldspar, quartz), propylitic (chlorite, epidote, carbonate), phyllic (quartz, sericite, muscovite) and argillic (kaolinite, montmorillonite, dickite and other clay). Magnetite is variably altered to hematite, specularite or martite. The copper sulphide minerals are comprised predominantly of bornite, chalcocite and minor chalcopyrite. Pyrite is generally rare in all alteration assemblages.

Exploration in the region dating from the 1950's to present has included prospecting, soil sampling, regional geochemical surveys, geological mapping, trenching, geophysical surveys, percussion and limited diamond drilling. Zone 2 was discovered by Happy Creek Minerals in 2008 and is located near the contact between Chataway and more felsic units (Bethsaida, Skeena or Bethlehem phases) of the Guichon Batholith, where shearing, faults, and dykes of aplite to feldspar porphyry composition occur. The mineralized zone is comprised of predominantly bornite, chalcocite, chalcopyrite and variable concentrations of molybdenite that are associated with quartz and k-feldspar zones; these are enveloped and in part overprinted by phyllic and propylitic alteration.

In 2012, two NQ size diamond drill holes were completed in Zone 2. The program was designed to define and expand the mineralized zone in this area. Drill results include R12-01 with 92.8 metres of 0.30% copper, 0.15 g/t gold starting from bedrock surface and the zone remains open in extent. This includes a 12.5 metre interval containing 0.63 % copper, 0.66 g/t gold and 3.2 g/t silver. R12-02 returned 152.5 metres of 0.35% copper and 0.57 g/t rhenium, including 32.5 metres of 0.91% copper, 0.010 %

molybdenum, 4.0 g/t silver, 0.11 g/t gold and 1.83 g/t rhenium. Overall, F12-02 contains 257.3 metres of 0.23% copper starting at 70.0 metres and reflects an approximate true width of around 100 metres.

Drilling to date in Zone 2 has returned elevated to substantial copper, molybdenum, gold, silver and rhenium values within an area approximately 1.0 kilometre by 600 metres in dimension and to a depth of at least 350 metres. Zone 2 remains undefined and open in extent.

## Table of Contents

Summary .....	iv
1. Location and Access .....	1
2. Claim Status .....	1
3. History.....	1
4. Regional Geology .....	4
5. 2012 Exploration Activities .....	7
5.1 Diamond Drilling .....	7
5.2 Logging and Sampling of 2011 drill core .....	7
5.3 Analytical Procedures .....	8
5.4 Quality Control Procedures.....	8
6. Results and Discussion .....	9
7. Conclusions and Recommendations .....	10
8. References.....	12
9. Statement of Costs .....	13
10. Statement of Qualifications.....	14

### Tables

- Table 1 - Rateria Mineral Tenures
- Table 2 - 2012 Diamond Drill Hole Collar
- Table 3 - Highlights of Zone 2 Drill Results
- Table 4 - Highlights of Hole R11-41 Drill Results

### Figures

- Figure 1 - Location Map
- Figure 2 - Mineral Tenure Locations
- Figure 3 - Regional Geology
- Figure 4 - Location of Exploration Activities, 2012
- Figure 5 - Zone 2, Diamond Drill Holes, Projection of Cu Assay
- Figure 6 - R12-01 Drill Hole Section, Cu Assay
- Figure 7 - R12-02 Drill Hole Section, Cu Assay
- Figure 8 - R11-41 Drill Hole Section, Cu Assay

### Appendices

- Appendix 1 - Diamond Drill Hole Logs
- Appendix 2 - Drill Core Assay Summary
- Appendix 3 - Diamond Drill Hole Geotechnical Log
- Appendix 4 - Certificates of Analyses

## 1. Location and Access

The Rateria property is located approximately 40 kilometres northwest of Merritt, British Columbia, and 10 kilometres southeast of the Valley Copper mine (Figure 1). The property is centred on 1200 57" 27' West longitude and 500 21" 59' North latitude on BCGS map sheet 0921036. Access to the property from Merritt, B.C., is via Highway 8 to Lower Nicola, then north along Aberdeen Road to Pimainus Lake Forest Service road. With relative proximity to the Valley Copper Mine and operating mill, infrastructure is considered excellent.

The Rateria property is situated within an upland plateau area of approximately 1,400 to 1,600 metres elevation. The area is covered by a blanket of multi—stage, complex glacial-fluvial sand, gravel, clay and boulders of variable thickness from less than 1.0 metre to over 50 metres. Small lakes, swamps and seasonal creeks occur throughout the property. Forested areas locally contain fir, birch, poplar and spruce, however lodge pole pine is predominant and a pine beetle infestation is the focus of ongoing logging activity. Characterized by a dry interior climate, the area has burnt and re-grown several times. Temperatures range from –30 to +40 degrees Celsius, and 50-100 cm annual precipitation occurs primarily as snow during the winter. Water, in suitable quantities for all stages of exploration, is generally available year round from nearby creeks and lakes. Well trained professional and field personnel as well as heavy equipment are available in Kamloops and Merritt. Most supplies needed for exploration are available in Kamloops.

## 2. Claim Status

The Rateria claims are situated within the Highland Valley copper belt, approximately 40 kilometres northwest of Merritt, B.C. The property is comprised of 18 claims totalling 5,585.1 hectares and is owned 100% by Happy Creek Minerals Ltd. (Table 1, Figure 2). The claims have not been legally surveyed.

## 3. History

Between 1968 and 1974, the area which presently covers the Rateria property was subject to regional geochemical surveys, soil sampling, geological mapping, induced polarization surveys, bulldozer trenching, road building, and percussion and minor diamond drilling. During 1970, Asarco drilled percussion holes on a 2,000-foot grid pattern to test up to 100 feet of bedrock typically with a total depth of

approximately 90-120 feet, and locally to a depth of 200 feet or more (Bayley, 1970; Blann, 2007). Percussion hole 70-D8c returned 0.57% copper in the bottom 30 feet of the hole. Two additional percussion holes were drilled 285 metres southwest and 312 metres northeast of 70-D8c to depths of 120 and 200 feet respectively; however, these did not intersect encouraging values (Bayley, 1970; Blann, 2007).

During 1972, International Mogul Mines Ltd. drilled four diamond drill holes on the Chataway Exploration Co. property. Drill hole M72-4 was located 45 metres west of 70-D8c and drilled eastward at - 45 degrees to a depth of 225 feet (Willars, 1972). The deepest sample contained 0.06% copper and strong oxidation as noted in drill logs, indicating that M72-4 may have stopped short of intersecting the mineralized zone noted in 70-D8c (Willars, 1972; Blann, 2007).

Mineral claims in the Roscoe Lake area lapsed, and in 1976 the Roscoe 1 claim was staked by Highmont Operating Corporation for National Trust Company Ltd., and remains in good standing. Cominco Ltd. carried out reconnaissance induced polarization surveys over the Gump property located north and east of the Three Creeks prospect. Highmont Operating Corporation performed 123.4 metres of diamond drilling on the Yubet north prospect for National Trust Company (Sanford, 1983). In 1984, Highmont drilled 8 percussion holes, including three holes on the Yubet south prospect, returning 0.40% copper, 0.005% molybdenum, and 4.2 g/t silver over the final 24.4 metres of drill hole RL-84-8 (Tsang, 1985).

In 1992, Hudson Bay Mining under Aucumo resources performed geological mapping, stream sediment sampling and induced polarization survey over a large area. Drilling of 6 holes in 1993 was also conducted that returned locally elevated copper values.

By 1999 a large number of claims in the area had lapsed and Brian Malahoff staked the Rateria property. Cominco Ltd. optioned the Rateria property in 2000 and contracted Scott Geophysics of Vancouver, B.C., to conduct an induced polarization survey on the property. Grid lines were oriented east - west with 300 metre spacing. A pole-dipole array was used with an "a" spacing of 100 metres and "n" separations of 1 to 6. The north and south portions of the property were not covered by the survey, however, several strong through-going structural features comprising weakly anomalous chargeability and resistivity values were identified (Bond, 2000).



The Rateria property was optioned to Happy Creek Minerals Ltd. in December of 2004. Silt geochemistry as well as GPS surveying of topographic and historical features was completed in 2004 and early 2005. During 2005, property work included a 341 metre, two hole, diamond drill program, 13.5 kilometres of line cutting, and a subsequent 3D-IP survey. The two drill holes tested IP anomalies from the 2000 geophysical survey, and consequently DDH05-2 returned 13.8 metres of 0.071% copper and 9.7 metres of 0.063% copper in the area now known as Zone 1. Near this area, the 2005 IP survey identified an anomaly approximately 1.6 kilometres by 600 metres in dimension (Blann, 2006).

During 2006, a 2,400 metre diamond drill program was completed in the area of the 2005 induced polarization anomaly. The 14 diamond drill holes were designed to test the central portion of the IP anomaly from west to east (Blann, 2007). Diamond drill holes R06-08 returned 32.0 metres grading 0.24% copper and R06-14 returned 94 metres grading 0.15% copper. Locally higher grade intervals include up to 1.0 metre containing 3.88% copper and 126.0 g/t silver. This program was the discovery of Zone 1.

During 2007, Happy Creek Minerals Ltd., completed 14 diamond drill holes totalling 3,082 metres in Zone 1. From drill hole R07-13, which intersected over 189 metres of 0.22% copper, mineralization was traced north for approximately 600 metres along strike, extending Zone 1. Zone 1 may coincide with large-scale regional structures trending north to northwest.

During the period January to May 2008 Happy Creek Minerals completed a 91 line kilometre 3D-IP survey on the Rateria property. This program expanded upon the 2005 IP grid. The results of this survey were used to guide the 2008 drill program. Later in 2008, a nine hole, 3,072 metre, diamond drill program was conducted. Some highlights include hole R08-01 intersecting 103.25 m of 0.335% Cu and R08-05 intersecting 177.00 m of 0.366% Cu. This program was the discovery of Zone 2.

During the period August to December 2009 Happy Creek Minerals conducted an exploration program consisting of geological mapping, prospecting and diamond drilling. A nine hole, 2,026 metre, diamond drill program was conducted on the Rateria property. This program was designed to test geophysical targets generated during the 2008 3D-IP program and to follow up 2008 drilling. The drilling program confirmed the presence of copper within the well mineralized area known as Zone 2 (R09-1, 7 and 9) and extended the strike of known mineralization by some 125 m to the north (R09-6). Geology and analytical results suggest a linkage between high - grade copper mineralization and a north trending fault structure.

During 2010, the company conducted 6327.53 metres of drilling in 28 holes; mainly at Zone 1 and Zone 2 targets. Drilling intersected phyllic and propylitic altered granodiorite/quartz monzonite containing dominantly chalcocite. The drill program extended the size of mineralized zones (Zone 1 and Zone 2) and confirmed the presence of copper between some of the widely spaced previous drill holes. Several diamond drill holes returned substantial copper grades. The mineralized zones remain open to the east, north, south and to depth.

During 2010, soil, silt and rock sampling was also performed in the area. 566 soil samples covered a 2.8 square km area between Zone 1 and the Moss 4 showing, 56 rock and silt samples collected from south Yubet (Copper Creek), and Sho Showing, returned positive values of copper. Widespread silt sampling in the area returned low to strong values of copper.

In July 2010, a Lidar (laser topographic and photograph) airborne survey was completed at the Rateria property, and covered Zone 1 and Zone 2 areas. The survey was approximately 15.25 square km in area.

During 2011, 41 NQ size diamond drill holes were completed in the area. The drilling program was designed to test for depth extension of Zone 1 as well as prospecting drilling in Yubet area (Liaghat and Blann 2011). A few holes were also drilled in Zone 2. 3D-IP and magnetic surveys were performed at the Sho property covering approximately 51 line km between Feb 25 and March 24, 2012. In addition, a GPS collar survey was completed by Meridian Mapping Ltd. at the Rateria property in 2011.

#### **4. Regional Geology**

The Rateria property is underlain by the Upper Triassic - Lower Jurassic Guichon Creek batholith ( $198 \pm 8$  my; McMillan, 1976). This multi-phase calc-alkaline intrusion extends over an area of approximately 1,000 square kilometres and is elongated in a north-northwesterly direction (Figure 3). The nearly concentric phases have contacts ranging from gradational to locally sharp or partially brecciated, and are progressively younger and more felsic toward the central core of the batholith. Textural and compositional criteria have been used to characterize the various intrusive phases after Northcote (1969) and McMillan (1976).

The oldest phase of the Guichon Creek batholith is the Border or Hybrid phase, a fine to medium grained, mafic rich diorite to quartz diorite, which locally contains xenoliths of amphibolite and monzonite. The Highland Valley phase consists of Guichon and Chataway varieties. The Guichon variety is a quartz diorite to granodiorite, typically containing 15% mafic minerals of uneven distribution. The Chataway variety is a hornblende granodiorite normally containing 12% evenly distributed mafic minerals. The Bethlehem phase, a fine to medium grained granodiorite with approximately 8% mafic minerals, is characterized by amoeboid quartz crystals and several percent poikilitic hornblende crystals. The Skeena variety of granodiorite is texturally similar to the Bethlehem and in part Bethsaida phase, but is distinguished by its coarser grain size, slightly lower mafic content, and subhedral to anhedral quartz. The youngest intrusive phase of the Guichon Creek batholith is the Bethsaida, having a biotite ± hornblende quartz monzonite to granodiorite composition, and containing approximately 6% mafic minerals, predominantly coarse-grained euhedral biotite books. The core of the Guichon Creek batholith is within a regional magnetic low.

A porphyry dyke swarm extending northward from Highland Valley cuts Bethlehem granodiorite, and to the south, dykes and small plugs of porphyry cut the Skeena variety. Some of these porphyries appear to be offshoots or derivatives of the Bethsaida phase (McMillan, 1976).

Alkaline and felsic volcanic dykes, flows and tuffs, Eocene to Miocene in age, cut the Guichon Creek batholith rocks. During the last glacial period, portions of the Tertiary and older rocks were eroded, and between one and over 30 metres of till, glaciofluvial and lacustrine cover was deposited following a 165° azimuth.

Rock outcrops comprise less than 5% of the Rateria property and occur in limited exposures such as creek beds, abandoned melt water channels and locally flanks and crests of hills. Although bulldozer trenching was apparently widespread during the 1970's, the seven to 30 metre thickness of glacial deposits limited trenching effectiveness, therefore property geology is largely derived from recent and historical drilling and from scattered outcrops.

The western portion of the property is underlain by quartz rich, mafic poor intrusive rocks of quartz diorite, granodiorite and quartz monzonite composition, likely of the Bethsaida phase. Adjacent to these rocks, along a northerly trending contact to the east, are medium-grained granodiorite and biotite quartz diorite interpreted as the Skeena variety. Further east, a north striking contact occurs between the Skeena variety and medium to coarse grained granodiorite of the Chataway variety. Dykes and small plugs of

quartz monzonite, aplite, quartz and feldspar porphyry, and crowded quartz - k-feldspar porphyry occur locally.

Highland Valley copper  $\pm$  molybdenum deposits are generally associated with or near the dyke swarm or occur within Bethsaida phase and related dykes. Two phases of copper mineralization are thought to occur with intrusive phases; syn to post Bethlehem and syn to post Bethsaida phase.

Dominant ore controlling fracture sets at the Valley and Lornex deposits trend north-northwest to northeast and locally east-southeast. The north trending Lornex Fault cuts the length of the Guichon Creek batholith with a moderate to steep west dip and has a dextral sense slip. This fault apparently truncates the Lornex and Valley Copper deposits on the west and east respectively. Sulphide mineralization is strongly associated with veins, fractures, faults and/or breccias.

In the Highland Valley deposits, potassic alteration is variably developed and hydrothermal biotite or k-feldspar is fracture-controlled, flooded and veined. Phyllic alteration is typified by quartz and flakey sericite occurring in fracture-associated zones or as vein envelopes (McMillan, 1976). Phyllic alteration cuts potassic alteration. In argillic zones, which often extend within and extensively beyond the mineralized zones, feldspars and locally mafic minerals are altered to sericite and kaolinite +/- montmorillonite. Sericite, carbonate and clay alteration of feldspars, as well as chlorite-carbonate alteration of mafic minerals is characteristic of propylitic alteration. Calcite and zeolite occur primarily as late stage veins and fracture coatings.

Sulphide zoning is common in the Highland Valley deposits with bornite as the predominant sulphide, followed by chalcopyrite, and then outward to pyrite. Main hypogene copper sulphides include chalcopyrite, bornite and minor digenite. Topographically above hypogene mineralization, supergene enriched zones may contain limonite, malachite, chalcocite, native copper and occasionally tenorite. Pyrite occurs in a propylitic fringe to potassic alteration zone generally in concentrations less than one percent. Distribution and concentration of molybdenite is highly variable throughout the Highland Valley deposits, with economically significant occurrences having similar distribution as that of the copper. The relative abundance and importance of molybdenum in the ore deposits increases from the Valley, Lornex to Highmont.

## **5. 2012 Exploration Activities**

During 2012 the Company completed diamond drilling of two holes in Zone 2 and logging and sampling of one hole that was completed in 2011.

### **5.1 Diamond Drilling**

In late November 2012, two holes (R12-01 and R12-02) were drilled in Zone 2 of Rateria property. The holes were designed to define and expand the mineralized zone in this area. Zone 2 is located about 6.5 kilometres southeast of Teck's Highmont mine. Approximately 7 to 25 metres of glacial till overlies the bedrock in this area. Both drill holes were angled holes (090/-60, -65 degrees), NQ-sized and located along the west side of Zone 2 and drilled eastward. Drill hole location and orientation are provided in Table 2 and shown in Figure 4.

Drill sites were located close to a logging access road and minor clearing was required to prepare the drill sites. Drill core was logged and sampled on site by Happy Creek Minerals personnel. Core was picked up from the drill by Happy Creek personnel or delivered to the core shack by the drillers. Five locked sea containers were located at the core shack and overnight drill core was stored in the containers until the next day. Core was logged, photographed, and split in half using a manual core splitter. After splitting, core samples along with sample tags were placed in plastic sample bags, sealed with zap straps and placed inside a rice bag. All the sample numbers were recorded on a sample shipment form. The samples were stored in the locked containers until they were picked up by AGAT laboratory personnel for delivery to their Vancouver laboratory. Once sampling was completed, the core boxes were stored in a locked sea container. There are no obvious drilling, sampling or recovery factors that would impact the reliability of the core samples.

A plan map and cross sections of diamond drill holes are provided in Figures 5 to 7. Significant drill results are presented in Section 6 of this report and summarized in Table 3. Drill core logs are included in Appendix 1 and core sample intervals with assays are listed in Appendix 2. Geotechnical logs are in Appendix 3 and certificates of analyses are included in Appendix 4.

### **5.2 Logging and Sampling of 2011 drill core**

Hole R11-41; the last hole from 2011 drilling program was logged and sampled in late October 2012. The hole is located east side of Zone 2 mineralization collider (Fig. 4). A plan map of the drill holes

and a cross section of R11-41 are presented in Figures 5 and 8, respectively. A summary of results are presented in Section 6 and in Table 4. Logs, assays and certificates of analyses are provided in Appendices 1 to 4 as described above.

### **5.3 Analytical Procedures**

Drill core samples were dried, crushed, and pulverized by AGAT Laboratories Ltd. in Vancouver, B.C. Analysis at AGAT was done using an Aqua Regia Digest - Metals Package, ICP/ICP-MS analysis.

The split drill core samples were crushed in their entirety to 80% passing -10 mesh (2 millimetres) and the crusher was cleaned with barren rock between samples. From the coarse rejects a sub-sample of 250 grams was pulverized to 85% passing -200 mesh (0.074 millimetres). The pulveriser was cleaned with silica sand between samples. Copper (in addition to 50 other elements) was determined using an aqua regia solution to digest the sample, followed by ICP-MS analysis. Over limit copper values were repeated using Aqua regia digest and AA finish with results provided in percent copper.

AGAT's quality system is compliant with the International Organization for Standardization's ISO/IEC 17025, 'General Requirements for the Competence of Testing and Calibration Laboratories' and the ISO 9000 series of Quality Management standards.

### **5.4 Quality Control Procedures**

Happy Creek implemented a full quality control ("QC") program which involved the insertion of certified reference material (1 for every 30 samples), blank material (bright white marble cobbles obtained from Landscaping supply store) (1 for every 30 samples) and field (1/4 core) duplicates (1 for every 30 samples). Therefore in a group of 30 samples there was 1 duplicate, 1 blank and 1 standard. The author examined the performance of the blanks, field duplicates and standard reference material.

Two reference material were used, CGS-27 and CDN CM-7. Of the 56 data points for the reference material none fell outside the tolerance limits supplied by CDN Resource Laboratories Ltd. The performance of the blanks was very good with only few data points barely exceeding the detection limit tolerance for Cu. These blanks are thought to be within reasonable limits and further follow up not required. The field duplicates performed well. Few sample pairs had minor difference between them and

suggest that small differences can be attributed to changes in mineralized fractures locally and are expected and within normal variability of mineralized samples.

## 6. Results and Discussion

Drill Hole R12-01 is located 60 metres north of R11-36 (152.5 metres of 0.26% copper, 0.67 g/t rhenium). R120-01 returned 92.8 metres of 0.30% copper, 0.15 g/t gold starting from bedrock surface and includes 12.5 metres of 0.63% copper, 0.66 g/t gold, 3.2 g/t silver. R12-01 also returned 2.5 metres containing 0.029% molybdenum and 3.0 g/t rhenium starting at 192.5 metres. Other samples returned 0.10 to 0.12% copper near the end of the hole at 237.5 metres where the final sample contains 0.019% molybdenum. Not all drill core was sampled.

Drill Hole R12-02 is located approximately 380 metres south of R12-01 and 150 metres west of R08-05 (126.0 metres of 0.46% copper, 0.10 g/t gold). R12-02 returned 152.5 metres of 0.35% copper and 0.57 g/t rhenium, including 32.5 metres of 0.91% copper, 0.010 % molybdenum, 4.0 g/t silver, 0.11 g/t gold and 1.83 g/t rhenium. Overall, F12-02 contains 257.3 metres of 0.23% copper starting at 70.0 metres, and suggests Zone 2 is sub-vertical in orientation and around 100 metres in width.

Drill Hole R11-41 is located east side of Zone 2. R11-41 (depth 404.45m), was angled at -55 degrees to the west. R11-41 intersected few short intervals of poor mineralization. Samples analyses results returned not more than 909 ppm for Cu, 161 ppm for Mo, 0.24 ppm for Re and 34.2 ppm for Zn.

Most of the rock types from drill holes are tentatively interpreted to be Chataway Variety and locally Skeena phase that are diorite, quartz monzonite or granodiorite in composition, locally with higher mafic granodiorite phases of the Guichon batholith. Dikes of aplite and feldspar porphyry occur and mostly associated with shear zones and brecciated rocks. Fine to coarse grained, 1mm to 15mm equigranular to unequigranular phenocrysts are locally porphyritic. The core is light green, gray to dark green and mottled in colour due to varying concentration and distribution of chlorite and sericite alteration minerals. In the potassic alteration zone, salmon pink color mixed with pistachio green color of epidote alteration was observed.

Alteration in R12-01 and R12-02 is quite variable, with pervasive potassic, phyllic and propylitic alteration ranging from weak to strong. Locally minor silica and clay (argillic) alteration are observed. Potassic alteration is strongly associated with intense fracturing and breccia zones. In potassic zones, vein

controlled chlorite, carbonate, epidote (propylitic) is concentrated along fractures and permeates from fracture surfaces into the host rocks forming a halo or selvage of alteration adjacent to the fracture plane. In strong potassic zones, sericite is weak and patchy overall, and occurs along fractures and as pervasive replacement of entire feldspar grains close or adjacent to fracture surfaces. Argillic alteration (kaolinite or other clay) locally is mild to intense along fractures/fault surfaces. Mafic minerals are weakly to strongly replaced with chlorite and locally epidote, mainly close to fractures, veins and faults. Mafic minerals are in part replaced by magnetite and hematite. Sericite-carbonate gouge is locally common. Silicification is not strong, although in some areas quartz veins and quartz flooding is concentrated in fracture zones. A late overprint of iron oxide (hematite, goethite or jarosite) is concentrated on fracture planes and pervasively stains the core. Sparse fractures, locally intense, are common throughout the drill core, averaging  $>60^\circ$  to the core axis, and are mainly filled with sericite, chlorite and epidote.

Copper mineralization in drill core of both 2012 holes is strongly associated with pervasive pink to pinkish-green potassic-clay alteration, commonly within fault zones containing intermittent gouge. Bornite and chalcopyrite (and trace molybdenite) occur as blebs within or associated with quartz veins, and fractures. Less frequently chalcocite generally occurs as fine-grained fracture fillings and disseminations having ubiquitous mixing with bornite and alteration minerals sericite, clay +/- hematite.

Minor to trace bornite and chalcopyrite with chalcocite occurs in drill hole R11-41 and is hosted in potassic alteration in thin quartz veins and fractures, dipping gently to steeply. K-feldspar minerals form salmon pink fracture halos and pervasive alteration occurs locally. Late hematite occurs as coatings on fractures and as granular specularite replacing magnetite.

## **7. Conclusions and Recommendations**

The Rateria property is situated in the southeast portion of the Guichon Creek batholith and underlain by granodiorite, quartz diorite, quartz monzonite and dykes and small plugs of crowded quartz feldspar porphyry and aplite. Lithologies encountered in recent drilling are consistent with descriptions of Bethsaida, Skeena, Bethlehem and Highland Valley phases of the composite Guichon Batholith. These are the host rocks for the Valley and Lornex copper deposits found approximately 10 kilometres northwest of Rateria.

The 2012 diamond drill program has expanded the mineralization body in Zone 2 and extended the depth of known mineralization by about 200 metres to approximately 350 metres (result from R12-02 under



drill hole R05-08), where it remains open in extent. Geology, analytical results and interpretation indicate copper mineralization is controlled by a dominantly northerly trending sub-vertical structure and cross cutting structures of east, northeast and northwest orientation. Future exploration should focus on deeper drilling and expanding Zone 2 to the north and south. The Zone 2 area contains geology slightly different than in Zone 1, with copper mineralization more directly associated with potassic alteration and quartz veins, and contains elevated values of molybdenum, rhenium and gold.

Drilling at Zone 2 has returned elevated to substantial copper, molybdenum, gold, silver and rhenium values within an area approximately 1.0 kilometre by 600 metres in dimension and to a depth of at least 350 metres. The geology, alteration and mineralization on the Rateria property are interpreted to be consistent with a deeper-seated porphyry copper system and share similarities with other deposits in the Highland Valley.

It is recommended that further exploration consist of drilling ten to fifteen holes totalling 5,000 metres to expand and define Zone 2.

*Respectfully Submitted,*

*"Sassan Liaghat"*

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*Sassan Liaghat, Ph.D*

*"David Blann"*

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*David Blann, P.Eng.*

## 8. References

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- Blann, D.E., P.Eng. (2006). Geological, Geophysical and Diamond Drilling report on the Rateria Property, Kamloops Mining Division, for Happy Creek Minerals Ltd., AR28094.
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- Northcote, K. (1969). Geology and geochronology of the Guichon Creek Batholith. Dep. Mines and Pet. Res., B.C., *Bull. 56*, 73 p.
- Sanford, G.R., 1983, Diamond Drilling Report on the Roscoe 1 Mineral Claim, Highmont Mines, prepared for National Trust Company Limited, Ass# 11,369. (Note: Property is north of Rateria Claims) Sutherland Brown, Editor, 1976, *Porphyry Deposits of the Canadian Cordillera, CIM Special Volume 15*.
- Tsang, L.C.H., 1985, Percussion Drilling Report on the Roscoe 1 Mineral Claim, Kamloops Mining Division, Highmont Mining Corporation, prepared for National Trust Company Limited. Asst # 13824 (Note: property is north of Rateria Claims)
- Willars, Jack G., P.Eng. (1972). Report on the Geological Survey and Diamond Drilling on the Property of Chataway Explorations Co. Ltd., for International Mogul Mines Limited, AR04050.

## 9. Statement of Costs

**Feb. 1 to Dec. 15, 2012**

<b>Company</b>	<b>Description / Name</b>	<b># of People</b>	<b>Days</b>	<b>Rate</b>	<b>Total</b>
<b>Geological and Consulting</b>					
Sassan Liaghat, PhD	Geology	1	22.00	\$ 550.00	\$ 12,331.40
Std. Metals Expl., David Blann, P.Eng.,	Geology, Design Supervision, QP	1	16.50	\$ 500.00	\$ 8,250.00
Illes Ignath	Core splitting/ Level 3 First Aid	1	37.00	\$ 325.00	\$ 12,098.58
	Total (Man Days)		75.50	\$ 432.85	\$ 32,679.98
<b>Drilling</b>					
Glens Drilling	2064ft between \$26-\$36/ft				\$ 74,236.23
Ikan Industrial	Trucking - water truck for drill				\$ 11,500.00
JS Reimer	Move backhoe				\$ 688.28
<b>Field Supplies and Equipment</b>					
Okanagan Custom	Ambulance EMT with Level 3 FA equip				\$ 2,500.00
4X4 Pickup truck- crew transport			22	\$ 75.00	\$ 1,650.00
Standard Metals	Field supplies				\$ 1,750.00
western Technical	Field supplies				\$ 112.98
Sassan Liaghat- fuel , crew accommodation, core shack	Field supplies				\$ 4,169.24
Affordable parts- large trailer- mob/demob	Field supplies				\$ 3,000.00
ATV- field Honda 250.	Misc Field transport				\$ 500.00
Pothier Enterprises	Rent Pajari borehole for 1month				\$ 650.00
Daisytech ink for printer	Field maps				\$ 239.98
<b>Communications</b>					
Telus/Glentel- sat phone/cell phone	Communications				\$ 1,236.58
<b>Travel</b>					
Assorted crew mob/demob	Travel costs				\$ 1,132.08
<b>Sample Shipping and Analysis</b>					
Agat Labs	Assaying ICP-MS + ICP				\$ 1,031.31
Report					\$ 3,500.00
				Total	\$ 140,576.66

## 10. Statement of Qualifications

**Sassan Liaghat**, M Sc, PhD Coquitlam, British Columbia, do hereby certify that:

- I am a geologist, I graduated from the Universities of McGill and Ecole Polytechnique of Montreal in Master and Ph.D degrees in 1990 and 1994 respectively.
- That I have been actively engaged in the mineral exploration research and industry since 1990.
- I am the author or co-author of several scientific papers and reports, published in international and local journals.
- Since 2006, I have been involved in mineral exploration for base and precious metals in BC.

Dated at Vancouver, BC February 2013.

*"Sassan liaghat"* (Signed)

Sassan Liaghat Ph.D

I, **David E. Blann**, P.Eng., of Squamish, British Columbia, do hereby certify:

- That I am a Professional Engineer registered in the Province of British Columbia since 1990.
- That I am a B.Sc. graduate in Geological Engineering from the Montana College of Mineral Science and Technology, Butte, Montana, 1987.
- That I am a graduate with a Diploma in Mining Engineering Technology from the B.C. Institute of Technology, 1984.
- That I have been actively engaged in the mining and mineral exploration industry since 1984.

Dated in Vancouver, B.C., February 2013

*David Blann* (Signed)

David E Blann, P.Eng.

# Tables

**Table 1, Rateria Mineral Tenuers**

	<b>Tenure Number</b>	<b>Claim Name</b>	<b>Owner</b>	<b>Issue Date</b>	<b>Good To Date</b>	<b>Area (ha)</b>
1	511809	NEW RATERIA	203169 (100%)	2005/apr/28	2021/dec/31	144.3
2	513870	RATERIA	203169 (100%)	2005/jun/03	2021/dec/31	1154.2
3	522356	RATERIA NE	203169 (100%)	2005/nov/17	2021/dec/31	494.4
4	528775	MAL	203169 (100%)	2006/feb/23	2021/dec/31	494.4
5	528778	MAL 2	203169 (100%)	2006/feb/23	2021/dec/31	514.9
6	529011	RATERIA NORTH	203169 (100%)	2006/feb/27	2021/dec/31	514.8
7	529013	RATERIA NORTH-2	203169 (100%)	2006/feb/27	2021/dec/31	515.1
8	563796	SHO	203169 (100%)	2007/jul/29	2021/dec/31	989.9
9	571030		203169 (100%)	2007/nov/30	2021/dec/31	20.6
10	571031		203169 (100%)	2007/nov/30	2021/dec/31	82.4
11	572518	SHO 2	203169 (100%)	2007/dec/27	2021/dec/31	20.6
12	572519		203169 (100%)	2007/dec/27	2021/dec/27	20.6
13	572520		203169 (100%)	2007/dec/27	2021/dec/27	20.6
14	573338	COPPER 16	203169 (100%)	2008/jan/09	2021/dec/31	165.0
15	591057	COPPER CONNECTOR	203169 (100%)	2008/sep/08	2021/dec/31	82.5
16	591058	COPPER CONNECTOR 2	203169 (100%)	2008/sep/08	2021/dec/31	41.3
17	954808		203169 (100%)	2012/mar/02	2013/mar/02	144.4
18	954819	Sho South	203169 (100%)	2012/Mar/02	2013/mar/02	165.0
					<b>Total</b>	<b>5585.076</b>

**Table 2: Diamond Drill Holes Collar****Rateria 2012 DDHs**

Hole_ID	Easting	Northing	Elev m	EOH (m)	Dip	AZ	OVB	Start	End	Dip EOH	AZ -EOH
R12-01	647250	5584360	1507	236.84	-65	90	12.19	Nov 14,12	Nov 18,12	-68	92
R12-02	647300	5584000	1500	392.28	-60	90	23.47	Nov 19,12	Nov 25,12	-60	93
TOTAL				629.12							



**Table 3, Highlights of Zone 2 Drill Results**

<b>Hole</b>	<b>From</b>	<b>To</b>	<b>Interval</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Re</b>
	(m)	(m)	(m)	%	g/t	g/t	g/t
R12-01	12.2	105	92.8	0.3	1.5	0.15	0.02
includes	60	72.5	12.5	0.63	3.2	0.66	0.01
R12-02	172.5	325	152.5	0.35	1.7	0.06	0.57
includes	182.5	215	32.5	0.91	4	0.11	1.83

**Table 4 Highlights of Hole R11-41 Drill Results**

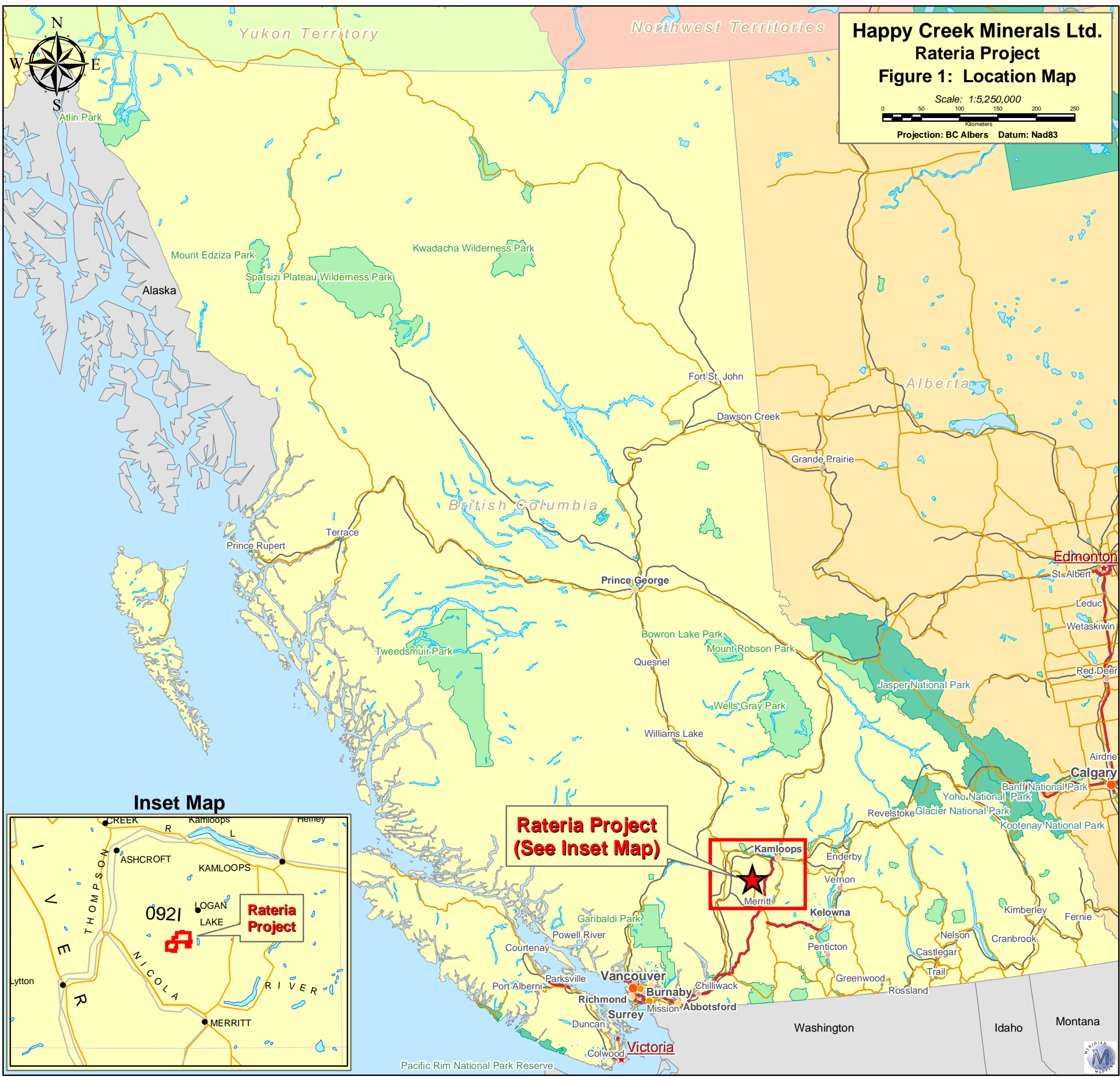
R11-41	From	to	Cu(ppm)	Mo(ppm)	Re(ppm)
	75	77.5	400	161	0.237
	140	142.5	780	1.03	0.002
	195	197.5	909	1.01	0.002

# Figures

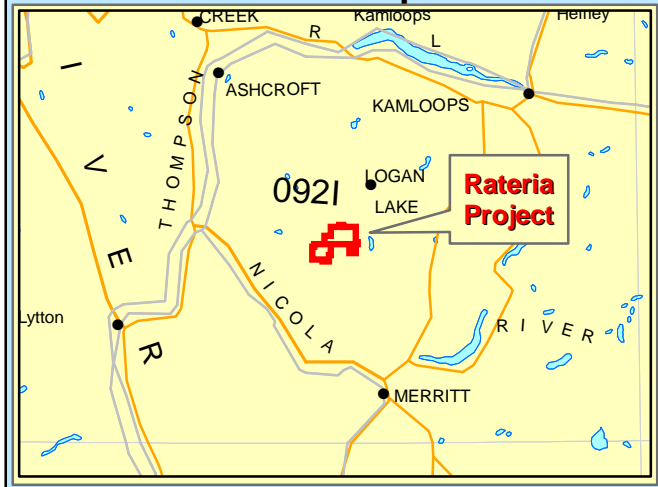
**Happy Creek Minerals Ltd.**  
**Rateria Project**  
**Figure 1: Location Map**

Scale: 1:5,250,000

Projection: BC Albers Datum: Nad83

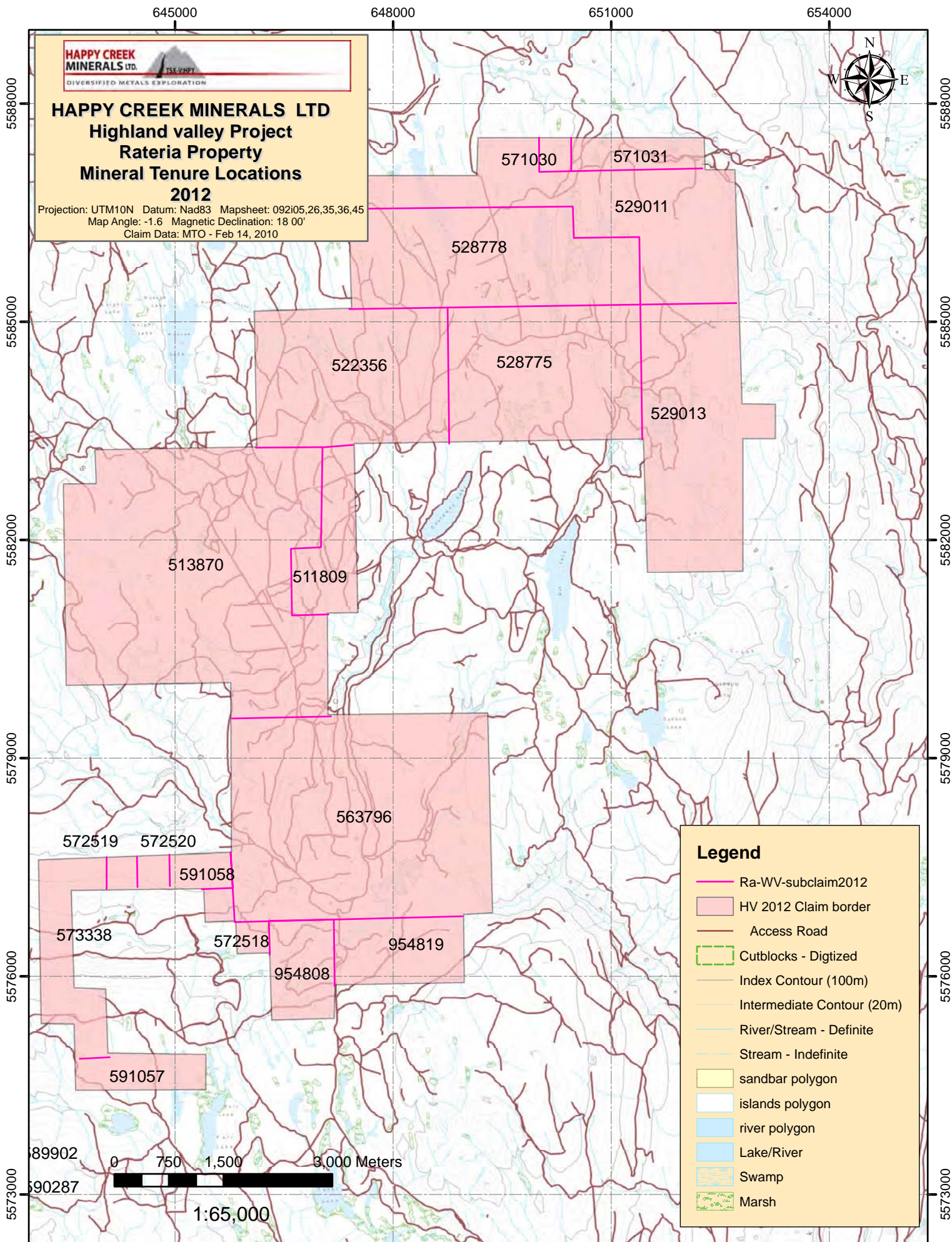


**Inset Map**



**Rateria Project**  
**(See Inset Map)**





**HAPPY CREEK MINERALS LTD**  
**Highland valley Project**  
**Rateria Property**  
**Mineral Tenure Locations**  
**2012**  
 Projection: UTM10N Datum: Nad83 Mapsheet: 092i05,26,35,36,45  
 Map Angle: -1.6° Magnetic Declination: 18 00'  
 Claim Data: MTO - Feb 14, 2010

- Legend**
- Ra-WV-subclaim2012
  - HV 2012 Claim border
  - Access Road
  - Cutblocks - Digitized
  - Index Contour (100m)
  - Intermediate Contour (20m)
  - River/Stream - Definite
  - Stream - Indefinite
  - sandbar polygon
  - islands polygon
  - river polygon
  - Lake/River
  - Swamp
  - Marsh

Fig 2

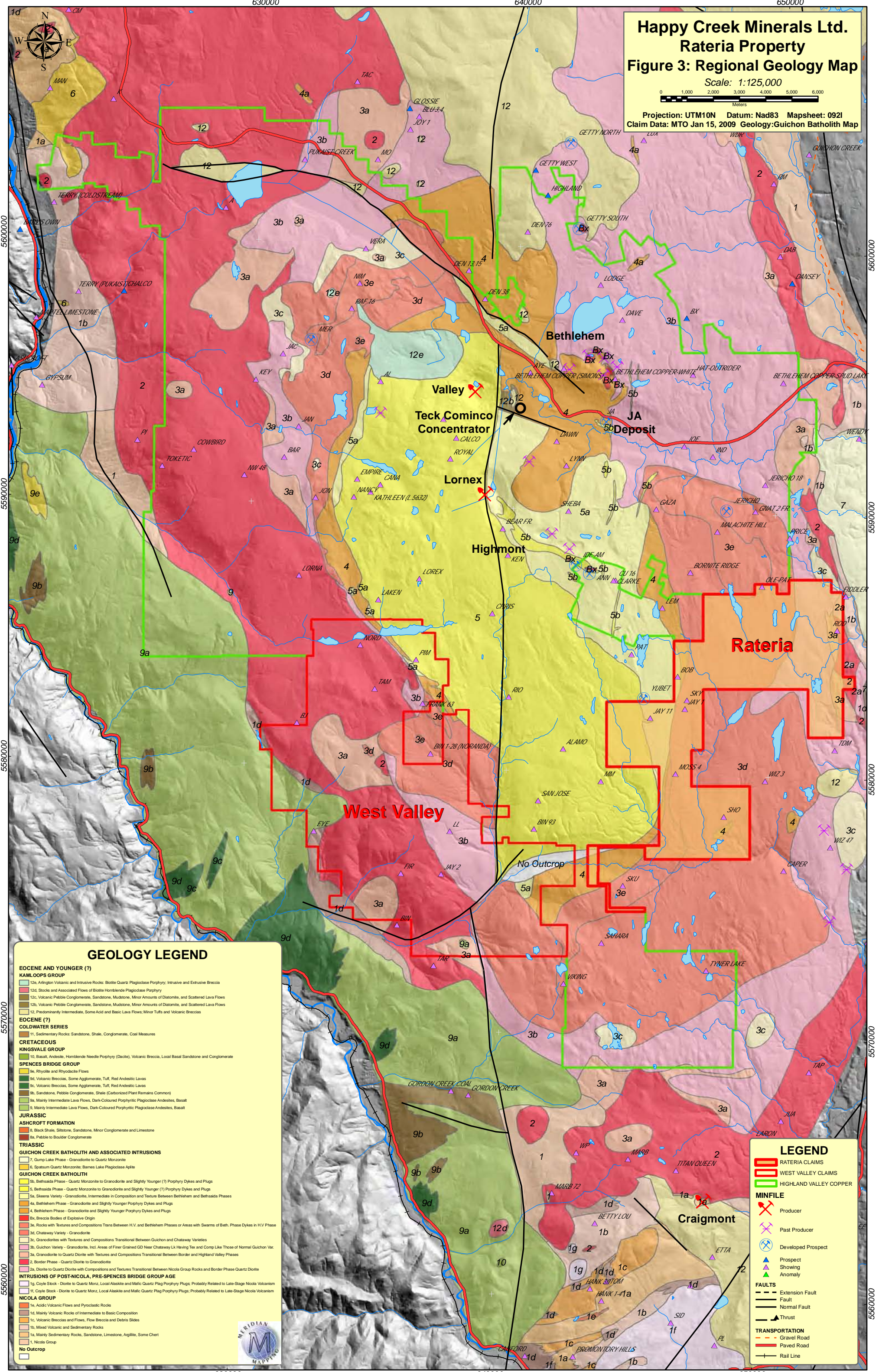
1:65,000

**Happy Creek Minerals Ltd.  
Rateria Property  
Figure 3: Regional Geology Map**

Scale: 1:125,000

0 1,000 2,000 3,000 4,000 5,000 6,000  
Meters

Projection: UTM10N Datum: Nad83 Mapsheet: 0921  
Claim Data: MTO Jan 15, 2009 Geology: Guichon Batholith Map



**GEOLOGY LEGEND**

- EOCENE AND YOUNGER (?)**
- KAMLOOPS GROUP**
  - 12e. Aftonian Volcanic and Intrusive Rocks: Biotite Quartz Plagioclase Porphyry; Intrusive and Extrusive Breccia
  - 12d. Stocks and Associated Flows of Biotite Hornblende Plagioclase Porphyry
  - 12c. Volcanic Pebble Conglomerate, Sandstone, Mudstone, Minor Amounts of Diatomite, and Scattered Lava Flows
  - 12b. Volcanic Pebble Conglomerate, Sandstone, Mudstone, Minor Amounts of Diatomite, and Scattered Lava Flows
  - 12. Predominantly Intermediate, Some Acid and Basic Lava Flows; Minor Tuffs and Volcanic Breccias
- EOCENE (?)**
- COLDWATER SERIES**
  - 11. Sedimentary Rocks: Sandstone, Shale, Conglomerate, Coal Measures
- CRETACEOUS**
- KINGSVALE GROUP**
  - 10. Basalt, Andesite, Hornblende Needle Porphyry (Dacite), Volcanic Breccia, Local Basal Sandstone and Conglomerate
- SPENCES BRIDGE GROUP**
  - 9e. Rhyolite and Rhyodacite Flows
  - 9d. Volcanic Breccias, Some Agglomerate, Tuff, Red Andesitic Lavas
  - 9c. Volcanic Breccias, Some Agglomerate, Tuff, Red Andesitic Lavas
  - 9b. Sandstone, Pebble Conglomerate, Shale (Carbonized Plant Remains Common)
  - 9a. Mainly Intermediate Lava Flows, Dark-Coloured Porphyritic Plagioclase Andesites, Basalt
  - 9. Mainly Intermediate Lava Flows, Dark-Coloured Porphyritic Plagioclase Andesites, Basalt
- JURASSIC**
- ASHCROFT FORMATION**
  - 8. Black Shale, Siltstone, Sandstone, Minor Conglomerate and Limestone
  - 7a. Pebble to Boulder Conglomerate
- TRIASSIC**
- GUICHON CREEK BATHOLITH AND ASSOCIATED INTRUSIONS**
  - 7. Gump Lake Phase - Granodiorite to Quartz Monzonite
  - 6. Spatum Quartz Monzonite; Barnes Lake Plagioclase Aplites
- GUICHON CREEK BATHOLITH**
  - 5b. Bethsaida Phase - Quartz Monzonite to Granodiorite and Slightly Younger (?) Porphyry Dykes and Plugs
  - 5a. Bethsaida Phase - Quartz Monzonite to Granodiorite and Slightly Younger (?) Porphyry Dykes and Plugs
  - 5. Skeena Variety - Granodiorite, Intermediate in Composition and Texture Between Bethlehem and Bethsaida Phases
  - 4a. Bethlehem Phase - Granodiorite and Slightly Younger Porphyry Dykes and Plugs
  - 4. Bethlehem Phase - Granodiorite and Slightly Younger Porphyry Dykes and Plugs
  - 3e. Breccia Bodies of Explosive Origin
  - 3d. Rocks with Textures and Compositions Transitional Between H.V. and Bethlehem Phases or Areas with Swarms of Beth. Phase Dykes in HV Phase
  - 3c. Chataway Variety - Granodiorite
  - 3b. Granodiorites with Textures and Compositions Transitional Between Guichon and Chataway Varieties
  - 3. Guichon Variety - Granodiorite, Incl. Areas of Finer Grained GD Near Chataway Lk Having Text and Comp Like Those of Normal Guichon Var.
  - 2a. Granodiorite to Quartz Diorite with Textures and Compositions Transitional Between Border and Highland Valley Phases
  - 2. Border Phase - Quartz Diorite to Granodiorite
  - 1a. Diorite to Quartz Diorite with Compositions and Textures Transitional Between Nicola Group Rocks and Border Phase Quartz Diorite
- INTRUSIONS OF POST-NICOLA, PRE-SPENCES BRIDGE GROUP AGE**
  - 1g. Coyte Stock - Diorite to Quartz Monz. Local Alaskite and Mafic Quartz Plag Porphyry Plugs, Probably Related to Late-Stage Nicola Volcanism
  - 1f. Coyte Stock - Diorite to Quartz Monz. Local Alaskite and Mafic Quartz Plag Porphyry Plugs, Probably Related to Late-Stage Nicola Volcanism
  - 1e. Coyte Stock - Diorite to Quartz Monz. Local Alaskite and Mafic Quartz Plag Porphyry Plugs, Probably Related to Late-Stage Nicola Volcanism
- NICOLA GROUP**
  - 1c. Acidic Volcanic Flows and Pyroclastic Rocks
  - 1b. Mainly Volcanic Rocks of Intermediate to Basic Composition
  - 1a. Volcanic Breccias and Flows, Flow Breccias and Debris Slides
  - 1. Mixed Volcanic and Sedimentary Rocks
  - 1. Mainly Sedimentary Rocks, Sandstone, Limestone, Argillite, Some Chert
  - 1. Nicola Group
- No Outcrop

**LEGEND**

- RATERIA CLAIMS** (Red outline)
- WEST VALLEY CLAIMS** (Red outline)
- HIGHLAND VALLEY COPPER** (Green outline)
- MINFILE**
  - Producer (Red X)
  - Past Producer (Purple X)
  - Developed Prospect (Blue circle with X)
  - Prospect Showing (Blue triangle)
  - Anomaly (Green triangle)
- FAULTS**
  - Extension Fault (Dashed line)
  - Fault (Solid line)
  - Normal Fault (Line with triangles)
  - Thrust (Line with triangles)
- TRANSPORTATION**
  - Gravel Road (Dashed line)
  - Paved Road (Solid line)
  - Rail Line (Line with cross-ticks)

Fig 3

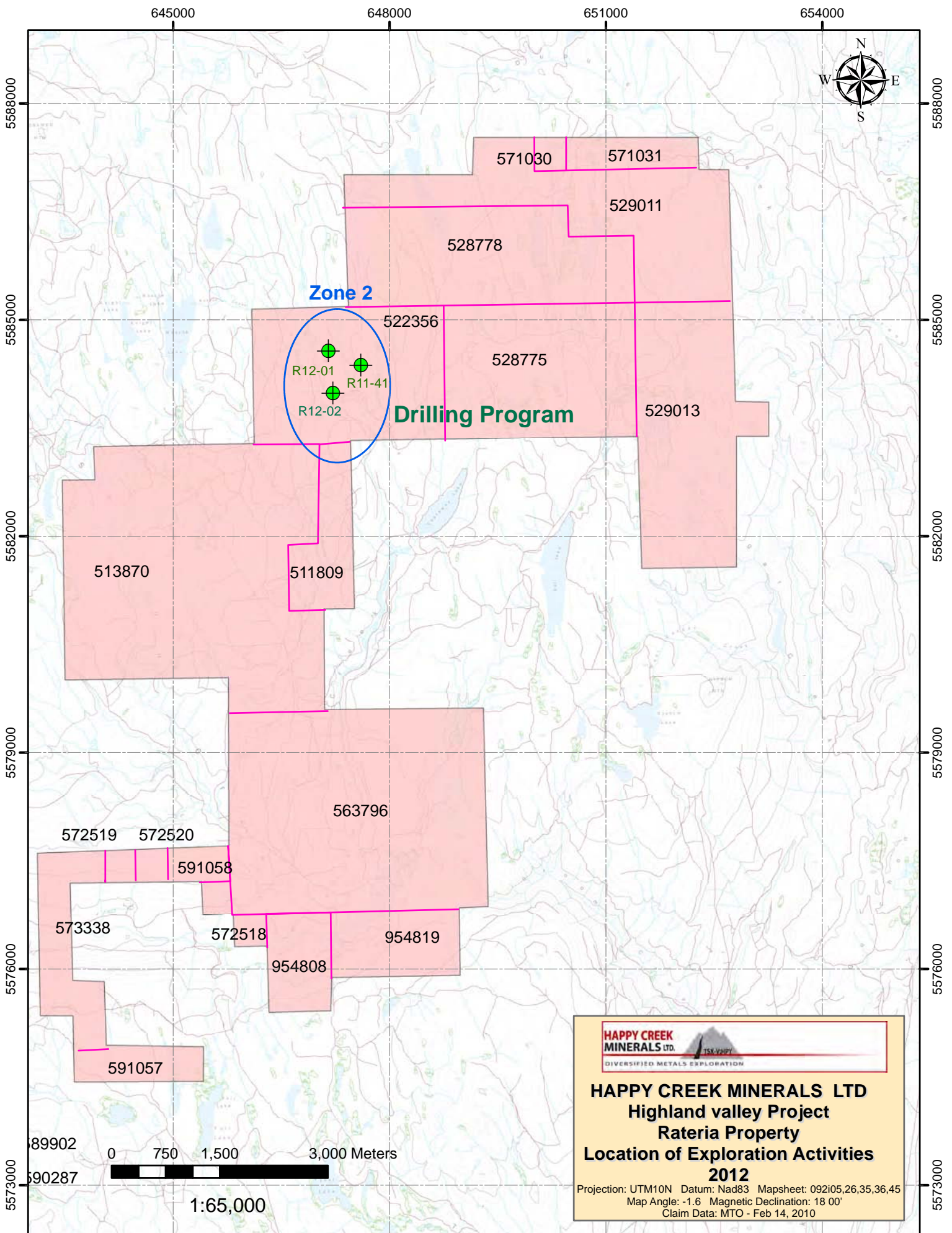


Fig. 4

645000

648000

651000

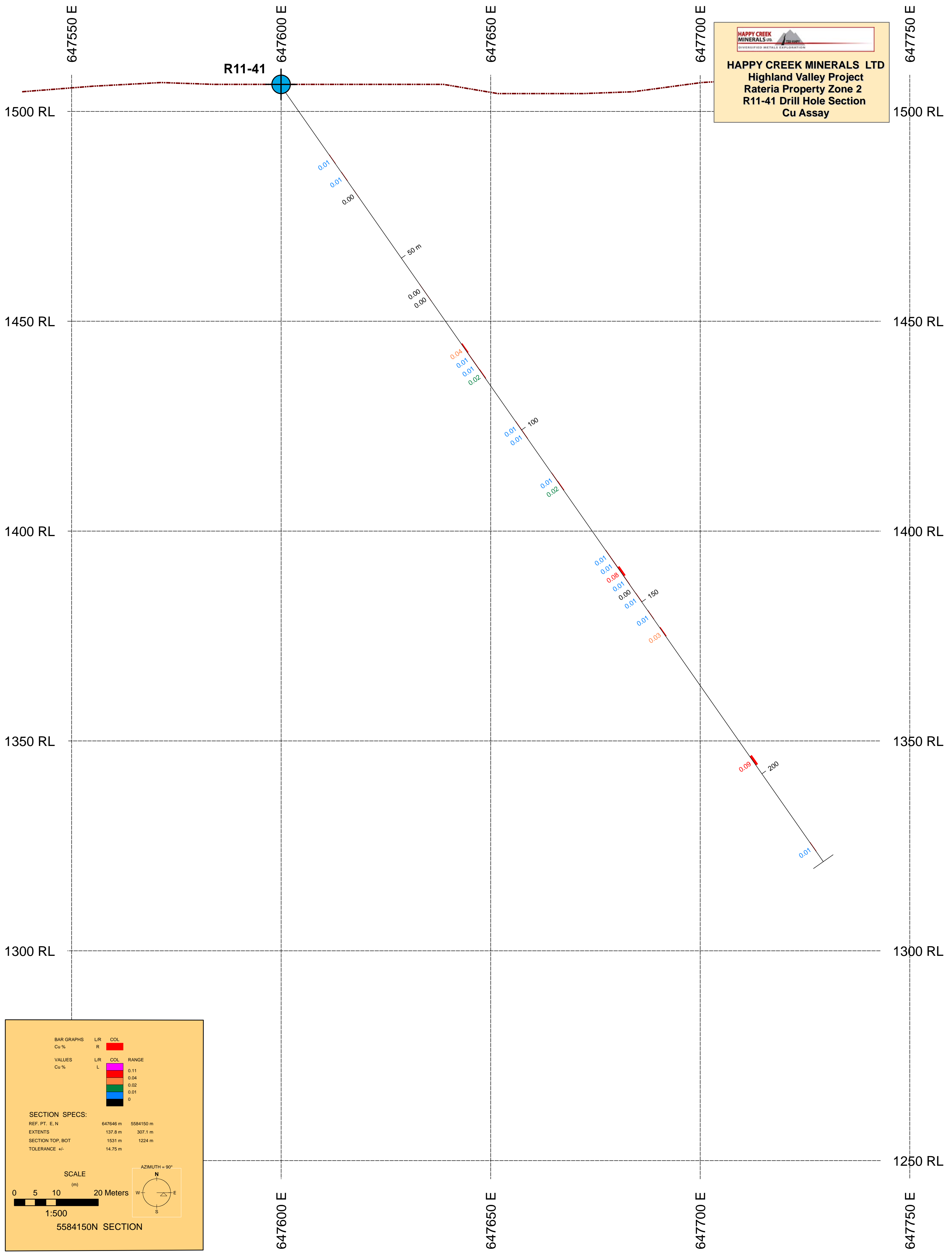
654000

**HAPPY CREEK MINERALS LTD.**  
 DIVERSIFIED METALS EXPLORATION

**HAPPY CREEK MINERALS LTD**  
**Highland valley Project**  
**Rateria Property**  
**Location of Exploration Activities**  
**2012**

Projection: UTM10N Datum: Nad83 Mapsheet: 092105,26,35,36,45  
 Map Angle: -1.6 Magnetic Declination: 18 00'  
 Claim Data: MTO - Feb 14, 2010

**HAPPY CREEK MINERALS LTD**  
 Highland Valley Project  
 Rateria Property Zone 2  
 R11-41 Drill Hole Section  
 Cu Assay



**BAR GRAPHS**

L/R	COL
Cu %	Red

**VALUES**

L/R	COL	RANGE
Cu %	Red	0.11
	Orange	0.04
	Green	0.02
	Blue	0.01
	Black	0

**SECTION SPECS:**

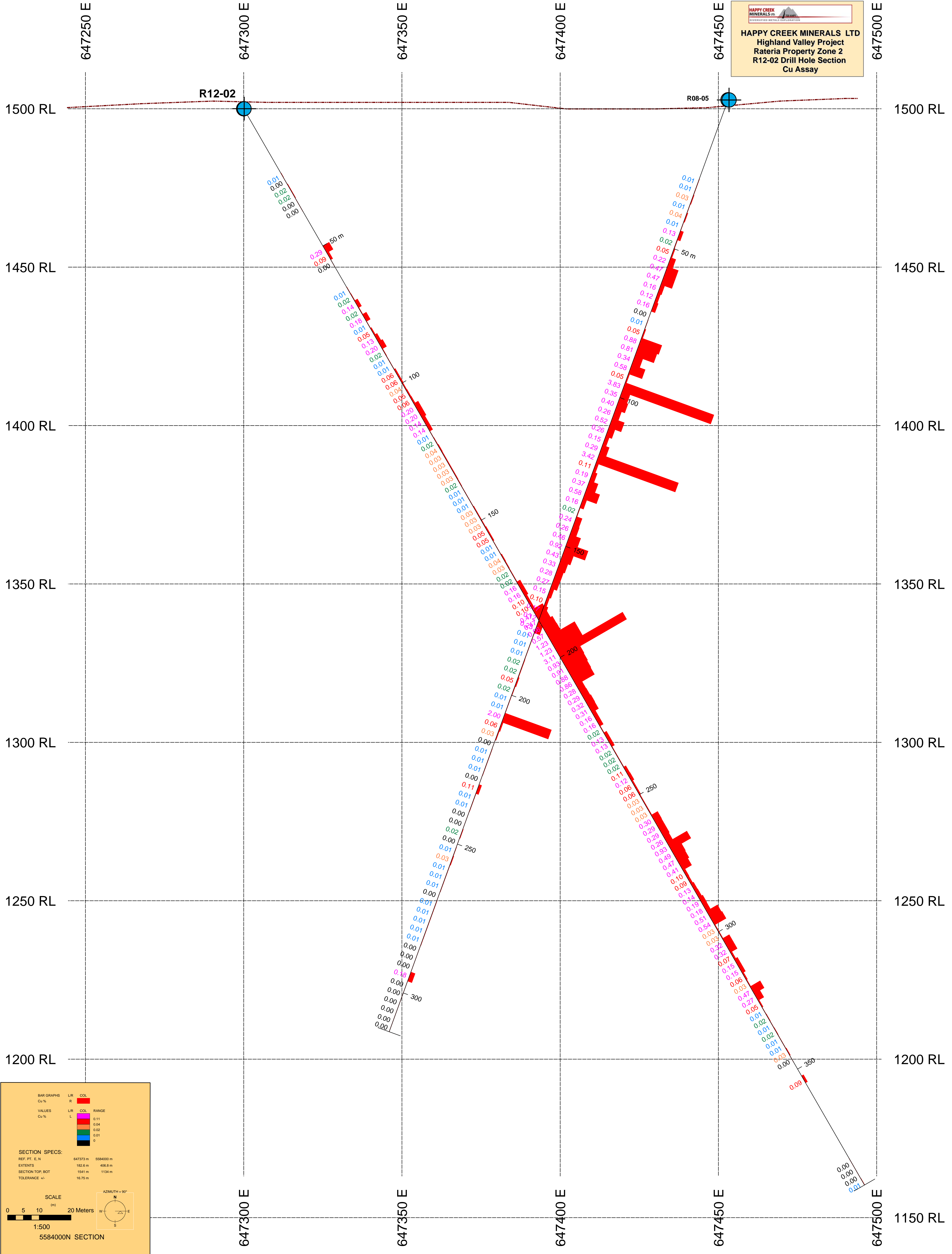
REF. PT. E, N	647646 m	5584150 m
EXTENTS	137.8 m	307.1 m
SECTION TOP, BOT	1531 m	1224 m
TOLERANCE +/-	14.75 m	

**SCALE**  
 0 5 10 20 Meters  
 1:500

**5584150N SECTION**

Diagram showing orientation: N (North), S (South), E (East), W (West). AZIMUTH = 90°





BAR GRAPHS		LR	COL
Cu %	R		

VALUES		LR	COL	RANGE
Cu %	L			0.11
				0.04
				0.02
				0.01
				0

**SECTION SPECS:**

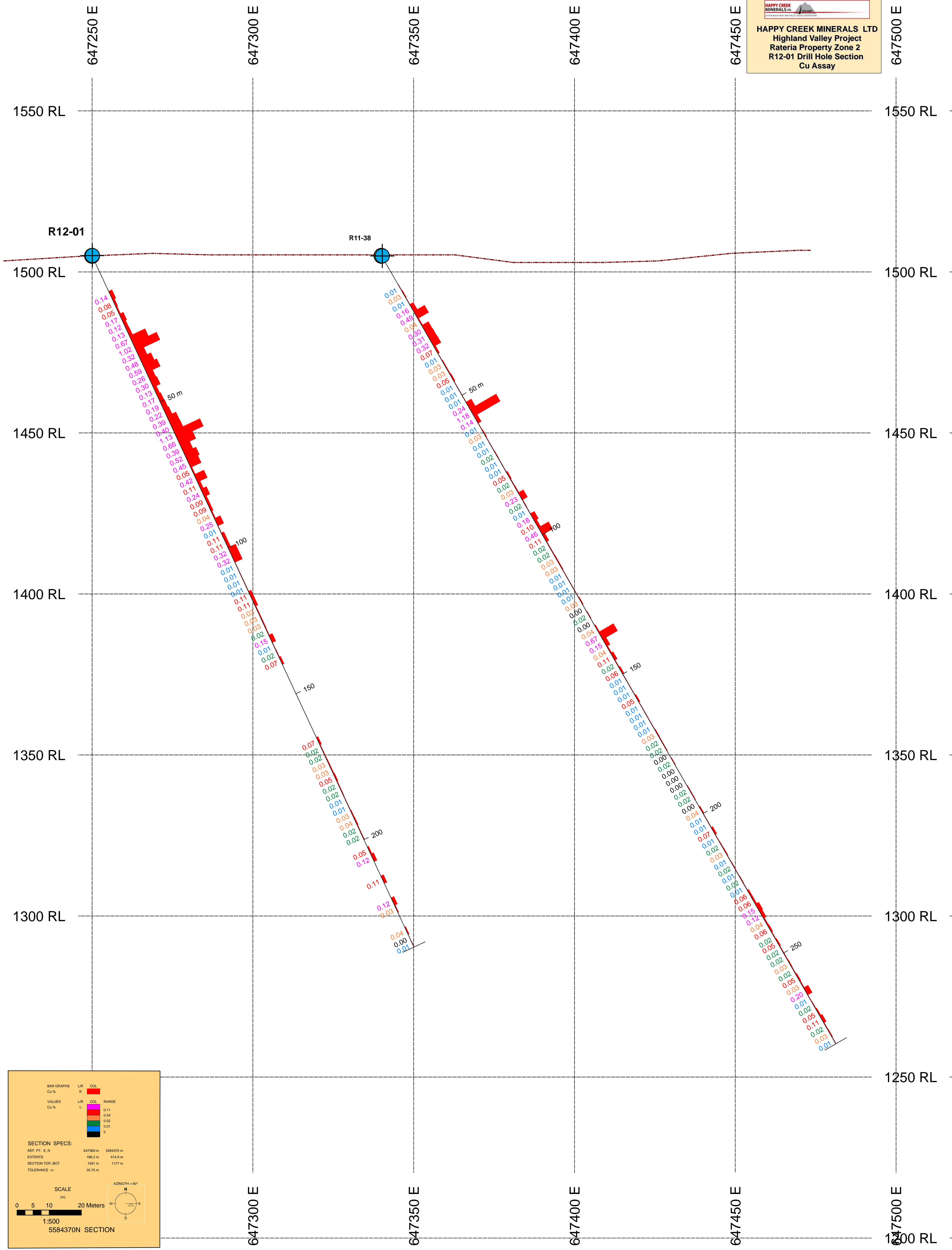
REF. PT. E, N	647373 m	5584000 m
EXTENTS	182.6 m	406.8 m
SECTION TOP, BOT	154 m	1134 m
TOLERANCE +/-	16.75 m	

**SCALE**  
 0 5 10 20 Meters  
 1:500

**5584000N SECTION**

**AZIMUTH = 90°**



BAR GRAPHS		L/R	COL
Cu %		R	Red

VALUES		L/R	COL	RANGE
Cu %		L	Red	0.11
		L	Orange	0.04
		L	Yellow	0.02
		L	Green	0.01
		L	Blue	0

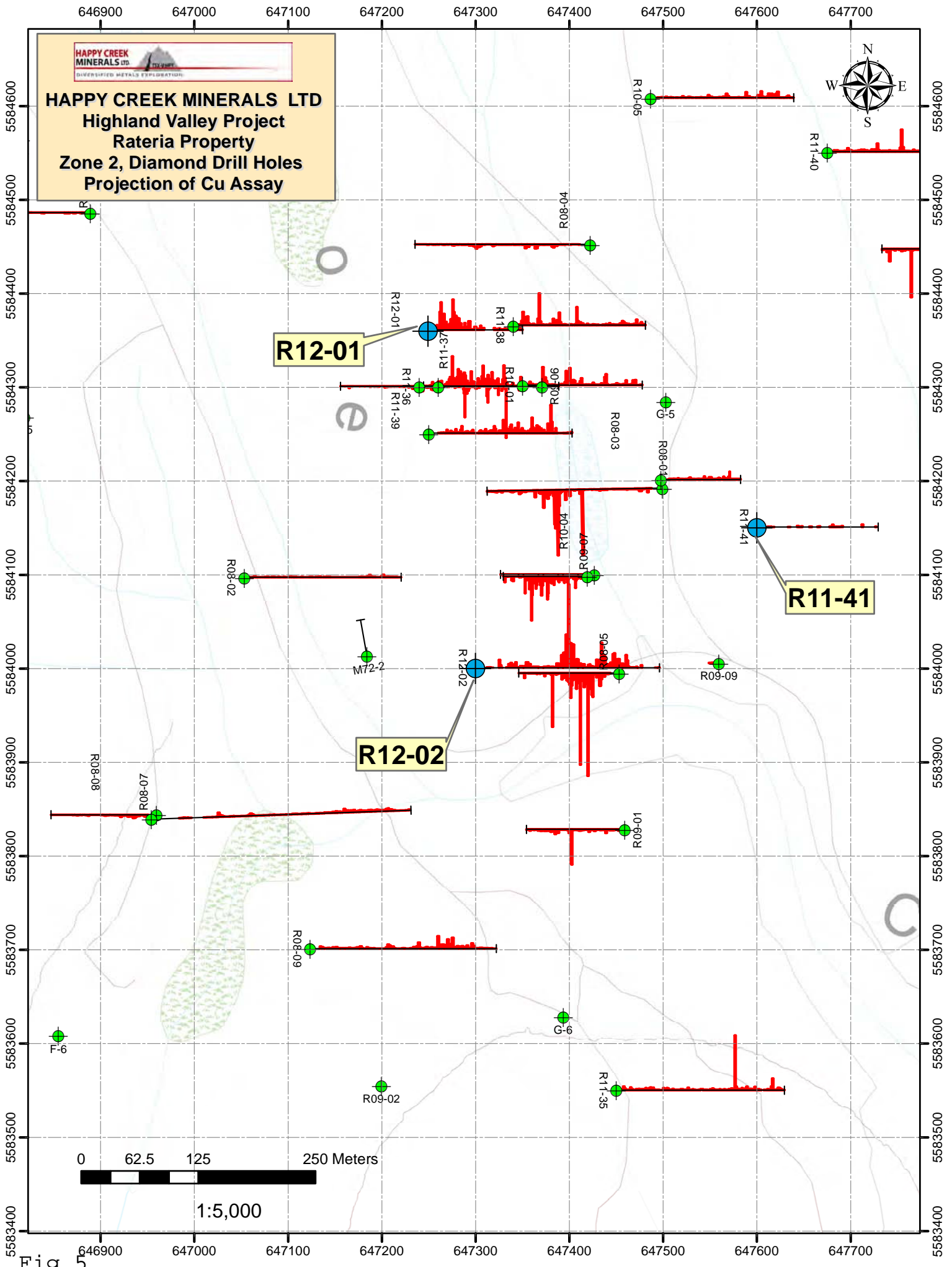
SECTION SPECS:

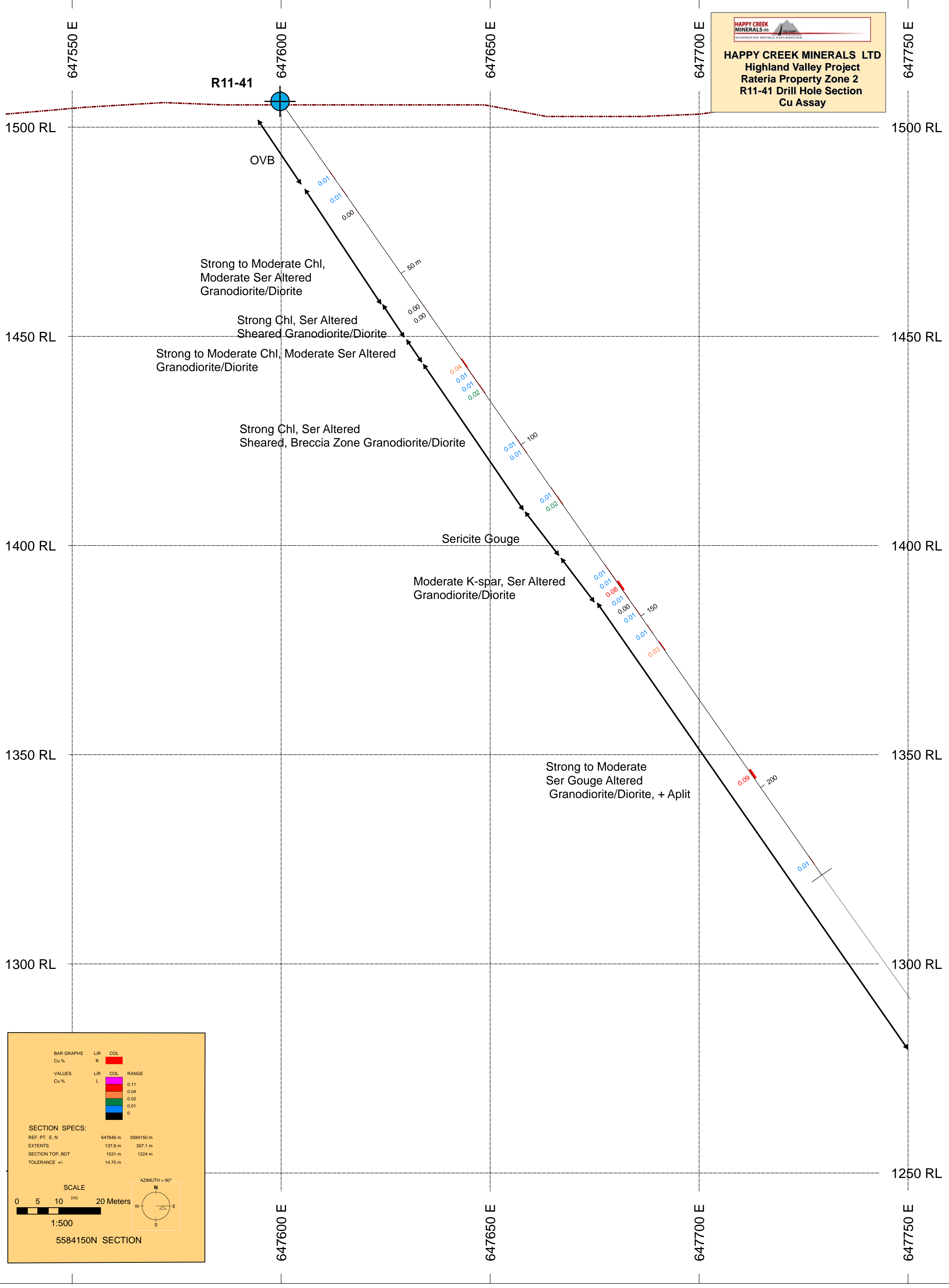
REF.-PT. E, N	647389 m	5584370 m
EXTENTS	186.2 m	414.8 m
SECTION TOP, BOT	1591 m	1177 m
TOLERANCE +/-	20.75 m	

SCALE (m): 0 5 10 20 Meters  
 1:500  
 5584370N SECTION

AZIMUTH = 90°





BAR GRAPHS		
Cu %	L/R	COL
	R	Red

VALUES			
Cu %	L/R	COL	RANGE
	L	Green	0.11
		Red	0.04
		Orange	0.02
		Blue	0.01
		Black	0

**SECTION SPECS:**

REF. PT., E, N	647646 m	5584150 m
EXTENTS	137.8 m	307.1 m
SECTION TOP, BOT	1531 m	1224 m
TOLERANCE +/-	14.75 m	

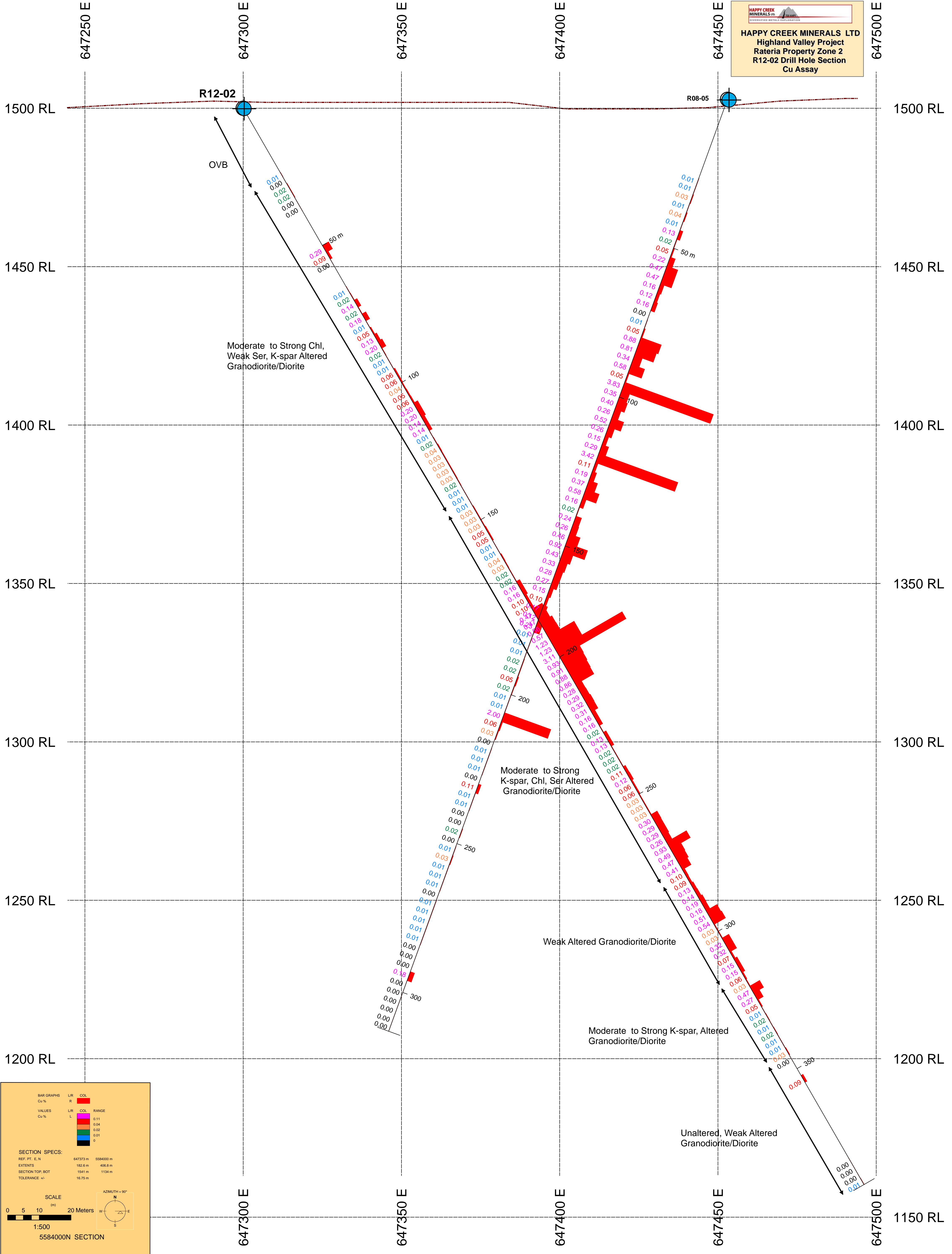
  

**SCALE**

0 5 10 20 Meters

1:500

5584150N SECTION



R12-02

R08-05

OVB

Moderate to Strong Chl,  
 Weak Ser, K-spar Altered  
 Granodiorite/Diorite

Moderate to Strong  
 K-spar, Chl, Ser Altered  
 Granodiorite/Diorite

Weak Altered Granodiorite/Diorite

Moderate to Strong K-spar, Altered  
 Granodiorite/Diorite

Unaltered, Weak Altered  
 Granodiorite/Diorite

BAR GRAPHS

LR	COL	
R		
Cu %		

VALUES

LR	COL	RANGE
L		
Cu %		

SECTION SPECS:

REF. PT. E, N 647373 m 5584000 m

EXTENTS 182.6 m 498.8 m

SECTION TOP, BOT 1594 m 1134 m

TOLERANCE +/- 16.75 m

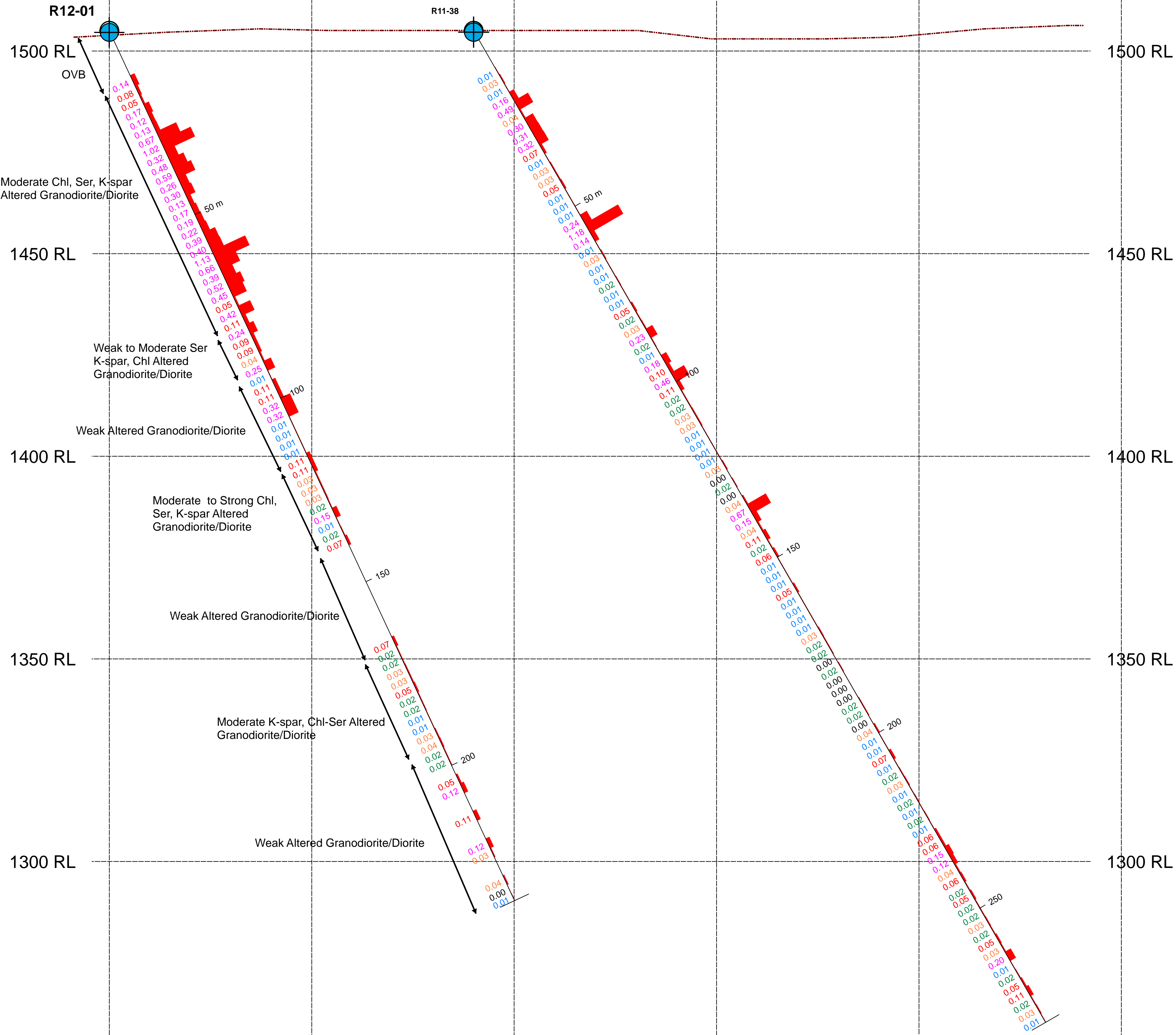
SCALE

0 5 10 20 Meters

1:500

5584000N SECTION

AZIMUTH = 90°



BAR GRAPHS		L/R	COL
Cu %	R		Red

VALUES		L/R	COL	RANGE
Cu %	L		Red	0.11
			Orange	0.04
			Yellow	0.02
			Green	0.01
			Blue	0

SECTION SPECS:  
 REF. PT. E, N 647369 m 5584370 m  
 EXTENTS 186.2 m 414.9 m  
 SECTION TOP, BOT 1591 m 1177 m  
 TOLERANCE +/- 20.75 m

SCALE  
 0 5 10 20 Meters  
 1:500

5584370N SECTION

AZIMUTH = 90°

647300 E

647350 E

647400 E

647450 E

647500 E

1250 RL

1250 RL

1300 RL

1300 RL

1350 RL

1350 RL

1400 RL

1400 RL

1450 RL

1450 RL

1500 RL

1500 RL

1550 RL

1550 RL

R12-01

R11-38

OVB

Moderate Chl, Ser, K-spar  
Altered Granodiorite/Diorite

Weak to Moderate Ser  
K-spar, Chl Altered  
Granodiorite/Diorite

Weak Altered Granodiorite/Diorite

Moderate to Strong Chl,  
Ser, K-spar Altered  
Granodiorite/Diorite

Weak Altered Granodiorite/Diorite

Moderate K-spar, Chl-Ser Altered  
Granodiorite/Diorite

Weak Altered Granodiorite/Diorite

50 m

100

150

200

250

50 m

100

150

200

250

# Appendix 1

## Diamond Drill Hole Logs

PROPERTY: Rateria			UTM ZONE: 10			DRILLED FOR: Happy Creek Minerals Ltd.						DOWNHOLE SURVEY											
MINING DIVISION: Kamloops			DATUM: NAD83			DRILLED BY: Glen's Drilling						INSTRUMENT: Pajari											
DDH # R12-01		UTM-E: 647250			START DATE: Nov14,2012						DEPTH	AZIMUT	DIP										
OVERBURDEN: 12.19			UTM-N: 5584360			FINISH DATE: Nov18,2012						EOH	-68	92									
TOTAL DEPTH: 236.84m			ELEVATION: 1507m			LOGGED BY: Sassan Liaghat																	
CORE SIZE: N			AZIMUTH: 090																				
			DIP: -65E																				
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):						STRUC					
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other			
0.00	12.19	OVb		Glacial Overburden/Casing																			
12.19	47.85	Mod Chl, Ser, K-Spar, Altd GD/Dio		<p>Medium to coarse grained granodiorite. Moderate light green color, locally pink. Moderate solid, in some area strongly broken rock</p> <p><b>Composition:</b> ~65% anhydral to euhydral plagioclase (up to 3mm in size), ~10 % grey subhedral quartz (up to 5 mm in size), 15 to 20% mafics (bio&gt;hb), locally coarse biotite up to 5mm in dimension. K-spar ~12%, magnetite 1-2%.</p> <p><b>Alteration:</b> Chlorite and sericite is a major alteration mineral; replacing groundmass of mafic minerals and feldspar. Dark chl in fractures and fills veins are common, particularly in potassic zones. Dark silicate minerals seems to be concentrated in intense chl zones Epi in minor amount associated with chl . Carb veins observe and some parts accompany with minor hematite.</p> <p><b>Structure:</b> Moderate fractures (about 60 c/a) and irregular tiny chl +epi veins.</p> <p>-few irregular qtz veins in lower part of interval,</p> <p><b>Mineralization:</b> Moderate to weak grade of bn and cc observed in or associated with chl veins/fractures within K-spar alterion zone.</p> <p><b>Sub Sections:</b></p> <p>-From 14.20 to 14.55 and 15.20 to 16, and 19.85 to 20.55m : Kspar zone with minor bn-cc in or assicted with chl veins/fractures.</p> <p>-@18.90m, 5 cm mafic dike with 70% fine grained mafic minerals. Sharp contact in both sides (70 to c/a).</p> <p>-@25.80m, 2cm irregular qtz vein with epi and in selvage fine grained hem.</p> <p>-Locally cluster of mafic minerals, e.g., @ 26.90m, 1.5cm dimension..</p> <p>-From 30.85 to 31.20m mafic rich, fine grained diorite, gradual contacts</p> <p>-in strong k-spar zone locally irregular qtz vein (silicifications) and tiny epi veinlets e.g., @ 41.40m.</p> <p>@41.50 zone of mafic rich zone for about 10 cm.</p> <p>-@ 43.60m for 7 cm carb rich felsic dike with sharp contacts (60 to c/a), white color, slightly ser altered.</p> <p>-@46.10m, 1cm wide carb-qtz vein, 45 to c/a, in selvage hem</p>		2	2	2	1	1	2	1					1	0.00	0.20	0.20			several chl veins and veinlets.



PROPERTY: Rateria			UTM ZONE: 10			DRILLED FOR: Happy Creek Minerals Ltd.			DOWNHOLE SURVEY												
MINING DIVISION: Kamloops			DATUM: NAD83			DRILLED BY: Glen's Drilling			INSTRUMENT: Pajari												
DDH # R12-01			UTM-E: 647250			START DATE: Nov14,2012			DEPTH	AZIMUT	DIP										
OVERBURDEN: 12.19			UTM-N: 5584360			FINISH DATE: Nov18,2012			EOH	-68	92										
TOTAL DEPTH: 236.84m			ELEVATION: 1507m			LOGGED BY: Sassan Liaghat															
CORE SIZE: N			AZIMUTH: 090																		
			DIP: -65E																		
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):						STRUC			
FROM	TO	m			>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
47.85	55.00		Mod Ser, Wk Chl Altd GD/Dio	General characters similar to above interval, Fine grained, locally solid, chlorite and light green ser alteration periodically changes. -light green ser -carb alteration within fractures and several veins and veinlets. Low mag content. -From 50 to 51.30m coarse grained GD with gradual contacts. <b>Mineralization:</b> Trace copper minerals may present in fractures and chlorite veinlets	1	1	2	1	1	0	2	0				1	0.10	0.10	0.10		fracturing
55.00	76.80		Mod Chl, Ser, K-Spar, Altd GD/Dio	Same as 12.19-47.85m interval , - hem is more present in fractures and with semi brecciated rock at 55.85 for 5 cm - In some parts rock strongly broken and chloritized. -From 60 to end of interval potassic zone more wider and solid, micro veins of chl associated with hem. -Fractures filling with chl +epi with halo of k-spar common, mostly 50 to c/a (e.g., @69m) <b>Mineralization:</b> Weak copper (bn+cp) -@47.95m fracture/vein of chl-epi host for cluster of bn; about 3cm wide and 2-3 mm thick. -From 59. 5m mineralization drop to wk, locally bn in fractures with chl and dark minerals. -Trace cp observed in some fractures parallel to c/a. -@ 76.65m Carb-qtz vein , 1.5 cm thick	1	1	1	2	1	1	2	1				1	0.10	0.10			fracturing and chl veinlets
76.80	80.10		Wk to Mod Ser-K-sapr- Altd GD/Dio	General character similar to first unit. Coarse grained rock , Contact with above unit is semi sharp contact with potassic and carbonate alterations.Solid coarse grained mafics (Hb+bio 30 to 40%), up to 4mm in size. Dark green color. - Fractures about 60 to c/a, fill with dark chl, epi and probably cc?? <b>Alteration:</b> Plagioclase weak altered to ser. feldspar partially to potassic alteration, minor silicifications with irregular qtz veinlets. Locally potassic zone in selvage of fractures, epi-chl veins. Minor carb veins and undeveloped qtz veins locally. <b>Mineralization:</b> Wk mineralization in this interval, cc probably in some fractures with chl, bn in trace amount in fractures and within chl veins			1	1	1	1	1	1				0.3	0.10	,1	0.10		fracturing

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MINING DIVISION: Kamloops			DATUM: NAD83			DRILLED BY: Glen's Drilling						INSTRUMENT: Pajari								
DDH # R12-01		UTM-E: 647250			START DATE: Nov14,2012						DEPTH	AZIMUTH	DIP							
OVERBURDEN: 12.19			UTM-N: 5584360			FINISH DATE: Nov18,2012						EOH	-68	92						
TOTAL DEPTH: 236.84m			ELEVATION: 1507m			LOGGED BY: Sassan Liaghat														
CORE SIZE: N			AZIMUTH: 090																	
			DIP: -65E																	
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):								MINERALIZATION (%):						STRUC
FROM	TO m					>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	
80.10	86.00	Wk to Mod Ser-K-sapr-Chl Altd GD/Dio		General characters same as first interval. Med- coarse grained rock, locally mixed with fine grained diorite. rocks in this interval relatively more solid. Light green color, -Carb veins (some pinkish white are common and more concentrate locally (e.g., @ 84.67m) <b>Mineralization:</b> Mineralization in this interval is weak and contain minor bn in qtz carb veins	1	1	1	1	1	1	1	1	1	0.4		0.10	0.00	Fracturing		
86.00	127.00	Wk Altd GD/Dio		General rock characters same as first unit, Mod -coarse grained unit. Mostly light green color and solid. Fractures generally high angle to c/a and wide spread. Locally high concentration of fractures observed in strong chl zones. Altering between potassic and chl alteration all through the interval. -From 87.48 to 89.80m less altered rocks. - Irregular carb veins (pink color) are more available from 92.5m down to interval. Locally potassic zone in selvage of fractures, epi-chl veins. Few short aplite dikes observed. -From 110 m down the interval, rock more solid, more hem in fractures (e.g., 117m, 117.96m, 119.30m. <b>Mineralization:</b> Mineralization in this interval in general weak, but locally condense cc in fractures. -Type of mineralization from 86m to depth changes from mainly bn to mainly cc.			1	1	1	1	2	1		1		0.10	0.10	Fracturing and chl veinlets		
127.00	138.70	Mod to Strg Chl-K-sapr-Altd GD/Dio - Fault Zone		General character of rock same as first interval Rock generally broken and locally intense fractured, few short of gouge zone, few thin dioritic dike cut through. -From 127 to 130.15m : highly fractured chl-k-spar GD , parallel to c/a carb-clay vein . - From 130.15 to 131m diorite intrusive , gradual /broken contact, rich in fine grained mafics, Fractures fill with carb-chl and clay. aplite dikes observed. - From 131 to 134.90m semi altered GD, in fractures hm and carb. -From 13.90 to 138.70m, intense fault zone shear zone, strong ser, carb alteration and veins. - Locally short zones of ser gouge. <b>Mineralization:</b> Mineralization is trace, cc may present in dark fractures			1	1	1	1	1	1		1		0.00	0.10	Broken, Shearing fault zone		

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<b>MINING DIVISION: Kamloops</b>			<b>DATUM: NAD83</b>			<b>DRILLED BY: Glen's Drilling</b>						<b>INSTRUMENT: Pajari</b>									
<b>DDH # R12-01</b>			<b>UTM-E: 647250</b>			<b>START DATE: Nov14,2012</b>						<b>DEPTH</b>	<b>AZIMUT</b>	<b>DIP</b>							
<b>OVERBURDEN: 12.19</b>			<b>UTM-N: 5584360</b>			<b>FINISH DATE: Nov18,2012</b>						<b>EOH</b>	<b>-68</b>	<b>92</b>							
<b>TOTAL DEPTH: 236.84m</b>			<b>ELEVATION: 1507m</b>			<b>LOGGED BY: Sassan Liaghat</b>															
<b>CORE SIZE: N</b>			<b>AZIMUTH: 090</b>																		
			<b>DIP: -65E</b>																		
<b>INTERVAL (m):</b>		<b>ROCK TYPE</b>	<b>ROCK sub TYPE</b>	<b>DESCRIPTION</b>	<b>QTZ VEINS</b>	<b>ALTERATION (1-5):</b>						<b>MINERALIZATION (%):</b>						<b>STRUC</b>			
<b>FROM</b>	<b>TO m</b>				>3mm	<b>K-spar</b>	<b>Ser</b>	<b>Chl</b>	<b>Ep</b>	<b>Kaol</b>	<b>Carb</b>	<b>Silica</b>	<b>Mus</b>	<b>Py</b>	<b>Mag</b>	<b>FeOX</b>	<b>Cpy</b>	<b>Bor</b>	<b>Cc</b>	<b>other</b>	
138.70	175.00	Wk-Altd GD/Dio		General characters same as first interval . Mixing of fine and coarse grained rock, locally gradual or sharp contacts. -@149.5m and 155.5m intense chl zone, -Few pink color fine grained dikes about 1cm thick max, cut interval with low angle (20 to c/a) e.g., at 153.95m -Locally potassic zone e.g., from 165 to 166.5m, brecciated zone from 165 to 166m.frctures fill with hem-carb. -Fine grained mafic dike, 17cm wide, with sharp contact @ 172m. - Fractures with hem observed, e.g., 172.72m. <b>Mineralization:</b> Mineralization in this interval is trace, observed at 166.80m in 90 to c/a fracture.		1	1	1	1	1	2	0				0.3		0.00	0.10		short pink dike
175.00	193.10	Mod K-spar-Chl-Ser Altrd GD/Dio		General characters same as first interval . Mixing of fine and coarse grained rock, locally gradual or sharp contacts. Rock more fractured than above in terval. mixing of k-spar and chl zone all through. in fractures carb -clay and chl. Epi-carb veins are common. -Some fractures host for hem. e.g., 177.62m, -Some short ser-carb gouge zone observed , e.g. 189.5 for 15cm., -@193m for 20cm mafic dike, and locally concentration of irregular mafic dikes (e.g., 192.192.90m). -Locally undeveloped qtz veins, e.g., @ 190.80m. <b>Mineralization:</b> Mineralization in this interval weak-moderate @179 cc in fracture, @191m bn+cc in some fractures, @194m bn in some fractures		2	2	2	1	2	2	1				2		0.10	0.10		Few short gouge-mafic dikes

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MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling				INSTRUMENT: Pajari													
DDH # R12-01		UTM-E: 647250		START DATE: Nov14,2012				DEPTH		AZIMUT		DIP									
OVERBURDEN: 12.19		UTM-N: 5584360		FINISH DATE: Nov18,2012				EOH		-68		92									
TOTAL DEPTH: 236.84m		ELEVATION: 1507m		LOGGED BY: Sassan Liaghat																	
CORE SIZE: N		AZIMUTH: 090																			
		DIP: -65E																			
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):				STRUC					
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
193.10	236.84	Wk Altrd GD/Dio		General characters same as first interval . Mixing of fine and coarse grained rock, locally gradual or sharp contacts. Rock less fractured than above interval. and more solid, locally fresh. Locally short zones of K-spar alteration. Fractures are mostly high angle to c/a and partly dray contacts, and some fill with carb and chl. Pink carb in irregular veinlets . Some fractures host for hem. - Aplit dike from 195.75 to 196.10m - Locally spec observed in fractures e.g., 221.15m . -To the end of hole, in general rock is more solid , less altered and less mineralized. <b>Mineralization:</b> Mineralization in this interval weak -trace -From 203.80 to 206m potassic zone with trace bn and cc (e.g., at 205.15m bn, @ 205 30 cc in high angle fracture ) -@213 cc in high angle fracture to c/a with trace cp. - @235.30 m chl-qtz vein in short chl zone may contain trace cc,		1	1	1	1	1	2	1				0.3		0.10	0.10		solid rock

<b>PROPERTY: Rateria</b>			<b>UTM ZONE: 10</b>				<b>DRILLED FOR: Happy Creek Minerals Ltd.</b>					<b>DOWNHOLE SURVEY</b>													
<b>MINING DIVISION: Kamloops</b>			<b>DATUM: NAD83</b>				<b>DRILLED BY: Glen's Drilling</b>					<b>INSTRUMENT: Pajari</b>													
<b>DDH # R12-02</b>		<b>UTM-E: 647300</b>				<b>START DATE: Nov19,2012</b>					<b>DEPTH</b>		<b>AZIMUTH</b>		<b>DIP</b>										
<b>OVERBURDEN: 23.47m</b>		<b>UTM-N: 5584000</b>				<b>FINISH DATE: Nov25,2012</b>					<b>EOH</b>		<b>-60</b>		<b>93</b>										
<b>TOTAL DEPTH: 392.28m</b>		<b>ELEVATION: 1500m</b>				<b>LOGGED BY: Sassan Liaghat</b>																			
<b>CORE SIZE: NQ</b>			<b>AZIMUTH: 090</b>																						
			<b>DIP: -60E</b>																						
<b>INTERVAL (m):</b>		<b>ROCK TYPE</b>	<b>ROCK sub TYPE</b>	<b>DESCRIPTION</b>				<b>QTZ VN</b>		<b>ALTERATION (1-5):</b>					<b>MINERALIZATION (%):</b>					<b>STRUC</b>					
<b>FROM</b>	<b>TO m</b>							>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other		
0.00	23.47	OVB		Glacial Overburden/Casing																					
23.47	73.00	Mod to Strg Chl, Wk Ser, K-spar Altd GD/Dio		<p>Medium to coarse grained granodiorite. Moderate dark green color, locally light pink. Moderate solid, in some area strongly broken rock. Altering between fractured-chloritic and weak altered rocks.</p> <p><b>Composition:</b> ~65% anhydral to euhydrat plagioclase (up to 3mm in size), ~10 % grey subhedral quartz (up to 5 mm in size), about 20% mafics (bio&gt;hb), locally coarse biotite up to 4mm in dimension. K-spar ~10%, magnetite 1-2%.</p> <p><b>Alteration:</b> Chlorite is a major alteration mineral; replacing groundmass of mafic minerals. Dark chl in fractures and fills veins are common, particularly in potassic zones. Ser in fractures and replacing feldspars. Dark silicate minerals seems to be concentrated in intense chl zones Epi in minor amount associated with chl . Carb veins observe and some parts accompany with minor hematite.</p> <p><b>Structure:</b> Locally strong fractures (about 60-65 c/a) and irregular tiny chl +epi veins.</p> <p><b>Mineralization:</b> cc MAY present in some of the dark fractures and chl veins</p> <p><b>Sub Sections:</b></p> <p>-From 25 to 35.10m chl zone and from 35.10 to 50.90m less altered rock and again from 50.90m to 57m chl zone, which is contains k-spar altertaion banding.</p> <p>-@51.17m, Potassic alteration in halo of fractue, hem in fracture.</p> <p>-@51.17m, hem zone for 20 cm,</p> <p>-@ 52.5m, 7cm qtz vein , 80 to c/a, in selvage potassic alteration.</p> <p>-From 57 to 64.5m, solid and wk altered rock, and from 64.5 to 75 strong chl, with locally short zone of chl gouge and potassic alteration.</p> <p>-@ 70m, 2cm wide carb vein.</p>					1	1	2	1	1	2	1					1	0.00	0.00	0.10		several chl veins and veinlets.

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MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling				INSTRUMENT: Pajari															
DDH #	R12-02	UTM-E: 647300		START DATE: Nov19,2012				DEPTH	AZIMUTH	DIP													
OVERBURDEN:	23.47m	UTM-N: 5584000		FINISH DATE: Nov25,2012				EOH	-60	93													
TOTAL DEPTH:	392.28m	ELEVATION: 1500m		LOGGED BY: Sassan Liaghat																			
CORE SIZE: NQ		AZIMUTH: 090																					
		DIP: -60E																					
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ	ALTERATION (1-5):							MINERALIZATION (%):					STRUC					
FROM	TO m				VN	>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other		
73.00	146.00	Strg Chl, Wk Ser, Kspar Altd GD/Dio		General rock type charactrs are similar to above interval. Rock strongly broken and locally chloritic gouged. Short range of K-spar alteration locally, hem in fractures. chlorite and light green ser alteration periodically changes. -light green ser -carb alteration within fractures and several veins and veinlets. <b>Mineralization:</b> cc +bn MAY present in some of the dark fractures and chl veins <b>Sub Sections:</b> -From 82.20 to 83m hem and brecciated rock with several carb veins. -From 95.10 to 95.90 ham zone. -@98.80m aplit dike , 30cm, lower contact broken, upper contact sharp, 20 to c/a. -Locally ser-carb gouge, e.g., @ 101.50m, 101.60m, 112.5 (20cm). -From 119 to 153m, aplit dike, sharp contacts, 10 to c/a -From 124.05 to 124.80m strong chl zone, -Hem zone from 135 to 136.5m. -@142.30 and 143m, chl-hem-ser gouge with hem staining	1		1		1	3	1	1	2	0				2	0.00	0.10	0.10		fracturing, short aplit dikes
146.00	165.00	Mod to Stg K-Spar, Chl, Ser Altd GD/Dio		General rock charactrs similar to first interval , rock changes to more altered, broken and gougy rock. Hem and K-spar are locally mix together in gouge and brecciated rock. Locally rock is more solid and less altered. Carb veins are common within ser-Kspar smashed rock. <b>Mineralization:</b> cc +bn MAY present in some of the dark fractures and chl veins <b>Sub Sections:</b> -From 146 to 154.90m: K-spar zone, with carb-epi-ser in fractures and shearing zone. Dark hem is more present in fractures and with gouge and broken rock. -From 145.90 to 162m: rock more solid, fractures with halo of K-spar . - @ 174m epi in fractures with strong potassic zone.	1		2		2	2	1	1	2	1				1		0.10	0.10		fracturing and chl veinlets

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MINING DIVISION: Kamloops			DATUM: NAD83			DRILLED BY: Glen's Drilling			INSTRUMENT: Pajari													
DDH #		R12-02	UTM-E: 647300			START DATE: Nov19,2012			DEPTH	AZIMUTH	DIP											
OVERBURDEN:		23.47m	UTM-N: 5584000			FINISH DATE: Nov25,2012			EOH	-60	93											
TOTAL DEPTH:		392.28m	ELEVATION: 1500m			LOGGED BY: Sassan Liaghat																
CORE SIZE: NQ			AZIMUTH: 090																			
			DIP: -60E																			
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VN	ALTERATION (1-5):							MINERALIZATION (%):					STRUC				
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other		
165.00	227.00	Strg K-sapr-locally Chl Altd GD/Dio		General character similar to first unit. Coarse-medium grained rock . Some locations mixing of coarese grained and medium granined . Rock strongly potassic altered, broken and contain chl-epi veins, Core locally show carb veins, <b>Mineralization:</b> (MINERALIZATION ZONE). Strong to Moderate copper mineralization present in this interval. bn is in fracturs , irregular veins, and as clusters. From 165 to 175m moderate, From 172 to 212m strong, and from 210 to 227m moderate bn and cc are observed. <b>Sub Sections:</b> From 208 to 211 m strong chl zone , fractures have cc.			3	2	2	1	1	2	1				2	0.10	0.30	0.20		fracturin g, smashed rock with mineraliz ation veining
227.00	239.15	Wk K-sapr-Chl-Ser Altd GD/Dio		General characters same as first interval. Less altered, more solid than the previous interval. <b>Mineralization:</b> Weak cc in some fractures.		1	1	1	1	1	1	1				1		0.10	0.00		Fracturin g	
239.15	271.80	Strg K-spar,Chl, Mod Hem,Ser Altd GD/Dio		General rock characters same as first unit, Mod -coarse grained unit. Changing between strongly K-sapr, chl altered and weak altered rocks. Rock strongly fractured. and broken. Locally strong hem zone. Dark chl in fractures. Fractures generally 60-65 angle to c/a. Locally high concentration of fractures observed in strong K-spar zones. <b>Sub Sections:</b> -From 239.15 to 271.80m: stringly broken , -@ 239.70m hem zone with brecciated structure for 7cm with irregular carb veins. -Locally potassic zone in selvage of fractures, epi-chl veins. -From 241.40 to 241.78m hem zone. -From 264.15 to 271.80m rock strongly broken, K-spar altered, and contain hem and carb. <b>Mineralization:</b> Mineralization in this interval moderate , locally condense cc in fractures. bn in veins, and as cluster and feacture filling .				1	1	1	1	2	1			1		0.10	0.10		Fracturin g and chl veinlets	

PROPERTY: Rateria		UTM ZONE: 10		DRILLED FOR: Happy Creek Minerals Ltd.				DOWNHOLE SURVEY													
MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling				INSTRUMENT: Pajari													
DDH #	R12-02	UTM-E: 647300		START DATE: Nov19,2012				DEPTH	AZIMUTH	DIP											
OVERBURDEN:	23.47m	UTM-N: 5584000		FINISH DATE: Nov25,2012				EOH	-60	93											
TOTAL DEPTH:	392.28m	ELEVATION: 1500m		LOGGED BY: Sassan Liaghat																	
CORE SIZE: NQ		AZIMUTH: 090																			
		DIP: -60E																			
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VN	ALTERATION (1-5):						MINERALIZATION (%):						STRUC			
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
271.80	316.00	Wk Altrd GD/Dio		<p>General character of rock type same as first interval</p> <p>Weak altered rock, solid, locally zone of K sapr alteration. Pink carb locally.</p> <p>-From 330.5 to 332.45 K-zone with chl-epi vein.</p> <p>From 294.20 to 294.84m Felsic dike with broken contacts.</p> <p>-Weak alteration continues to end of interval, locally potassic zone (e.g., 298.70 to 299, contain bn veins).</p> <p>- potassic -ser, epi zone from 310.5 to 311 and 305 to 305.5m</p> <p><b>Mineralization:</b></p> <p>Moderate grade of bn, cc +/- cpy in some fractures and veins of chl and dark minerals. Bn present in tiny irregular veins (1-3mm wide) all through interval (0.5 to 1m apart). Locally more concentrate (e.g, 292 to 295m). Bn veins show potassic alteration halo. Cc in some fractures. bn in veins at 277.05m.</p> <p>-Mineralization decreases to bottom of interval.</p>			1	1	1	1	1	1				1		0.00	0.10		Broken locally
316.00	327.70	Mod to Stg K spar Altrd GD/Dio		<p>General characters same as first interval.</p> <p>- From 316 to 319 strong k-altertion zone .Salmon pink color, in fractures epi and ser.</p> <p>- From 319 to 327.70m strongly broken rock, potassic, ser , chl, carb and epi are common.</p> <p><b>Mineralization:</b></p> <p>Weak, cc and bn observed in minor amount in broken rock</p>		1	1	1	1	1	2	0				0.3		0.00	0.10		short pink dike
327.70	338.00	Wk K-spar-Chl-Ser Altrd GD/Dio		<p>General characters same as first interval . Solid, Locally potassic alteration with epi.</p> <p>-From 330.5 to 332.45m k-spar alteration with epi.</p> <p>-@331.35m, 12 cm carb-qtz epi vein observed</p> <p>-From 332.45 to 339m wk altered rock.</p> <p><b>Mineralization:</b></p> <p>bn and cc may present in chl-epi vein and in potassic alteration</p>		2	1	1	1	1	2	1				2		0.10	0.10		solid rock



PROPERTY: Rateria			UTM ZONE: 10			DRILLED FOR: Happy Creek Minerals Ltd.			DOWNHOLE SURVEY														
MINING DIVISION: Kamloops			DATUM: NAD83			DRILLED BY: Glen's Drilling			INSTRUMENT: Pajari														
DDH # R12-02		UTM-E: 647300			START DATE: Nov19,2012			DEPTH	AZIMUTH	DIP													
OVERBURDEN: 23.47m		UTM-N: 5584000			FINISH DATE: Nov25,2012			EOH	-60	93													
TOTAL DEPTH: 392.28m		ELEVATION: 1500m			LOGGED BY: Sassan Liaghat																		
CORE SIZE: NQ			AZIMUTH: 090																				
			DIP: -60E																				
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION			QTZ VN		ALTERATION (1-5):					MINERALIZATION (%):					STRUC				
FROM	TO m						>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
338.00	392.28	Unaltd, Wk Altrd GD/Dio		General characters same as first interval . Rock less altered and fractured than above interval and more solid, locally fresh. Locally short zones of minor K-spar alteration . -To the end of hole, in general rock is more solid and less altered <b>Mineralization:</b> Mineralization in this interval: not observed.				1	1	1	1	1	2	1				0.3		0.00	0.00		solid rock

PROPERTY: Rateria		UTM ZONE: 10		DRILLED FOR: Happy Creek Minerals Ltd.										DOWNHOLE SURVEY							
MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling										INSTRUMENT: Acid,Pajari							
DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011										DEPTH	AZIMUTH	DIP					
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011										100	90	-55					
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat										210	90	-53					
CORE SIZE: NQ		AZIMUTH: 90												300	95	-53					
		DIP: -55												EOH	99	-50					
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):							MINERALIZATION (%):					STRU			
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
				<p><b>General Charachters</b></p> <p>Coarse to medium grained granodiorite-diorite. Light to dark green color, locally creamy color. Entire of hole strongly broken, fractured and sheared rocks gouged and moderately brecciated. Locally moderate solid.</p> <p><b>Composition:</b> ~60% anhydral to euhydral plagioclase (up to 5mm in size), ~10 % grey subhedral quartz (up to 5 mm in size), ~20% mafics (bio=hb), locally biotite book up to 4mm in dimension. Locally irregular crowded of coarse grained or fine graied mafics, interstitial k-spar ~5%, magnetite 3-4%.</p> <p><b>Alteration:</b> Chlorite is a major alteration mineral; replacing groundmass of mafic minerals.Dark chlorite also present in some fractures and veins. Weak to moderate sericite locally observe, Some intervals characterized by weak altering of potassic alteration and light green sericitization. Locally chlorite gouge is envelopes along fractures. Weak hematite light red, fine grained replacing mafics in groundmass and fillings some fractures, locally common in shearing zones. In some intervals weak quartz flooding, and undeveloped quartz vein observed, some associated with carbonate. and clay. Carbonte vains and fracture filling are present inseveral intervals.</p> <p><b>Structures:</b> Rock variablyand strongly broken, fractued and some areas sheared. Some locations show short zone of chl-ser-carb-clay gouge. Carb veins observe and some parts accompany with hematite. Some major shearing fractures are observed.</p> <p><b>Mineralization:</b> trace-weak copper minerals locally in cores</p>																	
0.00	20.00	OVB		Glacial overburden																	with semi-rounded boulder

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MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling										INSTRUMENT: Acid,Pajari									
DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011										DEPTH	AZIMUTH	DIP							
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011										100	90	-55							
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat										210	90	-53							
CORE SIZE: NQ		AZIMUTH: 90												300	95	-53							
		DIP: -55												EOH	99	-50							
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):										MINERALIZATION (%):						STRU	
FROM	TO m				>3mm	K-spa	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other			
20.00	44.90	Strg-Mod Chl Mod Ser Altd GD-Dio		General features same as above. Interval strongly and variably altered with chl and moderately sericite. Minor silicification of groundmass also observed locally, Fractures and locally groundmass contain hm, trace epi and quartz, several zones of gouge with same materials observed. Carbonate tiny veins is also dominant in this interval. Most of fractures 70 to 80 c/a. <b>Mineralization:</b> Copper minerals not observed, may locate in intense chl zone. <b>Subsections:</b> -From 23.5m to end of interval stronger alteration. -From 24.90m to 25m chl gouge. -Chl veins, irregular, locally with hem in some parts, e.g., @32m. - From 41.74 to 42m Shearing fault, with hem carb, minor breccias, chl alteration is dominate. @ 44.80m for 10cm gouge with hem staining.			1	3	3	1		3	1				0.3						variably broken. Short gouge
44.90	56.90	Mod Chl Mod Ser Altd GD-Dio		Rock type and some features same as 20 to 44.90m interval with less alteration. Chl-ser-carb gouge are common. Fractured and broken rock textures, Carb, chl in fractures. fractures 65 to 70 c/a, fill with chl- pink carb-clay. <b>Mineralization:</b> Copper minerals not observed, may locate in intense chl zone. <b>Subsections:</b> -From 47.55m to 55m weaker alteration more solid.			1	4	1		1	4	1			0.5				tr		Gouge	
56.90	62.55	Strg Chl- Ser Altd- Sheared GD-Dio		Rock type and some features same as 20-44.90m interval . Strongly gouge and shearing. Toward the bottom of interval gouge zones are increase. <b>Mineralization:</b> Copper minerals not observed, may locate in intense chl zone.	4	3	3	1			3	1				3	0.1	0.1	0.2			short zone of gouge and shearing Quartz carb veins	

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MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling										INSTRUMENT: Acid,Pajari							
DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011										DEPTH	AZIMUTH	DIP					
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011										100	90	-55					
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat										210	90	-53					
CORE SIZE: NQ		AZIMUTH: 90												300	95	-53					
		DIP: -55												EOH	99	-50					
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):							MINERALIZATION (%):						STRU		
FROM	TO m				>3mm	K-spat	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
62.55	68.15	Strg-Mod Chl Mod Ser Altd GD-Dio		Same as 20-44.90m <b>Mineralization:</b> Copper minerals not observed, may locate in intense chl zone.																	irregular qtz-carb -ser-chl veins
68.19	84.73	Strg Chl- Ser Altd- Sheared GD-Dio		Rock type and some features same as as 15.85-21.32 interval .. -Rock solid weak to moderate altered, locally fractures fill with hem, e.g, @103.50m, 103.70m,		1	2	2			3	2				2					locally fractures fill with hem,
			Breccia Zone	Semi breccias, broken rock, matrix hosts for 1cm wide chl-carb (80%) and cc(20%). @109.60m small fractures with cc, @113.8m: broken piece of qtz-carb vein, in selvage patches of cc + bo, @113.2m: 1cm wide qtz-carb vein, 85 to c/a, @115.40m: specks of cpy and bo, @ 117.60m, cc+hem, @ 122.5m specks of cc, In this part of hole rock changes from semi-solid to broken in few times,	2	2	4	3	1		4	2				2			0.4		Semi breccias, broken rock

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DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011										DEPTH	AZIMUTH	DIP						
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011										100	90	-55						
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat										210	90	-53						
CORE SIZE: NQ		AZIMUTH: 90												300	95	-53						
		DIP: -55												EOH	99	-50						
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):										MINERALIZATION (%):						STRU
FROM	TO	m			>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other		
123.00	128.10		Mod to Stg Se, Wk Si Altd GD	Rock type and some features same as as 15.85-21.32 interval . Green color. Altering of mod and strg chl and ser alterations. short parts of the interval broken, locally ser-clay gouge, dark chl in fractures; locally mixed with hem and carb. Short zones of k-spar alteration observed in entire of interval, dark chl veinlets and silicification are more common in this type of alteration. Qtz veins and qtz flooding are present within groundmass, in some parts. Structural banding of chl-rich zoned along and in selvage of some fractures. Toward the bottom of interval rock more altered and more fractured. <b>Mineralization:</b> Trace specks of cc may observe in some fractures <b>Subsections:</b> @126m: concentration of hem in fractures,	4	2	4	2			4	3	1			1				tr	broken, locally ser-clay gouge,Qtz veins and qtz flooding	
128.10	129.00		Gouge	Ser gouge, broken rock,	1	2	4	1	1	1	4	1				1				tr	Gouge	
129.00	131.00		Mod to Stg Ser, Wk Si Altd GD	Rock type and some features same as 15.85-21.32 interval In lower portion of this interval more hematite in groundmass.		1	3			1	3	1				3					Hem veins	
131.00	140.00		Mod K-spar, Ser Altd GD	Rock type and some features same as 15.85-21.32 interval . Pinkish and bleached minerals. Hematite stained minerals may determine as K-spar minerals. Locally zone of bleached minerals in selvage of ser-carb-clay fractures. <b>Mineralization:</b> Trace specks of cc-cpy may observe in some fractures,		3	3			1	3	1				3	0.1		0.1			

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DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011								DEPTH	AZIMUTH	DIP							
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011								100	90	-55							
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat								210	90	-53							
CORE SIZE: NQ		AZIMUTH: 90										300	95	-53							
		DIP: -55										EOH	99	-50							
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):						STRU			
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
140.00	200.00	Wk to Strg Ser Altd GD		<p>Rock type and some features same as 15.85-21.32 interval .            Altering of light green mod to strong ser + Kspar altered rock and mild ser altered rock.            -locally carb, hem vein and fractures filling are common, dotted hem replacing some maics, hem veins about 2mm max wide observe all through interval, in different directions.            -Few short ser-carb gouge,            -dark chl in some fractures and replacing are common mafics            -locally k-spar altered rocks, some interval weak altered            -in lower portion of this interval, hem veins and fractures fillings</p> <p><b>Subsections:</b>            @151.50m for 25cm gouge,            @163m for 20 cm broken rock and gouge,            @about 162.5m fractures fill with hem, ser, chl and clay            -From 178 to 187m carb irregular veins are more intense,            @160.25m, 1cm irregular qtz vein,            -From 199 to about 209m, hem + qtz veins in few locations            @199.98m dark hem in fractures + broken hem veins            @200.70m, 7mm irregular hem vein 70 to c/a,            @201.20m for 30 cm broken rock with broken carb –qtz-hem veins (dark hem may contains cc)</p> <p><b>Mineralization:</b> few short intervals show cc +/- cp +/- bo mineralization (e.g., weak mineralization zone 140.90 to 145m),            -cc fills fractures in minor amount observe throughout the interval, and locally in groundmass mixed with hem, e.g, from 140.90 to 142m</p>	1	2	4	1		2	4	2					3	0.1	0.1	0.2	hem + qtz veins in few locations, ser-carb gouge

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DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011							DEPTH	AZIMUTH	DIP										
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011							100	90	-55										
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat							210	90	-53										
CORE SIZE: NQ		AZIMUTH: 90									300	95	-53										
		DIP: -55									EOH	99	-50										
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):					MINERALIZATION (%):					STRU							
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other			
200.00	282.50	Strg Ser Altd, Gouge , Mineralized GD,		<p>Rock type and some features same as 15.85-21.32 interval . Strongly ser altered rock, fractures and some mafic groundmass fills and replaced with dark chlorite, locally K-rich zone (or probably felsic dikes) and hematitic rock observed.</p> <p>Toward bottom of interval alteration, fracturing and gouge materials are increase.</p> <p>-chl in tiny fractures and veinlets are common in some parts.</p> <p>-different sets of chl-carb-ser veins and fracture filling observed in various directions, some host cc+/-bo.</p> <p><u>Subsections:</u></p> <p>@208.27m for 10 cm breccias and gouge, matrix fill with carb-qtz and ser,</p> <p>@205.80m, irregular hem-carb vein,</p> <p>@206.20m, 20 cm ser gouge,@211.10m 20 cm ser carb gouge, broken rock,</p> <p>-From 220 to bottom of interval the number of breccia-gouge zone increase (e.g., @ 222.0 and 223.9) @221.40 cc in fracture 50 to c/a From 221m, cc mixing with dark minerals and chl in many locations, @215.75m cc in 20 c/a fracture. @225.40m, 1m long fracture sub parallel to c/a fills with dark chl-ser and cc,@227m ser-carb vein/fracture 20 c/a,</p> <p>-From 227 to end of interval gouge and fractured rock are more common,</p> <p>-From 230.73 to 232.40 gouge,-From 229.75 to 230.52m zone of potassic alteration- @234.30, 234.35, 234.40, and many other locations, cc in fractures and in selvage of fractures.</p> <p>-Around 230.83m, 231.80m, 232 to down of interval.</p> <p>@232.45m, 2cm hem-cc vein high angle to c/a</p> <p>-in some area qtz-carb vein, 90 to c/a present. (e.g, 251.05m, 225m, 1cm)</p> <p>@265m, for 5cm dark green chl gouge zone may host for cc,</p> <p>From 265.05 to 269m, intense bleached rock,</p> <p>From 277.55 to 273.88m strong ser-gouge breccias, dominated in ser, clay and carb,</p>			2	4	2	1	3	4	2						3	0.1	0.1	0.3	with gouge

PROPERTY: Rateria		UTM ZONE: 10		DRILLED FOR: Happy Creek Minerals Ltd.								DOWNHOLE SURVEY									
MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling								INSTRUMENT: Acid,Pajari									
DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011								DEPTH	AZIMUTH	DIP							
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011								100	90	-55							
TOTAL DEPTH: 404.45		ELEVATION: 1568		LOGGED BY: Sassan Liaghat								210	90	-53							
CORE SIZE: NQ		AZIMUTH: 90										300	95	-53							
		DIP: -55										EOH	99	-50							
INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):						STRU			
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
273.78	274.50		K-spar Altrd Zone (with Felsic Dikes)	Rock type and some features same as 15.85-21.32 interval .. Altering of K-rich GD and felsic dikes, hard to separate, contact gradational, both unit host for cc, lower copper content in dike. Hem staining and fractures filling are more common in GD <b>Mineralization:</b> From 200-247: Moderate to Strong mineralization, From 247-282.5: Strong to Moderate mineralization, From 230 to down of hole more stronger (e.g. @249.5m, 255.70m (+bo), 256.55m, 257.65m). From 277 copper mineralization decreases . -cc +/- bo mineralization observe within gouge, e.g., 211.10m within fractures (from 30 to 80 c/a), e.g., 212.35m, 212.70m (in 8mm vein of chl-carb), and disseminations in groundmass with dark chl.		4	3	2	1	2	3	2				3	0.3	0.3	0.5		with felsic dikes,
282.50	290.00	Ser-Clay-Carb Gouge, Shear Zone		Rock type and some features same as 15.85-21.32 interval . Interval strongly bleached and soft. Within the gouge, breccia and broken rocks minor cc present	1	2	4	3		4	4	2				0.4			0.2		gouge, breccia and broken rocks



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MINING DIVISION: Kamloops		DATUM: NAD83		DRILLED BY: Glen's Drilling								INSTRUMENT: Acid,Pajari									
DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011								DEPTH	AZIMUTH	DIP							
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011								100	90	-55							
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INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):						MINERALIZATION (%):						STRU			
FROM	TO m				>3mm	K-spa	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other	
290.00	315.00	Mod to Strg Ser Altd GD+ Gouge		<p>Rock type and some features same as 15.85-21.32 interval . Similar as before, but mineralization in lower grade, -some carb-qtz veins observed, hem staining of groundmass present.</p> <p><u>Subsections:</u></p> <p>-From 290 to 309m ser-carb gouge, breccias, locally slide sides fractures,</p> <p>@298.5m, 1.5 cm wide qtz –carb vein, parallel to c/a,</p> <p>@298m carb vein, 4mm wide, high angle to c/a</p> <p>-From 296 to 297m rock dominate in gouge and breccias.</p> <p>-From 297.5 to 298.5m dark mafic and cc scattered in pinkish broken rock.</p> <p>@299.3m, 60 to c/a and 299.35m, 80 to c/a qtz-carb veins</p> <p>-From 299 to 301m dark green broken rock contains dark patches and irregular black minerals, could be cc.</p> <p>CC in several fractures and groundmass, @312m,in fractures 50 c/a,</p> <p><b>Mineralization</b></p> <p>Moderate mineralization is in upper portion of interval. Trace to weak mineralization in lower portion of interval.</p> <p>-cc with bo in some area are common in fractures and within qtz and carb chl veins. Cc also present in patches and as disseminations in rock.</p>	2	2	4	2		3	3	2						0.1	0.1	0.3	with gouge

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DDH # R11- 41		UTM-E: 645763.293		START DATE: May 05, 2011										DEPTH	AZIMUTH	DIP				
OVERBURDEN: 15.85m		UTM-N: 5582297.191		FINISH DATE: May, 12, 2011										100	90	-55				
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INTERVAL (m):		ROCK TYPE	ROCK sub TYPE	DESCRIPTION	QTZ VEINS	ALTERATION (1-5):							MINERALIZATION (%):						STRU	
FROM	TO m				>3mm	K-spar	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other
315.00	333.00	Mod-Weak Ser -hem, locally K-spar Altd GD		<p>Rock type and some features same as 15.85-21.32 interval . Compare to previous intervals, more solid, Altering between K-spar (+hem) and ser altered rocks, gradational changes, without clear contacts.</p> <p>-Some fractures fill with white ser-clay carb rich gouge,</p> <p>-Short range of breccia zone observed (e.g., 316m)</p> <p>Locally short gouge and chlorite alteration,</p> <p><u>Subsections:</u></p> <p>- CC in several fractures and groundmass, @321.5m,in fractures 50 c/a, 3mm thick,</p> <p>-@322.10mcc +chl +carb fill 70 to c/a fractures,</p> <p>_from 322 to 323.60m hem-qtz shear zone breccias</p> <p><b>Mineralization</b></p> <p>few patches of cc, and minor mineralization of cpy in fractures.</p> <p>-cc observe in some fractures and in groundmass.</p> <p>-Locally qtz veins about few cm wide, perpendiculars to c/a have minor amount of cc in selvage.</p>		2	3	2		2	3						0.1	0.2	0	Short range of breccia-gouge zone

<b>PROPERTY:</b> Rateria		<b>UTM ZONE:</b> 10		<b>DRILLED FOR:</b> Happy Creek Minerals Ltd.							<b>DOWNHOLE SURVEY</b>									
<b>MINING DIVISION:</b> Kamloops		<b>DATUM:</b> NAD83		<b>DRILLED BY:</b> Glen's Drilling							<b>INSTRUMENT:</b> Acid,Pajari									
<b>DDH #</b> R11- 41		<b>UTM-E:</b> 645763.293		<b>START DATE:</b> May 05, 2011							<b>DEPTH</b>	<b>AZIMUTH</b>	<b>DIP</b>							
<b>OVERBURDEN:</b> 15.85m		<b>UTM-N:</b> 5582297.191		<b>FINISH DATE:</b> May, 12, 2011							100	90	-55							
<b>TOTAL DEPTH:</b> 404.45		<b>ELEVATION:</b> 1568		<b>LOGGED BY:</b> Sassan Liaghat							210	90	-53							
<b>CORE SIZE:</b> NQ		<b>AZIMUTH:</b> 90									300	95	-53							
		<b>DIP:</b> -55									EOH	99	-50							
<b>INTERVAL (m):</b>		<b>ROCK TYPE</b>	<b>ROCK sub TYPE</b>	<b>DESCRIPTION</b>	<b>QTZ VEINS</b>	<b>ALTERATION (1-5):</b>					<b>MINERALIZATION (%):</b>					<b>STRU</b>				
<b>FROM</b>	<b>TO m</b>				>3mm	K-spa	Ser	Chl	Ep	Kaol	Carb	Silica	Mus	Py	Mag	FeOX	Cpy	Bor	Cc	other
333.00	373.00	Mod to Strg Ser Altd GD +Aplite DK		<p>Rock type and some features same as 15.85-21.32 interval .</p> <p>-Light green color, locally short ser-hem gouge, hem and dark chlorite in fractures</p> <p>-From 323.60m rock strongly altered, dark green-ser-chl altered rocks,</p> <p>-Veinlets and fractures fill with chl-ser and carb,</p> <p>-to bottom of interval rock changes to less altered rocks</p> <p><b>Subsections:</b></p> <p>-From 334.22 to 334.28m: Aplite dike, pinkish, with sharp contacts, 60 c/a, some coarse rounded qtz in margins.</p> <p>-From 334.5 to 334.55m:Aplite dike, same as above, also few short aplite dikes, with sharp contacts and high angle to c/a observed at: 355.03m, 7cm; 360m, 1.5 cm; 362.15m, 1.5 cm,</p> <p>-Locally weak hem stained and hem veins (e.g., 327.05 and from 332 to 332.35m.</p> <p>-From 352.05 to 354.07: gouge zone.</p> <p><b>Mineralization</b></p> <p>- Moderate mineralization of cc in few fractures and veinlets</p>		2	3	2		2	3	1				2			0.5	with Aplite dike



## Appendix 2

### Drill Core Assay Summary

Rateria Hole: R12-01, R12-02, Assay Results										
Hole_ID	Sample	From	To	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn(ppm)	Cu%
R12-01	5528710	12.19	15	0.67	<0.01	1350	1.38	0.002	22.7	0.14
R12-01	5528711	15	17.5	0.45	<0.01	778	1.02	<0.001	17.6	0.08
R12-01	5528712	17.5	20	0.32	<0.01	549	0.97	0.003	16.6	0.05
R12-01	5528713	20	22.5	0.86	0.02	1680	1.57	0.005	18.8	0.17
R12-01	5528714	22.5	25	0.61	0.01	1160	1.45	0.003	18.4	0.12
R12-01	5528715	25	27.5	0.72	0.02	1310	42.5	0.017	18.8	0.13
R12-01	5528716	27.5	30	3.69	0.12	6650	1.03	<0.001	19.1	0.67
R12-01	5528717	30	32.5	5.33	0.21	>10000	2.81	0.006	21.7	1.02
R12-01	5528718	32.5	35	1.72	0.06	3220	2.43	0.003	21.4	0.32
R12-01	5528719	35	37.5	2.91	0.17	4820	8.83	0.028	17.1	0.48
R12-01	5528721	37.5	40	3.06	0.17	5910	6.5	0.01	19.5	0.59
R12-01	5528722	40	42.5	1.36	0.36	2570	4.79	0.004	20.4	0.26
R12-01	5528723	42.5	45	1.3	0.12	2950	1.03	0.002	23	0.30
R12-01	5528724	45	47.5	0.76	0.02	1270	5.51	0.014	13.8	0.13
R12-01	5528725	47.5	50	0.93	0.02	1720	3.17	0.026	11.4	0.17
R12-01	5528726	50	52.5	0.91	0.02	1900	7.3	0.023	19.3	0.19
R12-01	5528727	52.5	55	1.08	0.05	2220	1.08	0.007	18.3	0.22
R12-01	5528728	55	57.5	1.96	0.06	3940	0.83	0.004	18.1	0.39
R12-01	5528729	57.5	60	2.06	0.03	4000	1.58	0.007	20.3	0.40
R12-01	5528731	60	62.5	5.85	2.5	>10000	3.74	0.029	15.6	1.13
R12-01	5528732	62.5	65	3.53	0.23	6630	20.2	0.022	16.1	0.66
R12-01	5528733	65	67.5	2	0.2	3860	2.01	0.003	15.8	0.39
R12-01	5528734	67.5	70	2.63	0.17	5160	14.2	0.016	15.1	0.52
R12-01	5528735	70	72.5	2	0.19	4510	1.77	0.004	17	0.45
R12-01	5528736	72.5	75	0.29	<0.01	514	1.84	0.001	15	0.05
R12-01	5528737	75	77.5	1.74	0.15	4160	0.88	0.002	28.1	0.42
R12-01	5528738	77.5	80	0.48	0.02	1060	0.96	0.004	35.6	0.11
R12-01	5528739	80	82.5	1.14	0.09	2410	2.51	0.013	19.5	0.24
R12-01	5528741	82.5	85	0.49	0.04	890	2.43	0.014	14.9	0.09
R12-01	5528742	85	87.5	0.5	0.11	910	2.45	0.013	15.1	0.09
R12-01	5528743	87.5	90	0.24	<0.01	404	15.2	0.012	14.5	0.04
R12-01	5528744	90	92.5	1.02	0.05	2470	2.91	0.016	17.5	0.25
R12-01	5528745	92.5	95	0.14	<0.01	134	0.76	<0.001	21.3	0.01
R12-01	5528746	95	97.5	0.45	0.04	1090	1.53	0.025	14.5	0.11
R12-01	5528747	97.5	100	0.48	0.05	1100	1.43	0.02	15.3	0.11
R12-01	5528748	100	102.5	1.32	0.06	3150	5.64	0.129	16.9	0.32
R12-01	5528749	102.5	105	1.39	0.06	3190	5.71	0.13	17.3	0.32
R12-01	5528751	105	107.5	0.08	<0.01	138	1.06	0.004	21.3	0.01
R12-01	5528752	107.5	110	0.1	<0.01	130	1.08	0.004	19.7	0.01
R12-01	5528753	110	112.5	0.11	<0.01	55.1	0.73	<0.001	18.7	0.01
R12-01	5528754	112.5	115	0.12	<0.01	52.2	0.74	<0.001	17.7	0.01
R12-01	5528755	115	117.5	0.47	0.01	1140	0.95	0.005	20.1	0.11
R12-01	5528756	117.5	120	0.45	<0.01	1060	0.89	0.006	18.1	0.11

Rateria Hole: R12-01, R12-02, Assay Results										
Hole_ID	Sample	From	To	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn(ppm)	Cu%
R12-01	5528757	120	122.5	0.2	<0.01	340	1.7	0.007	20.8	0.03
R12-01	5528758	122.5	125	0.19	<0.01	344	1.64	0.005	21.7	0.03
R12-01	5528759	125	127.5	0.16	<0.01	293	0.93	0.005	20.9	0.03
R12-01	5528761	127.5	130	0.16	<0.01	230	109	0.411	17	0.02
R12-01	5528762	130	132.5	0.61	0.25	1470	117	0.094	26.2	0.15
R12-01	5528763	132.5	135	0.13	<0.01	118	1.78	0.003	16.8	0.01
R12-01	5528764	135	137.5	0.14	0.01	152	1.43	0.002	17.8	0.02
R12-01	5528765	137.5	140	0.3	<0.01	749	1.9	0.006	21.4	0.07
R12-01	5528777	165	167.5	0.31	<0.01	698	1.83	0.006	20.9	0.07
R12-01	5528778	167.5	170	0.42	<0.01	232	5.81	0.018	24.4	0.02
R12-01	5528779	170	172.5	0.45	<0.01	247	5.55	0.018	25.4	0.02
R12-01	5528781	172.5	175	0.21	<0.01	291	1.98	0.002	21	0.03
R12-01	5528782	175	177.5	0.16	<0.01	266	1.16	0.001	20.5	0.03
R12-01	5528783	177.5	180	0.24	<0.01	539	0.75	<0.001	21.4	0.05
R12-01	5528784	180	182.5	0.09	<0.01	156	0.87	0.001	20.5	0.02
R12-01	5528785	182.5	185	0.08	<0.01	151	0.86	0.001	21	0.02
R12-01	5528786	185	187.5	0.07	<0.01	71.4	0.91	0.002	20.2	0.01
R12-01	5528787	187.5	190	0.05	<0.01	78.5	0.92	0.002	21.1	0.01
R12-01	5528788	190	192.5	0.12	<0.01	290	27.8	0.159	20.2	0.03
R12-01	5528789	192.5	195	0.16	<0.01	395	290	3.01	10.1	0.04
R12-01	5528791	195	197.5	0.13	<0.01	220	20.5	0.471	14.2	0.02
R12-01	5528792	197.5	200	0.1	<0.01	221	19.7	0.477	15.6	0.02
R12-01	5528794	202.5	205	0.14	<0.01	459	2.09	0.023	18.3	0.05
R12-01	5528795	205	207.5	0.29	<0.01	1170	5.1	0.061	14.9	0.12
R12-01	5528798	212.5	215	0.26	<0.01	1130	5.42	0.064	14.8	0.11
R12-01	5528802	220	222.5	0.23	<0.01	1220	1.53	0.011	13.9	0.12
R12-01	5528803	222.5	225	0.06	<0.01	280	17	0.018	11.5	0.03
R12-01	5528806	230	232.5	0.05	<0.01	394	2.75	0.004	11.9	0.04
R12-01	5528807	232.5	235	0.03	<0.01	32.5	0.81	<0.001	14.9	0.00
R12-01	5528808	235	237.5	0.05	<0.01	53.9	187	0.032	14.4	0.01
<b>R12-02</b>										
R12-02	5528809	23.47	25	0.06	<0.01	87.2	2.1	0.002	19.6	0.01
R12-02	5528811	25	27.5	0.05	<0.01	41.5	1.12	<0.001	18.7	0.00
R12-02	5528812	27.5	30	0.1	<0.01	221	1.37	0.008	18.9	0.02
R12-02	5528813	30	32.5	0.09	<0.01	159	0.88	0.005	15.8	0.02
R12-02	5528814	32.5	35	0.04	<0.01	27.3	0.87	<0.001	16	0.00
R12-02	5528815	35	37.5	0.03	<0.01	28.7	0.66	<0.001	18.7	0.00
R12-02	5528822	50	52.5	1.43	0.02	2870	2.19	0.024	18.4	0.29
R12-02	5528823	52.5	55	0.54	<0.01	929	0.95	0.005	20.5	0.09
R12-02	5528824	55	57.5	0.06	<0.01	42.6	0.64	<0.001	16.9	0.00
R12-02	5528828	65	67.5	0.06	<0.01	108	0.79	<0.001	19	0.01
R12-02	5528829	67.5	70	0.09	<0.01	150	1.56	<0.001	17.4	0.02
R12-02	5528831	70	72.5	0.68	0.01	1440	15.6	0.154	21	0.14

Rateria Hole: R12-01, R12-02, Assay Results										
Hole_ID	Sample	From	To	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn(ppm)	Cu%
R12-02	5528832	72.5	75	0.13	<0.01	192	0.84	0.002	19.6	0.02
R12-02	5528833	75	77.5	0.79	0.02	1750	0.95	0.011	22	0.18
R12-02	5528834	77.5	80	0.08	<0.01	62	0.51	<0.001	21.3	0.01
R12-02	5528835	80	82.5	0.23	<0.01	538	0.81	0.003	21.8	0.05
R12-02	5528836	82.5	85	0.61	0.03	1270	1.74	0.009	15.6	0.13
R12-02	5528837	85	87.5	1	0.08	2030	53.5	0.491	16.9	0.20
R12-02	5528838	87.5	90	0.12	<0.01	154	1.93	0.017	21.9	0.02
R12-02	5528839	90	92.5	0.07	<0.01	132	0.8	0.003	21.1	0.01
R12-02	5528841	92.5	95	0.06	<0.01	117	0.75	0.003	20.4	0.01
R12-02	5528842	95	97.5	0.27	<0.01	644	0.91	0.004	19.2	0.06
R12-02	5528843	97.5	100	0.29	<0.01	645	0.86	0.004	18.7	0.06
R12-02	5528844	100	102.5	0.22	<0.01	449	1.96	0.018	17.8	0.04
R12-02	5528845	102.5	105	0.23	<0.01	467	1.97	0.018	17.9	0.05
R12-02	5528846	105	107.5	0.26	<0.01	576	1.95	0.019	17.6	0.06
R12-02	5528847	107.5	110	0.89	0.02	2010	1.78	0.02	20	0.20
R12-02	5528848	110	112.5	0.86	0.02	2040	1.69	0.019	19.9	0.20
R12-02	5528849	112.5	115	0.64	0.03	1400	1.82	0.016	21.5	0.14
R12-02	5528851	115	117.5	0.65	0.02	1380	2.98	0.016	20.5	0.14
R12-02	5528852	117.5	120	0.11	<0.01	143	1.13	0.004	20.4	0.01
R12-02	5528853	120	122.5	0.08	<0.01	155	1	0.003	20.5	0.02
R12-02	5528854	122.5	125	0.2	<0.01	355	1.48	0.006	23.3	0.04
R12-02	5528855	125	127.5	0.2	<0.01	336	1.49	0.006	22.2	0.03
R12-02	5528856	127.5	130	0.17	<0.01	322	0.99	0.006	17.9	0.03
R12-02	5528857	130	132.5	0.14	<0.01	311	1.06	0.007	17.4	0.03
R12-02	5528858	132.5	135	0.16	<0.01	321	1.24	0.005	18.8	0.03
R12-02	5528859	135	137.5	0.08	<0.01	186	2.06	0.006	22	0.02
R12-02	5528861	137.5	140	0.05	<0.01	80.3	1.04	0.001	17.6	0.01
R12-02	5528862	140	142.5	0.05	<0.01	87.3	1.04	<0.001	17.6	0.01
R12-02	5528863	142.5	145	0.07	<0.01	145	1.56	0.009	25.6	0.01
R12-02	5528864	145	147.5	0.13	<0.01	253	0.81	0.005	30.1	0.03
R12-02	5528865	147.5	150	0.16	<0.01	288	0.86	0.005	31.1	0.03
R12-02	5528866	150	152.5	0.16	<0.01	303	0.83	0.006	31.8	0.03
R12-02	5528867	152.5	155	0.26	<0.01	487	0.88	0.003	30.2	0.05
R12-02	5528868	155	157.5	0.27	0.02	495	0.83	0.004	29.7	0.05
R12-02	5528869	157.5	160	0.08	<0.01	141	0.91	0.003	28.2	0.01
R12-02	5528871	160	162.5	0.07	<0.01	141	0.88	0.004	28.1	0.01
R12-02	5528872	162.5	165	0.14	<0.01	390	7.33	0.055	28.2	0.04
R12-02	5528873	165	167.5	0.15	<0.01	345	7.57	0.057	27.2	0.03
R12-02	5528874	167.5	170	0.1	<0.01	178	2.1	0.015	26.2	0.02
R12-02	5528875	170	172.5	0.11	<0.01	185	2.14	0.016	26.9	0.02
R12-02	5528876	172.5	175	0.62	0.01	1590	28.7	0.346	28.5	0.16
R12-02	5528877	175	177.5	0.63	0.01	1600	28.8	0.356	28.9	0.16
R12-02	5528878	177.5	180	0.43	<0.01	1020	24.1	0.287	27.3	0.10



Rateria Hole: R12-01, R12-02, Assay Results										
Hole_ID	Sample	From	To	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn(ppm)	Cu%
R12-02	5528879	180	182.5	0.42	<0.01	1030	23.6	0.283	26.7	0.10
R12-02	5528881	182.5	185	1.88	0.02	4670	73.2	1.09	24.4	0.47
R12-02	5528882	185	187.5	1.96	0.02	4730	74.3	1.1	23.5	0.47
R12-02	5528883	187.5	190	2.59	0.04	5640	242	4.98	24.6	0.56
R12-02	5528884	190	192.5	2.6	0.02	5710	243	4.89	24.5	0.57
R12-02	5528885	192.5	195	5.31	0.11	>10000	104	2.08	23.4	1.23
R12-02	5528886	195	197.5	5.34	0.15	>10000	101	2.05	23.2	1.23
R12-02	5528887	197.5	200	14	0.62	>10000	37	0.497	23	3.11
R12-02	5528888	200	202.5	4.47	0.21	9270	6.79	0.09	23.1	0.93
R12-02	5528889	202.5	205	3.82	0.06	9110	82.8	0.884	26.3	0.91
R12-02	5528890	205	207.5	3.87	0.11	8830	85.1	0.847	25.8	0.88
R12-02	5528891	207.5	210	3.75	0.09	8580	82.3	0.859	25.4	0.86
R12-02	5528892	210	212.5	1.38	0.02	2840	143	2.21	25.6	0.28
R12-02	5528893	212.5	215	1.41	0.02	2920	141	2.2	25.8	0.29
R12-02	5528894	215	217.5	1.53	0.01	3200	77.9	0.668	24.6	0.32
R12-02	5528895	217.5	220	1.49	0.01	3130	80	0.688	23.8	0.31
R12-02	5528896	220	222.5	0.79	<0.01	1630	19.2	0.194	22.9	0.16
R12-02	5528897	222.5	225	0.77	<0.01	1610	19.3	0.202	22.7	0.16
R12-02	5528898	225	227.5	0.14	<0.01	191	14.1	0.125	22.1	0.02
R12-02	5528899	227.5	230	0.61	<0.01	1310	26.1	0.309	18.3	0.13
R12-02	5528901	230	232.5	0.58	<0.01	1300	26.2	0.314	19.1	0.13
R12-02	5528902	232.5	235	0.14	<0.01	226	3.79	0.031	19.9	0.02
R12-02	5528903	235	237.5	0.2	<0.01	239	4.2	0.035	20.4	0.02
R12-02	5528904	237.5	240	0.08	<0.01	209	3.67	0.032	20.1	0.02
R12-02	5528905	240	242.5	0.57	<0.01	1110	37.1	0.291	25.9	0.11
R12-02	5528906	242.5	245	0.58	<0.01	1170	37.8	0.293	27.3	0.12
R12-02	5528907	245	247.5	0.39	<0.01	588	1.86	0.009	25.8	0.06
R12-02	5528908	247.5	250	0.37	<0.01	560	1.72	0.008	25.3	0.06
R12-02	5528909	250	252.5	0.18	<0.01	347	1.17	0.004	22.6	0.03
R12-02	5528911	252.5	255	0.22	<0.01	342	2.43	0.005	21.8	0.03
R12-02	5528912	255	257.5	0.16	0.02	320	1.18	0.004	22.1	0.03
R12-02	5528913	257.5	260	1.58	0.02	2990	3.24	0.03	18.3	0.30
R12-02	5528914	260	262.5	1.52	0.02	2940	4.38	0.097	21	0.29
R12-02	5528915	262.5	265	1.52	0.02	2910	4.34	0.096	22.3	0.29
R12-02	5528916	265	267.5	1.32	0.04	2600	3.64	0.106	28.7	0.26
R12-02	5528917	267.5	270	5.5	1.03	9290	236	3.38	24.5	0.93
R12-02	5528918	270	272.5	2.59	0.06	4870	16.2	0.153	28.1	0.49
R12-02	5528919	272.5	275	2.49	0.08	4690	15.6	0.15	27.5	0.47
R12-02	5528921	275	277.5	2.01	0.07	4140	8.97	0.055	24.6	0.41
R12-02	5528922	277.5	280	0.44	0.02	978	15.8	0.097	22.8	0.10
R12-02	5528923	280	282.5	0.46	<0.01	912	15.3	0.094	22.1	0.09
R12-02	5528924	282.5	285	0.65	<0.01	1330	7	0.056	22.2	0.13
R12-02	5528925	285	287.5	0.7	<0.01	1360	7.19	0.057	23.4	0.14

Rateria Hole: R12-01, R12-02, Assay Results										
Hole_ID	Sample	From	To	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn(ppm)	Cu%
R12-02	5528926	287.5	290	0.92	0.01	1910	15.7	0.104	22	0.19
R12-02	5528927	290	292.5	0.91	0.03	1840	15.8	0.104	21.1	0.18
R12-02	5528928	292.5	295	2.84	0.02	5080	55.7	0.328	20.6	0.51
R12-02	5528929	295	297.5	2.97	0.22	5400	57.1	0.329	21.2	0.54
R12-02	5528931	297.5	300	0.13	<0.01	282	53.2	0.351	26	0.03
R12-02	5528932	300	302.5	0.15	<0.01	279	53.6	0.349	26.1	0.03
R12-02	5528933	302.5	305	1.66	0.02	3230	3.43	0.024	25.5	0.32
R12-02	5528934	305	307.5	1.66	<0.01	3160	3.19	0.024	24.6	0.32
R12-02	5528935	307.5	310	0.33	<0.01	714	1.4	0.002	22.9	0.07
R12-02	5528936	310	312.5	0.85	<0.01	1480	5.97	0.033	21.8	0.15
R12-02	5528937	312.5	315	0.85	<0.01	1500	6.19	0.035	21.9	0.15
R12-02	5528938	315	317.5	0.31	<0.01	564	1.25	0.003	24.3	0.06
R12-02	5528939	317.5	320	0.15	<0.01	302	13.6	0.188	24.1	0.03
R12-02	5528941	320	322.5	2.5	0.03	4670	2.99	0.018	22	0.47
R12-02	5528942	322.5	325	1.45	0.05	2720	11.7	0.218	21.9	0.27
R12-02	5528943	325	327.5	0.26	<0.01	498	0.94	0.003	29.4	0.05
R12-02	5528944	327.5	330	0.09	<0.01	144	1.9	0.005	24.4	0.01
R12-02	5528945	330	332.5	0.1	<0.01	154	107	0.479	18.9	0.02
R12-02	5528946	332.5	335	0.05	<0.01	124	2.83	0.015	20.4	0.01
R12-02	5528947	335	337.5	0.08	<0.01	203	0.83	0.002	27.3	0.02
R12-02	5528948	337.5	340	0.06	<0.01	129	2.14	0.009	22	0.01
R12-02	5528949	340	342.5	0.05	<0.01	99.5	1.24	0.003	35.1	0.01
R12-02	5528951	342.5	345	0.13	<0.01	279	0.99	0.003	44.8	0.03
R12-02	5528952	345	347.5	0.02	<0.01	24.2	1.53	0.004	23.8	0.00
R12-02	5528955	352.5	355	0.42	0.02	881	7.99	0.059	17.5	0.09
R12-02	5528968	382.5	385	0.05	<0.01	29.2	0.76	0.001	36.1	0.00
R12-02	5528969	385	387.5	0.01	<0.01	17.1	0.67	0.003	32	0.00
R12-02	5528971	387.5	390	<0.01	<0.01	19	0.63	<0.001	28.3	0.00
R12-02	5528972	390	392.5	0.03	<0.01	70.7	0.68	0.002	38.2	0.01

Rateria Hole: R11-41, Assay Results									
Hole ID	Sample	From	to	Ag(ppm)	Au(ppm)	Cu(ppm)	Mo(ppm)	Re(ppm)	Zn (ppm)
R11-41	5283485	20	22.5	0.05	<0.01	63.1	0.99	<0.001	30.8
R11-41	5283486	25	27.5	0.04	<0.01	51.1	0.82	<0.001	32.9
R11-41	5283487	30	32.5	0.03	<0.01	49	0.81	<0.001	31.6
R11-41	5283488	57.5	60	0.03	<0.01	44.8	0.66	<0.001	26.1
R11-41	5283489	60	62.5	0.03	<0.01	39.7	0.6	<0.001	30.3
R11-41	5283490	75	77.5	0.21	<0.01	400	161	0.237	31.1
R11-41	5283491	77.5	80	0.06	<0.01	94.6	1.57	0.001	31.5
R11-41	5283492	80	82.5	0.04	<0.01	51.9	1.43	0.002	31.3
R11-41	5283493	82.5	85	0.08	<0.01	163	0.93	<0.001	28.7
R11-41	5283494	97.5	100	0.04	<0.01	52.4	0.81	<0.001	27.3
R11-41	5283495	100	102.5	0.09	<0.01	67.3	0.68	<0.001	29.4
R11-41	5283496	112.5	115	0.05	<0.01	94.1	0.56	<0.001	34.2
R11-41	5283497	115	117.5	0.1	<0.01	167	0.74	<0.001	23.5
R11-41	5283498	135	137.5	0.06	<0.01	110	0.6	<0.001	27.3
R11-41	5283499	137.5	140	0.04	<0.01	57.4	0.71	<0.001	27.6
R11-41	5283500	140	142.5	0.34	<0.01	780	1.03	0.002	26.5
R11-41	5283501	142.5	145	0.07	<0.01	94.2	0.71	<0.001	24.3
R11-41	5283502	145	147.5	0.04	<0.01	47.1	0.64	<0.001	25.8
R11-41	5283503	147.5	150	0.07	<0.01	132	0.98	<0.001	27
R11-41	5283504	152.5	155	0.05	<0.01	52.3	0.93	<0.001	27.3
R11-41	5283505	157.5	160	0.14	<0.01	308	0.8	<0.001	25.2
R11-41	5283506	195	197.5	0.38	<0.01	909	1.01	0.002	24.8
R11-41	5283507	220	222.5	0.05	<0.01	59.3	0.88	<0.001	27.3

# Appendix 3

## Diamond Drill Hole Geotechnical Log

## HOLE # R12-01

From	to	Interval	Length of core	Recovery	Length > 10 cm	RQD	# Frac 1-3 mm	Average Core angle	# Frac 3-10 mm	Average Core angle	#Qtz-ser Veins 1-3 mm	Average Core angle	# Qtz-ser Veins 3-10 mm	Average Core angle	Mag Sus Avg	Mag Sus max	Mass Air	Mass Water	SG
12.19	14.33	2.14	184.0	86%	29.00	16%	48	60-80							8.492	16.72	443	268	2.53
14.33	17.37	3.04	284.0	93%	12.00	4%	40	60-81							8.529	17.14			
17.37	20.42	3.05	273.0	90%	11.00	4%	45	60-82							7.060	26.64			
20.42	23.47	3.05	303.0	99%	55.00	18%	50	60-83			1				9.986	20.45			
23.47	26.52	3.05	297.0	97%	76.00	26%	50	60-84							12.320	21.25			
26.52	29.57	3.05	300.0	98%	32.00	11%	50	60-85							9.257	19.65			
29.57	32.61	3.04	303.0	100%	48.00	16%	50	60-86			1				10.130	20.73	475	290	2.57
32.61	35.66	3.05	298.0	98%	52.00	17%	50	60-87							8.917	17.880			
35.66	38.71	3.05	280.0	92%	56.00	20%	40	60-88			1				11.180	23.130			
38.71	41.76	3.05	279.0	91%	37.00	13%	>50	60-89							7.163	16.77			
41.76	44.81	3.05	299.0	98%	12.00	4%	27	60-90							8.347	16.32			
44.81	47.85	3.04	297.0	98%	32.00	11%	39	60-91					1		9.291	15.17			
47.85	50.90	3.05	267.0	88%	41.00	15%	38	60-92							6.000	17.74			
50.90	53.95	3.05	278.0	91%	50.00	18%	50	60-93							7.090	13.17	362	228	2.70
53.95	57.00	3.05	302.0	99%	24.00	8%	30	60-94							0.855	14.20			
57.00	60.05	3.05	182.0	60%	65.00	36%	27	60-95							0.721	15.12			
60.05	63.09	3.04	300.0	99%	13.00	4%	25	60							2.271	16.11			
63.09	66.14	3.05	288.0	94%	62.00	22%	20	60							7.262	17.29			
66.14	69.19	3.05	293.0	96%	23.00	8%	14	60							10.872	22.38			
69.19	72.24	3.05	280.0	92%	26.00	9%	20	60							7.061	17.53	450	280	2.65
72.24	75.29	3.05	302.0	99%	76.00	25%	32	60							7.841	22.44			
75.29	78.33	3.04	304.0	100%	34.00	11%	27	60							15.630	31.89			
78.33	81.38	3.05	294.0	96%	21.00	7%	34	60					1	60	13.970	45.49			
81.38	84.43	3.05	303.0	99%	58.00	19%	20	60							8.855	21.85			
84.43	87.48	3.05	288.0	94%	12.00	4%	20	70							8.855	21.85			
87.48	90.53	3.05	289.0	95%	30.00	10%	15	75							11.580	22.04	456	285	2.67
90.53	93.57	3.04	291.0	96%	23.00	8%	17	60							8.78	19.71			

## HOLE # R12-01

From	to	Interval	Length of core	Recovery	Length > 10 cm	RQD	# Frac 1-3 mm	Average Core angle	# Frac 3-10 mm	Average Core angle	#Qtz-ser Veins 1-3 mm	Average Core angle	# Qtz-ser Veins 3-10 mm	Average Core angle	Mag Sus Avg	Mag Sus max	Mass Air	Mass Water	SG
93.57	96.62	3.05	282.0	92%	13.00	5%	22	60							9.94	18.41			
96.62	99.67	3.05	296.0	97%	67.00	23%	30	60							8.501	19.42			
99.67	102.72	3.05	295.0	97%	40.00	14%	35	60							5.58	16.02			
102.72	105.77	3.05	301.0	99%	27.00	9%	20	60							10.24	18.68			
105.77	108.81	3.04	284.0	93%	40.00	14%	30	65							7.392	14.33			
108.81	111.86	3.05	290.0	95%	39.00	13%	19	65							16.310	20.01			
111.86	114.91	3.05	270.0	89%	45.00	17%	35	65							12.22	19.70	438	272	2.64
114.91	117.96	3.05	290.0	95%	100.00	34%	22	65							16.440	18.18			
117.96	121.01	3.05	300.0	98%	120.00	40%	15	65							15.190	20.16			
121.01	124.05	3.04	301.0	99%	72.00	24%	40	60							12.760	21.87			
124.05	127.10	3.05	305.0	100%	41.00	13%	45	60							11.260	12.25			
127.10	130.15	3.05	287.0	94%	0.00	0%	50	60							2.778	12.38			
130.15	133.20	3.05	291.0	95%	26.00	9%	45	60							18.330	64.52			
133.20	136.25	3.05	300.0	98%	0.00	0%	>50	60							4.215	14.19			
136.25	139.29	3.04	305.0	100%	23.00	8%	40	70							7.456	19.28			
139.29	142.34	3.05	298.0	98%	48.00	16%	15	70							12.140	20.42	473	295	2.66
142.34	145.39	3.05	296.0	97%	48.00	16%	20	80							10.780	20.33			
145.39	148.44	3.05	292.0	96%	27.00	9%	25	80							9.759	23.91			
148.44	151.49	3.05	300.0	98%	73.00	24%	25	90							8.031	24.31			
151.49	154.53	3.04	300.0	99%	111.00	37%	10	80							9.472	22.99			
154.53	157.58	3.05	295.0	97%	17.00	6%	17	75							9.693	22.35			
157.58	160.63	3.05	299.0	98%	71.00	24%	15	75							9.693	22.35			
160.63	163.68	3.05	295.0	97%	38.00	13%	19	75							9.693	22.35	402	252	2.68
163.68	166.73	3.05	304.0	100%	48.00	16%	19	75							9.693	22.35			
166.73	169.77	3.04	300.0	99%	67.00	22%	17	75							9.693	22.35			
169.77	172.82	3.05	290.0	95%	52.00	18%	15	75							8.664	21.04			
172.82	175.87	3.05	300.0	98%	0.00	0%	40	75							8.664	21.040			

**HOLE # R12-01**

From	to	Interval	Length of core	Recovery	Length > 10 cm	RQD	# Frac 1-3 mm	Average Core angle	# Frac 3-10 mm	Average Core angle	#Qtz-ser Veins 1-3 mm	Average Core angle	# Qtz-ser Veins 3-10 mm	Average Core angle	Mag Sus Avg	Mag Sus max	Mass Air	Mass Water	SG
175.87	178.92	3.05	300.0	98%	0.00	0%	>50	75							5.789	16.64			
178.92	181.97	3.05	296.0	97%	16.00	5%	>50	50							5.789	16.64			
181.97	185.01	3.04	305.0	100%	61.00	20%	>50	50							5.789	16.64			
185.01	188.06	3.05	303.0	99%	18.00	6%	>50	50							7.404	14.86	432	269	2.65
188.06	191.11	3.05	300.0	98%	0.00	0%	>50	60							2.684	13.72			
191.11	194.46	3.35	295.0	88%	30.00	10%	>50	60							7.101	19.130			
194.46	197.21	2.75	305.0	111%	59.00	19%	15	60							9.917	20.45			
197.21	200.25	3.04	302.0	99%	27.00	9%	17	60							9.917	20.45			
200.25	203.30	3.05	304.0	100%	63.00	21%	20	60							9.917	20.45	505	316	2.67
203.30	206.35	3.05	300.0	98%	64.00	21%	22	60							9.917	20.45			
206.35	209.40	3.05	300.0	98%	87.00	29%	20	70							9.917	20.45			
209.40	212.45	3.05	305.0	100%	48.00	16%	20	65							9.647	20.69			
212.45	215.49	3.04	299.0	98%	72.00	24%	20	65							9.647	20.69			
215.49	218.54	3.05	302.0	99%	66.00	22%	25	65							9.647	20.690			
218.54	221.59	3.05	299.0	98%	55.00	18%	22	65							11.570	21.19	624	352	2.29
221.59	224.65	3.06	303.0	99%	39.00	13%	22	65							11.570	21.160			
224.65	227.69	3.04	305.0	100%	136.00	45%	22	50							11.570	21.19			
227.69	230.73	3.04	308.0	101%	26.00	8%	22	50							12.070	29.7			
230.73	233.78	3.05	302.0	99%	70.00	23%	17	50							12.910	22.53	629	366	2.39
233.78	236.83	3.05	300.0	98%	28.00	9%	20	50					1		10.810	21.33			











**HOLE # R12-02**

From	to	Interval	Length of core	Recovery	Length > 10 cm	RQD	# Frac 1-3 mm	Average Core angle	# Frac 3-10 mm	Average Core angle	#Qtz-ser Veins 1-3 mm	Average Core angle	# Qtz-ser Veins 3-10 mm	Average Core angle	Mag Sus Avg	Mag Sus max	Mass Air	Mass Water	SG
386.18	389.22	3.04	300.00	99%	12.00	4%	50	50											
389.22	392.28	3.06	293.00	96%	52.00	18%	42	50							11.17	26.42			







## Appendix 4

### Certificates of Analyses



CLIENT NAME: HAPPY CREEK MINERALS LTD.  
SUITE 460-789 WEST PENDER STREET  
VANCOUVER, BC V6C1H2  
(604) 662-8310

ATTENTION TO: DAVID BLANN

PROJECT NO: R12 - Holes

AGAT WORK ORDER: 12V667379

SOLID ANALYSIS REVIEWED BY: Yufei Chen, Analyst

DATE REPORTED: Dec 10, 2012

PAGES (INCLUDING COVER): 42

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

\*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
Sample Description														
5528710	5.94	0.67	1.26	2.9	<0.01	<5	47	0.32	0.36	1.33	0.03	11.4	9.7	13.4
5528711	5.11	0.45	1.11	1.8	<0.01	<5	56	0.29	0.21	1.31	0.02	12.0	9.1	12.5
5528712	4.65	0.32	0.79	1.0	<0.01	<5	102	0.17	0.11	0.81	0.02	11.0	7.5	10.6
5528713	5.66	0.86	1.08	1.3	0.02	<5	61	0.27	0.34	1.22	0.02	11.8	9.2	12.3
5528714	6.65	0.61	0.97	1.0	0.01	<5	96	0.23	0.25	1.01	0.01	12.1	8.4	12.5
5528715	5.99	0.72	0.97	1.1	0.02	<5	79	0.22	0.32	1.08	0.12	13.6	8.8	13.1
5528716	6.22	3.69	1.27	1.1	0.12	<5	52	0.32	1.56	1.30	0.03	12.4	10.3	11.6
5528717	4.96	5.33	1.43	1.1	0.21	<5	51	0.36	2.03	1.40	0.04	12.1	11.8	11.9
5528718	5.54	1.72	1.12	1.0	0.06	<5	58	0.31	0.71	1.08	0.03	13.6	9.1	11.9
5528719	4.22	2.91	1.00	1.1	0.17	<5	69	0.24	0.87	0.82	0.05	13.3	9.4	10.1
5528720	0.96	0.04	0.03	<0.1	<0.01	<5	16	<0.05	0.02	19.6	0.04	1.37	0.8	0.9
5528721	5.28	3.06	1.15	0.9	0.17	<5	55	0.31	1.20	1.23	0.04	12.9	9.6	15.0
5528722	3.36	1.36	0.96	1.3	0.36	<5	64	0.29	0.51	1.06	0.03	12.8	8.7	15.2
5528723	6.29	1.30	1.28	1.7	0.12	<5	64	0.26	0.69	2.11	0.02	16.3	8.3	11.7
5528724	5.24	0.76	0.86	1.1	0.02	<5	66	0.19	0.20	1.15	0.02	13.1	8.2	12.7
5528725	5.96	0.93	1.23	0.6	0.02	<5	64	0.46	0.54	1.22	0.03	10.3	8.2	13.6
5528726	5.35	0.91	1.32	1.3	0.02	<5	57	0.41	0.63	1.33	0.03	13.2	9.3	15.4
5528727	7.62	1.08	1.06	0.9	0.05	<5	37	0.21	0.81	1.38	0.03	17.0	8.8	12.6
5528728	4.51	1.96	0.84	2.4	0.06	<5	46	0.24	1.15	1.83	0.05	22.3	8.9	15.7
5528729	6.03	2.06	0.86	1.4	0.03	<5	47	0.21	1.20	1.09	0.05	15.2	8.9	15.4
5528730	0.05	1.85	1.18	12.9	1.21	<5	131	0.23	0.53	0.69	1.26	11.7	7.8	30.1
5528731	5.42	5.85	0.87	1.3	2.50	<5	34	0.26	4.85	1.56	0.10	25.3	9.8	13.6
5528732	5.58	3.53	1.08	1.1	0.23	<5	52	0.26	2.50	1.25	0.10	17.4	9.4	12.5
5528733	6.13	2.00	0.92	0.8	0.20	<5	56	0.23	1.61	0.97	0.04	11.6	8.2	14.0
5528734	5.69	2.63	1.01	1.1	0.17	<5	45	0.25	3.53	1.17	0.11	13.6	8.6	12.1
5528735	5.46	2.00	1.29	1.1	0.19	<5	53	0.37	3.37	1.84	0.05	14.8	7.7	24.5
5528736	6.24	0.29	0.89	1.7	<0.01	<5	70	0.29	0.17	1.08	0.02	15.6	6.2	6.8
5528737	6.93	1.74	1.28	1.0	0.15	<5	49	0.33	2.12	1.64	0.08	16.4	9.0	19.9
5528738	5.66	0.48	1.24	1.2	0.02	<5	53	0.31	0.35	1.33	0.02	12.6	8.9	5.9
5528739	2.62	1.14	1.10	1.3	0.09	<5	51	0.30	6.67	1.57	0.05	15.1	7.1	22.6
5528740	3.66	1.12	1.19	0.9	0.06	<5	53	0.33	6.94	1.67	0.04	16.4	7.4	24.3

Certified By:

# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
Sample Description														
5528741	6.22	0.49	0.93	1.3	0.04	<5	62	0.28	0.28	1.22	0.02	14.0	5.8	6.4
5528742	6.62	0.50	1.01	1.4	0.11	<5	66	0.30	0.26	1.34	0.02	14.0	5.9	6.6
5528743	5.74	0.24	0.95	1.3	<0.01	<5	82	0.24	0.10	0.91	0.05	14.9	6.0	22.6
5528744	5.69	1.02	0.81	1.2	0.05	<5	64	0.18	3.31	0.87	0.06	15.1	6.2	8.9
5528745	5.29	0.14	1.14	1.9	<0.01	<5	70	0.31	0.08	1.32	0.01	15.7	6.6	20.6
5528746	5.67	0.45	1.05	2.7	0.04	<5	57	0.30	0.77	1.30	0.02	14.7	6.4	7.2
5528747	3.95	0.48	1.06	2.1	0.05	<5	58	0.27	0.79	1.30	0.02	14.7	6.3	7.7
5528748	6.30	1.32	1.18	2.7	0.06	<5	54	0.31	3.48	1.86	0.03	17.5	6.9	17.3
5528749	6.51	1.39	1.22	2.6	0.06	<5	56	0.32	3.63	1.97	0.03	18.1	7.1	17.8
5528750	0.79	0.05	0.04	<0.1	<0.01	<5	17	<0.05	0.02	20.7	0.04	1.48	0.9	1.3
5528751	6.36	0.08	1.58	4.0	<0.01	<5	72	0.52	0.08	2.17	0.01	16.2	6.9	6.9
5528752	4.66	0.10	1.57	3.5	<0.01	<5	70	0.54	0.07	2.11	0.01	17.1	7.0	6.7
5528753	4.83	0.11	0.98	1.3	<0.01	<5	102	0.23	0.02	0.80	0.01	14.4	6.0	28.4
5528754	5.55	0.12	0.99	1.1	<0.01	<5	100	0.23	0.02	0.80	0.01	13.9	6.0	28.8
5528755	5.35	0.47	0.97	2.9	0.01	<5	104	0.30	0.45	1.81	0.03	19.3	6.8	25.9
5528756	6.40	0.45	0.92	3.0	<0.01	<5	100	0.28	0.44	1.79	0.02	19.0	6.7	23.8
5528757	6.04	0.20	0.96	1.6	<0.01	<5	125	0.25	0.13	1.09	0.02	15.5	6.4	8.7
5528758	6.54	0.19	0.95	1.6	<0.01	<5	124	0.24	0.13	1.08	0.02	15.3	6.3	8.6
5528759	5.90	0.16	1.19	1.8	<0.01	<5	70	0.32	0.11	1.47	0.01	16.3	6.8	24.8
5528760	0.05	1.50	1.16	11.3	0.73	<5	128	0.24	0.52	0.68	1.05	10.7	6.9	29.8
5528761	5.29	0.16	0.75	3.1	<0.01	<5	47	0.20	0.14	1.95	0.35	16.5	5.8	8.5
5528762	4.99	0.61	1.45	1.8	0.25	<5	70	0.26	0.68	1.82	0.37	17.6	9.6	19.9
5528763	5.37	0.13	0.96	3.0	<0.01	<5	55	0.30	0.08	2.15	0.02	16.2	6.6	6.4
5528764	4.43	0.14	1.00	3.4	0.01	<5	56	0.30	0.08	2.32	0.02	16.3	6.8	6.2
5528765	6.43	0.30	1.20	2.7	<0.01	<5	49	0.34	0.32	1.69	0.02	13.4	7.6	22.7
5528777	6.36	0.31	1.19	3.0	<0.01	<5	48	0.34	0.35	1.74	0.02	13.6	7.7	22.1
5528778	5.75	0.42	0.88	2.2	<0.01	<5	60	0.24	0.09	1.29	0.03	15.5	7.1	28.3
5528779	6.45	0.45	0.93	2.2	<0.01	<5	61	0.26	0.10	1.37	0.03	16.1	7.1	29.0
5528780	0.06	1.48	1.16	12.3	0.64	<5	127	0.24	0.54	0.66	1.05	10.7	6.9	30.8
5528781	6.26	0.21	1.01	1.9	<0.01	<5	99	0.25	0.17	1.17	0.03	16.9	6.5	9.4
5528782	5.13	0.16	0.94	1.7	<0.01	<5	92	0.25	0.16	1.14	0.03	16.9	6.2	10.7

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
5528783	6.18	0.24	1.18	2.0	<0.01	<5	61	0.29	0.20	2.19	0.02	21.6	7.6	22.2
5528784	6.44	0.09	1.26	1.3	<0.01	<5	60	0.34	0.10	1.45	0.02	15.8	7.4	9.8
5528785	6.36	0.08	1.23	1.4	<0.01	<5	58	0.34	0.10	1.43	0.02	15.8	7.4	9.4
5528786	6.37	0.07	1.43	1.3	<0.01	<5	55	0.33	0.04	2.06	0.01	18.8	7.6	26.3
5528787	6.75	0.05	1.49	1.3	<0.01	<5	56	0.35	0.04	2.14	0.01	19.5	7.7	27.2
5528788	7.01	0.12	1.37	1.2	<0.01	<5	49	0.34	0.10	2.26	0.09	22.6	7.9	8.1
5528789	6.09	0.16	1.28	1.4	<0.01	<5	56	0.28	0.23	1.71	0.79	16.9	6.7	25.8
5528790	0.06	1.50	1.21	11.4	0.58	<5	131	0.27	0.54	0.70	1.11	11.0	7.0	30.8
5528791	6.37	0.13	1.14	1.5	<0.01	<5	61	0.38	0.06	1.26	0.06	15.2	6.4	8.6
5528792	5.71	0.10	1.15	2.2	<0.01	<5	60	0.38	0.07	1.28	0.06	15.5	6.5	8.5
5528794	6.19	0.14	1.57	1.6	<0.01	<5	74	0.52	0.05	1.53	0.02	16.7	6.8	20.7
5528795	7.02	0.29	1.12	1.3	<0.01	<5	89	0.32	0.13	1.17	0.03	15.9	6.4	10.7
5528798	6.25	0.26	1.14	1.3	<0.01	<5	90	0.33	0.12	1.18	0.03	16.0	6.6	9.9
5528802	6.46	0.23	1.23	1.1	<0.01	<5	41	0.38	0.05	1.44	0.02	11.5	6.8	15.5
5528803	5.75	0.06	0.97	0.8	<0.01	<5	90	0.21	0.07	1.06	0.04	11.0	5.9	16.6
5528806	7.24	0.05	0.75	1.4	<0.01	<5	99	0.15	0.04	0.64	0.01	9.19	5.6	15.9
5528807	6.94	0.03	0.78	0.9	<0.01	<5	111	0.14	0.02	0.63	<0.01	9.17	5.8	15.8
5528808	4.25	0.05	0.83	0.7	<0.01	<5	103	0.17	0.03	0.83	0.49	9.88	5.6	13.8
5528809	2.84	0.06	0.78	0.7	<0.01	<5	67	0.16	0.04	0.74	0.01	10.8	6.4	15.9
5528810	0.66	0.01	0.03	<0.1	<0.01	<5	11	<0.05	0.01	20.5	0.05	1.35	0.8	1.6
5528811	4.10	0.05	0.83	0.9	<0.01	<5	65	0.21	0.02	1.04	0.01	10.8	6.1	12.5
5528812	4.70	0.10	1.02	2.0	<0.01	<5	97	0.30	0.07	0.99	0.01	11.2	6.7	13.2
5528813	5.09	0.09	0.78	1.2	<0.01	<5	73	0.23	0.05	1.19	0.01	12.4	6.0	12.1
5528814	4.91	0.04	0.86	1.4	<0.01	<5	79	0.28	0.02	1.11	<0.01	16.2	7.1	12.9
5528815	6.88	0.03	0.99	0.9	<0.01	<5	79	0.29	0.01	1.20	<0.01	12.7	6.5	13.7
5528822	5.13	1.43	1.16	2.7	0.02	<5	38	0.37	0.49	1.57	0.04	15.8	8.2	13.1
5528823	5.66	0.54	1.04	2.2	<0.01	<5	33	0.52	0.16	2.00	0.02	17.4	7.4	10.7
5528824	6.55	0.06	1.00	1.0	<0.01	<5	81	0.29	0.02	1.71	0.01	12.9	6.3	11.9
5528828	5.71	0.06	0.96	1.2	<0.01	<5	80	0.26	0.05	1.47	0.02	13.9	6.3	11.5
5528829	2.09	0.09	1.11	1.0	<0.01	<5	151	0.29	0.07	1.34	0.01	12.1	6.3	10.0
5528830	2.30	0.05	1.04	0.9	<0.01	<5	123	0.26	0.02	1.17	0.01	11.2	6.2	10.5

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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 TEL (905)501-9998  
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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
5528831	5.06	0.68	1.08	1.8	0.01	<5	90	0.43	0.33	2.48	0.07	20.4	6.9	7.6
5528832	4.17	0.13	1.06	1.0	<0.01	<5	340	0.31	0.05	2.23	0.01	16.2	7.4	11.9
5528833	4.31	0.79	1.09	1.2	0.02	<5	69	0.37	0.32	2.50	0.03	16.8	7.8	11.8
5528834	4.40	0.08	1.10	1.5	<0.01	<5	74	0.35	0.02	1.77	0.01	16.5	7.7	13.6
5528835	4.23	0.23	0.97	1.7	<0.01	<5	50	0.33	0.10	1.72	0.02	17.2	7.9	14.1
5528836	4.91	0.61	0.77	1.7	0.03	<5	134	0.23	0.45	2.11	0.03	14.9	6.5	13.9
5528837	5.88	1.00	0.74	10.2	0.08	<5	50	0.27	0.88	1.73	0.17	19.7	7.0	14.3
5528838	5.11	0.12	1.03	3.8	<0.01	<5	143	0.26	0.06	1.59	0.02	16.2	7.5	8.4
5528839	6.13	0.07	1.27	3.0	<0.01	<5	64	0.48	0.05	1.81	0.01	19.4	7.8	21.7
5528840	0.58	0.01	0.03	<0.1	<0.01	<5	21	<0.05	0.02	20.0	0.05	1.32	0.9	1.1
5528841	4.98	0.06	1.19	2.2	<0.01	<5	61	0.47	0.04	1.76	0.01	18.5	7.5	20.5
5528842	6.75	0.27	0.99	1.3	<0.01	<5	72	0.34	0.10	1.80	0.02	16.1	6.5	9.2
5528843	5.52	0.29	0.98	1.3	<0.01	<5	73	0.34	0.10	1.83	0.02	16.0	6.4	8.0
5528844	7.45	0.22	1.30	1.0	<0.01	<5	131	0.31	0.13	1.57	0.02	13.6	7.0	14.4
5528845	6.21	0.23	1.34	0.9	<0.01	<5	130	0.30	0.13	1.58	0.02	14.1	7.0	14.7
5528846	8.57	0.26	1.30	1.0	<0.01	<5	130	0.30	0.16	1.57	0.02	14.3	7.1	14.8
5528847	3.96	0.89	1.21	1.4	0.02	<5	120	0.30	0.58	1.34	0.03	16.6	8.5	9.8
5528848	7.19	0.86	1.21	1.4	0.02	<5	122	0.30	0.60	1.35	0.03	16.1	8.4	8.9
5528849	3.33	0.64	1.18	0.9	0.03	<5	103	0.25	0.43	1.08	0.04	16.3	8.2	25.2
5528850	0.05	1.63	1.24	11.2	0.90	<5	133	0.30	0.55	0.69	1.14	11.3	6.9	31.4
5528851	6.78	0.65	1.20	0.9	0.02	<5	104	0.28	0.42	1.09	0.04	16.7	8.1	25.5
5528852	4.39	0.11	0.89	1.4	<0.01	<5	175	0.23	0.07	1.16	0.02	16.0	6.4	8.7
5528853	7.29	0.08	0.86	1.2	<0.01	<5	171	0.21	0.07	1.12	0.01	15.7	6.4	8.7
5528854	6.14	0.20	0.89	1.5	<0.01	<5	83	0.32	0.17	1.49	0.02	18.2	7.4	25.6
5528855	6.22	0.20	0.88	1.5	<0.01	<5	82	0.31	0.16	1.46	0.02	18.1	7.5	25.5
5528856	5.64	0.17	0.89	0.5	<0.01	<5	184	0.21	0.16	1.13	0.01	13.6	6.5	9.8
5528857	6.39	0.14	0.85	1.5	<0.01	<5	177	0.20	0.16	1.07	0.02	13.9	6.7	9.7
5528858	6.22	0.16	1.27	1.5	<0.01	<5	134	0.35	0.13	1.32	0.01	16.7	7.2	24.6
5528859	3.02	0.08	1.13	2.7	<0.01	<5	72	0.54	0.08	2.33	0.02	17.8	8.2	7.8
5528860	3.11	0.08	1.19	2.8	<0.01	<5	75	0.55	0.09	2.42	0.02	17.8	8.1	7.5
5528861	6.75	0.05	0.94	1.0	<0.01	<5	219	0.25	0.04	1.21	0.01	14.8	6.7	29.6

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
5528862	5.73	0.05	0.97	1.0	<0.01	<5	223	0.26	0.04	1.24	0.01	15.3	6.9	30.7
5528863	6.32	0.07	1.05	2.1	<0.01	<5	239	0.34	0.05	1.58	0.01	15.5	7.2	10.7
5528864	5.59	0.13	1.28	1.2	<0.01	<5	59	0.43	0.06	2.02	0.01	15.5	7.6	13.5
5528865	6.47	0.16	1.34	1.1	<0.01	<5	60	0.46	0.07	2.10	0.01	15.9	7.7	13.4
5528866	6.53	0.16	1.31	1.1	<0.01	<5	61	0.46	0.07	2.07	0.01	15.7	7.8	13.5
5528867	6.18	0.26	1.16	2.2	<0.01	<5	60	0.52	0.25	2.31	0.02	16.1	7.5	6.3
5528868	6.05	0.27	1.14	1.8	0.02	<5	60	0.49	0.24	2.28	0.02	15.8	7.4	6.3
5528869	6.31	0.08	1.05	1.2	<0.01	<5	101	0.35	0.05	1.65	0.01	14.8	6.8	18.9
5528870	0.83	0.01	0.03	<0.1	<0.01	<5	17	0.05	0.01	19.9	0.05	1.43	0.9	0.9
5528871	5.50	0.07	1.04	1.0	<0.01	<5	102	0.38	0.05	1.67	0.01	14.5	6.8	18.8
5528872	3.84	0.14	1.07	1.6	<0.01	<5	78	0.22	0.09	1.58	0.03	12.0	8.4	8.2
5528873	5.02	0.15	1.01	1.8	<0.01	<5	73	0.21	0.09	1.49	0.03	11.8	8.5	7.6
5528874	6.59	0.10	0.79	1.3	<0.01	<5	103	0.14	0.10	1.17	0.02	13.7	8.0	22.0
5528875	6.17	0.11	0.80	1.0	<0.01	<5	103	0.14	0.09	1.18	0.02	14.0	8.0	22.4
5528876	5.46	0.62	1.05	1.0	0.01	<5	56	0.19	0.60	1.57	0.12	15.0	9.5	8.5
5528877	6.50	0.63	1.07	1.1	0.01	<5	56	0.18	0.60	1.63	0.12	14.9	9.6	9.0
5528878	5.84	0.43	1.11	0.9	<0.01	<5	58	0.18	0.13	1.17	0.08	16.5	9.9	21.1
5528879	7.24	0.42	1.10	0.9	<0.01	<5	57	0.19	0.12	1.17	0.07	15.9	9.6	20.1
5528880	0.05	1.70	1.12	14.1	0.80	<5	127	0.16	0.50	0.69	1.00	10.5	8.4	31.0
5528881	5.21	1.88	1.08	1.8	0.02	<5	48	0.23	0.80	1.68	0.19	16.8	9.1	7.3
5528882	6.08	1.96	1.12	1.3	0.02	<5	49	0.24	0.80	1.73	0.19	17.0	9.4	7.4
5528883	5.57	2.59	1.21	1.2	0.04	<5	65	0.26	0.52	1.29	0.56	20.1	10.5	20.2
5528884	5.77	2.60	1.18	1.1	0.02	<5	64	0.25	0.51	1.27	0.55	19.2	10.6	20.3
5528885	6.81	5.31	1.25	0.9	0.11	<5	41	0.26	2.40	1.53	0.30	14.8	9.5	8.5
5528886	6.54	5.34	1.23	1.0	0.15	<5	41	0.26	2.38	1.52	0.32	14.3	9.4	9.1
5528887	7.13	14.0	1.23	0.9	0.62	<5	64	0.26	17.8	1.12	0.28	14.0	8.6	26.1
5528888	6.50	4.47	1.08	0.9	0.21	<5	68	0.22	5.91	1.26	0.08	13.5	7.7	7.2
5528889	6.75	3.82	1.03	12.2	0.06	<5	57	0.26	4.17	1.78	0.21	20.4	9.1	15.2
5528890	5.86	3.87	0.97	12.2	0.11	<5	55	0.25	4.04	1.70	0.21	20.0	9.1	14.5
5528891	6.15	3.75	0.95	11.5	0.09	<5	55	0.26	4.10	1.73	0.21	19.8	8.9	14.5
5528892	6.96	1.38	1.17	1.1	0.02	<5	29	0.22	0.95	1.51	0.39	19.1	10.0	9.0

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
5528893	5.61	1.41	1.17	1.2	0.02	<5	28	0.23	0.97	1.54	0.39	18.8	10.2	9.0
5528894	6.50	1.53	1.12	0.9	0.01	<5	33	0.28	0.17	1.57	0.20	18.3	9.0	26.2
5528895	6.00	1.49	1.13	0.8	0.01	<5	33	0.27	0.16	1.54	0.22	18.1	8.9	24.7
5528896	6.56	0.79	0.96	0.8	<0.01	<5	33	0.24	0.09	1.23	0.08	15.7	8.4	9.6
5528897	6.59	0.77	0.96	0.6	<0.01	<5	32	0.24	0.09	1.22	0.07	16.1	8.5	9.3
5528898	6.26	0.14	1.14	0.9	<0.01	<5	51	0.28	0.05	1.31	0.04	21.7	8.5	24.0
5528899	7.01	0.61	0.83	1.9	<0.01	<5	37	0.23	0.27	1.41	0.08	23.4	7.5	24.6
5528900	0.48	0.03	0.02	<0.1	<0.01	<5	18	<0.05	0.02	18.7	0.05	1.24	1.0	1.1
5528901	5.57	0.58	0.90	1.1	<0.01	<5	39	0.25	0.25	1.92	0.08	22.5	7.4	25.3
5528902	6.68	0.14	0.70	1.1	<0.01	<5	38	0.21	0.03	1.66	0.02	17.1	8.0	8.6
5528903	5.84	0.20	0.73	1.3	<0.01	<5	37	0.21	0.03	1.74	0.02	16.7	8.0	8.9
5528904	6.38	0.08	0.73	2.4	<0.01	<5	39	0.21	0.04	1.66	0.01	16.8	7.9	9.0
5528905	4.46	0.57	1.01	1.8	<0.01	<5	24	0.34	0.39	2.19	0.10	24.1	9.3	7.5
5528906	5.97	0.58	1.02	1.8	<0.01	<5	24	0.35	0.45	2.17	0.10	24.6	9.6	7.6
5528907	5.59	0.39	0.87	1.5	<0.01	<5	34	0.27	0.13	1.46	0.02	20.5	7.4	22.6
5528908	5.74	0.37	0.89	1.3	<0.01	<5	35	0.28	0.14	1.48	0.02	21.1	7.5	22.7
5528909	4.52	0.18	0.69	1.1	<0.01	<5	27	0.17	0.14	0.91	0.01	17.9	6.5	8.4
5528910	0.05	1.62	1.16	13.8	0.70	<5	130	0.18	0.50	0.71	1.05	11.5	8.4	31.1
5528911	5.94	0.22	0.69	0.8	<0.01	<5	25	0.17	0.14	0.89	0.02	17.8	6.4	8.7
5528912	5.16	0.16	0.67	0.8	0.02	<5	25	0.16	0.13	0.87	0.01	17.3	6.4	9.3
5528913	6.49	1.58	0.81	0.8	0.02	<5	35	0.19	1.60	0.80	0.06	14.1	7.1	8.8
5528914	4.52	1.52	0.89	1.2	0.02	<5	41	0.19	1.54	1.01	0.04	21.0	7.7	30.2
5528915	5.99	1.52	0.92	1.1	0.02	<5	40	0.20	1.55	1.03	0.04	21.1	7.7	30.6
5528916	6.23	1.32	0.82	5.4	0.04	<5	27	0.35	1.17	2.97	0.07	23.1	9.1	3.4
5528917	6.57	5.50	1.12	1.4	1.03	<5	39	0.26	6.32	1.61	0.61	17.8	8.8	16.8
5528918	5.30	2.59	1.25	1.0	0.06	<5	41	0.28	1.60	1.41	0.09	12.3	8.3	7.8
5528919	3.51	2.49	1.21	0.9	0.08	<5	40	0.26	1.60	1.39	0.09	12.1	8.4	8.7
5528920	2.70	2.07	1.02	0.9	0.08	<5	42	0.25	1.49	1.05	0.05	14.8	7.6	31.1
5528921	6.68	2.01	1.01	0.8	0.07	<5	41	0.25	1.47	1.04	0.06	14.3	7.4	30.5
5528922	6.48	0.44	0.69	0.6	0.02	<5	41	0.15	0.25	0.71	0.06	14.1	6.4	11.3
5528923	6.21	0.46	0.70	0.6	<0.01	<5	42	0.15	0.24	0.70	0.06	14.3	6.5	10.9

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
5528924	6.19	0.65	0.77	0.8	<0.01	<5	40	0.16	0.32	0.89	0.03	20.6	6.4	37.0
5528925	6.13	0.70	0.78	0.8	<0.01	<5	41	0.16	0.33	0.91	0.03	21.5	6.6	37.3
5528926	5.37	0.92	0.64	0.5	0.01	<5	48	0.12	0.71	0.93	0.05	11.3	6.2	10.6
5528927	6.68	0.91	0.65	0.5	0.03	<5	48	0.13	0.71	0.94	0.05	10.9	6.0	10.7
5528928	6.79	2.84	0.72	0.5	0.02	<5	44	0.18	2.02	0.80	0.15	11.7	6.2	28.4
5528929	5.57	2.97	0.77	0.5	0.22	<5	47	0.20	1.99	0.83	0.17	11.9	6.2	29.7
5528930	0.70	0.05	0.03	<0.1	<0.01	<5	20	<0.05	0.02	21.8	0.05	1.18	1.1	1.0
5528931	5.65	0.13	0.78	0.6	<0.01	<5	48	0.18	0.13	0.74	0.12	11.2	7.1	12.5
5528932	6.03	0.15	0.75	0.5	<0.01	<5	47	0.18	0.13	0.73	0.11	11.7	7.2	13.4
5528933	5.34	1.66	0.78	0.5	0.02	<5	65	0.17	1.16	0.84	0.03	12.9	7.0	25.1
5528934	6.74	1.66	0.74	0.4	<0.01	<5	62	0.16	1.14	0.81	0.02	12.4	7.0	24.4
5528935	5.44	0.33	0.76	0.5	<0.01	<5	57	0.16	0.25	0.79	0.01	13.1	6.4	12.3
5528936	6.28	0.85	0.74	0.5	<0.01	<5	35	0.18	0.56	0.83	0.03	11.7	6.1	25.9
5528937	4.44	0.85	0.77	0.6	<0.01	<5	36	0.18	0.58	0.85	0.02	12.2	6.1	26.5
5528938	5.71	0.31	0.65	0.4	<0.01	<5	30	0.14	0.16	0.63	0.01	9.88	6.2	16.7
5528939	5.98	0.15	0.83	0.6	<0.01	<5	21	0.20	0.12	1.39	0.04	10.9	7.3	15.8
5528940	0.05	1.69	1.18	14.9	0.97	<5	128	0.21	0.51	0.72	1.05	11.7	8.4	30.7
5528941	4.94	2.50	0.80	0.9	0.03	<5	21	0.13	2.43	1.21	0.10	18.1	7.6	16.0
5528942	5.83	1.45	0.71	0.8	0.05	<5	22	0.13	1.38	1.63	0.07	18.0	7.4	16.3
5528943	6.25	0.26	0.73	0.8	<0.01	<5	26	0.14	0.23	1.78	0.02	24.6	8.1	16.0
5528944	6.12	0.09	0.67	0.6	<0.01	<5	37	0.11	0.07	0.81	<0.01	13.2	7.2	16.1
5528945	6.31	0.10	0.77	0.5	<0.01	<5	41	0.15	0.11	1.16	0.23	11.8	6.5	14.5
5528946	5.82	0.05	0.61	1.8	<0.01	<5	60	0.15	0.05	0.82	0.01	8.69	5.7	12.6
5528947	5.63	0.08	0.59	0.9	<0.01	<5	86	0.12	0.07	0.50	0.01	9.48	6.6	15.2
5528948	7.33	0.06	0.58	0.6	<0.01	<5	76	0.10	0.07	0.54	0.03	10.4	6.5	12.4
5528949	2.59	0.05	0.61	0.6	<0.01	<5	104	0.09	0.07	0.60	<0.01	11.0	7.6	11.5
5528950	3.34	0.06	0.62	0.5	<0.01	<5	70	0.10	0.05	0.80	0.01	12.4	7.5	12.5
5528951	5.75	0.13	0.71	1.1	<0.01	<5	90	0.13	0.11	1.00	<0.01	13.1	8.5	9.9
5528952	6.36	0.02	0.53	0.6	<0.01	<5	72	0.12	0.02	0.65	<0.01	9.24	5.7	10.9
5528955	6.52	0.42	0.72	0.6	0.02	<5	42	0.20	0.52	1.14	0.03	11.2	7.0	12.1
5528968	5.68	0.05	0.79	1.1	<0.01	<5	31	0.17	0.03	2.13	0.05	23.4	9.4	13.2

Certified By:







## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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 TEL (905)501-9998  
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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Analyte:	Sample Login Weight	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
Unit:	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
RDL:	0.01	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5
Sample Description														
5528969	7.02	0.01	0.88	0.7	<0.01	<5	40	0.16	0.02	1.70	0.03	19.4	8.6	12.7
5528971	7.36	<0.01	0.87	0.5	<0.01	<5	44	0.21	0.01	1.31	0.01	12.8	8.1	12.0
5528972	5.55	0.03	0.84	0.5	<0.01	<5	53	0.19	0.04	1.11	0.02	13.5	9.8	11.5

Certified By:

# Certificate of Analysis

AGAT WORK ORDER: 12V667379

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012		DATE REPORTED: Dec 10, 2012		SAMPLE TYPE: Rock									
Analyte:	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
RDL:	0.05	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05
5528710	0.27	1350	2.12	6.56	0.10	0.14	0.02	0.012	0.10	6.1	10.1	0.90	377	1.38
5528711	0.31	778	2.01	5.97	0.09	0.13	<0.01	0.015	0.11	6.3	9.1	0.81	336	1.02
5528712	0.39	549	1.85	4.47	0.08	0.14	<0.01	0.008	0.17	5.7	6.5	0.60	265	0.97
5528713	0.35	1680	2.10	5.83	0.08	0.15	0.01	0.010	0.12	6.2	8.9	0.83	360	1.57
5528714	0.34	1160	2.15	5.36	0.09	0.16	<0.01	0.009	0.15	6.2	8.5	0.76	322	1.45
5528715	0.38	1310	2.20	5.43	0.10	0.14	0.01	0.020	0.16	6.7	8.1	0.77	364	42.5
5528716	0.32	6650	2.36	6.40	0.10	0.13	0.05	0.012	0.10	6.6	10.2	0.91	360	1.03
5528717	0.37	>10000	2.60	7.14	0.11	0.13	0.07	0.013	0.11	6.4	11.7	1.07	421	2.81
5528718	0.32	3220	2.04	5.94	0.09	0.14	0.02	0.012	0.12	6.6	9.8	0.82	335	2.43
5528719	0.35	4820	2.25	5.60	0.10	0.13	0.02	0.011	0.15	6.5	8.8	0.77	319	8.83
5528720	0.16	2.8	0.43	0.10	<0.05	<0.02	<0.01	<0.005	0.02	0.7	0.7	12.1	229	0.17
5528721	0.28	5910	2.28	6.02	0.11	0.12	0.03	0.014	0.10	6.8	9.6	0.87	372	6.50
5528722	0.35	2570	2.18	5.58	0.10	0.13	0.01	0.015	0.11	6.9	9.4	0.82	349	4.79
5528723	0.44	2950	2.37	5.77	0.08	0.10	<0.01	0.016	0.10	8.1	8.8	0.87	402	1.03
5528724	0.37	1270	2.09	4.69	0.09	0.15	<0.01	0.012	0.12	6.7	8.3	0.75	323	5.51
5528725	0.27	1720	1.50	4.99	0.10	0.10	<0.01	0.017	0.08	5.7	9.8	0.86	337	3.17
5528726	0.35	1900	2.21	6.43	0.12	0.12	0.01	0.020	0.09	7.0	11.2	0.86	348	7.30
5528727	0.30	2220	1.72	5.07	0.12	0.09	0.01	0.040	0.09	8.4	9.6	0.82	451	1.08
5528728	0.43	3940	2.00	4.64	0.08	0.07	0.01	0.016	0.11	10.3	7.2	0.71	361	0.83
5528729	0.29	4000	2.03	5.05	0.08	0.09	0.01	0.013	0.09	7.4	8.8	0.79	340	1.58
5528730	0.43	3520	3.07	4.79	0.11	0.32	0.08	0.047	0.10	6.0	8.9	0.58	488	300
5528731	0.27	>10000	2.27	4.54	0.10	0.07	0.06	0.040	0.08	11.8	6.1	0.75	341	3.74
5528732	0.29	6630	2.17	5.49	0.11	0.10	0.05	0.020	0.09	8.2	8.8	0.81	375	20.2
5528733	0.26	3860	2.12	5.17	0.09	0.12	0.03	0.011	0.11	6.3	8.6	0.74	320	2.01
5528734	0.23	5160	2.06	5.42	0.10	0.10	0.02	0.014	0.09	6.9	8.9	0.80	340	14.2
5528735	0.28	4510	2.05	5.38	0.09	0.13	0.02	0.016	0.10	7.6	8.1	0.85	403	1.77
5528736	0.32	514	1.89	4.52	0.08	0.14	<0.01	0.014	0.13	7.7	6.3	0.57	281	1.84
5528737	0.26	4160	2.85	6.47	0.10	0.18	0.02	0.016	0.11	7.7	9.6	0.95	449	0.88
5528738	0.23	1060	3.47	6.78	0.11	0.20	<0.01	0.013	0.10	5.9	9.2	0.94	482	0.96
5528739	0.37	2410	2.13	5.18	0.07	0.12	0.01	0.012	0.10	7.4	7.9	0.73	378	2.51
5528740	0.41	2530	2.26	5.57	0.08	0.14	0.01	0.013	0.11	8.0	8.5	0.76	386	2.91
5528741	0.33	890	1.73	4.73	0.08	0.14	<0.01	0.011	0.11	7.5	6.5	0.55	277	2.43

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Cs ppm 0.05	Cu ppm 0.1	Fe % 0.01	Ga ppm 0.05	Ge ppm 0.05	Hf ppm 0.02	Hg ppm 0.01	In ppm 0.005	K % 0.01	La ppm 0.1	Li ppm 0.1	Mg % 0.01	Mn ppm 1	Mo ppm 0.05
5528742		0.32	910	1.89	4.85	0.08	0.13	<0.01	0.011	0.12	7.1	6.6	0.60	282	2.45
5528743		0.32	404	1.90	4.70	0.09	0.16	<0.01	0.008	0.17	7.3	6.4	0.56	268	15.2
5528744		0.27	2470	1.97	4.11	0.09	0.15	0.02	0.012	0.13	7.2	7.0	0.59	313	2.91
5528745		0.32	134	1.93	5.14	0.08	0.16	<0.01	0.011	0.13	7.6	8.2	0.68	348	0.76
5528746		0.30	1090	1.92	4.94	0.10	0.13	0.02	0.032	0.12	7.2	7.8	0.65	327	1.53
5528747		0.31	1100	1.92	4.80	0.10	0.13	0.01	0.031	0.12	7.2	7.7	0.66	326	1.43
5528748		0.33	3150	1.88	5.38	0.07	0.09	0.03	0.014	0.09	8.5	7.9	0.68	345	5.64
5528749		0.33	3190	1.98	5.70	0.07	0.09	0.03	0.014	0.10	8.7	8.2	0.71	350	5.71
5528750		0.13	3.0	0.45	0.13	<0.05	<0.02	<0.01	<0.005	0.02	0.7	1.0	12.9	212	0.28
5528751		0.40	138	2.07	6.25	0.09	0.14	<0.01	0.013	0.12	8.0	9.8	0.77	396	1.06
5528752		0.43	130	2.00	6.47	0.08	0.16	<0.01	0.014	0.12	8.3	10.0	0.74	380	1.08
5528753		0.41	55.1	2.01	4.52	0.09	0.21	<0.01	0.008	0.22	7.3	7.3	0.60	303	0.73
5528754		0.41	52.2	2.02	4.46	0.09	0.20	<0.01	0.009	0.23	7.2	7.1	0.59	298	0.74
5528755		0.39	1140	1.95	4.42	0.08	0.13	<0.01	0.016	0.13	9.1	5.7	0.63	369	0.95
5528756		0.37	1060	1.93	4.18	0.08	0.12	<0.01	0.016	0.12	8.8	5.5	0.62	357	0.89
5528757		0.37	340	2.12	4.46	0.08	0.18	<0.01	0.011	0.18	7.5	6.3	0.61	323	1.70
5528758		0.36	344	2.08	4.37	0.08	0.18	<0.01	0.011	0.18	7.4	6.3	0.60	333	1.64
5528759		0.30	293	2.10	5.22	0.08	0.17	<0.01	0.014	0.15	7.9	8.5	0.69	366	0.93
5528760		0.39	3430	3.00	4.18	0.09	0.32	0.08	0.042	0.10	5.4	8.9	0.57	483	246
5528761		0.29	230	1.60	3.53	0.08	0.09	0.04	0.023	0.13	8.0	5.7	0.53	372	109
5528762		0.26	1470	3.05	6.70	0.10	0.19	0.02	0.018	0.14	8.4	13.2	1.01	474	117
5528763		0.34	118	1.87	4.14	0.08	0.09	<0.01	0.012	0.09	8.0	6.4	0.49	345	1.78
5528764		0.35	152	1.97	4.30	0.08	0.09	<0.01	0.013	0.10	8.0	6.7	0.52	363	1.43
5528765		0.32	749	2.06	5.62	0.09	0.11	<0.01	0.011	0.11	7.2	10.4	0.84	369	1.90
5528777		0.32	698	2.10	5.61	0.10	0.10	<0.01	0.011	0.10	7.5	10.3	0.84	358	1.83
5528778		0.23	232	2.05	4.78	0.09	0.15	<0.01	0.011	0.12	7.5	9.1	0.66	349	5.81
5528779		0.23	247	2.09	4.89	0.09	0.16	<0.01	0.012	0.12	7.7	9.4	0.69	354	5.55
5528780		0.38	3570	3.04	4.25	0.10	0.32	0.11	0.045	0.10	5.4	9.4	0.57	494	247
5528781		0.38	291	2.17	4.71	0.09	0.20	<0.01	0.012	0.19	8.0	8.6	0.63	339	1.98
5528782		0.38	266	2.11	4.56	0.09	0.19	<0.01	0.012	0.18	7.9	7.8	0.61	329	1.16
5528783		0.31	539	2.21	5.63	0.09	0.13	<0.01	0.018	0.13	10.3	11.9	0.82	424	0.75
5528784		0.22	156	2.13	5.83	0.10	0.18	<0.01	0.014	0.16	7.6	11.1	0.84	376	0.87

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock				
Analyte:	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
RDL:	0.05	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	
5528785	0.21	151	2.12	5.78	0.10	0.18	<0.01	0.014	0.16	7.6	10.8	0.81	368	0.86	
5528786	0.60	71.4	1.92	5.96	0.07	0.10	<0.01	0.014	0.14	9.0	12.6	0.86	386	0.91	
5528787	0.63	78.5	2.00	6.21	0.08	0.10	<0.01	0.015	0.15	9.4	13.2	0.88	403	0.92	
5528788	0.30	290	2.29	6.27	0.09	0.08	0.04	0.019	0.12	10.2	11.7	0.90	391	27.8	
5528789	0.41	395	1.98	6.59	0.16	0.16	0.03	0.062	0.15	7.9	9.3	0.75	289	290	
5528790	0.40	3660	3.13	4.39	0.10	0.33	0.08	0.046	0.11	5.6	9.7	0.59	499	273	
5528791	0.34	220	1.99	5.35	0.10	0.17	<0.01	0.012	0.14	7.8	9.0	0.70	288	20.5	
5528792	0.34	221	2.02	5.40	0.09	0.18	0.01	0.013	0.14	7.5	8.8	0.71	289	19.7	
5528794	0.55	459	2.12	6.61	0.10	0.17	<0.01	0.014	0.14	8.1	10.3	0.79	339	2.09	
5528795	0.46	1170	2.15	5.23	0.10	0.18	<0.01	0.014	0.18	7.5	7.8	0.68	301	5.10	
5528798	0.47	1130	2.15	5.39	0.10	0.18	<0.01	0.015	0.18	7.7	8.1	0.69	295	5.42	
5528802	0.30	1220	2.23	5.77	0.09	0.14	<0.01	0.011	0.09	6.2	8.7	0.74	274	1.53	
5528803	0.44	280	2.01	4.49	0.08	0.14	<0.01	0.011	0.20	5.7	7.3	0.56	222	17.0	
5528806	0.40	394	1.93	3.79	0.09	0.12	<0.01	0.006	0.22	4.9	7.0	0.52	207	2.75	
5528807	0.47	32.5	1.90	3.83	0.09	0.12	<0.01	0.006	0.26	4.9	6.6	0.49	231	0.81	
5528808	0.43	53.9	1.85	4.10	0.08	0.11	<0.01	0.008	0.21	5.4	7.6	0.48	248	187	
5528809	0.31	87.2	2.01	4.17	0.08	0.14	<0.01	0.007	0.15	5.9	8.0	0.63	311	2.10	
5528810	0.08	1.8	0.41	0.10	<0.05	<0.02	<0.01	<0.005	0.01	0.6	0.9	12.5	201	0.88	
5528811	0.29	41.5	1.95	4.07	0.08	0.12	<0.01	0.007	0.12	5.6	7.8	0.65	352	1.12	
5528812	0.31	221	2.13	4.49	0.09	0.12	<0.01	0.011	0.16	5.7	8.5	0.66	318	1.37	
5528813	0.27	159	1.88	3.66	0.08	0.10	<0.01	0.009	0.13	6.5	7.0	0.55	332	0.88	
5528814	0.26	27.3	2.14	4.06	0.08	0.11	<0.01	0.016	0.11	7.6	7.1	0.67	314	0.87	
5528815	0.31	28.7	1.95	4.43	0.09	0.14	<0.01	0.009	0.17	6.6	8.4	0.65	357	0.66	
5528822	0.30	2870	2.14	4.97	0.08	0.12	0.01	0.013	0.12	8.0	9.2	0.79	435	2.19	
5528823	0.37	929	2.02	4.69	0.07	0.12	<0.01	0.014	0.08	8.2	5.8	0.72	357	0.95	
5528824	0.35	42.6	2.01	4.66	0.08	0.14	<0.01	0.008	0.16	6.8	8.2	0.64	375	0.64	
5528828	0.32	108	2.07	4.00	0.08	0.11	<0.01	0.010	0.17	7.2	7.2	0.54	350	0.79	
5528829	0.30	150	2.06	4.69	0.07	0.13	<0.01	0.009	0.13	6.4	7.1	0.59	307	1.56	
5528830	0.33	60.4	2.04	4.40	0.08	0.14	<0.01	0.009	0.16	6.0	7.1	0.57	307	0.65	
5528831	0.40	1440	2.10	3.95	0.08	0.08	<0.01	0.033	0.10	9.2	3.8	0.68	470	15.6	
5528832	0.25	192	2.10	4.67	0.07	0.14	<0.01	0.013	0.10	8.4	8.3	0.71	592	0.84	
5528833	0.26	1750	2.16	4.86	0.07	0.12	<0.01	0.014	0.10	8.2	8.6	0.75	531	0.95	

Certified By:





## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Cs ppm 0.05	Cu ppm 0.1	Fe % 0.01	Ga ppm 0.05	Ge ppm 0.05	Hf ppm 0.02	Hg ppm 0.01	In ppm 0.005	K % 0.01	La ppm 0.1	Li ppm 0.1	Mg % 0.01	Mn ppm 1	Mo ppm 0.05
5528834		0.26	62.0	2.17	4.97	0.08	0.15	<0.01	0.012	0.12	8.4	10.4	0.84	482	0.51
5528835		0.25	538	2.20	4.09	0.08	0.11	<0.01	0.015	0.12	8.0	6.4	0.80	342	0.81
5528836		0.28	1270	2.03	3.64	0.07	0.13	<0.01	0.013	0.14	7.9	6.4	0.67	547	1.74
5528837		0.26	2030	1.97	3.39	0.08	0.08	0.03	0.022	0.11	8.8	4.5	0.81	411	53.5
5528838		0.32	154	2.23	4.57	0.09	0.14	<0.01	0.015	0.16	8.1	6.6	0.71	447	1.93
5528839		0.34	132	2.21	5.32	0.08	0.14	<0.01	0.016	0.15	8.9	7.6	0.74	350	0.80
5528840		0.10	5.3	0.44	0.12	<0.05	<0.02	<0.01	<0.005	0.02	0.6	1.1	12.4	218	0.18
5528841		0.32	117	2.15	5.07	0.08	0.13	<0.01	0.016	0.13	8.5	7.7	0.72	335	0.75
5528842		0.36	644	1.99	4.27	0.08	0.14	<0.01	0.015	0.15	8.2	6.0	0.70	420	0.91
5528843		0.36	645	2.00	4.13	0.07	0.14	<0.01	0.015	0.14	8.1	6.1	0.72	401	0.86
5528844		0.31	449	2.18	4.99	0.09	0.14	<0.01	0.014	0.13	7.0	8.5	0.82	387	1.96
5528845		0.32	467	2.22	5.04	0.08	0.16	<0.01	0.014	0.13	7.2	8.9	0.80	405	1.97
5528846		0.33	576	2.16	5.13	0.10	0.15	<0.01	0.014	0.13	7.3	8.4	0.80	401	1.95
5528847		0.29	2010	2.42	4.64	0.09	0.15	<0.01	0.024	0.14	7.9	7.4	0.84	340	1.78
5528848		0.29	2040	2.42	4.57	0.09	0.14	<0.01	0.025	0.14	7.6	7.7	0.85	342	1.69
5528849		0.30	1400	2.28	5.05	0.09	0.13	<0.01	0.017	0.16	8.1	8.9	0.80	389	1.82
5528850		0.39	3670	3.03	4.38	0.10	0.34	0.09	0.048	0.11	5.7	10.5	0.58	505	271
5528851		0.31	1380	2.27	5.12	0.10	0.14	<0.01	0.018	0.16	8.2	9.1	0.80	369	2.98
5528852		0.52	143	2.16	4.00	0.08	0.19	<0.01	0.013	0.20	7.8	6.8	0.65	368	1.13
5528853		0.52	155	2.05	3.98	0.08	0.19	<0.01	0.014	0.20	7.6	6.7	0.62	376	1.00
5528854		0.40	355	2.26	4.14	0.08	0.17	<0.01	0.018	0.17	8.5	4.8	0.81	342	1.48
5528855		0.42	336	2.22	4.15	0.09	0.17	<0.01	0.019	0.17	8.5	4.9	0.80	339	1.49
5528856		0.45	322	2.23	4.03	0.08	0.19	<0.01	0.011	0.24	6.8	7.5	0.66	370	0.99
5528857		0.46	311	2.12	4.21	0.09	0.18	<0.01	0.011	0.23	7.0	7.3	0.64	362	1.06
5528858		0.35	321	2.31	5.21	0.09	0.25	<0.01	0.014	0.24	8.2	9.3	0.74	378	1.24
5528859		0.48	186	2.30	4.62	0.08	0.12	<0.01	0.022	0.12	8.7	6.3	0.97	432	2.06
5528860		0.50	171	2.41	4.57	0.07	0.13	<0.01	0.022	0.12	8.7	6.7	1.01	433	2.17
5528861		0.46	80.3	2.23	4.23	0.08	0.18	<0.01	0.015	0.21	7.3	6.6	0.66	346	1.04
5528862		0.48	87.3	2.26	4.34	0.08	0.19	<0.01	0.016	0.22	7.4	6.7	0.68	352	1.04
5528863		0.39	145	2.42	4.92	0.09	0.14	<0.01	0.015	0.14	7.6	7.9	0.74	329	1.56
5528864		0.38	253	2.12	5.48	0.09	0.10	<0.01	0.015	0.13	8.0	13.3	0.86	410	0.81
5528865		0.41	288	2.22	5.78	0.10	0.11	<0.01	0.015	0.13	8.1	14.1	0.89	419	0.86

Certified By:

# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock				
Analyte:	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
RDL:	0.05	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	
5528866	0.38	303	2.20	5.60	0.09	0.10	<0.01	0.016	0.14	8.1	13.7	0.89	420	0.83	
5528867	0.42	487	2.14	5.48	0.09	0.10	0.01	0.016	0.12	8.1	9.6	0.67	372	0.88	
5528868	0.43	495	2.12	5.48	0.08	0.10	0.01	0.016	0.12	8.1	9.6	0.70	369	0.83	
5528869	0.36	141	2.28	5.16	0.08	0.17	<0.01	0.014	0.13	7.4	10.6	0.68	370	0.91	
5528870	0.13	1.4	0.45	0.13	<0.05	<0.02	<0.01	<0.005	0.02	0.7	1.3	11.9	204	0.13	
5528871	0.35	141	2.32	5.12	0.08	0.17	<0.01	0.014	0.14	7.2	11.4	0.69	368	0.88	
5528872	0.29	390	2.33	5.66	0.07	0.12	<0.01	0.011	0.11	6.6	5.8	0.76	334	7.33	
5528873	0.27	345	2.20	5.59	0.07	0.12	0.01	0.012	0.10	6.5	5.7	0.68	322	7.57	
5528874	0.36	178	2.30	4.48	0.06	0.16	<0.01	0.010	0.18	7.1	3.6	0.60	316	2.10	
5528875	0.37	185	2.30	4.49	0.06	0.17	<0.01	0.011	0.18	7.2	3.7	0.61	323	2.14	
5528876	0.23	1590	2.37	5.87	0.07	0.14	0.06	0.013	0.10	8.2	6.1	0.79	393	28.7	
5528877	0.23	1600	2.48	5.87	0.07	0.14	0.06	0.012	0.10	8.2	6.1	0.81	396	28.8	
5528878	0.24	1020	2.65	6.00	0.08	0.18	0.02	0.013	0.11	8.6	6.4	0.87	355	24.1	
5528879	0.23	1030	2.62	5.80	0.08	0.17	0.02	0.012	0.11	8.4	6.2	0.86	350	23.6	
5528880	0.41	3550	3.31	4.59	0.08	0.29	0.07	0.040	0.10	5.6	5.5	0.59	505	282	
5528881	0.28	4670	2.35	5.69	0.07	0.11	0.02	0.015	0.09	9.0	5.6	0.82	347	73.2	
5528882	0.28	4730	2.44	5.86	0.08	0.11	0.03	0.015	0.09	9.1	5.6	0.83	347	74.3	
5528883	0.24	5640	2.60	6.27	0.08	0.16	0.03	0.012	0.11	10.2	6.1	0.90	326	242	
5528884	0.24	5710	2.56	6.25	0.10	0.15	0.03	0.012	0.11	9.7	6.1	0.89	326	243	
5528885	0.27	>10000	2.54	6.11	0.09	0.14	0.03	0.012	0.10	8.6	5.9	0.88	318	104	
5528886	0.26	>10000	2.53	6.01	0.09	0.13	0.04	0.012	0.10	8.5	5.7	0.87	317	101	
5528887	0.50	>10000	2.67	5.49	0.09	0.18	0.10	0.021	0.14	8.7	5.2	0.78	290	37.0	
5528888	0.66	9270	2.30	4.88	0.07	0.13	0.04	0.021	0.13	8.0	4.1	0.69	274	6.79	
5528889	0.43	9110	2.38	4.93	0.06	0.11	0.10	0.022	0.12	10.5	4.4	0.85	335	82.8	
5528890	0.42	8830	2.28	4.78	0.07	0.10	0.13	0.021	0.11	10.2	4.3	0.81	321	85.1	
5528891	0.41	8580	2.30	4.75	0.06	0.10	0.10	0.021	0.11	10.1	4.4	0.83	315	82.3	
5528892	0.22	2840	2.32	6.28	0.09	0.13	0.02	0.015	0.09	8.6	7.3	0.96	352	143	
5528893	0.21	2920	2.34	6.25	0.09	0.14	0.02	0.014	0.09	8.5	7.5	0.98	351	141	
5528894	0.20	3200	2.24	5.86	0.09	0.15	0.02	0.011	0.09	8.1	6.4	0.86	327	77.9	
5528895	0.20	3130	2.17	5.84	0.09	0.15	0.02	0.011	0.09	8.1	6.3	0.84	322	80.0	
5528896	0.22	1630	2.20	5.36	0.08	0.14	0.01	0.010	0.09	7.5	5.6	0.76	298	19.2	
5528897	0.22	1610	2.22	5.41	0.07	0.14	<0.01	0.010	0.09	7.7	5.7	0.76	295	19.3	

Certified By:





## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Cs ppm 0.05	Cu ppm 0.1	Fe % 0.01	Ga ppm 0.05	Ge ppm 0.05	Hf ppm 0.02	Hg ppm 0.01	In ppm 0.005	K % 0.01	La ppm 0.1	Li ppm 0.1	Mg % 0.01	Mn ppm 1	Mo ppm 0.05
5528898		0.31	191	2.18	6.23	0.10	0.18	<0.01	0.011	0.14	9.8	5.8	0.72	286	14.1
5528899		0.23	1310	2.07	4.76	0.09	0.15	0.01	0.020	0.09	9.9	5.2	0.69	282	26.1
5528900		0.09	2.1	0.44	0.08	<0.05	<0.02	<0.01	<0.005	0.01	0.6	0.5	11.3	217	0.34
5528901		0.23	1300	2.15	4.74	0.09	0.14	0.01	0.020	0.10	9.5	5.8	0.97	299	26.2
5528902		0.24	226	2.01	3.86	0.08	0.11	0.01	0.028	0.06	7.2	4.5	0.79	294	3.79
5528903		0.24	239	2.06	3.95	0.07	0.12	0.01	0.025	0.07	7.2	4.4	0.81	304	4.20
5528904		0.24	209	2.02	3.89	0.07	0.11	0.02	0.027	0.06	7.1	4.5	0.78	296	3.67
5528905		0.26	1110	2.29	5.61	0.08	0.11	0.03	0.018	0.07	10.2	7.2	0.91	426	37.1
5528906		0.27	1170	2.31	5.80	0.07	0.12	0.02	0.019	0.07	10.4	7.5	0.92	438	37.8
5528907		0.35	588	2.04	4.58	0.07	0.12	<0.01	0.014	0.12	9.4	5.1	0.63	309	1.86
5528908		0.36	560	2.07	4.72	0.07	0.13	<0.01	0.015	0.12	9.6	5.2	0.64	309	1.72
5528909		0.28	347	1.74	4.08	0.07	0.10	0.01	0.011	0.12	8.1	5.3	0.61	267	1.17
5528910		0.39	3600	3.36	4.68	0.08	0.27	0.08	0.043	0.10	5.6	5.9	0.60	504	296
5528911		0.30	342	1.74	4.01	0.07	0.10	0.01	0.011	0.12	8.0	5.1	0.60	263	2.43
5528912		0.28	320	1.67	3.92	0.07	0.10	<0.01	0.011	0.12	7.7	5.0	0.59	261	1.18
5528913		0.22	2990	1.92	4.81	0.08	0.14	0.05	0.010	0.13	7.3	5.4	0.64	219	3.24
5528914		0.31	2940	2.06	5.33	0.09	0.12	0.03	0.017	0.14	10.3	5.3	0.67	253	4.38
5528915		0.31	2910	2.12	5.33	0.08	0.12	0.03	0.017	0.14	10.4	5.5	0.68	259	4.34
5528916		0.65	2600	2.03	4.13	0.06	0.05	0.05	0.023	0.15	10.8	2.1	0.38	338	3.64
5528917		0.47	9290	2.19	6.37	0.09	0.09	0.05	0.026	0.14	8.5	5.3	0.68	308	236
5528918		0.40	4870	2.33	6.51	0.08	0.12	0.06	0.019	0.12	6.2	7.0	0.79	309	16.2
5528919		0.39	4690	2.26	6.49	0.09	0.10	0.06	0.019	0.12	6.0	6.4	0.73	304	15.6
5528920		0.29	4200	2.14	5.84	0.09	0.15	0.03	0.011	0.16	6.6	6.0	0.70	276	9.03
5528921		0.28	4140	2.12	5.67	0.09	0.15	0.03	0.011	0.15	6.4	5.8	0.69	273	8.97
5528922		0.32	978	1.86	4.26	0.08	0.17	<0.01	0.009	0.20	6.5	5.3	0.56	240	15.8
5528923		0.34	912	1.85	4.30	0.08	0.16	<0.01	0.009	0.20	6.6	5.2	0.56	237	15.3
5528924		0.25	1330	1.98	4.54	0.09	0.22	<0.01	0.011	0.17	8.5	5.4	0.57	268	7.00
5528925		0.26	1360	1.99	4.71	0.10	0.23	<0.01	0.011	0.17	8.8	5.3	0.58	271	7.19
5528926		0.28	1910	1.91	3.90	0.07	0.18	0.01	0.009	0.19	6.4	4.4	0.51	268	15.7
5528927		0.27	1840	1.91	3.78	0.07	0.17	<0.01	0.008	0.19	6.2	4.3	0.51	258	15.8
5528928		0.26	5080	1.81	4.23	0.07	0.14	0.01	0.010	0.16	7.2	5.0	0.53	239	55.7
5528929		0.27	5400	1.86	4.33	0.07	0.15	0.01	0.011	0.17	7.3	5.3	0.56	243	57.1

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Cs ppm 0.05	Cu ppm 0.1	Fe % 0.01	Ga ppm 0.05	Ge ppm 0.05	Hf ppm 0.02	Hg ppm 0.01	In ppm 0.005	K % 0.01	La ppm 0.1	Li ppm 0.1	Mg % 0.01	Mn ppm 1	Mo ppm 0.05
5528930		0.09	1.5	0.50	0.09	<0.05	<0.02	<0.01	<0.005	0.02	0.6	0.7	13.2	220	0.44
5528931		0.29	282	2.15	4.65	0.07	0.14	<0.01	0.009	0.18	6.7	5.7	0.61	266	53.2
5528932		0.30	279	2.13	4.70	0.07	0.15	<0.01	0.009	0.18	6.9	6.3	0.60	268	53.6
5528933		0.34	3230	2.20	4.38	0.07	0.18	<0.01	0.010	0.24	7.4	5.9	0.62	291	3.43
5528934		0.33	3160	2.17	4.30	0.07	0.18	<0.01	0.009	0.23	7.1	5.7	0.58	284	3.19
5528935		0.31	714	2.05	4.36	0.08	0.17	<0.01	0.009	0.24	7.1	5.2	0.52	266	1.40
5528936		0.28	1480	1.82	4.30	0.07	0.15	<0.01	0.008	0.17	6.7	5.3	0.53	249	5.97
5528937		0.29	1500	1.82	4.31	0.07	0.16	<0.01	0.007	0.18	7.0	5.5	0.55	257	6.19
5528938		0.35	564	1.92	3.92	0.06	0.13	<0.01	0.006	0.18	6.1	5.2	0.52	252	1.25
5528939		0.33	302	1.89	4.77	0.06	0.11	<0.01	0.009	0.10	6.6	6.8	0.72	305	13.6
5528940		0.40	3590	3.27	4.72	0.08	0.30	0.07	0.045	0.10	5.7	7.0	0.59	508	294
5528941		0.25	4670	1.92	4.42	0.05	0.04	<0.01	0.009	0.11	11.8	6.0	0.67	264	2.99
5528942		0.26	2720	1.90	4.00	<0.05	0.04	<0.01	0.009	0.11	10.7	6.2	0.63	318	11.7
5528943		0.30	498	2.08	4.06	<0.05	0.05	<0.01	0.011	0.11	12.5	6.7	0.62	347	0.94
5528944		0.31	144	1.96	4.08	0.07	0.13	<0.01	0.008	0.13	6.8	5.8	0.62	275	1.90
5528945		0.33	154	1.72	4.62	0.11	0.12	<0.01	0.041	0.10	6.0	5.8	0.58	262	107
5528946		0.34	124	1.70	3.66	0.07	0.09	<0.01	0.006	0.14	5.0	5.6	0.49	233	2.83
5528947		0.44	203	1.90	3.68	0.06	0.10	<0.01	0.007	0.22	5.5	6.1	0.53	251	0.83
5528948		0.39	129	1.93	3.56	0.07	0.09	<0.01	0.005	0.22	5.8	5.2	0.51	224	2.14
5528949		0.41	99.5	2.55	4.28	0.08	0.12	<0.01	0.011	0.23	5.4	5.3	0.62	354	1.24
5528950		0.32	82.3	2.43	4.51	0.08	0.12	<0.01	0.012	0.15	6.6	5.0	0.61	364	1.86
5528951		0.42	279	2.88	5.12	0.08	0.11	0.13	0.015	0.20	6.2	5.9	0.67	458	0.99
5528952		0.38	24.2	1.79	3.30	0.06	0.09	0.16	0.007	0.16	4.4	4.6	0.44	252	1.53
5528955		0.35	881	1.98	4.48	0.09	0.09	0.09	0.020	0.10	5.7	6.0	0.59	212	7.99
5528968		0.44	29.2	2.11	3.79	0.05	0.05	<0.01	0.015	0.10	11.3	8.1	0.69	386	0.76
5528969		0.40	17.1	2.26	4.77	0.08	0.08	<0.01	0.015	0.11	9.4	9.8	0.79	387	0.67
5528971		0.31	19.0	2.22	4.91	0.07	0.12	<0.01	0.012	0.10	6.2	8.9	0.77	382	0.63
5528972		0.40	70.7	2.84	5.65	0.09	0.09	<0.01	0.013	0.12	7.0	9.9	0.83	432	0.68

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528710		0.05	0.23	10.4	591	1.6	6.0	0.002	0.040	0.09	4.4	<0.2	0.2	38.4	<0.01
5528711		0.04	0.30	10.0	606	1.8	7.3	<0.001	0.023	0.11	4.3	<0.2	0.2	44.1	<0.01
5528712		0.04	0.34	8.2	599	0.9	11.9	0.003	0.017	0.05	2.6	<0.2	0.2	31.7	<0.01
5528713		0.05	0.29	9.5	599	1.2	8.5	0.005	0.050	0.08	4.1	<0.2	0.2	43.7	<0.01
5528714		0.05	0.31	8.7	630	1.1	11.0	0.003	0.033	0.07	3.4	<0.2	0.2	37.1	<0.01
5528715		0.05	0.30	7.9	632	1.0	11.6	0.017	0.041	0.11	3.7	0.2	0.2	45.4	<0.01
5528716		0.04	0.27	9.1	623	1.4	6.4	<0.001	0.216	0.10	5.1	0.2	<0.2	70.2	<0.01
5528717		0.05	0.24	11.2	738	1.6	7.3	0.006	0.320	0.10	5.4	0.2	<0.2	70.2	<0.01
5528718		0.04	0.30	9.2	541	1.4	8.6	0.003	0.099	0.08	4.2	0.2	0.3	58.1	<0.01
5528719		0.05	0.33	7.4	622	1.3	11.0	0.028	0.147	0.09	3.7	0.2	0.4	40.0	<0.01
5528720		<0.01	0.13	1.5	198	1.2	1.0	<0.001	0.007	<0.05	0.2	<0.2	<0.2	44.8	<0.01
5528721		0.04	0.23	9.0	607	1.3	7.0	0.010	0.189	0.11	4.7	0.2	0.2	67.5	<0.01
5528722		0.03	0.19	8.4	596	1.3	8.8	0.004	0.077	0.09	3.9	<0.2	0.3	65.4	<0.01
5528723		0.04	0.14	7.2	638	1.3	6.7	0.002	0.093	0.08	4.7	<0.2	<0.2	100	<0.01
5528724		0.04	0.32	6.1	591	0.8	9.8	0.014	0.038	0.12	3.5	<0.2	0.2	55.6	<0.01
5528725		0.04	0.21	6.1	588	1.2	4.4	0.026	0.052	0.20	2.9	<0.2	<0.2	66.5	<0.01
5528726		0.04	0.27	7.7	610	1.4	5.8	0.023	0.056	0.20	4.8	<0.2	0.3	67.9	<0.01
5528727		0.03	0.15	6.6	575	0.9	5.4	0.007	0.064	0.41	3.6	<0.2	<0.2	69.9	<0.01
5528728		0.03	0.13	8.7	556	0.9	7.3	0.004	0.125	0.33	4.3	<0.2	<0.2	69.8	<0.01
5528729		0.03	0.27	8.9	533	1.4	6.4	0.007	0.122	0.19	3.1	<0.2	0.5	47.3	<0.01
5528730		0.08	0.55	28.6	522	21.9	5.2	0.291	0.395	3.94	5.4	1.3	1.9	38.6	<0.01
5528731		0.03	0.10	7.8	592	1.6	4.7	0.029	0.367	0.50	5.6	0.3	<0.2	65.4	<0.01
5528732		0.04	0.19	7.5	554	1.3	6.5	0.022	0.224	0.21	4.2	<0.2	0.2	75.4	<0.01
5528733		0.04	0.31	7.1	581	1.1	8.2	0.003	0.123	0.12	3.3	<0.2	0.2	59.6	<0.01
5528734		0.04	0.22	7.1	572	1.2	5.7	0.016	0.173	0.17	4.0	<0.2	0.2	62.9	<0.01
5528735		0.07	0.23	6.5	577	1.6	5.7	0.004	0.143	0.13	4.1	<0.2	0.3	82.8	<0.01
5528736		0.07	0.37	5.3	555	1.6	8.5	0.001	0.018	0.11	3.0	<0.2	0.3	64.2	<0.01
5528737		0.07	0.30	6.6	742	1.7	6.4	0.002	0.123	0.19	4.9	<0.2	0.3	72.0	<0.01
5528738		0.08	0.37	4.9	949	1.6	4.5	0.004	0.030	0.12	3.9	<0.2	0.3	60.9	<0.01
5528739		0.06	0.25	5.6	587	1.6	5.6	0.013	0.075	0.10	3.7	<0.2	0.3	65.0	<0.01
5528740		0.07	0.25	5.8	613	1.7	6.2	0.016	0.079	0.10	4.0	<0.2	0.4	69.6	<0.01
5528741		0.06	0.42	4.8	521	1.6	7.6	0.014	0.029	0.06	2.9	<0.2	0.2	59.0	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528742		0.07	0.40	5.0	521	1.7	7.7	0.013	0.029	0.06	3.0	<0.2	0.3	60.0	<0.01
5528743		0.10	0.43	5.3	542	1.3	10.2	0.012	0.015	0.06	2.8	<0.2	0.3	53.7	<0.01
5528744		0.07	0.36	5.4	616	1.4	9.0	0.016	0.071	0.13	2.6	<0.2	0.5	55.5	<0.01
5528745		0.09	0.33	5.8	576	1.4	8.0	<0.001	0.007	0.11	3.6	<0.2	0.3	84.0	<0.01
5528746		0.08	0.29	5.0	553	1.5	7.2	0.025	0.033	0.23	3.1	<0.2	0.4	71.9	<0.01
5528747		0.07	0.30	5.7	568	1.3	7.0	0.020	0.034	0.21	3.0	<0.2	0.3	70.9	<0.01
5528748		0.06	0.16	5.6	565	1.3	5.9	0.129	0.102	0.08	4.3	<0.2	0.2	92.6	<0.01
5528749		0.06	0.16	5.8	573	1.5	6.1	0.130	0.103	0.07	4.5	<0.2	0.2	96.5	<0.01
5528750		<0.01	0.14	1.6	258	1.2	0.8	<0.001	0.010	<0.05	0.3	<0.2	<0.2	46.7	<0.01
5528751		0.08	0.14	5.9	589	2.0	6.9	0.004	0.008	0.07	3.9	<0.2	0.3	107	<0.01
5528752		0.08	0.17	5.9	575	2.0	7.4	0.004	0.008	0.07	4.1	<0.2	0.3	110	<0.01
5528753		0.13	0.35	5.5	602	1.6	13.1	<0.001	<0.005	0.07	3.2	<0.2	0.5	52.4	<0.01
5528754		0.13	0.33	4.8	586	1.4	13.1	<0.001	<0.005	0.07	3.0	<0.2	0.5	52.3	<0.01
5528755		0.07	0.16	6.7	604	2.2	7.1	0.005	0.039	0.23	4.6	<0.2	0.3	81.4	<0.01
5528756		0.07	0.16	6.1	598	2.1	6.6	0.006	0.037	0.23	4.5	<0.2	0.2	79.9	<0.01
5528757		0.10	0.30	5.2	614	2.6	11.4	0.007	0.013	0.09	3.4	<0.2	0.3	65.8	<0.01
5528758		0.10	0.30	5.6	637	2.5	11.3	0.005	0.013	0.09	3.3	<0.2	0.3	64.3	<0.01
5528759		0.11	0.29	6.4	599	1.9	7.9	0.005	0.010	0.16	3.9	<0.2	0.3	75.7	<0.01
5528760		0.08	0.38	27.8	516	21.9	4.4	0.268	0.388	3.55	4.4	1.1	1.7	33.9	<0.01
5528761		0.03	0.10	5.7	609	2.7	7.3	0.411	0.021	0.32	3.2	<0.2	0.4	72.3	<0.01
5528762		0.08	0.26	7.4	827	1.5	6.7	0.094	0.053	0.18	5.7	<0.2	0.3	73.4	<0.01
5528763		0.05	0.11	5.4	599	2.3	5.4	0.003	0.008	0.16	3.7	<0.2	<0.2	84.7	<0.01
5528764		0.05	0.12	5.8	615	2.4	5.5	0.002	0.009	0.17	3.9	<0.2	<0.2	86.6	<0.01
5528765		0.05	0.15	8.2	588	1.6	6.4	0.006	0.023	0.15	3.8	<0.2	0.2	73.3	<0.01
5528777		0.05	0.13	7.8	598	1.7	6.1	0.006	0.022	0.15	3.8	<0.2	0.2	75.8	<0.01
5528778		0.06	0.14	8.6	584	2.2	7.1	0.018	0.010	0.17	2.9	<0.2	0.3	62.5	<0.01
5528779		0.06	0.16	9.0	587	2.2	7.3	0.018	0.010	0.18	3.0	<0.2	0.3	65.3	<0.01
5528780		0.08	0.32	29.3	527	22.2	4.5	0.276	0.396	3.72	4.5	1.1	1.8	33.9	<0.01
5528781		0.11	0.30	6.1	594	3.5	11.1	0.002	0.024	0.12	3.4	<0.2	0.4	68.1	<0.01
5528782		0.10	0.26	6.1	575	3.4	10.8	0.001	0.022	0.10	3.1	<0.2	0.3	66.0	<0.01
5528783		0.07	0.14	7.2	640	1.3	6.4	<0.001	0.018	0.19	4.5	<0.2	0.3	78.6	<0.01
5528784		0.10	0.26	6.1	583	1.9	6.9	0.001	0.007	0.20	4.1	<0.2	0.3	58.8	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528785		0.10	0.25	6.2	588	2.0	6.9	0.001	0.007	0.20	4.1	<0.2	0.3	58.4	<0.01
5528786		0.06	0.15	7.1	563	1.3	7.1	0.002	<0.005	0.14	4.4	<0.2	0.2	87.4	<0.01
5528787		0.06	0.17	7.4	591	1.3	7.5	0.002	<0.005	0.15	4.5	<0.2	0.3	91.2	<0.01
5528788		0.07	0.07	7.1	628	1.3	6.2	0.159	0.013	0.16	4.4	<0.2	0.3	89.5	<0.01
5528789		0.10	0.26	6.1	591	1.3	9.3	3.01	0.037	0.26	3.3	<0.2	0.3	75.1	<0.01
5528790		0.09	0.34	29.2	527	22.5	4.7	0.302	0.400	3.83	4.5	1.0	1.8	35.7	<0.01
5528791		0.10	0.24	5.5	545	1.7	8.4	0.471	0.009	0.13	3.5	<0.2	0.3	62.4	<0.01
5528792		0.09	0.23	5.5	544	1.7	8.3	0.477	0.010	0.11	3.4	<0.2	0.3	63.1	<0.01
5528794		0.09	0.23	6.1	585	1.8	9.0	0.023	0.018	0.09	3.6	<0.2	0.3	104	<0.01
5528795		0.11	0.27	7.1	591	1.6	11.0	0.061	0.045	0.07	3.4	<0.2	0.3	60.0	<0.01
5528798		0.11	0.29	6.8	579	1.5	11.2	0.064	0.044	0.08	3.5	<0.2	0.3	61.6	<0.01
5528802		0.06	0.22	7.6	620	1.6	5.8	0.011	0.040	0.06	3.7	<0.2	0.3	48.0	<0.01
5528803		0.06	0.33	7.2	582	1.0	12.2	0.018	0.022	0.07	2.3	<0.2	0.2	50.2	<0.01
5528806		0.06	0.24	6.4	550	0.9	13.8	0.004	0.016	<0.05	1.7	<0.2	<0.2	26.4	<0.01
5528807		0.06	0.26	6.6	571	0.8	16.5	<0.001	<0.005	<0.05	1.8	<0.2	<0.2	38.5	<0.01
5528808		0.06	0.26	5.8	560	1.2	13.1	0.032	0.018	0.05	1.9	<0.2	<0.2	48.9	<0.01
5528809		0.05	0.26	6.1	619	1.0	10.5	0.002	<0.005	0.08	1.8	<0.2	0.2	28.6	<0.01
5528810		<0.01	0.11	0.9	224	1.3	0.6	<0.001	<0.005	<0.05	0.2	<0.2	<0.2	53.2	<0.01
5528811		0.04	0.14	5.6	612	1.0	8.4	<0.001	<0.005	0.10	2.1	<0.2	0.2	52.9	<0.01
5528812		0.08	0.16	5.4	593	1.3	9.0	0.008	0.009	0.09	3.2	<0.2	0.2	68.2	<0.01
5528813		0.06	0.13	5.4	596	1.1	8.6	0.005	0.006	0.07	2.4	<0.2	0.2	56.6	<0.01
5528814		0.05	0.11	5.8	623	1.2	7.2	<0.001	<0.005	0.12	3.3	<0.2	0.2	68.6	<0.01
5528815		0.08	0.20	5.7	597	1.3	9.9	<0.001	<0.005	0.07	2.6	<0.2	0.2	53.5	<0.01
5528822		0.06	0.12	7.3	624	1.4	5.7	0.024	0.080	0.11	4.0	<0.2	0.3	66.8	<0.01
5528823		0.06	0.09	6.7	607	1.8	4.2	0.005	0.027	0.10	4.1	<0.2	0.2	84.4	<0.01
5528824		0.08	0.23	5.1	626	1.2	9.7	<0.001	<0.005	0.06	2.7	<0.2	0.2	69.4	<0.01
5528828		0.09	0.15	5.2	647	1.3	9.1	<0.001	0.005	0.12	2.6	<0.2	<0.2	76.3	<0.01
5528829		0.08	0.17	5.2	676	1.4	7.4	<0.001	0.007	0.09	2.6	<0.2	0.2	103	<0.01
5528830		0.09	0.20	4.9	687	1.2	9.4	<0.001	<0.005	0.07	2.6	<0.2	0.2	82.4	<0.01
5528831		0.06	<0.05	5.4	718	1.8	5.3	0.154	0.046	0.26	5.1	<0.2	0.4	163	<0.01
5528832		0.06	0.11	6.7	648	1.3	5.7	0.002	0.009	0.18	3.1	<0.2	0.2	187	<0.01
5528833		0.06	0.08	7.1	654	1.6	5.1	0.011	0.049	0.18	3.7	<0.2	0.2	91.2	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528834		0.06	0.10	7.6	655	1.4	7.0	<0.001	<0.005	0.14	3.5	<0.2	0.2	84.8	<0.01
5528835		0.06	0.08	7.8	673	1.5	5.3	0.003	0.017	0.37	4.1	<0.2	0.2	73.8	<0.01
5528836		0.06	0.16	7.0	632	1.1	8.4	0.009	0.036	0.38	2.7	<0.2	0.2	83.9	<0.01
5528837		0.06	<0.05	7.3	672	1.0	6.3	0.491	0.067	0.13	5.2	<0.2	0.2	78.2	<0.01
5528838		0.10	0.11	6.9	650	2.0	9.2	0.017	0.009	0.07	3.8	<0.2	0.3	92.5	<0.01
5528839		0.09	0.09	7.8	656	1.7	6.7	0.003	0.008	0.13	4.7	<0.2	0.4	90.7	<0.01
5528840		<0.01	0.11	1.6	242	1.3	0.7	<0.001	0.012	<0.05	0.2	<0.2	<0.2	51.3	<0.01
5528841		0.08	0.08	7.4	645	1.5	6.5	0.003	0.007	0.13	4.4	<0.2	0.3	89.5	<0.01
5528842		0.07	0.09	6.1	598	1.6	7.7	0.004	0.020	0.31	3.7	<0.2	0.3	91.7	<0.01
5528843		0.07	0.09	5.8	594	1.5	7.6	0.004	0.019	0.30	3.6	<0.2	0.2	91.2	<0.01
5528844		0.09	0.15	6.0	628	1.0	7.7	0.018	0.015	0.14	3.8	<0.2	0.3	101	<0.01
5528845		0.09	0.17	6.3	665	1.0	7.9	0.018	0.015	0.15	3.9	<0.2	0.3	102	<0.01
5528846		0.08	0.16	6.4	651	1.0	8.0	0.019	0.018	0.14	3.9	<0.2	0.3	104	<0.01
5528847		0.09	0.10	8.0	662	1.1	7.9	0.020	0.058	0.22	4.6	<0.2	0.3	91.5	<0.01
5528848		0.09	0.11	7.5	663	1.1	7.7	0.019	0.058	0.23	4.5	<0.2	0.3	90.8	<0.01
5528849		0.09	0.11	7.7	658	1.0	9.1	0.016	0.041	0.20	3.8	<0.2	0.3	81.2	<0.01
5528850		0.11	0.31	29.0	533	22.6	4.7	0.295	0.399	4.15	4.4	1.1	2.0	36.5	<0.01
5528851		0.09	0.12	7.6	655	1.0	9.4	0.016	0.041	0.23	3.9	<0.2	0.3	81.4	<0.01
5528852		0.11	0.24	5.9	622	1.2	13.6	0.004	0.007	0.10	3.3	<0.2	0.3	90.9	<0.01
5528853		0.10	0.21	6.1	628	1.1	13.5	0.003	0.007	0.09	3.3	<0.2	0.3	90.6	<0.01
5528854		0.09	0.14	7.3	614	1.1	10.8	0.006	0.012	0.11	4.5	<0.2	0.3	74.8	<0.01
5528855		0.09	0.14	7.4	613	1.1	11.2	0.006	0.012	0.11	4.6	<0.2	0.3	75.4	<0.01
5528856		0.10	0.25	6.6	653	1.6	15.1	0.006	0.012	0.09	2.6	<0.2	0.3	82.4	<0.01
5528857		0.10	0.23	6.3	631	1.0	15.4	0.007	0.012	0.10	2.7	<0.2	0.3	84.3	<0.01
5528858		0.18	0.25	6.9	651	1.2	12.2	0.005	0.010	0.19	3.5	<0.2	0.4	87.1	<0.01
5528859		0.07	0.05	7.5	626	1.8	6.6	0.006	0.008	0.25	5.5	<0.2	0.3	96.4	<0.01
5528860		0.07	0.07	7.0	617	1.8	6.7	0.010	0.008	0.25	5.6	<0.2	0.3	94.2	<0.01
5528861		0.12	0.20	6.9	647	1.0	13.2	0.001	0.005	0.09	3.5	<0.2	0.3	98.3	<0.01
5528862		0.12	0.20	6.9	662	0.9	13.5	<0.001	0.006	0.09	3.6	<0.2	0.3	99.7	<0.01
5528863		0.06	0.09	7.6	665	1.2	9.4	0.009	0.008	0.16	3.7	<0.2	0.3	139	<0.01
5528864		0.04	0.07	7.6	639	1.6	8.2	0.005	0.009	0.23	3.9	<0.2	0.2	121	<0.01
5528865		0.04	0.13	7.4	641	1.5	9.0	0.005	0.011	0.24	4.4	<0.2	0.2	122	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528866		0.04	0.05	7.6	635	1.5	7.9	0.006	0.011	0.24	3.7	<0.2	0.2	124	<0.01
5528867		0.05	0.13	6.5	656	1.6	8.0	0.003	0.015	0.21	4.5	<0.2	0.2	102	<0.01
5528868		0.05	0.12	6.3	649	1.6	8.0	0.004	0.017	0.22	4.5	<0.2	0.2	102	<0.01
5528869		0.07	0.17	7.0	639	1.2	9.3	0.003	0.007	0.08	3.3	<0.2	0.3	104	<0.01
5528870		<0.01	0.08	1.2	238	1.3	0.9	<0.001	0.012	<0.05	0.2	<0.2	<0.2	49.6	<0.01
5528871		0.07	0.14	6.9	624	1.2	9.1	0.004	0.007	0.07	3.1	<0.2	0.3	105	<0.01
5528872		0.05	0.20	6.5	653	1.3	6.9	0.055	0.014	0.07	4.1	<0.2	0.2	80.2	<0.01
5528873		0.05	0.17	6.3	646	1.2	6.4	0.057	0.012	0.07	3.7	<0.2	0.2	79.7	<0.01
5528874		0.08	0.24	7.3	642	0.9	11.8	0.015	0.009	0.06	3.4	<0.2	0.3	64.1	<0.01
5528875		0.08	0.26	7.4	652	0.9	11.6	0.016	0.008	0.06	3.4	<0.2	0.3	64.5	<0.01
5528876		0.05	0.22	7.7	686	1.1	6.5	0.346	0.052	0.10	4.0	<0.2	0.2	76.0	<0.01
5528877		0.05	0.21	7.7	707	1.1	6.3	0.356	0.052	0.11	4.1	<0.2	0.2	76.3	<0.01
5528878		0.07	0.24	7.1	696	1.0	6.9	0.287	0.033	0.15	4.3	<0.2	0.3	71.8	<0.01
5528879		0.07	0.24	7.2	683	1.0	6.7	0.283	0.032	0.14	4.2	<0.2	0.3	69.3	<0.01
5528880		0.08	0.41	29.7	532	21.3	4.3	0.265	0.405	3.77	5.0	1.1	1.8	35.0	<0.01
5528881		0.05	0.18	6.7	652	1.3	7.0	1.09	0.163	0.12	4.3	<0.2	0.2	75.3	<0.01
5528882		0.05	0.18	6.9	659	1.4	7.1	1.10	0.163	0.12	4.5	<0.2	0.2	77.6	<0.01
5528883		0.06	0.30	8.5	634	1.6	7.9	4.98	0.211	0.14	4.4	<0.2	0.3	75.8	<0.01
5528884		0.06	0.29	8.3	627	1.6	8.2	4.89	0.209	0.14	4.5	<0.2	0.3	75.3	<0.01
5528885		0.05	0.28	7.8	642	1.8	8.3	2.08	0.433	0.11	4.6	0.2	0.2	69.3	<0.01
5528886		0.05	0.27	7.7	636	1.7	8.0	2.05	0.433	0.11	4.5	<0.2	0.2	68.1	<0.01
5528887		0.07	0.33	7.2	632	2.8	12.0	0.497	1.23	0.14	4.2	0.4	0.3	64.5	<0.01
5528888		0.05	0.18	5.6	614	1.3	12.7	0.090	0.382	0.11	3.8	0.2	0.2	87.1	<0.01
5528889		0.04	0.14	8.6	567	2.1	11.3	0.884	0.356	0.19	4.6	0.2	0.2	88.4	<0.01
5528890		0.04	0.14	8.4	550	2.2	10.7	0.847	0.343	0.21	4.4	0.2	0.2	86.4	<0.01
5528891		0.04	0.13	7.7	532	2.1	10.7	0.859	0.334	0.18	4.4	0.2	<0.2	86.6	<0.01
5528892		0.04	0.27	8.6	559	1.2	6.0	2.21	0.099	0.14	4.8	<0.2	0.3	64.1	<0.01
5528893		0.04	0.26	8.8	571	1.2	5.8	2.20	0.100	0.13	4.8	<0.2	0.3	64.3	<0.01
5528894		0.05	0.28	8.1	596	1.4	5.7	0.668	0.105	0.10	3.8	<0.2	0.3	73.9	<0.01
5528895		0.05	0.30	8.2	564	1.4	5.7	0.688	0.101	0.11	3.7	<0.2	0.3	74.1	<0.01
5528896		0.04	0.31	7.6	591	1.8	6.1	0.194	0.050	0.06	3.1	<0.2	0.3	49.0	<0.01
5528897		0.04	0.31	7.3	593	1.2	6.0	0.202	0.049	0.06	3.1	<0.2	0.3	49.3	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528898		0.08	0.43	7.8	570	1.4	10.3	0.125	0.007	0.08	3.6	<0.2	0.5	67.0	<0.01
5528899		0.05	0.32	7.2	572	1.1	5.9	0.309	0.041	0.15	3.6	0.2	0.3	55.7	<0.01
5528900		<0.01	0.12	1.6	236	1.3	0.5	0.001	0.013	<0.05	0.3	<0.2	<0.2	53.6	<0.01
5528901		0.05	0.31	8.0	593	1.3	5.9	0.314	0.040	0.15	3.6	0.2	0.3	55.7	<0.01
5528902		0.03	0.24	7.1	547	1.1	5.0	0.031	0.009	0.12	3.4	<0.2	0.2	57.6	<0.01
5528903		0.03	0.25	7.6	582	0.9	5.0	0.035	0.009	0.12	3.4	<0.2	0.3	58.5	<0.01
5528904		0.03	0.22	7.3	557	1.0	4.9	0.032	0.009	0.14	3.3	<0.2	0.3	58.4	<0.01
5528905		0.03	0.17	7.8	525	1.8	4.7	0.291	0.035	0.21	5.2	0.2	0.3	80.0	<0.01
5528906		0.03	0.19	8.4	557	1.7	4.7	0.293	0.037	0.22	5.3	0.2	0.3	80.9	<0.01
5528907		0.05	0.26	7.3	487	1.4	8.2	0.009	0.018	0.13	4.4	<0.2	0.3	79.5	<0.01
5528908		0.05	0.25	7.4	503	1.3	8.4	0.008	0.018	0.12	4.6	<0.2	0.3	81.6	<0.01
5528909		0.03	0.29	6.4	404	0.9	8.5	0.004	0.012	0.11	3.5	<0.2	0.3	48.5	<0.01
5528910		0.08	0.34	29.9	521	21.5	4.4	0.281	0.408	3.93	5.1	1.1	1.9	36.2	<0.01
5528911		0.03	0.29	6.5	417	1.0	8.4	0.005	0.012	0.12	3.3	<0.2	0.3	47.8	<0.01
5528912		0.03	0.24	6.2	396	0.9	8.0	0.004	0.011	0.10	3.2	<0.2	0.3	47.2	<0.01
5528913		0.05	0.29	6.3	422	1.9	8.0	0.030	0.097	0.16	3.7	<0.2	0.3	49.1	<0.01
5528914		0.05	0.19	7.2	468	1.3	8.5	0.097	0.093	0.18	4.5	<0.2	0.3	51.0	<0.01
5528915		0.05	0.19	7.1	463	1.2	8.4	0.096	0.093	0.18	4.5	<0.2	0.3	51.5	<0.01
5528916		0.04	<0.05	6.0	603	2.2	10.5	0.106	0.076	1.01	5.7	<0.2	<0.2	93.6	<0.01
5528917		0.06	0.14	6.2	605	1.7	9.7	3.38	0.347	0.22	5.4	<0.2	0.2	86.7	<0.01
5528918		0.06	0.29	6.0	606	1.9	7.9	0.153	0.147	0.17	4.4	<0.2	0.3	80.4	<0.01
5528919		0.06	0.22	6.1	605	1.8	7.6	0.150	0.145	0.16	4.3	<0.2	0.3	80.5	<0.01
5528920		0.07	0.43	7.2	522	1.6	9.7	0.054	0.128	0.09	4.1	0.2	0.4	53.6	<0.01
5528921		0.07	0.42	7.3	519	1.6	9.6	0.055	0.125	0.08	4.0	<0.2	0.4	51.6	<0.01
5528922		0.06	0.53	6.5	449	1.2	13.6	0.097	0.031	0.08	3.0	<0.2	0.4	32.9	<0.01
5528923		0.06	0.52	6.5	435	1.2	13.9	0.094	0.029	0.08	3.1	<0.2	0.4	34.1	<0.01
5528924		0.07	0.72	7.0	466	1.1	10.5	0.056	0.042	0.13	3.7	0.3	0.5	42.0	<0.01
5528925		0.07	0.75	6.8	463	1.1	10.9	0.057	0.043	0.14	4.0	0.3	0.6	44.1	<0.01
5528926		0.06	0.38	6.2	466	1.2	12.3	0.104	0.061	0.08	3.3	<0.2	0.2	33.3	<0.01
5528927		0.06	0.37	6.1	446	1.2	11.9	0.104	0.059	0.07	3.1	<0.2	0.2	32.3	<0.01
5528928		0.06	0.30	6.7	434	1.4	9.4	0.328	0.172	0.08	2.8	<0.2	<0.2	39.8	<0.01
5528929		0.06	0.33	6.8	455	1.4	9.9	0.329	0.179	0.08	3.0	<0.2	<0.2	41.6	<0.01

Certified By:



# Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

## Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5528930		<0.01	0.12	1.4	227	1.2	0.6	0.001	0.014	<0.05	0.3	<0.2	<0.2	53.7	<0.01
5528931		0.05	0.27	7.5	535	1.1	11.8	0.351	0.013	0.07	2.9	<0.2	<0.2	38.3	<0.01
5528932		0.06	0.33	7.7	535	1.1	11.9	0.349	0.013	0.06	3.0	<0.2	<0.2	38.8	<0.01
5528933		0.08	0.37	7.2	593	1.1	14.7	0.024	0.101	0.06	3.6	<0.2	0.2	37.8	<0.01
5528934		0.08	0.34	7.1	579	1.0	14.6	0.024	0.099	0.06	3.5	<0.2	<0.2	37.0	<0.01
5528935		0.09	0.39	6.7	444	1.3	13.3	0.002	0.025	0.05	2.9	<0.2	0.3	36.4	<0.01
5528936		0.05	0.33	6.5	417	1.4	10.2	0.033	0.047	0.06	2.7	<0.2	0.2	49.1	<0.01
5528937		0.05	0.35	6.9	441	1.4	10.4	0.035	0.047	0.06	2.7	<0.2	0.2	50.0	<0.01
5528938		0.03	0.29	6.8	455	1.3	11.7	0.003	0.017	<0.05	2.2	<0.2	0.3	27.5	<0.01
5528939		0.03	0.22	7.2	429	1.2	6.1	0.188	0.010	0.11	3.5	<0.2	<0.2	47.2	<0.01
5528940		0.08	0.46	29.3	536	21.3	4.6	0.277	0.405	4.10	5.3	1.2	1.9	37.7	<0.01
5528941		0.02	0.07	7.3	451	1.2	6.6	0.018	0.142	0.16	3.3	<0.2	<0.2	43.7	<0.01
5528942		0.02	0.08	6.9	443	1.0	6.1	0.218	0.080	0.14	3.2	<0.2	<0.2	45.3	<0.01
5528943		0.03	0.09	8.5	507	1.0	5.6	0.003	0.016	0.16	4.6	<0.2	<0.2	58.3	<0.01
5528944		0.03	0.30	7.2	473	0.7	9.1	0.005	0.006	0.12	3.1	<0.2	0.2	39.2	<0.01
5528945		0.03	0.34	6.4	447	1.0	7.1	0.479	0.014	0.22	3.1	<0.2	0.2	63.3	<0.01
5528946		0.03	0.21	5.2	471	1.0	10.3	0.015	0.006	0.06	2.1	<0.2	<0.2	38.6	<0.01
5528947		0.04	0.22	6.6	502	0.9	15.7	0.002	0.008	<0.05	1.9	<0.2	<0.2	32.1	<0.01
5528948		0.04	0.28	5.6	574	0.6	15.7	0.009	<0.005	<0.05	1.7	<0.2	<0.2	25.8	<0.01
5528949		0.04	0.28	4.3	766	0.6	13.2	0.003	<0.005	<0.05	2.1	<0.2	0.2	24.6	<0.01
5528950		0.03	0.26	4.2	766	0.7	9.4	0.007	<0.005	<0.05	2.7	<0.2	0.2	32.0	<0.01
5528951		0.04	0.19	3.8	955	0.7	11.3	0.003	0.010	<0.05	3.4	<0.2	0.3	42.6	<0.01
5528952		0.04	0.22	4.1	542	0.7	9.6	0.004	<0.005	<0.05	1.6	<0.2	<0.2	32.7	<0.01
5528955		0.03	0.18	6.6	560	1.0	7.3	0.059	0.025	0.13	3.0	<0.2	<0.2	40.5	<0.01
5528968		0.03	0.05	8.0	628	1.7	5.3	0.001	<0.005	0.18	3.8	<0.2	<0.2	87.1	<0.01
5528969		0.04	0.15	7.2	641	1.5	6.5	0.003	<0.005	0.16	4.5	<0.2	<0.2	78.2	<0.01
5528971		0.04	0.21	7.4	639	1.2	6.2	<0.001	<0.005	0.14	3.8	<0.2	0.2	63.0	<0.01
5528972		0.04	0.15	6.1	757	1.1	7.0	0.002	<0.005	0.12	3.3	<0.2	0.2	52.4	<0.01

Certified By:





## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock	
Analyte:	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Cu-OL	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
RDL:	0.01	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.01	
Sample Description												
5528710	0.05	2.9	0.132	0.02	1.36	64.9	0.14	4.36	22.7	1.1		
5528711	0.02	2.7	0.123	0.02	1.25	67.3	0.14	4.62	17.6	1.1		
5528712	0.02	2.7	0.134	0.04	1.41	65.7	0.09	4.27	16.6	1.1		
5528713	0.04	2.8	0.125	0.03	1.55	67.2	0.12	4.96	18.8	1.1		
5528714	0.04	3.7	0.139	0.03	1.74	69.6	0.11	4.87	18.4	1.2		
5528715	0.06	4.3	0.127	0.04	2.17	74.0	0.12	5.27	18.8	1.0		
5528716	0.07	4.2	0.097	0.02	1.88	68.7	0.13	5.08	19.1	0.9		
5528717	0.08	2.3	0.110	0.02	1.31	78.5	0.18	4.76	21.7	1.2	1.02	
5528718	0.03	3.5	0.124	0.03	1.60	62.6	0.14	5.61	21.4	1.0		
5528719	0.06	3.2	0.130	0.04	1.56	71.6	0.25	5.80	17.1	1.0		
5528720	<0.01	<0.1	<0.005	<0.01	0.58	7.0	<0.05	0.91	<0.5	<0.5		
5528721	0.08	4.3	0.098	0.02	1.54	65.2	0.20	5.99	19.5	0.8		
5528722	0.02	4.0	0.105	0.03	1.96	66.6	0.19	5.87	20.4	0.9		
5528723	0.02	4.8	0.068	0.02	2.64	64.5	0.23	6.29	23.0	0.6		
5528724	0.01	4.1	0.110	0.03	2.18	62.2	0.25	5.50	13.8	1.1		
5528725	0.03	2.7	0.073	0.01	1.06	38.3	0.19	4.07	11.4	0.8		
5528726	0.03	4.1	0.100	0.02	2.04	65.1	0.17	5.26	19.3	0.8		
5528727	0.03	3.1	0.052	0.02	1.26	44.7	0.24	6.14	18.3	0.7		
5528728	0.04	2.5	0.036	0.02	2.02	54.5	0.39	7.59	18.1	0.6		
5528729	0.07	4.2	0.079	0.02	1.87	59.8	0.21	5.43	20.3	0.6		
5528730	0.18	1.3	0.125	0.10	0.38	51.4	1.22	8.10	47.7	5.9		
5528731	0.20	4.5	0.018	0.01	1.44	53.4	0.85	8.80	15.6	0.6	1.13	
5528732	0.13	4.1	0.063	0.02	1.73	56.6	0.39	6.69	16.1	0.7		
5528733	0.14	3.1	0.102	0.02	1.86	64.6	0.16	4.79	15.8	0.8		
5528734	0.30	3.1	0.071	0.02	1.35	57.6	0.23	5.13	15.1	0.7		
5528735	0.24	4.2	0.083	0.02	1.59	58.5	0.30	5.27	17.0	0.8		
5528736	0.02	4.0	0.095	0.03	2.10	59.9	0.26	5.06	15.0	0.9		
5528737	0.38	3.3	0.130	0.02	1.71	80.0	0.23	6.62	28.1	1.2		
5528738	0.03	1.5	0.184	0.01	0.98	103	0.14	5.40	35.6	1.4		
5528739	0.50	3.8	0.083	0.02	1.63	62.3	0.24	5.13	19.5	0.8		
5528740	0.46	4.2	0.095	0.02	1.78	62.5	0.23	5.69	20.5	0.9		
5528741	0.05	4.2	0.104	0.02	1.86	61.8	0.17	4.46	14.9	0.9		

Certified By:





## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock	
Analyte:	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Cu-OL	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
RDL:	0.01	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.01	
5528742	0.04	4.1	0.112	0.03	1.86	61.4	0.17	4.53	15.1	0.8		
5528743	0.02	3.9	0.133	0.04	1.90	63.3	0.15	4.98	14.5	1.1		
5528744	0.38	3.7	0.108	0.03	1.70	66.9	0.70	4.78	17.5	1.0		
5528745	0.02	3.8	0.104	0.03	1.77	62.3	0.29	4.99	21.3	1.0		
5528746	0.09	4.1	0.094	0.02	1.62	59.8	0.23	4.76	14.5	0.8		
5528747	0.09	3.9	0.094	0.02	1.60	59.9	0.22	4.66	15.3	0.8		
5528748	0.42	4.4	0.049	0.02	1.92	57.3	0.23	5.80	16.9	0.5		
5528749	0.44	4.8	0.052	0.02	2.00	57.3	0.22	6.00	17.3	0.5		
5528750	0.02	0.1	<0.005	<0.01	0.64	7.0	0.05	1.09	2.8	<0.5		
5528751	0.01	5.2	0.086	0.02	2.32	64.1	0.22	5.51	21.3	0.9		
5528752	<0.01	5.3	0.089	0.02	2.33	62.6	0.25	5.74	19.7	1.0		
5528753	<0.01	2.7	0.147	0.05	2.41	68.5	0.28	4.71	18.7	1.2		
5528754	<0.01	5.3	0.147	0.05	2.39	68.3	0.30	4.64	17.7	1.2		
5528755	0.09	2.7	0.058	0.04	2.33	60.1	0.24	6.61	20.1	0.8		
5528756	0.09	5.1	0.054	0.04	2.49	56.6	0.28	6.46	18.1	0.8		
5528757	0.02	2.8	0.120	0.04	2.51	64.6	0.16	5.29	20.8	1.1		
5528758	0.01	5.1	0.118	0.04	2.32	66.0	0.15	5.27	21.7	1.1		
5528759	0.04	4.5	0.106	0.03	2.02	65.4	0.21	5.58	20.9	1.1		
5528760	0.17	1.2	0.122	0.10	0.36	50.4	1.25	7.66	45.4	5.3		
5528761	0.11	4.5	0.039	0.03	1.46	50.4	0.29	6.06	17.0	0.6		
5528762	0.21	3.5	0.122	0.02	1.53	90.5	0.38	6.83	26.2	1.3		
5528763	0.02	4.2	0.052	0.02	1.91	53.3	0.36	5.97	16.8	0.6		
5528764	0.01	5.5	0.056	0.02	2.29	55.9	0.45	6.07	17.8	0.6		
5528765	0.08	4.5	0.080	0.02	1.90	63.9	0.22	5.37	21.4	0.7		
5528777	0.09	4.3	0.074	0.02	1.73	58.7	0.19	5.36	20.9	0.6		
5528778	0.01	3.9	0.101	0.03	1.55	67.4	0.68	6.22	24.4	1.0		
5528779	0.01	4.3	0.109	0.03	1.71	66.0	0.57	6.51	25.4	1.0		
5528780	0.19	1.2	0.116	0.09	0.36	50.8	1.22	7.79	47.7	4.7		
5528781	0.02	3.9	0.123	0.05	1.80	71.1	0.26	6.50	21.0	1.3		
5528782	0.02	3.8	0.119	0.05	1.76	68.8	0.23	6.27	20.5	1.2		
5528783	0.02	4.6	0.063	0.02	1.49	65.1	0.23	8.00	21.4	0.8		
5528784	0.02	4.3	0.121	0.02	1.79	64.6	0.15	5.90	20.5	1.2		

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock	
Analyte:	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Cu-OL	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
RDL:	0.01	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.01	
5528785	0.02	4.3	0.118	0.02	1.77	63.0	0.14	5.76	21.0	1.2		
5528786	<0.01	3.9	0.055	0.02	1.36	53.1	0.21	6.59	20.2	0.7		
5528787	0.01	4.3	0.057	0.02	1.49	56.2	0.20	6.82	21.1	0.7		
5528788	0.11	3.5	0.031	0.02	1.18	60.8	0.23	7.91	20.2	0.5		
5528789	0.13	3.4	0.106	0.03	2.33	61.2	0.23	6.40	10.1	1.1		
5528790	0.17	1.3	0.124	0.10	0.38	52.4	1.19	7.93	48.6	5.3		
5528791	0.03	3.5	0.109	0.03	1.96	61.5	0.15	5.57	14.2	1.2		
5528792	0.02	3.4	0.110	0.03	1.96	61.5	0.15	5.68	15.6	1.1		
5528794	0.01	2.5	0.111	0.03	1.41	64.7	0.15	6.08	18.3	1.1		
5528795	0.02	2.5	0.138	0.04	1.30	72.0	0.15	5.60	14.9	1.2		
5528798	0.02	2.5	0.140	0.04	1.29	69.2	0.15	5.83	14.8	1.3		
5528802	0.02	2.5	0.127	0.02	1.02	71.1	0.24	4.39	13.9	1.0		
5528803	0.03	2.3	0.141	0.05	1.08	71.5	0.24	4.16	11.5	1.0		
5528806	0.02	2.3	0.140	0.06	1.00	66.4	0.13	3.11	11.9	0.8		
5528807	<0.01	1.7	0.143	0.07	0.80	64.1	0.08	2.94	14.9	0.8		
5528808	0.02	1.5	0.123	0.06	1.22	63.9	0.68	2.69	14.4	0.7		
5528809	<0.01	2.9	0.135	0.04	1.41	63.1	0.15	3.43	19.6	0.8		
5528810	0.01	<0.1	<0.005	<0.01	0.67	6.8	<0.05	0.96	<0.5	<0.5		
5528811	<0.01	3.1	0.104	0.03	1.32	63.0	0.24	3.88	18.7	0.7		
5528812	0.01	3.0	0.103	0.03	1.34	65.0	0.17	4.27	18.9	0.7		
5528813	<0.01	3.5	0.088	0.03	1.36	60.7	0.13	4.55	15.8	0.7		
5528814	<0.01	3.5	0.074	0.02	1.41	62.6	0.14	5.32	16.0	0.7		
5528815	<0.01	2.9	0.111	0.03	1.31	60.7	0.12	4.69	18.7	0.8		
5528822	<0.01	3.3	0.075	0.02	1.37	60.8	0.20	5.92	18.4	0.8		
5528823	<0.01	3.4	0.055	0.01	1.50	59.0	0.21	6.64	20.5	0.7		
5528824	<0.01	3.6	0.121	0.03	1.76	65.8	0.19	4.65	16.9	0.9		
5528828	<0.01	3.7	0.091	0.03	1.73	67.3	0.25	4.94	19.0	0.7		
5528829	<0.01	3.3	0.106	0.03	1.66	63.8	0.24	3.94	17.4	0.8		
5528830	<0.01	3.1	0.120	0.03	1.79	66.2	0.19	3.69	17.6	0.9		
5528831	0.01	4.4	0.021	0.02	1.35	64.7	0.50	7.74	21.0	0.5		
5528832	<0.01	3.8	0.089	0.02	1.64	64.6	0.27	7.26	19.6	0.9		
5528833	0.02	3.7	0.070	0.02	1.45	64.3	0.30	7.80	22.0	0.8		

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012	DATE RECEIVED: Nov 26, 2012					DATE REPORTED: Dec 10, 2012					SAMPLE TYPE: Rock	
Analyte:	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Cu-OL	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
RDL:	0.01	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	0.01	
5528834	<0.01	3.9	0.093	0.02	1.61	64.5	0.32	6.68	21.3	0.9		
5528835	<0.01	3.9	0.059	0.02	1.65	60.1	0.34	6.56	21.8	0.7		
5528836	0.02	3.2	0.091	0.03	1.80	67.7	0.39	7.40	15.6	0.9		
5528837	0.03	4.0	0.036	0.02	1.42	61.1	0.35	8.02	16.9	<0.5		
5528838	0.01	4.0	0.095	0.03	2.37	67.9	0.21	6.56	21.9	0.9		
5528839	0.01	4.3	0.065	0.02	2.02	67.4	0.31	7.53	21.1	0.9		
5528840	<0.01	0.1	<0.005	<0.01	0.59	6.6	<0.05	1.02	2.5	<0.5		
5528841	<0.01	4.1	0.060	0.02	1.63	63.7	0.30	7.35	20.4	0.8		
5528842	<0.01	3.7	0.067	0.02	1.58	66.3	0.39	6.31	19.2	1.0		
5528843	<0.01	4.2	0.064	0.02	1.64	63.1	0.41	6.29	18.7	1.1		
5528844	0.01	3.6	0.100	0.03	1.85	68.2	0.28	5.41	17.8	0.9		
5528845	0.01	4.4	0.106	0.03	2.00	71.5	0.32	5.53	17.9	1.0		
5528846	0.01	3.4	0.103	0.03	1.81	69.6	0.29	5.57	17.6	0.9		
5528847	0.02	4.1	0.083	0.03	1.73	71.9	0.31	6.37	20.0	1.0		
5528848	0.02	5.0	0.082	0.03	1.80	72.6	0.31	6.30	19.9	1.0		
5528849	0.01	3.8	0.085	0.03	1.66	72.6	0.33	5.42	21.5	0.9		
5528850	0.18	1.3	0.123	0.10	0.39	53.5	1.39	8.13	47.9	5.0		
5528851	0.02	3.7	0.087	0.03	1.62	70.8	0.31	5.50	20.5	0.9		
5528852	<0.01	5.3	0.124	0.05	2.88	72.0	0.22	6.01	20.4	1.3		
5528853	<0.01	4.9	0.116	0.05	2.75	72.9	0.20	5.97	20.5	1.2		
5528854	<0.01	4.1	0.087	0.04	1.90	75.9	0.37	7.55	23.3	1.1		
5528855	0.01	4.2	0.084	0.04	1.87	74.7	0.38	7.48	22.2	1.1		
5528856	<0.01	3.8	0.149	0.06	1.95	74.6	0.20	5.63	17.9	1.2		
5528857	0.01	4.2	0.139	0.05	2.01	72.6	0.21	5.63	17.4	1.2		
5528858	0.02	3.8	0.170	0.04	1.99	76.8	0.28	6.72	18.8	1.7		
5528859	<0.01	3.4	0.055	0.02	1.34	71.0	0.49	8.09	22.0	0.9		
5528860	<0.01	3.2	0.059	0.02	1.38	70.2	0.55	7.98	22.3	0.9		
5528861	<0.01	3.6	0.129	0.05	1.63	77.9	0.21	5.93	17.6	1.2		
5528862	<0.01	3.9	0.133	0.05	1.73	77.8	0.21	6.07	17.6	1.2		
5528863	0.01	3.3	0.093	0.03	1.50	68.8	0.32	5.78	25.6	1.0		
5528864	0.01	2.9	0.049	0.02	1.16	52.4	0.32	6.15	30.1	0.7		
5528865	0.02	3.2	0.051	0.03	1.30	51.2	0.39	6.30	31.1	0.8		

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

5623 McADAM ROAD  
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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Te ppm 0.01	Th ppm 0.1	Ti % 0.005	Tl ppm 0.01	U ppm 0.05	V ppm 0.5	W ppm 0.05	Y ppm 0.05	Zn ppm 0.5	Zr ppm 0.5	Cu-OL % 0.01
5528866		0.02	3.2	0.052	0.02	1.23	51.2	0.31	6.38	31.8	0.7	
5528867		0.08	3.1	0.054	0.03	1.17	54.9	0.61	6.33	30.2	0.7	
5528868		0.08	3.1	0.054	0.03	1.16	55.8	0.54	6.30	29.7	0.7	
5528869		<0.01	3.5	0.118	0.03	1.37	69.9	0.22	5.78	28.2	1.1	
5528870		<0.01	0.3	<0.005	<0.01	0.80	7.1	<0.05	1.15	2.5	<0.5	
5528871		<0.01	3.4	0.118	0.03	1.33	70.6	0.20	5.82	28.1	1.1	
5528872		0.03	3.7	0.110	0.02	1.21	69.4	0.21	4.39	28.2	1.6	
5528873		0.03	3.4	0.104	0.02	1.17	67.1	0.19	4.36	27.2	1.5	
5528874		<0.01	3.9	0.130	0.04	1.50	72.3	0.13	5.31	26.2	2.0	
5528875		<0.01	3.9	0.132	0.04	1.50	74.3	0.13	5.44	26.9	2.0	
5528876		0.26	6.2	0.101	0.02	2.06	69.6	0.20	5.75	28.5	1.7	
5528877		0.27	6.1	0.102	0.02	2.05	70.8	0.23	5.74	28.9	1.6	
5528878		0.05	6.2	0.124	0.02	2.64	75.3	0.18	6.32	27.3	2.1	
5528879		0.04	6.1	0.121	0.02	2.65	74.4	0.17	6.07	26.7	2.0	
5528880		0.19	1.2	0.119	0.09	0.35	51.0	1.15	7.64	57.3	8.4	
5528881		0.16	5.2	0.075	0.02	2.65	64.2	0.23	6.56	24.4	1.2	
5528882		0.16	5.6	0.075	0.02	2.77	64.9	0.22	6.78	23.5	1.3	
5528883		0.51	6.1	0.115	0.03	2.46	70.3	0.26	8.37	24.6	1.8	
5528884		0.51	5.9	0.110	0.03	2.41	69.9	0.24	8.10	24.5	1.8	
5528885		0.90	4.6	0.096	0.02	2.05	62.9	0.28	6.18	23.4	1.6	1.23
5528886		0.94	4.6	0.094	0.02	2.05	62.6	0.29	6.09	23.2	1.7	1.23
5528887		5.27	5.9	0.123	0.04	3.33	62.4	0.28	4.77	23.0	2.0	3.11
5528888		1.83	5.9	0.092	0.04	3.59	63.6	0.21	4.48	23.1	1.3	
5528889		0.98	5.7	0.067	0.05	6.60	61.8	0.35	7.92	26.3	1.3	
5528890		0.95	5.7	0.063	0.05	7.99	58.3	0.34	7.91	25.8	1.3	
5528891		0.95	6.0	0.063	0.05	7.00	56.3	0.35	7.80	25.4	1.4	
5528892		0.22	4.2	0.097	0.02	1.51	62.2	0.22	9.44	25.6	1.5	
5528893		0.21	4.3	0.095	0.02	1.49	61.1	0.22	9.28	25.8	1.5	
5528894		0.12	3.4	0.113	0.02	1.35	62.4	0.18	9.02	24.6	2.1	
5528895		0.12	3.4	0.113	0.02	1.36	60.8	0.17	8.98	23.8	1.7	
5528896		0.05	2.7	0.119	0.02	1.17	65.5	0.12	7.53	22.9	1.8	
5528897		0.05	2.7	0.118	0.02	1.20	65.6	0.14	7.53	22.7	1.7	

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Te ppm 0.01	Th ppm 0.1	Ti % 0.005	Tl ppm 0.01	U ppm 0.05	V ppm 0.5	W ppm 0.05	Y ppm 0.05	Zn ppm 0.5	Zr ppm 0.5	Cu-OL % 0.01
5528898		0.02	3.2	0.141	0.03	1.51	67.6	0.15	10.8	22.1	2.3	
5528899		0.03	4.7	0.095	0.02	1.76	60.5	0.26	10.9	18.3	1.6	
5528900		<0.01	0.3	<0.005	<0.01	0.54	6.4	<0.05	1.03	2.1	<0.5	
5528901		0.02	4.5	0.099	0.02	1.71	63.2	0.24	12.0	19.1	1.6	
5528902		0.02	3.0	0.074	0.02	1.14	55.9	0.21	9.95	19.9	1.2	
5528903		<0.01	3.7	0.080	0.02	1.37	57.3	0.30	9.78	20.4	1.3	
5528904		0.01	3.0	0.075	0.02	1.20	55.4	0.22	9.43	20.1	1.2	
5528905		0.04	5.1	0.055	0.01	1.67	55.7	0.41	13.2	25.9	1.2	
5528906		0.05	4.7	0.058	0.01	1.60	57.0	0.42	13.3	27.3	1.2	
5528907		0.01	3.8	0.070	0.02	1.54	56.4	0.23	10.4	25.8	1.5	
5528908		0.01	3.8	0.072	0.03	1.49	55.5	0.23	10.4	25.3	1.5	
5528909		0.01	2.8	0.080	0.03	0.91	50.7	0.16	7.80	22.6	1.2	
5528910		0.17	1.2	0.119	0.09	0.36	48.6	1.07	7.80	57.1	8.1	
5528911		0.02	2.5	0.078	0.03	0.83	50.5	0.15	7.65	21.8	1.3	
5528912		0.01	2.3	0.074	0.03	0.85	48.9	0.12	7.55	22.1	1.2	
5528913		0.10	3.4	0.106	0.03	1.23	52.8	0.17	5.71	18.3	1.7	
5528914		0.05	3.5	0.078	0.03	1.75	54.5	0.21	7.14	21.0	1.5	
5528915		0.04	3.6	0.079	0.03	1.39	55.5	0.21	7.09	22.3	1.4	
5528916		0.03	4.1	<0.005	0.03	0.91	53.4	0.39	10.7	28.7	0.8	
5528917		0.67	4.4	0.046	0.03	1.41	50.0	0.23	7.15	24.5	1.1	
5528918		0.22	2.8	0.116	0.02	1.18	64.1	0.14	5.50	28.1	1.7	
5528919		0.19	2.8	0.108	0.02	1.17	62.3	0.18	5.31	27.5	1.5	
5528920		0.14	3.2	0.149	0.03	1.35	65.8	0.09	7.91	24.4	2.1	
5528921		0.15	3.1	0.147	0.03	1.38	64.2	0.09	7.52	24.6	2.1	
5528922		0.05	2.7	0.151	0.05	1.24	57.6	0.09	6.71	22.8	2.0	
5528923		0.05	2.8	0.151	0.05	1.25	56.8	0.08	6.78	22.1	2.0	
5528924		0.05	3.1	0.171	0.03	1.58	62.0	0.12	11.8	22.2	2.8	
5528925		0.05	3.1	0.175	0.04	1.58	63.2	0.12	12.4	23.4	2.9	
5528926		0.04	3.0	0.148	0.04	1.33	60.7	0.11	3.35	22.0	2.1	
5528927		0.04	2.9	0.147	0.04	1.29	57.2	0.12	3.21	21.1	2.0	
5528928		0.20	3.7	0.124	0.03	1.66	55.9	0.18	2.50	20.6	1.8	
5528929		0.21	4.0	0.133	0.03	1.69	60.3	0.20	2.64	21.2	1.9	

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

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CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 26, 2012

DATE RECEIVED: Nov 26, 2012

DATE REPORTED: Dec 10, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Te ppm 0.01	Th ppm 0.1	Ti % 0.005	Tl ppm 0.01	U ppm 0.05	V ppm 0.5	W ppm 0.05	Y ppm 0.05	Zn ppm 0.5	Zr ppm 0.5	Cu-OL % 0.01
5528930		<0.01	0.1	<0.005	<0.01	0.67	8.2	0.05	1.00	1.3	<0.5	
5528931		0.02	2.9	0.157	0.04	1.32	67.9	0.08	2.51	26.0	1.7	
5528932		0.02	2.7	0.161	0.04	1.41	69.0	0.09	2.64	26.1	1.8	
5528933		0.07	2.3	0.175	0.05	1.13	71.3	0.10	2.86	25.5	2.3	
5528934		0.07	2.2	0.167	0.05	1.12	71.0	0.10	2.71	24.6	2.2	
5528935		0.03	2.5	0.158	0.04	1.17	61.5	0.10	3.15	22.9	2.2	
5528936		0.07	2.9	0.134	0.03	1.20	59.2	0.09	2.53	21.8	1.9	
5528937		0.06	2.9	0.139	0.03	1.21	60.4	0.09	2.63	21.9	1.9	
5528938		0.04	2.0	0.131	0.04	0.94	57.4	0.05	1.87	24.3	1.6	
5528939		<0.01	1.8	0.098	0.02	0.80	53.0	0.09	2.33	24.1	1.4	
5528940		0.19	1.2	0.127	0.09	0.37	52.3	1.21	8.15	56.0	9.0	
5528941		0.05	2.6	0.022	0.02	0.73	43.2	0.17	2.73	22.0	0.6	
5528942		0.04	2.5	0.027	0.02	0.80	45.6	0.11	3.39	21.9	0.6	
5528943		0.01	3.2	0.021	0.02	0.91	55.7	0.06	5.67	29.4	0.7	
5528944		0.01	2.9	0.114	0.03	1.40	57.0	0.07	3.93	24.4	1.4	
5528945		0.04	2.8	0.099	0.02	1.50	52.6	0.08	3.10	18.9	1.3	
5528946		0.01	3.1	0.105	0.04	1.52	57.7	0.08	2.00	20.4	1.0	
5528947		0.02	3.2	0.124	0.05	1.51	61.0	0.06	1.99	27.3	1.1	
5528948		0.02	3.7	0.126	0.05	1.40	59.5	0.06	2.28	22.0	1.0	
5528949		0.01	2.5	0.142	0.05	1.09	70.6	0.07	3.48	35.1	1.5	
5528950		<0.01	2.7	0.112	0.03	1.19	66.4	0.05	4.24	37.0	1.3	
5528951		<0.01	1.9	0.129	0.04	0.87	82.7	<0.05	4.52	44.8	1.1	
5528952		<0.01	3.6	0.091	0.03	1.19	53.7	<0.05	2.91	23.8	1.0	
5528955		0.06	3.0	0.085	0.02	1.35	58.5	0.11	2.94	17.5	1.1	
5528968		<0.01	3.0	0.015	0.02	1.20	52.4	0.31	10.0	36.1	0.7	
5528969		0.01	2.8	0.046	0.02	1.37	59.8	0.14	8.64	32.0	1.3	
5528971		<0.01	2.1	0.112	0.02	1.10	67.1	0.09	6.62	28.3	1.4	
5528972		<0.01	2.7	0.098	0.03	1.00	75.9	0.12	5.06	38.2	1.0	

Comments: RDL - Reported Detection Limit

Certified By:

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis												
RPT Date: Dec 10, 2012			REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
							Lower			Upper		
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968493	0.670	0.746	10.7%	< 0.01	12.3	13.0	94%	80%	120%	
Al	1	3968493	1.26	1.26	0.0%	< 0.01				80%	120%	
As	1	3968493	2.92	2.42	18.7%	0.1				80%	120%	
Au	1	3968493	< 0.01	0.01		< 0.01				80%	120%	
B	1	3968493	< 5	< 5	0.0%	< 5				80%	120%	
Ba	1	3968493	47	48	2.1%	< 1				80%	120%	
Be	1	3968493	0.32	0.32	0.0%	< 0.05				80%	120%	
Bi	1	3968493	0.365	0.375	2.7%	< 0.01				80%	120%	
Ca	1	3968493	1.33	1.33	0.0%	< 0.01				80%	120%	
Cd	1	3968493	0.03	0.03	0.0%	< 0.01				80%	120%	
Ce	1	3968493	11.4	11.1	2.7%	< 0.01				80%	120%	
Co	1	3968493	9.71	9.96	2.5%	< 0.1				80%	120%	
Cr	1	3968493	13.4	13.9	3.7%	< 0.5				80%	120%	
Cs	1	3968493	0.27	0.27	0.0%	< 0.05				80%	120%	
Cu	1	3968493	1350	1370	1.5%	< 0.1	5918	6000	98%	80%	120%	
Fe	1	3968493	2.12	2.25	5.9%	< 0.01				80%	120%	
Ga	1	3968493	6.56	6.62	0.9%	< 0.05				80%	120%	
Ge	1	3968493	0.10	0.10	0.0%	< 0.05				80%	120%	
Hf	1	3968493	0.14	0.14	0.0%	< 0.02				80%	120%	
Hg	1	3968493	0.02	0.02	0.0%	< 0.01				80%	120%	
In	1	3968493	0.0123	0.0130	5.5%	< 0.005				80%	120%	
K	1	3968493	0.10	0.10	0.0%	< 0.01				80%	120%	
La	1	3968493	6.08	5.94	2.3%	< 0.1				80%	120%	
Li	1	3968493	10.1	10.5	3.9%	< 0.1				80%	120%	
Mg	1	3968493	0.903	0.907	0.4%	< 0.01				80%	120%	
Mn	1	3968493	377	397	5.2%	< 1				80%	120%	
Mo	1	3968493	1.38	1.42	2.9%	< 0.05	315	360	87%	80%	120%	
Na	1	3968493	0.05	0.05	0.0%	< 0.01				80%	120%	
Nb	1	3968493	0.230	0.235	2.2%	< 0.05				80%	120%	
Ni	1	3968493	10.4	11.0	5.6%	< 0.2				80%	120%	
P	1	3968493	591	597	1.0%	< 10	679	600	113%	80%	120%	
Pb	1	3968493	1.6	1.6	0.0%	< 0.1				80%	120%	
Rb	1	3968493	6.02	6.09	1.2%	< 0.1				80%	120%	
Re	1	3968493	0.002	0.002	0.0%	< 0.001				80%	120%	
S	1	3968493	0.040	0.040	0.0%	< 0.005				80%	120%	
Sb	1	3968493	0.09	0.09	0.0%	< 0.05				80%	120%	
Sc	1	3968493	4.4	4.3	2.3%	< 0.1				80%	120%	
Se	1	3968493	< 0.2	< 0.2	0.0%	< 0.2				80%	120%	
Sn	1	3968493	0.2	0.2	0.0%	< 0.2				80%	120%	
Sr	1	3968493	38.4	38.4	0.0%	< 0.2				80%	120%	
Ta	1	3968493	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Te	1	3968493	0.05	0.05	0.0%	< 0.01				80%	120%	
Th	1	3968493	2.88	3.27	12.7%	< 0.1				80%	120%	
Ti	1	3968493	0.132	0.132	0.0%	< 0.005				80%	120%	

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012		REPLICATE					Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
Tl	1	3968493	0.02	0.02	0.0%	< 0.01				80%	120%	
U	1	3968493	1.36	1.45	6.4%	< 0.05				80%	120%	
V	1	3968493	64.9	66.7	2.7%	< 0.5				80%	120%	
W	1	3968493	0.138	0.133	3.7%	< 0.05				80%	120%	
Y	1	3968493	4.36	4.33	0.7%	< 0.05	6	7	80%	80%	120%	
Zn	1	3968493	22.7	23.1	1.7%	< 0.5				80%	120%	
Zr	1	3968493	1.1	1.1	0.0%	< 0.5				80%	120%	
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968518	2.00	2.08	3.9%	< 0.01	10.9	13.0	83%	80%	120%	
Al	1	3968518	1.29	1.36	5.3%	< 0.01				80%	120%	
As	1	3968518	1.1	1.1	0.0%	0.1				80%	120%	
Au	1	3968518	0.19	0.18	5.4%	< 0.01				80%	120%	
B	1	3968518	< 5	< 5	0.0%	< 5				80%	120%	
Ba	1	3968518	53	56	5.5%	< 1				80%	120%	
Be	1	3968518	0.37	0.37	0.0%	< 0.05				80%	120%	
Bi	1	3968518	3.37	3.45	2.3%	< 0.01				80%	120%	
Ca	1	3968518	1.84	1.98	7.3%	0.01				80%	120%	
Cd	1	3968518	0.05	0.05	0.0%	< 0.01				80%	120%	
Ce	1	3968518	14.8	15.3	3.3%	< 0.01				80%	120%	
Co	1	3968518	7.74	8.09	4.4%	< 0.1				80%	120%	
Cr	1	3968518	24.5	25.0	2.0%	< 0.5				80%	120%	
Cs	1	3968518	0.28	0.28	0.0%	< 0.05				80%	120%	
Cu	1	3968518	4510	4730	4.8%	< 0.1	5773	6000	96%	80%	120%	
Fe	1	3968518	2.05	2.20	7.1%	< 0.01				80%	120%	
Ga	1	3968518	5.38	5.60	4.0%	< 0.05				80%	120%	
Ge	1	3968518	0.09	0.09	0.0%	< 0.05				80%	120%	
Hf	1	3968518	0.13	0.13	0.0%	< 0.02				80%	120%	
Hg	1	3968518	0.024	0.027	11.8%	< 0.01				80%	120%	
In	1	3968518	0.0158	0.0166	4.9%	< 0.005				80%	120%	
K	1	3968518	0.100	0.106	5.8%	< 0.01				80%	120%	
La	1	3968518	7.60	7.86	3.4%	< 0.1				80%	120%	
Li	1	3968518	8.11	8.60	5.9%	< 0.1				80%	120%	
Mg	1	3968518	0.854	0.914	6.8%	< 0.01				80%	120%	
Mn	1	3968518	403	430	6.5%	< 1				80%	120%	
Mo	1	3968518	1.77	1.66	6.4%	< 0.05				80%	120%	
Na	1	3968518	0.07	0.07	0.0%	< 0.01				80%	120%	
Nb	1	3968518	0.23	0.23	0.0%	< 0.05				80%	120%	
Ni	1	3968518	6.5	6.7	3.0%	< 0.2				80%	120%	
P	1	3968518	577	595	3.1%	< 10	648	600	108%	80%	120%	
Pb	1	3968518	1.60	1.69	5.5%	< 0.1				80%	120%	
Rb	1	3968518	5.75	5.94	3.3%	< 0.1				80%	120%	
Re	1	3968518	0.0040	0.0046	14.0%	< 0.001				80%	120%	
S	1	3968518	0.143	0.151	5.4%	< 0.005				80%	120%	



## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)										
RPT Date: Dec 10, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL			
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits
						Lower				Upper
Sb	1	3968518	0.13	0.13	0.0%	< 0.05			80%	120%
Sc	1	3968518	4.12	4.20	1.9%	< 0.1			80%	120%
Se	1	3968518	< 0.2	< 0.2	0.0%	< 0.2			80%	120%
Sn	1	3968518	0.3	0.3	0.0%	< 0.2			80%	120%
Sr	1	3968518	82.8	86.2	4.0%	< 0.2			80%	120%
Ta	1	3968518	< 0.01	< 0.01	0.0%	< 0.01			80%	120%
Te	1	3968518	0.24	0.25	4.1%	< 0.01			80%	120%
Th	1	3968518	4.18	4.15	0.7%	< 0.1			80%	120%
Ti	1	3968518	0.0831	0.0887	6.5%	< 0.005			80%	120%
Tl	1	3968518	0.02	0.02	0.0%	< 0.01			80%	120%
U	1	3968518	1.59	1.67	4.9%	< 0.05			80%	120%
V	1	3968518	58.5	61.7	5.3%	< 0.5			80%	120%
W	1	3968518	0.30	0.30	0.0%	< 0.05			80%	120%
Y	1	3968518	5.27	5.42	2.8%	< 0.05			80%	120%
Zn	1	3968518	17.0	18.9	10.6%	< 0.5			80%	120%
Zr	1	3968518	0.84	0.91	8.0%	< 0.5			80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)										
Ag	1	3968533	0.05	0.01		< 0.01	10.9	13.0	83%	80% 120%
Al	1	3968533	0.04	0.04	0.0%	< 0.01			80%	120%
As	1	3968533	< 0.1	< 0.1	0.0%	0.2			80%	120%
Au	1	3968533	< 0.01	< 0.01	0.0%	< 0.01			80%	120%
B	1	3968533	< 5	< 5	0.0%	< 5			80%	120%
Ba	1	3968533	17	18	5.7%	< 1			80%	120%
Be	1	3968533	< 0.05	< 0.05	0.0%	< 0.05			80%	120%
Bi	1	3968658	< 0.01	< 0.01	0.0%	< 0.01			80%	120%
Ca	1	3968533	20.7	21.2	2.4%	< 0.01			80%	120%
Cd	1	3968533	0.045	0.048	6.5%	< 0.01			80%	120%
Ce	1	3968533	1.48	1.54	4.0%	< 0.01			80%	120%
Co	1	3968533	0.9	0.9	0.0%	< 0.1			80%	120%
Cr	1	3968533	1.26	1.14	10.0%	< 0.5			80%	120%
Cs	1	3968533	0.134	0.157	15.8%	< 0.05			80%	120%
Cu	1	3968533	8.1	6.6	20.4%	< 0.1	5555	6000	92%	80% 120%
Fe	1	3968533	0.45	0.45	0.0%	< 0.01			80%	120%
Ga	1	3968533	0.13	0.13	0.0%	< 0.05			80%	120%
Ge	1	3968533	< 0.05	< 0.05	0.0%	0.05			80%	120%
Hf	1	3968533	< 0.02	< 0.02	0.0%	< 0.02			80%	120%
Hg	1	3968533	< 0.01	< 0.01	0.0%	< 0.01			80%	120%
In	1	3968533	< 0.005	< 0.005	0.0%	< 0.005			80%	120%
K	1	3968533	0.02	0.02	0.0%	< 0.01			80%	120%
La	1	3968533	0.7	0.7	0.0%	< 0.1			80%	120%
Li	1	3968533	1.02	0.94	8.2%	< 0.1			80%	120%
Mg	1	3968533	12.9	13.3	3.1%	< 0.01			80%	120%
Mn	1	3968533	212	223	5.1%	< 1			80%	120%
Mo	1	3968658	3.83	3.50	9.0%	< 0.05			80%	120%

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)											
RPT Date: Dec 10, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
						Lower				Upper	
Na	1	3968533	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Nb	1	3968533	0.14	0.14	0.0%	< 0.05				80%	120%
Ni	1	3968533	1.59	1.40	12.7%	< 0.2				80%	120%
P	1	3968533	258	264	2.3%	< 10	640	600	107%	80%	120%
Pb	1	3968533	1.2	1.2	0.0%	< 0.1				80%	120%
Rb	1	3968533	0.83	0.93	11.4%	< 0.1				80%	120%
Re	1	3968533	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3968533	0.010	0.008	22.2%	< 0.005				80%	120%
Sb	1	3968533	< 0.05	< 0.05	0.0%	< 0.05				80%	120%
Sc	1	3968533	0.25	0.23	8.3%	< 0.1				80%	120%
Se	1	3968533	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sn	1	3968533	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sr	1	3968533	46.7	47.5	1.7%	< 0.2				80%	120%
Ta	1	3968533	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Te	1	3968658	5.06	3.82	27.9%	< 0.01				80%	120%
Th	1	3968533	0.1	0.1	0.0%	< 0.1				80%	120%
Ti	1	3968533	< 0.005	< 0.005	0.0%	< 0.005				80%	120%
Tl	1	3968533	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
U	1	3968533	0.64	0.60	6.5%	< 0.05				80%	120%
V	1	3968533	6.98	7.65	9.2%	< 0.5				80%	120%
W	1	3968533	0.05	0.05	0.0%	< 0.05				80%	120%
Y	1	3968533	1.09	1.08	0.9%	< 0.05				80%	120%
Zn	1	3968533	2.81	2.72	3.3%	< 0.5				80%	120%
Zr	1	3968533	< 0.5	< 0.5	0.0%	< 0.5				80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3968544	0.16	0.13	20.7%	< 0.01	11.1	13.0	85%	80%	120%
Al	1	3968544	0.752	0.792	5.2%	< 0.01				80%	120%
As	1	3968544	3.1	3.1	0.0%	0.1				80%	120%
Au	1	3968544	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3968544	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3968544	47	51	8.2%	< 1				80%	120%
Be	1	3968544	0.205	0.226	9.7%	< 0.05				80%	120%
Bi	1	3968544	0.14	0.14	0.0%	< 0.01				80%	120%
Ca	1	3968544	1.95	1.99	2.0%	< 0.01				80%	120%
Cd	1	3968544	0.35	0.37	5.6%	< 0.01				80%	120%
Ce	1	3968544	16.5	16.8	1.8%	< 0.01				80%	120%
Co	1	3968544	5.82	5.97	2.5%	< 0.1				80%	120%
Cr	1	3968544	8.50	8.14	4.3%	< 0.5				80%	120%
Cs	1	3968544	0.29	0.27	7.1%	< 0.05				80%	120%
Cu	1	3968544	230	249	7.9%	< 0.1	5945	6000	99%	80%	120%
Fe	1	3968544	1.60	1.69	5.5%	< 0.01				80%	120%
Ga	1	3968544	3.53	3.59	1.7%	< 0.05				80%	120%
Ge	1	3968544	0.08	0.08	0.0%	< 0.05				80%	120%
Hf	1	3968544	0.086	0.079	8.5%	< 0.02				80%	120%

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012		REPLICATE					Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
Hg	1	3968544	0.045	0.056	21.8%	< 0.01			80%	120%		
In	1	3968544	0.0230	0.0224	2.6%	< 0.005			80%	120%		
K	1	3968544	0.13	0.13	0.0%	< 0.01			80%	120%		
La	1	3968544	8.03	8.12	1.1%	< 0.1			80%	120%		
Li	1	3968544	5.71	5.91	3.4%	< 0.1			80%	120%		
Mg	1	3968544	0.533	0.568	6.4%	< 0.01			80%	120%		
Mn	1	3968544	372	376	1.1%	< 1			80%	120%		
Mo	1	3968544	109	113	3.6%	< 0.05			80%	120%		
Na	1	3968544	0.033	0.035	5.9%	< 0.01			80%	120%		
Nb	1	3968544	0.10	0.10	0.0%	< 0.05			80%	120%		
Ni	1	3968544	5.7	5.5	3.6%	< 0.2			80%	120%		
P	1	3968544	609	622	2.1%	< 10	679	600	113%	80%	120%	
Pb	1	3968544	2.75	2.77	0.7%	< 0.1			80%	120%		
Rb	1	3968544	7.29	7.21	1.1%	< 0.1			80%	120%		
Re	1	3968544	0.411	0.429	4.3%	< 0.001			80%	120%		
S	1	3968544	0.021	0.022	4.7%	< 0.005			80%	120%		
Sb	1	3968544	0.322	0.294	9.1%	< 0.05			80%	120%		
Sc	1	3968544	3.20	3.25	1.6%	< 0.1			80%	120%		
Se	1	3968544	< 0.2	< 0.2	0.0%	< 0.2			80%	120%		
Sn	1	3968544	0.4	0.4	0.0%	< 0.2			80%	120%		
Sr	1	3968544	72.3	73.6	1.8%	< 0.2			80%	120%		
Ta	1	3968544	< 0.01	< 0.01	0.0%	< 0.01			80%	120%		
Te	1	3968544	0.112	0.129	14.1%	< 0.01			80%	120%		
Th	1	3968544	4.5	4.7	4.3%	< 0.1			80%	120%		
Ti	1	3968544	0.0393	0.0406	3.3%	< 0.005			80%	120%		
Tl	1	3968544	0.03	0.03	0.0%	< 0.01			80%	120%		
U	1	3968544	1.46	1.57	7.3%	< 0.05			80%	120%		
V	1	3968544	50.4	50.6	0.4%	< 0.5			80%	120%		
W	1	3968544	0.291	0.306	5.0%	< 0.05			80%	120%		
Y	1	3968544	6.06	6.24	2.9%	< 0.05			80%	120%		
Zn	1	3968544	17.0	17.8	4.6%	< 0.5			80%	120%		
Zr	1	3968544	0.56	0.51	9.3%	< 0.5			80%	120%		
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968568	0.234	0.241	2.9%	< 0.01	11.6	13.0	89%	80%	120%	
Al	1	3968568	1.23	1.19	3.3%	< 0.01			80%	120%		
As	1	3968568	1.1	1.1	0.0%	0.2			80%	120%		
Au	1	3968568	< 0.01	< 0.01	0.0%	< 0.01			80%	120%		
B	1	3968568	< 5	< 5	0.0%	< 5			80%	120%		
Ba	1	3968568	41	41	0.0%	< 1			80%	120%		
Be	1	3968568	0.38	0.38	0.0%	< 0.05			80%	120%		
Bi	1	3968568	0.05	0.05	0.0%	< 0.01			80%	120%		
Ca	1	3968568	1.44	1.42	1.4%	< 0.01			80%	120%		
Cd	1	3968568	0.017	0.014	19.4%	< 0.01			80%	120%		

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012		REPLICATE					Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
Ce	1	3968568	11.5	11.5	0.0%	< 0.01				80%	120%	
Co	1	3968568	6.76	6.75	0.1%	< 0.1				80%	120%	
Cr	1	3968568	15.5	15.6	0.6%	< 0.5				80%	120%	
Cs	1	3968568	0.30	0.30	0.0%	< 0.05				80%	120%	
Cu	1	3968568	1220	1260	3.2%	< 0.1	6345	6000	105%	80%	120%	
Fe	1	3968568	2.23	2.19	1.8%	< 0.01				80%	120%	
Ga	1	3968568	5.77	5.79	0.3%	< 0.05				80%	120%	
Ge	1	3968568	0.09	0.09	0.0%	< 0.05				80%	120%	
Hf	1	3968568	0.14	0.14	0.0%	< 0.02				80%	120%	
Hg	1	3968568	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
In	1	3968568	0.0115	0.0115	0.0%	< 0.005				80%	120%	
K	1	3968568	0.09	0.09	0.0%	< 0.01				80%	120%	
La	1	3968568	6.17	6.12	0.8%	< 0.1				80%	120%	
Li	1	3968568	8.7	8.8	1.1%	< 0.1				80%	120%	
Mg	1	3968568	0.74	0.73	1.4%	< 0.01				80%	120%	
Mn	1	3968568	274	272	0.7%	< 1				80%	120%	
Mo	1	3968568	1.53	1.56	1.9%	< 0.05				80%	120%	
Na	1	3968568	0.056	0.052	7.4%	< 0.01				80%	120%	
Nb	1	3968568	0.22	0.22	0.0%	< 0.05				80%	120%	
Ni	1	3968568	7.64	8.31	8.4%	< 0.2				80%	120%	
P	1	3968568	620	617	0.5%	< 10	698	600	116%	80%	120%	
Pb	1	3968568	1.6	1.6	0.0%	0.2				80%	120%	
Rb	1	3968568	5.85	5.96	1.9%	< 0.1				80%	120%	
Re	1	3968568	0.011	0.011	0.0%	< 0.001				80%	120%	
S	1	3968568	0.0399	0.0427	6.8%	< 0.005				80%	120%	
Sb	1	3968568	0.06	0.06	0.0%	< 0.05				80%	120%	
Sc	1	3968568	3.7	3.7	0.0%	< 0.1				80%	120%	
Se	1	3968568	< 0.2	< 0.2	0.0%	< 0.2				80%	120%	
Sn	1	3968568	0.29	0.23	23.1%	< 0.2				80%	120%	
Sr	1	3968568	48.0	47.4	1.3%	< 0.2				80%	120%	
Ta	1	3968568	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Te	1	3968568	0.02	0.02	0.0%	< 0.01				80%	120%	
Th	1	3968568	2.5	2.5	0.0%	< 0.1				80%	120%	
Ti	1	3968568	0.127	0.124	2.4%	< 0.005				80%	120%	
Tl	1	3968568	0.02	0.02	0.0%	< 0.01				80%	120%	
U	1	3968568	1.02	1.03	1.0%	< 0.05				80%	120%	
V	1	3968568	71.1	70.4	1.0%	< 0.5				80%	120%	
W	1	3968568	0.242	0.232	4.2%	< 0.05				80%	120%	
Y	1	3968568	4.39	4.31	1.8%	< 0.05				80%	120%	
Zn	1	3968568	13.9	14.0	0.7%	< 0.5				80%	120%	
Zr	1	3968568	1.0	1.0	0.0%	< 0.5				80%	120%	
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968580	1.43	1.45	1.4%	< 0.01	11.6	13.0	89%	80%	120%	
Al	1	3968580	1.16	1.14	1.7%	< 0.01				80%	120%	

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012		REPLICATE					Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
As	1	3968701	< 0.1	< 0.1	0.0%	< 0.1				80%	120%	
Au	1	3968580	0.016	0.012	28.6%	< 0.01				80%	120%	
B	1	3968580	< 5	< 5	0.0%	< 5				80%	120%	
Ba	1	3968580	38	38	0.0%	< 1				80%	120%	
Be	1	3968580	0.374	0.381	1.9%	< 0.05				80%	120%	
Bi	1	3968580	0.49	0.47	4.2%	< 0.01				80%	120%	
Ca	1	3968580	1.57	1.55	1.3%	< 0.01				80%	120%	
Cd	1	3968580	0.036	0.030	18.2%	< 0.01				80%	120%	
Ce	1	3968580	15.8	15.5	1.9%	< 0.01				80%	120%	
Co	1	3968580	8.19	8.04	1.8%	< 0.1				80%	120%	
Cr	1	3968580	13.1	13.1	0.0%	< 0.5				80%	120%	
Cs	1	3968580	0.30	0.30	0.0%	< 0.05				80%	120%	
Cu	1	3968580	2870	2700	6.1%	< 0.1	6135	6000	102%	80%	120%	
Fe	1	3968580	2.14	2.13	0.5%	< 0.01				80%	120%	
Ga	1	3968580	4.97	4.96	0.2%	< 0.05				80%	120%	
Ge	1	3968580	0.08	0.08	0.0%	< 0.05				80%	120%	
Hf	1	3968580	0.12	0.12	0.0%	< 0.02				80%	120%	
Hg	1	3968580	0.01	0.01	0.0%	< 0.01				80%	120%	
In	1	3968580	0.013	0.013	0.0%	< 0.005				80%	120%	
K	1	3968580	0.12	0.12	0.0%	< 0.01				80%	120%	
La	1	3968580	8.0	8.0	0.0%	< 0.1				80%	120%	
Li	1	3968580	9.22	9.38	1.7%	< 0.1				80%	120%	
Mg	1	3968580	0.788	0.785	0.4%	< 0.01				80%	120%	
Mn	1	3968580	435	414	4.9%	< 1				80%	120%	
Mo	1	3968580	2.19	2.03	7.6%	< 0.05	289	280	103%	80%	120%	
Na	1	3968580	0.06	0.06	0.0%	< 0.01				80%	120%	
Nb	1	3968580	0.12	0.12	0.0%	< 0.05				80%	120%	
Ni	1	3968580	7.28	6.60	9.8%	< 0.2				80%	120%	
P	1	3968580	624	615	1.5%	< 10	695	600	116%	80%	120%	
Pb	1	3968580	1.4	1.4	0.0%	< 0.1				80%	120%	
Rb	1	3968580	5.66	5.75	1.6%	< 0.1				80%	120%	
Re	1	3968580	0.024	0.021	13.3%	< 0.001				80%	120%	
S	1	3968580	0.0800	0.0762	4.9%	< 0.005				80%	120%	
Sb	1	3968580	0.11	0.11	0.0%	< 0.05				80%	120%	
Sc	1	3968580	4.02	4.06	1.0%	< 0.1				80%	120%	
Se	1	3968580	< 0.2	< 0.2	0.0%	< 0.2				80%	120%	
Sn	1	3968701	< 0.2	< 0.2	0.0%	< 0.2				80%	120%	
Sr	1	3968580	66.8	67.2	0.6%	< 0.2				80%	120%	
Ta	1	3968580	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Te	1	3968580	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Th	1	3968580	3.3	3.3	0.0%	< 0.1				80%	120%	
Ti	1	3968580	0.075	0.074	1.3%	< 0.005				80%	120%	
Tl	1	3968580	0.02	0.02	0.0%	< 0.01				80%	120%	
U	1	3968580	1.37	1.37	0.0%	< 0.05				80%	120%	

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012		REPLICATE					Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
V	1	3968580	60.8	60.7	0.2%	< 0.5				80%	120%	
W	1	3968580	0.198	0.207	4.4%	< 0.05				80%	120%	
Y	1	3968580	5.92	5.94	0.3%	< 0.05				80%	120%	
Zn	1	3968580	18.4	18.2	1.1%	< 0.5				80%	120%	
Zr	1	3968580	0.8	0.8	0.0%	< 0.5				80%	120%	
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968593	0.12	0.10	18.2%	< 0.01	11.7	13.0	90%	80%	120%	
Al	1	3968593	1.03	0.99	4.0%	< 0.01				80%	120%	
As	1	3968593	3.8	2.6		< 0.1				80%	120%	
Au	1	3968593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
B	1	3968593	< 5	< 5	0.0%	< 5				80%	120%	
Ba	1	3968593	143	141	1.4%	< 1				80%	120%	
Be	1	3968593	0.264	0.280	5.9%	< 0.05	0.4	0.4	100%	80%	120%	
Bi	1	3968593	0.06	0.06	0.0%	< 0.01				80%	120%	
Ca	1	3968593	1.59	1.55	2.5%	< 0.01				80%	120%	
Cd	1	3968593	0.02	0.02	0.0%	< 0.01				80%	120%	
Ce	1	3968593	16.2	16.7	3.0%	< 0.01				80%	120%	
Co	1	3968593	7.5	7.4	1.3%	< 0.1				80%	120%	
Cr	1	3968593	8.4	9.1	8.0%	< 0.5				80%	120%	
Cs	1	3968593	0.319	0.335	4.9%	< 0.05				80%	120%	
Cu	1	3968593	154	163	5.7%	< 0.1	6421	6000	107%	80%	120%	
Fe	1	3968593	2.23	2.18	2.3%	< 0.01				80%	120%	
Ga	1	3968593	4.57	4.62	1.1%	< 0.05				80%	120%	
Ge	1	3968593	0.087	0.081	7.1%	< 0.05				80%	120%	
Hf	1	3968593	0.139	0.148	6.3%	< 0.02				80%	120%	
Hg	1	3968593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
In	1	3968593	0.015	0.015	0.0%	< 0.005				80%	120%	
K	1	3968593	0.16	0.16	0.0%	< 0.01				80%	120%	
La	1	3968593	8.1	8.2	1.2%	< 0.1				80%	120%	
Li	1	3968593	6.6	6.9	4.4%	< 0.1				80%	120%	
Mg	1	3968593	0.710	0.701	1.3%	< 0.01				80%	120%	
Mn	1	3968593	447	478	6.7%	< 1				80%	120%	
Mo	1	3968593	1.93	1.72	11.5%	< 0.05	297	360	82%	80%	120%	
Na	1	3968593	0.10	0.10	0.0%	< 0.01				80%	120%	
Nb	1	3968593	0.110	0.139	23.3%	< 0.05				80%	120%	
Ni	1	3968593	6.90	7.08	2.6%	< 0.2				80%	120%	
P	1	3968593	650	690	6.0%	< 10	702	600	117%	80%	120%	
Pb	1	3968593	2.0	1.3		< 0.1				80%	120%	
Rb	1	3968593	9.2	9.3	1.1%	< 0.1	13	13	101%	80%	120%	
Re	1	3968593	0.017	0.016	6.1%	< 0.001				80%	120%	
S	1	3968593	0.009	0.009	0.0%	< 0.005				80%	120%	
Sb	1	3968593	0.07	0.07	0.0%	< 0.05				80%	120%	
Sc	1	3968593	3.8	3.8	0.0%	< 0.1				80%	120%	
Se	1	3968593	< 0.2	< 0.2	0.0%	< 0.2				80%	120%	

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012			REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
Sn	1	3968593	0.3	0.3	0.0%	< 0.2				80%	120%	
Sr	1	3968593	92.5	93.0	0.5%	< 0.2				80%	120%	
Ta	1	3968593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Te	1	3968593	0.01	< 0.01		< 0.01				80%	120%	
Th	1	3968593	4.0	4.0	0.0%	< 0.1				80%	120%	
Ti	1	3968593	0.0949	0.0945	0.4%	< 0.005				80%	120%	
Tl	1	3968593	0.03	0.03	0.0%	< 0.01				80%	120%	
U	1	3968593	2.37	1.62		< 0.05				80%	120%	
V	1	3968593	67.9	72.8	7.0%	< 0.5				80%	120%	
W	1	3968593	0.21	0.22	4.7%	< 0.05				80%	120%	
Y	1	3968593	6.56	6.72	2.4%	< 0.05				80%	120%	
Zn	1	3968593	21.9	24.0	9.2%	< 0.5				80%	120%	
Zr	1	3968593	0.90	0.95	5.4%	< 0.5				80%	120%	
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)												
Ag	1	3968605	1.63	1.67	2.4%	< 0.01	11.7	13.0	90%	80%	120%	
Al	1	3968605	1.24	1.21	2.4%	< 0.01				80%	120%	
As	1	3968605	11.2	11.5	2.6%	< 0.1				80%	120%	
Au	1	3968605	0.901	0.712	23.4%	< 0.01				80%	120%	
B	1	3968605	< 5	< 5	0.0%	< 5				80%	120%	
Ba	1	3968605	133	130	2.3%	< 1				80%	120%	
Be	1	3968605	0.30	0.30	0.0%	< 0.05	0.3	0.4	82%	80%	120%	
Bi	1	3968605	0.55	0.56	1.8%	< 0.01				80%	120%	
Ca	1	3968605	0.691	0.698	1.0%	< 0.01				80%	120%	
Cd	1	3968605	1.14	1.16	1.7%	< 0.01				80%	120%	
Ce	1	3968605	11.3	11.6	2.6%	< 0.01				80%	120%	
Co	1	3968605	6.9	6.9	0.0%	< 0.1				80%	120%	
Cr	1	3968605	31.4	30.9	1.6%	< 0.5				80%	120%	
Cs	1	3968605	0.394	0.410	4.0%	< 0.05				80%	120%	
Cu	1	3968605	3670	3570	2.8%	< 0.1	6114	6000	101%	80%	120%	
Fe	1	3968605	3.03	2.99	1.3%	< 0.01				80%	120%	
Ga	1	3968605	4.38	4.50	2.7%	< 0.05				80%	120%	
Ge	1	3968605	0.097	0.093	4.2%	< 0.05				80%	120%	
Hf	1	3968605	0.34	0.35	2.9%	< 0.02				80%	120%	
Hg	1	3968605	0.086	0.078	9.8%	< 0.01				80%	120%	
In	1	3968605	0.048	0.049	2.1%	< 0.005				80%	120%	
K	1	3968605	0.11	0.11	0.0%	< 0.01				80%	120%	
La	1	3968605	5.70	5.88	3.1%	< 0.1				80%	120%	
Li	1	3968605	10.5	11.1	5.6%	< 0.1				80%	120%	
Mg	1	3968605	0.584	0.574	1.7%	< 0.01				80%	120%	
Mn	1	3968605	505	499	1.2%	< 1				80%	120%	
Mo	1	3968605	271	276	1.8%	< 0.05	292	360	81%	80%	120%	
Na	1	3968605	0.107	0.098	8.8%	< 0.01				80%	120%	
Nb	1	3968605	0.313	0.409	26.6%	< 0.05				80%	120%	

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.  
 PROJECT NO: R12 - Holes

AGAT WORK ORDER: 12V667379  
 ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)												
RPT Date: Dec 10, 2012			REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD	Result Value		Expect Value	Recovery	Acceptable Limits		
										Lower	Upper	
Ni	1	3968605	29.0	28.6	1.4%	< 0.2				80%	120%	
P	1	3968605	533	518	2.9%	< 10	685	600	114%	80%	120%	
Pb	1	3968605	22.6	22.9	1.3%	< 0.1				80%	120%	
Rb	1	3968605	4.75	4.86	2.3%	< 0.1	11	13	83%	80%	120%	
Re	1	3968605	0.295	0.298	1.0%	< 0.001				80%	120%	
S	1	3968605	0.399	0.400	0.3%	< 0.005				80%	120%	
Sb	1	3968605	4.15	4.16	0.2%	< 0.05				80%	120%	
Sc	1	3968605	4.4	4.6	4.4%	< 0.1				80%	120%	
Se	1	3968605	1.1	1.1	0.0%	< 0.2				80%	120%	
Sn	1	3968605	2.0	2.0	0.0%	< 0.2				80%	120%	
Sr	1	3968605	36.5	38.0	4.0%	< 0.2				80%	120%	
Ta	1	3968605	< 0.01	< 0.01	0.0%	< 0.01				80%	120%	
Te	1	3968605	0.177	0.226	24.3%	< 0.01				80%	120%	
Th	1	3968605	1.3	1.3	0.0%	< 0.1				80%	120%	
Ti	1	3968605	0.123	0.126	2.4%	< 0.005				80%	120%	
Tl	1	3968605	0.10	0.10	0.0%	< 0.01				80%	120%	
U	1	3968605	0.39	0.39	0.0%	< 0.05				80%	120%	
V	1	3968605	53.5	53.1	0.8%	< 0.5				80%	120%	
W	1	3968605	1.39	1.27	9.0%	< 0.05				80%	120%	
Y	1	3968605	8.13	8.41	3.4%	< 0.05	6	7	84%	80%	120%	
Zn	1	3968605	47.9	47.9	0.0%	< 0.5				80%	120%	
Zr	1	3968605	5.01	5.70	12.9%	< 0.5				80%	120%	

Certified By:





## Method Summary

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight	MIN-12009		BALANCE
Ag	MIN-200-12017		ICP-MS
Al	MIN-200-12017		ICP/OES
As	MIN-200-12017		ICP-MS
Au	MIN-200-12017		ICP-MS
B	MIN-200-12017		ICP/OES
Ba	MIN-200-12017		ICP-MS
Be	MIN-200-12017		ICP-MS
Bi	MIN-200-12017		ICP-MS
Ca	MIN-200-12017		ICP/OES
Cd	MIN-200-12017		ICP-MS
Ce	MIN-200-12017		ICP-MS
Co	MIN-200-12017		ICP-MS
Cr	MIN-200-12017		ICP/OES
Cs	MIN-200-12017		ICP-MS
Cu	MIN-200-12017		ICP-MS
Fe	MIN-200-12017		ICP/OES
Ga	MIN-200-12017		ICP-MS
Ge	MIN-200-12017		ICP-MS
Hf	MIN-200-12017		ICP-MS
Hg	MIN-200-12017		ICP-MS
In	MIN-200-12017		ICP-MS
K	MIN-200-12017		ICP/OES
La	MIN-200-12017		ICP-MS
Li	MIN-200-12017		ICP-MS
Mg	MIN-200-12017		ICP/OES
Mn	MIN-200-12017		ICP/OES
Mo	MIN-200-12017		ICP-MS
Na	MIN-200-12017		ICP/OES
Nb	MIN-200-12017		ICP-MS
Ni	MIN-200-12017		ICP-MS
P	MIN-200-12017		ICP/OES
Pb	MIN-200-12017		ICP-MS
Rb	MIN-200-12017		ICP-MS
Re	MIN-200-12017		ICP-MS
S	MIN-200-12017		ICP/OES
Sb	MIN-200-12017		ICP-MS
Sc	MIN-200-12017		ICP-MS
Se	MIN-200-12017		ICP-MS
Sn	MIN-200-12017		ICP-MS
Sr	MIN-200-12017		ICP-MS
Ta	MIN-200-12017		ICP-MS
Te	MIN-200-12017		ICP-MS
Th	MIN-200-12017		ICP-MS
Ti	MIN-200-12017		ICP/OES
Tl	MIN-200-12017		ICP-MS
U	MIN-200-12017		ICP-MS
V	MIN-200-12017		ICP/OES
W	MIN-200-12017		ICP-MS

## Method Summary

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V667379

PROJECT NO: R12 - Holes

ATTENTION TO: DAVID BLANN

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Y	MIN-200-12017		ICP-MS
Zn	MIN-200-12017		ICP-MS
Zr	MIN-200-12017		ICP-MS
Cu-OL	MIN-200-12032		AA

CLIENT NAME: HAPPY CREEK MINERALS LTD.  
SUITE 460-789 WEST PENDER STREET  
VANCOUVER, BC V6C1H2  
(604) 662-8310

ATTENTION TO: DAVID BLANN

PROJECT NO: R11-41

AGAT WORK ORDER: 12V658970

SOLID ANALYSIS REVIEWED BY: Yufei Chen, Analyst

DATE REPORTED: Nov 09, 2012

PAGES (INCLUDING COVER): 10

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

\*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.



## Certificate of Analysis

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 01, 2012

DATE RECEIVED: Nov 01, 2012

DATE REPORTED: Nov 09, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Sample Login Weight kg	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm
5283485		5.70	0.05	1.13	4.8	<0.01	<5	46	0.34	0.02	1.40	0.04	14.1	7.0	21.1
5283486		5.97	0.04	1.25	2.0	<0.01	<5	51	0.37	0.01	1.70	0.02	15.9	7.2	18.4
5283487		3.92	0.03	1.44	1.7	<0.01	<5	51	0.37	0.02	2.04	0.01	15.2	8.4	18.0
5283488		4.69	0.03	1.32	1.0	<0.01	<5	61	0.41	0.01	1.83	0.01	14.7	7.3	15.7
5283489		4.25	0.03	1.07	0.5	<0.01	<5	38	0.42	0.02	4.71	0.03	28.1	7.1	11.5
5283490		5.18	0.21	1.21	1.1	<0.01	<5	34	0.33	0.11	2.64	0.43	19.2	9.0	13.1
5283491		5.20	0.06	0.81	1.2	<0.01	<5	53	0.23	0.04	2.33	0.01	20.4	7.2	20.6
5283492		4.62	0.04	1.16	1.5	<0.01	<5	39	0.39	0.02	1.74	0.01	18.5	7.3	13.1
5283493		5.45	0.08	1.23	1.6	<0.01	<5	71	0.35	0.06	1.39	0.01	16.5	7.5	20.0
5283494		5.48	0.04	0.98	1.1	<0.01	<5	119	0.25	0.02	1.60	0.01	17.3	6.8	16.0
5283495		5.59	0.09	1.19	1.0	<0.01	<5	150	0.32	0.02	1.72	0.01	18.1	7.3	18.4
5283496		5.91	0.05	1.11	0.9	<0.01	<5	30	0.37	0.03	1.96	0.01	22.4	8.3	13.0
5283497		4.44	0.10	1.23	0.9	<0.01	<5	97	0.34	0.07	1.54	<0.01	17.9	6.8	16.4
5283498		5.57	0.06	1.13	0.7	<0.01	<5	53	0.35	0.04	1.89	0.01	22.0	7.9	14.6
5283499		4.47	0.04	1.06	1.0	<0.01	<5	68	0.25	0.03	2.04	0.01	20.6	7.2	17.5
5283500		6.15	0.34	1.13	1.4	<0.01	<5	62	0.36	0.10	1.63	0.02	20.8	7.1	15.9
5283501		4.09	0.07	1.46	1.4	<0.01	<5	78	0.36	0.03	1.51	0.01	18.2	6.8	16.2
5283502		4.90	0.04	1.24	1.3	<0.01	<5	44	0.41	0.02	1.93	<0.01	19.6	7.6	14.8
5283503		5.27	0.07	1.25	2.6	<0.01	<5	171	0.37	0.03	1.21	0.01	16.2	6.9	17.1
5283504		5.58	0.05	0.99	1.8	<0.01	<5	83	0.32	0.02	1.31	0.02	17.4	6.7	16.2
5283505		5.48	0.14	0.94	1.3	<0.01	<5	116	0.26	0.04	1.39	<0.01	18.2	6.6	19.4
5283506		6.21	0.38	0.84	1.1	<0.01	<5	62	0.32	0.04	1.49	0.01	21.4	6.6	16.2
5283507		5.17	0.05	0.82	0.8	<0.01	<5	68	0.30	0.03	2.47	0.02	24.4	7.2	19.9

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 01, 2012	DATE RECEIVED: Nov 01, 2012		DATE REPORTED: Nov 09, 2012		SAMPLE TYPE: Rock									
Analyte:	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
RDL:	0.05	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05
5283485	0.36	63.1	1.89	5.33	0.07	0.14	<0.01	0.011	0.12	6.8	6.8	0.61	342	0.99
5283486	0.39	51.1	1.88	5.49	0.08	0.12	<0.01	0.011	0.14	7.5	7.2	0.66	377	0.82
5283487	0.37	49.0	1.90	6.06	0.07	0.09	<0.01	0.015	0.16	7.1	8.8	0.81	435	0.81
5283488	0.51	44.8	1.75	5.61	0.07	0.08	<0.01	0.012	0.14	7.3	6.7	0.65	388	0.66
5283489	0.73	39.7	1.56	4.31	<0.05	0.05	<0.01	0.019	0.16	13.6	4.1	0.45	646	0.60
5283490	0.33	400	2.05	3.98	<0.05	0.05	<0.01	0.045	0.11	8.3	4.2	0.97	523	161
5283491	0.38	94.6	1.74	3.46	0.05	0.05	<0.01	0.014	0.17	9.3	3.2	0.44	378	1.57
5283492	0.45	51.9	1.73	5.22	0.06	0.05	<0.01	0.016	0.11	8.2	5.9	0.65	367	1.43
5283493	0.47	163	1.93	5.71	0.09	0.11	<0.01	0.012	0.13	7.6	8.0	0.70	371	0.93
5283494	0.44	52.4	1.85	4.60	0.07	0.12	<0.01	0.011	0.15	8.0	4.9	0.53	357	0.81
5283495	0.41	67.3	1.83	5.34	0.07	0.09	<0.01	0.013	0.15	8.3	7.9	0.72	395	0.68
5283496	0.58	94.1	1.95	4.26	0.07	0.05	<0.01	0.013	0.18	10.0	3.8	0.57	395	0.56
5283497	0.34	167	1.80	5.16	0.07	0.09	<0.01	0.013	0.12	8.2	4.4	0.58	291	0.74
5283498	0.44	110	1.96	4.34	0.06	0.07	<0.01	0.016	0.15	9.8	2.6	0.62	342	0.60
5283499	0.32	57.4	1.94	4.18	0.07	0.09	<0.01	0.012	0.14	9.0	3.1	0.58	357	0.71
5283500	0.39	780	1.85	4.83	0.07	0.10	<0.01	0.018	0.16	9.9	4.5	0.59	341	1.03
5283501	0.46	94.2	1.96	5.56	0.08	0.10	<0.01	0.013	0.15	8.1	4.8	0.76	343	0.71
5283502	0.40	47.1	2.02	5.30	0.07	0.11	<0.01	0.015	0.13	8.8	4.7	0.55	367	0.64
5283503	0.40	132	1.90	5.79	0.09	0.16	<0.01	0.010	0.18	7.3	7.5	0.67	337	0.98
5283504	0.40	52.3	1.89	4.96	0.08	0.10	<0.01	0.013	0.12	8.1	4.5	0.58	335	0.93
5283505	0.28	308	1.84	4.63	0.08	0.10	<0.01	0.012	0.12	7.9	5.1	0.54	333	0.80
5283506	0.41	909	1.82	4.48	0.09	0.09	<0.01	0.028	0.14	9.3	3.2	0.45	310	1.01
5283507	0.55	59.3	1.63	2.89	0.07	0.04	<0.01	0.013	0.20	11.2	2.6	0.31	386	0.88

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
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TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 01, 2012

DATE RECEIVED: Nov 01, 2012

DATE REPORTED: Nov 09, 2012

SAMPLE TYPE: Rock

Sample Description	Analyte: Unit: RDL:	Na %	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm	Re ppm	S %	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm
5283485		0.08	0.27	5.3	655	2.3	5.1	<0.001	<0.005	0.12	3.4	<0.2	0.3	51.9	<0.01
5283486		0.07	0.18	5.4	640	2.1	5.8	<0.001	<0.005	0.10	3.5	<0.2	0.3	67.0	<0.01
5283487		0.07	0.17	6.0	625	2.0	5.9	<0.001	<0.005	0.12	4.3	<0.2	0.2	66.8	<0.01
5283488		0.06	0.13	4.9	579	1.9	6.0	<0.001	<0.005	0.07	3.4	<0.2	0.3	97.9	<0.01
5283489		0.04	<0.05	5.2	586	2.0	7.3	<0.001	<0.005	0.17	3.4	0.3	<0.2	96.5	<0.01
5283490		0.04	<0.05	5.7	495	1.7	4.4	0.237	0.021	0.33	5.2	0.2	0.2	80.6	<0.01
5283491		0.05	0.09	5.4	631	1.2	6.4	0.001	<0.005	0.17	3.6	0.2	<0.2	70.8	<0.01
5283492		0.07	0.07	5.1	613	1.7	4.3	0.002	<0.005	0.20	4.2	<0.2	0.2	74.8	<0.01
5283493		0.09	0.19	5.2	586	1.8	6.0	<0.001	<0.005	0.12	3.8	<0.2	0.3	86.0	<0.01
5283494		0.09	0.24	4.8	617	1.4	7.1	<0.001	<0.005	0.08	2.8	0.2	0.3	104	<0.01
5283495		0.09	0.14	4.8	618	1.7	5.7	<0.001	<0.005	0.11	3.4	<0.2	0.2	111	<0.01
5283496		0.06	0.06	5.1	575	1.5	7.3	<0.001	<0.005	0.09	3.1	0.2	<0.2	69.1	<0.01
5283497		0.09	0.12	4.4	552	1.5	5.4	<0.001	0.006	0.08	3.6	<0.2	0.3	126	<0.01
5283498		0.07	<0.05	5.2	597	1.6	6.6	<0.001	<0.005	0.11	4.1	0.2	0.2	101	<0.01
5283499		0.07	0.08	5.1	599	1.4	5.5	<0.001	<0.005	0.11	3.3	0.2	0.2	99.4	<0.01
5283500		0.09	0.16	4.9	584	1.6	6.9	0.002	0.021	0.16	3.6	0.2	0.3	78.9	<0.01
5283501		0.10	0.11	4.2	573	1.6	7.6	<0.001	<0.005	0.07	3.8	<0.2	0.3	119	<0.01
5283502		0.10	0.16	4.8	621	1.5	5.8	<0.001	<0.005	0.07	4.5	0.2	0.3	76.4	<0.01
5283503		0.13	0.34	4.7	611	1.9	8.5	<0.001	<0.005	0.10	3.3	0.2	0.3	110	<0.01
5283504		0.08	0.17	5.1	635	1.7	7.1	<0.001	<0.005	0.06	3.5	<0.2	0.3	131	<0.01
5283505		0.09	0.23	4.9	560	1.6	6.0	<0.001	0.009	0.08	3.1	<0.2	0.2	116	<0.01
5283506		0.08	0.17	4.9	574	1.4	7.5	0.002	0.027	0.17	4.1	0.2	0.2	65.0	<0.01
5283507		0.05	0.05	5.8	603	1.2	8.7	<0.001	<0.005	0.09	2.9	0.2	<0.2	72.8	<0.01

Certified By:



## Certificate of Analysis

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

5623 McADAM ROAD  
 MISSISSAUGA, ONTARIO  
 CANADA L4Z 1N9  
 TEL (905)501-9998  
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<http://www.agatlabs.com>

CLIENT NAME: HAPPY CREEK MINERALS LTD.

ATTENTION TO: DAVID BLANN

### Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Nov 01, 2012	DATE RECEIVED: Nov 01, 2012					DATE REPORTED: Nov 09, 2012					SAMPLE TYPE: Rock
Analyte:	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	
Unit:	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
RDL:	0.01	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5	
5283485	<0.01	2.5	0.089	0.02	0.93	67.0	0.19	5.12	30.8	1.5	
5283486	<0.01	2.4	0.067	0.02	0.85	58.7	0.24	5.62	32.9	1.4	
5283487	<0.01	2.9	0.055	0.02	1.06	57.6	0.18	5.77	31.6	1.2	
5283488	<0.01	2.4	0.044	0.02	0.82	52.4	0.15	5.57	26.1	1.1	
5283489	<0.01	2.3	0.007	0.02	0.59	47.8	0.33	10.5	30.3	0.7	
5283490	0.07	2.1	<0.005	0.02	2.04	57.4	0.73	8.58	31.1	0.8	
5283491	<0.01	2.3	0.017	0.02	0.68	49.0	0.27	7.39	31.5	0.6	
5283492	<0.01	2.3	0.017	0.01	0.76	50.3	0.23	6.36	31.3	0.6	
5283493	0.01	2.0	0.070	0.02	0.93	61.2	0.17	6.26	28.7	1.2	
5283494	<0.01	2.3	0.082	0.02	1.10	63.1	0.20	6.30	27.3	1.3	
5283495	<0.01	2.4	0.054	0.02	0.95	58.0	0.52	6.59	29.4	1.0	
5283496	<0.01	2.4	0.017	0.02	0.90	43.5	0.16	7.39	34.2	0.6	
5283497	<0.01	2.4	0.048	0.02	1.10	57.2	0.36	6.47	23.5	1.0	
5283498	<0.01	2.6	0.019	0.02	1.10	55.1	0.19	8.31	27.3	0.8	
5283499	<0.01	2.6	0.041	0.02	1.12	56.2	0.22	7.81	27.6	1.1	
5283500	0.03	2.6	0.057	0.02	1.59	60.0	0.13	7.74	26.5	1.2	
5283501	<0.01	2.5	0.057	0.02	1.57	61.6	0.12	6.61	24.3	1.0	
5283502	<0.01	2.8	0.049	0.02	1.22	62.9	0.13	7.50	25.8	1.2	
5283503	0.01	3.2	0.112	0.03	2.41	66.7	0.14	5.72	27.0	1.7	
5283504	<0.01	2.7	0.061	0.02	1.30	65.4	0.17	6.22	27.3	1.2	
5283505	<0.01	2.5	0.068	0.02	1.27	59.4	0.14	6.88	25.2	1.1	
5283506	0.01	3.1	0.046	0.02	1.23	59.8	0.09	7.71	24.8	0.9	
5283507	<0.01	4.6	0.010	0.02	1.65	39.9	0.31	9.83	27.3	0.5	

Comments: RDL - Reported Detection Limit

Certified By:

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

ATTENTION TO: DAVID BLANN

Solid Analysis											
RPT Date: Nov 09, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
						Lower				Upper	
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3882122	0.05	0.05	0.0%	< 0.01	11.8	13.0	91%	80%	120%
Al	1	3882122	1.13	1.07	5.5%	< 0.01				80%	120%
As	1	3882122	4.78	4.02	17.3%	0.1				80%	120%
Au	1	3882122	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3882122	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3882122	46	44	4.4%	< 1				80%	120%
Be	1	3882122	0.34	0.33	3.0%	< 0.05				80%	120%
Bi	1	3882122	0.02	0.02	0.0%	< 0.01				80%	120%
Ca	1	3882122	1.40	1.34	4.4%	< 0.01				80%	120%
Cd	1	3882122	0.035	0.030	15.4%	< 0.01				80%	120%
Ce	1	3882122	14.1	13.4	5.1%	< 0.01				80%	120%
Co	1	3882122	7.03	6.84	2.7%	< 0.1				80%	120%
Cr	1	3882122	21.1	19.1	10.0%	< 0.5				80%	120%
Cs	1	3882122	0.355	0.346	2.6%	< 0.05				80%	120%
Cu	1	3882122	63.1	56.3	11.4%	< 0.1	5905	6000	98%	80%	120%
Fe	1	3882122	1.89	1.83	3.2%	< 0.01				80%	120%
Ga	1	3882122	5.33	5.12	4.0%	< 0.05				80%	120%
Ge	1	3882122	0.072	0.075	4.1%	< 0.05				80%	120%
Hf	1	3882122	0.135	0.127	6.1%	< 0.02				80%	120%
Hg	1	3882122	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
In	1	3882122	0.0108	0.0101	6.7%	< 0.005				80%	120%
K	1	3882122	0.12	0.12	0.0%	< 0.01				80%	120%
La	1	3882122	6.77	6.51	3.9%	< 0.1				80%	120%
Li	1	3882122	6.83	6.43	6.0%	< 0.1				80%	120%
Mg	1	3882122	0.610	0.572	6.4%	< 0.01				80%	120%
Mn	1	3882122	342	313	8.9%	< 1				80%	120%
Mo	1	3882122	0.99	0.90	9.5%	< 0.05	334	360	92%	80%	120%
Na	1	3882122	0.077	0.071	8.1%	< 0.01				80%	120%
Nb	1	3882122	0.27	0.43		< 0.05				80%	120%
Ni	1	3882122	5.31	5.02	5.6%	< 0.2				80%	120%
P	1	3882122	655	602	8.4%	< 10	675	600	113%	80%	120%
Pb	1	3882122	2.30	2.24	2.6%	< 0.1				80%	120%
Rb	1	3882122	5.11	5.01	2.0%	< 0.1				80%	120%
Re	1	3882122	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3882122	< 0.005	< 0.005	0.0%	< 0.005				80%	120%
Sb	1	3882122	0.118	0.112	5.2%	< 0.05				80%	120%
Sc	1	3882122	3.40	3.31	2.7%	< 0.1				80%	120%
Se	1	3882122	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sn	1	3882122	0.3	0.3	0.0%	< 0.2				80%	120%
Sr	1	3882122	51.9	50.1	3.5%	< 0.2				80%	120%
Ta	1	3882122	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Te	1	3882122	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Th	1	3882122	2.54	2.45	3.6%	< 0.1				80%	120%
Ti	1	3882122	0.0886	0.0864	2.5%	< 0.005				80%	120%



## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)											
RPT Date: Nov 09, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
						Lower				Upper	
Tl	1	3882122	0.02	0.02	0.0%	< 0.01				80%	120%
U	1	3882122	0.929	0.902	2.9%	< 0.05				80%	120%
V	1	3882122	67.0	61.8	8.1%	< 0.5				80%	120%
W	1	3882122	0.19	0.17	11.1%	< 0.05				80%	120%
Y	1	3882122	5.12	4.97	3.0%	< 0.05				80%	120%
Zn	1	3882122	30.8	28.2	8.8%	< 0.5				80%	120%
Zr	1	3882122	1.49	1.45	2.7%	< 0.5				80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3882140	0.07	0.07	0.0%	< 0.01	11.9	13.0	91%	80%	120%
Al	1	3882140	1.25	1.22	2.4%	< 0.01				80%	120%
As	1	3882140	2.6	1.8		< 0.1				80%	120%
Au	1	3882140	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3882140	< 5	< 5	0.0%	< 5	8.17	7.00	117%	80%	120%
Ba	1	3882140	171	164	4.2%	< 1				80%	120%
Be	1	3882140	0.366	0.364	0.5%	< 0.05				80%	120%
Bi	1	3882140	0.03	0.03	0.0%	< 0.01				80%	120%
Ca	1	3882140	1.21	1.19	1.7%	< 0.01				80%	120%
Cd	1	3882140	0.01	0.01	0.0%	< 0.01				80%	120%
Ce	1	3882140	16.2	15.4	5.1%	< 0.01				80%	120%
Co	1	3882140	6.9	6.9	0.0%	< 0.1				80%	120%
Cr	1	3882140	17.1	17.1	0.0%	< 0.5				80%	120%
Cs	1	3882140	0.40	0.39	2.5%	< 0.05				80%	120%
Cu	1	3882140	132	130	1.5%	< 0.1	6037	6000	100%	80%	120%
Fe	1	3882140	1.90	1.88	1.1%	< 0.01				80%	120%
Ga	1	3882140	5.79	5.72	1.2%	< 0.05				80%	120%
Ge	1	3882140	0.086	0.084	2.4%	< 0.05				80%	120%
Hf	1	3882140	0.156	0.142	9.4%	< 0.02				80%	120%
Hg	1	3882140	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
In	1	3882140	0.010	0.010	0.0%	< 0.005				80%	120%
K	1	3882140	0.181	0.174	3.9%	< 0.01				80%	120%
La	1	3882140	7.3	7.1	2.8%	< 0.1				80%	120%
Li	1	3882140	7.54	7.34	2.7%	< 0.1				80%	120%
Mg	1	3882140	0.668	0.640	4.3%	< 0.01				80%	120%
Mn	1	3882140	337	333	1.2%	< 1				80%	120%
Mo	1	3882140	0.98	0.91	7.4%	< 0.05	339	360	94%	80%	120%
Na	1	3882140	0.126	0.122	3.2%	< 0.01				80%	120%
Nb	1	3882140	0.34	0.34	0.0%	< 0.05				80%	120%
Ni	1	3882140	4.69	4.52	3.7%	< 0.2				80%	120%
P	1	3882140	611	602	1.5%	< 10	693	600	115%	80%	120%
Pb	1	3882140	1.88	1.81	3.8%	< 0.1				80%	120%
Rb	1	3882140	8.53	8.33	2.4%	< 0.1				80%	120%
Re	1	3882140	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3882140	< 0.005	< 0.005	0.0%	< 0.005				80%	120%

## Quality Assurance

CLIENT NAME: HAPPY CREEK MINERALS LTD.  
 PROJECT NO: R11-41

AGAT WORK ORDER: 12V658970  
 ATTENTION TO: DAVID BLANN

Solid Analysis (Continued)											
RPT Date: Nov 09, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
										Lower	Upper
Sb	1	3882140	0.099	0.084	16.4%	< 0.05				80%	120%
Sc	1	3882140	3.26	3.13	4.1%	< 0.1				80%	120%
Se	1	3882140	0.2	0.2	0.0%	< 0.2				80%	120%
Sn	1	3882140	0.3	0.3	0.0%	< 0.2				80%	120%
Sr	1	3882140	110	111	0.9%	< 0.2				80%	120%
Ta	1	3882140	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Te	1	3882140	0.01	< 0.01		< 0.01				80%	120%
Th	1	3882140	3.2	3.2	0.0%	< 0.1				80%	120%
Ti	1	3882140	0.112	0.109	2.7%	< 0.005				80%	120%
Tl	1	3882140	0.03	0.03	0.0%	< 0.01				80%	120%
U	1	3882140	2.41	2.29	5.1%	< 0.05				80%	120%
V	1	3882140	66.7	65.5	1.8%	< 0.5				80%	120%
W	1	3882140	0.14	0.13	7.4%	< 0.05				80%	120%
Y	1	3882140	5.72	5.64	1.4%	< 0.05				80%	120%
Zn	1	3882140	27.0	26.6	1.5%	< 0.5				80%	120%
Zr	1	3882140	1.70	1.77	4.0%	< 0.5				80%	120%

Certified By:



## Method Summary

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

ATTENTION TO: DAVID BLANN

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight	MIN-12009		BALANCE
Ag	MIN-200-12017		ICP-MS
Al	MIN-200-12017		ICP/OES
As	MIN-200-12017		ICP-MS
Au	MIN-200-12017		ICP-MS
B	MIN-200-12017		ICP/OES
Ba	MIN-200-12017		ICP-MS
Be	MIN-200-12017		ICP-MS
Bi	MIN-200-12017		ICP-MS
Ca	MIN-200-12017		ICP/OES
Cd	MIN-200-12017		ICP-MS
Ce	MIN-200-12017		ICP-MS
Co	MIN-200-12017		ICP-MS
Cr	MIN-200-12017		ICP/OES
Cs	MIN-200-12017		ICP-MS
Cu	MIN-200-12017		ICP-MS
Fe	MIN-200-12017		ICP/OES
Ga	MIN-200-12017		ICP-MS
Ge	MIN-200-12017		ICP-MS
Hf	MIN-200-12017		ICP-MS
Hg	MIN-200-12017		ICP-MS
In	MIN-200-12017		ICP-MS
K	MIN-200-12017		ICP/OES
La	MIN-200-12017		ICP-MS
Li	MIN-200-12017		ICP-MS
Mg	MIN-200-12017		ICP/OES
Mn	MIN-200-12017		ICP/OES
Mo	MIN-200-12017		ICP-MS
Na	MIN-200-12017		ICP/OES
Nb	MIN-200-12017		ICP-MS
Ni	MIN-200-12017		ICP-MS
P	MIN-200-12017		ICP/OES
Pb	MIN-200-12017		ICP-MS
Rb	MIN-200-12017		ICP-MS
Re	MIN-200-12017		ICP-MS
S	MIN-200-12017		ICP/OES
Sb	MIN-200-12017		ICP-MS
Sc	MIN-200-12017		ICP-MS
Se	MIN-200-12017		ICP-MS
Sn	MIN-200-12017		ICP-MS
Sr	MIN-200-12017		ICP-MS
Ta	MIN-200-12017		ICP-MS
Te	MIN-200-12017		ICP-MS
Th	MIN-200-12017		ICP-MS
Ti	MIN-200-12017		ICP/OES
Tl	MIN-200-12017		ICP-MS
U	MIN-200-12017		ICP-MS
V	MIN-200-12017		ICP/OES
W	MIN-200-12017		ICP-MS

## Method Summary

CLIENT NAME: HAPPY CREEK MINERALS LTD.

AGAT WORK ORDER: 12V658970

PROJECT NO: R11-41

ATTENTION TO: DAVID BLANN

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Y	MIN-200-12017		ICP-MS
Zn	MIN-200-12017		ICP-MS
Zr	MIN-200-12017		ICP-MS