



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: 2104 Technical Assessment Report on Prospecting, Sampling and Reclamation of the Limonite Creek Property

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AUTHOR(S): Richard Beck and Anastasia Ledwon

SIGNATURE(S):

Two handwritten signatures in black ink, one on the left and one on the right, corresponding to the authors listed above.

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S) : Event #5513287

YEAR OF WORK: 2014

PROPERTY NAME: Limonite Creek

CLAIM NAME(S) (on which work was done): claim tenure numbers 535231 & 535233

COMMODITIES SOUGHT: Fe & Cu

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Omineca

NTS / BCGS: 93L/12

LATITUDE: 54 ° 33 ' 30 "

LONGITUDE: 127 ° 48 ' 17 " (at centre of work)

UTM Zone: 9 EASTING: 577711 NORTHING: 6046230

OWNER(S): Honey Badger Exploration Inc.

MAILING ADDRESS: 141 Adelaide Street West, Suite 520, Toronto, Ontario, CANADA, M5H 3L5
OPERATOR(S) [who paid for the work]: Honey Badger Exploration Inc.

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REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock	10	535233	\$4208.32
Other – water sampling	8	535231 and 535233	\$2808.00
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Other - reclamation work		535233	\$14032.00
		TOTAL COST	\$21048.32

2014 Technical Assessment Report On Prospecting, Sampling and Reclamation Of the Limonite Creek Property

**Omineca Mining Division
British Columbia**

**NTS 93L/12
54°33 30' N/127°48 17' W**

Event #5513287

**Mineral Tenure #'s:
535231 & 535233**

**Prepared for:
Honey Badger Exploration Inc.**

**Prepared by:
Richard Beck, President
UTM Exploration Services Ltd.
&
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September 2014

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1. Summary

In July 2014 Honey Badger Exploration Inc. contracted UTM Exploration Services Ltd. of Smithers, BC to conduct a 6-day prospecting and sampling program of the Limonite Creek Property, southwest of Smithers, BC (Figure 1). The program involved defined rock sampling peripheral to the exotic limonite deposits, water sampling along similar locations where possible, and reclamation work on the historical camp dating from the late 1980's and early 1990's. The design and intention of this summer program was to collect rock samples in and around the exotic limonite locations for the purpose of whole rock and ICP-MS analysis to better analyze and understand the alteration within and around the main deposit. The intention of the water sampling was to determine the existing pH levels in efforts of locating a possible source to the limonite deposit through acidity in the water levels.

Areas of historical interest were targeted pre-field in hopes of finding extensions or parallel zones of interest. Reconnaissance work focused on following historical trends, but included exploring other areas in efforts to find new areas of interest.

The property is located approximately 50km southwest of Smithers, B.C. The property consists of two mineral claims. Exploration included rock sampling, water sampling and reclamation fieldwork.

The results of the rock and water sampling are documented in this report.

2. Introduction and Terms of Reference

The work was completed between July 14th-July 19th 2014, and 10 rock samples and 8 water samples were collected. The rock samples were submitted to ACME Labs of Smithers, B.C. for Whole Analysis and ICP analysis. Water samples were collected on and tested using an Extech pH/Conductivity meter. Samples were collected by Richard Beck and Howard Inkster of UTM Exploration Services.

This report borrows/quotes from historical assessment reports of the area as noted in the References section.

3. Property Description and Location

3.1 Accessibility and Infrastructure

The Limonite Creek prospect is located within the Howson Range chain of mountains along the northeastern end of the Telkwa Pass. The Telkwa Pass is a midway point between the communities of Smithers and Terrace, British Columbia (Figure 1) and Limonite Creek is in the northeastern most part of the Telkwa Pass, about 50 km southwesterly from Smithers. The claims are found along a mountain ridge approximately 1.75km north of Tauw Lake, a small glacial-fed lake within the Telkwa Pass. Elevations at the prospect area range from 1120 to 1595 m.

Access by road from the town of Telkwa is possible along the Telkwa River logging road; however, access is truncated at the 40km mark on this FSR as you approach the narrows of Telkwa Pass. Remaining access to the claims is via helicopter from staging areas that are located along the logging roads. Alternatively, helicopters are available directly from the towns of Telkwa and Smithers. The current program was helicopter-supported out of the town of Smithers.

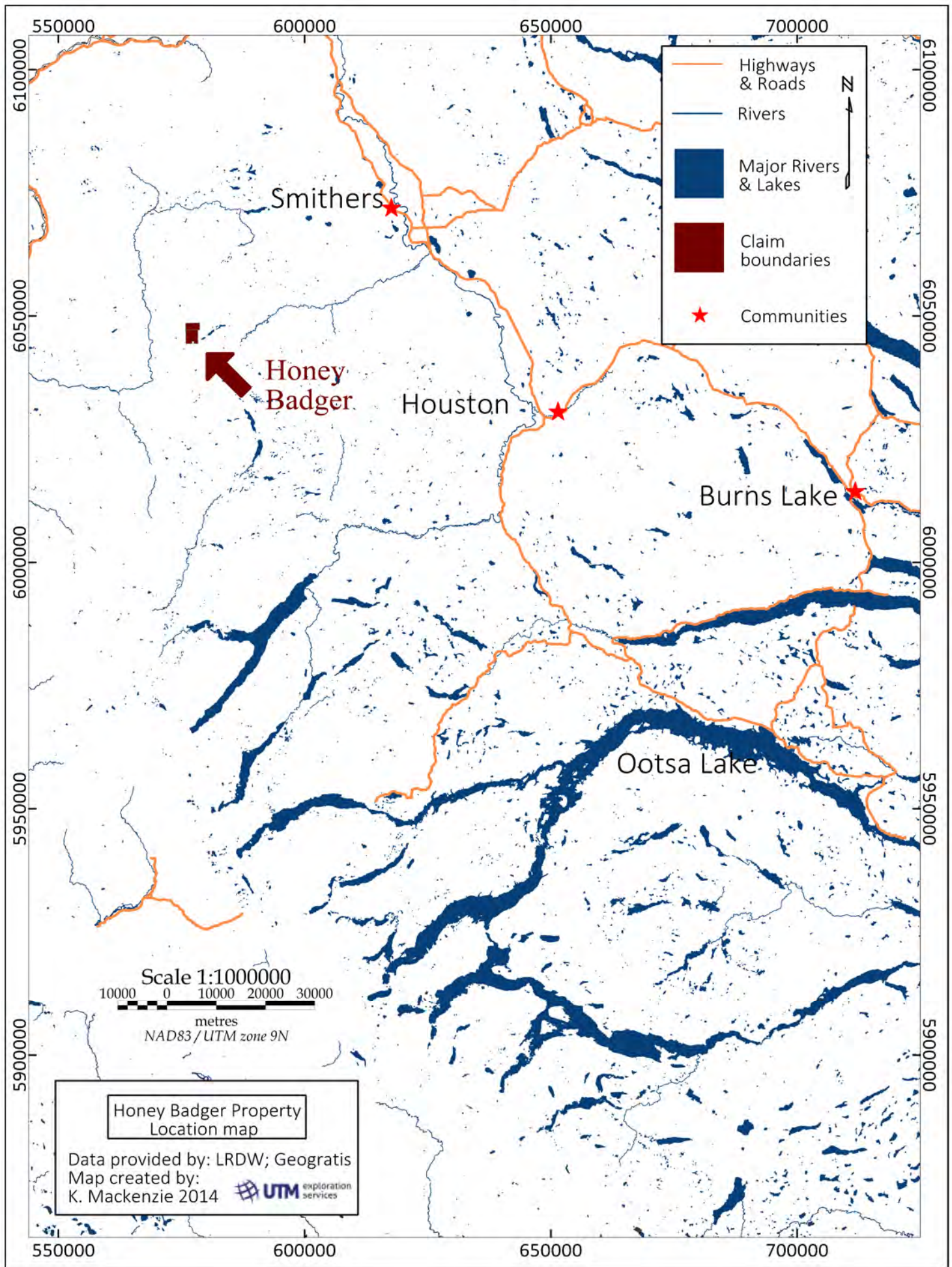


Figure 1. Limonite Creek Location Map.

3.2 Mineral Tenure Information

The Limonite Creek property consists of 2 mineral claims totaling 1050 ha (Table 1, Figure 2 and Figure 3). The property is located on NTS map sheet 93L/12 in the Omineca Mining Division, approximately 50km southwest of Smithers, BC. The geographic coordinates of the approximate property center are latitude 54°33 30' N longitude 127°48 17' W. The claims are 100% owned by Honey Badger.

Table 1. Mineral Tenure Claims.

Tenure Number	Owner	Map Number	Issue Date	Good To Date	Status	Area (ha)
535231	138491 (100%)	093L	2006/jun/08	2016/jul/19	GOOD	656.476
535233	138491 (100%)	093L	2006/jun/08	2016/jul/19	GOOD	393.709

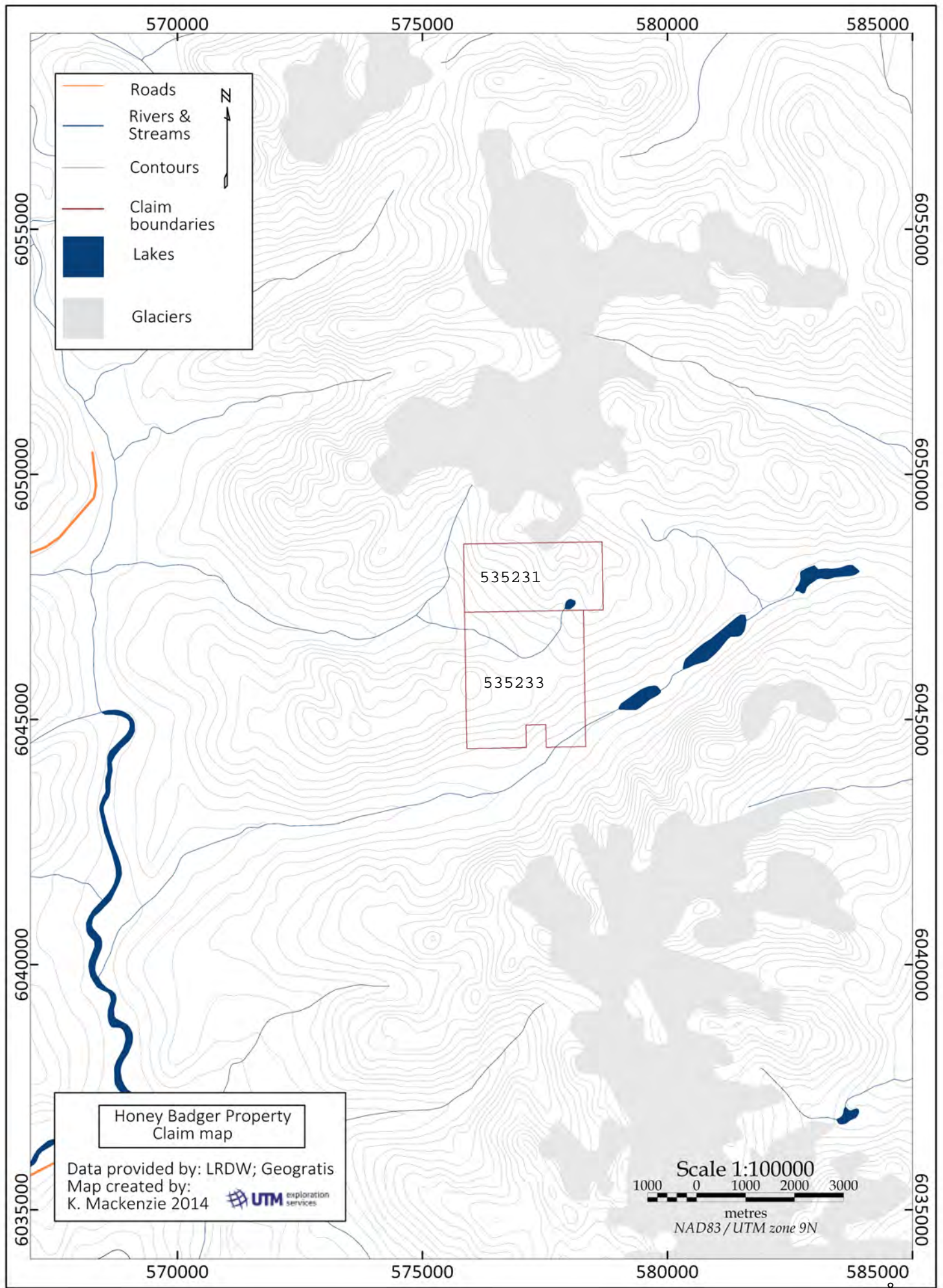


Figure 2. Limonite Creek Mineral Tenure Map (100K).

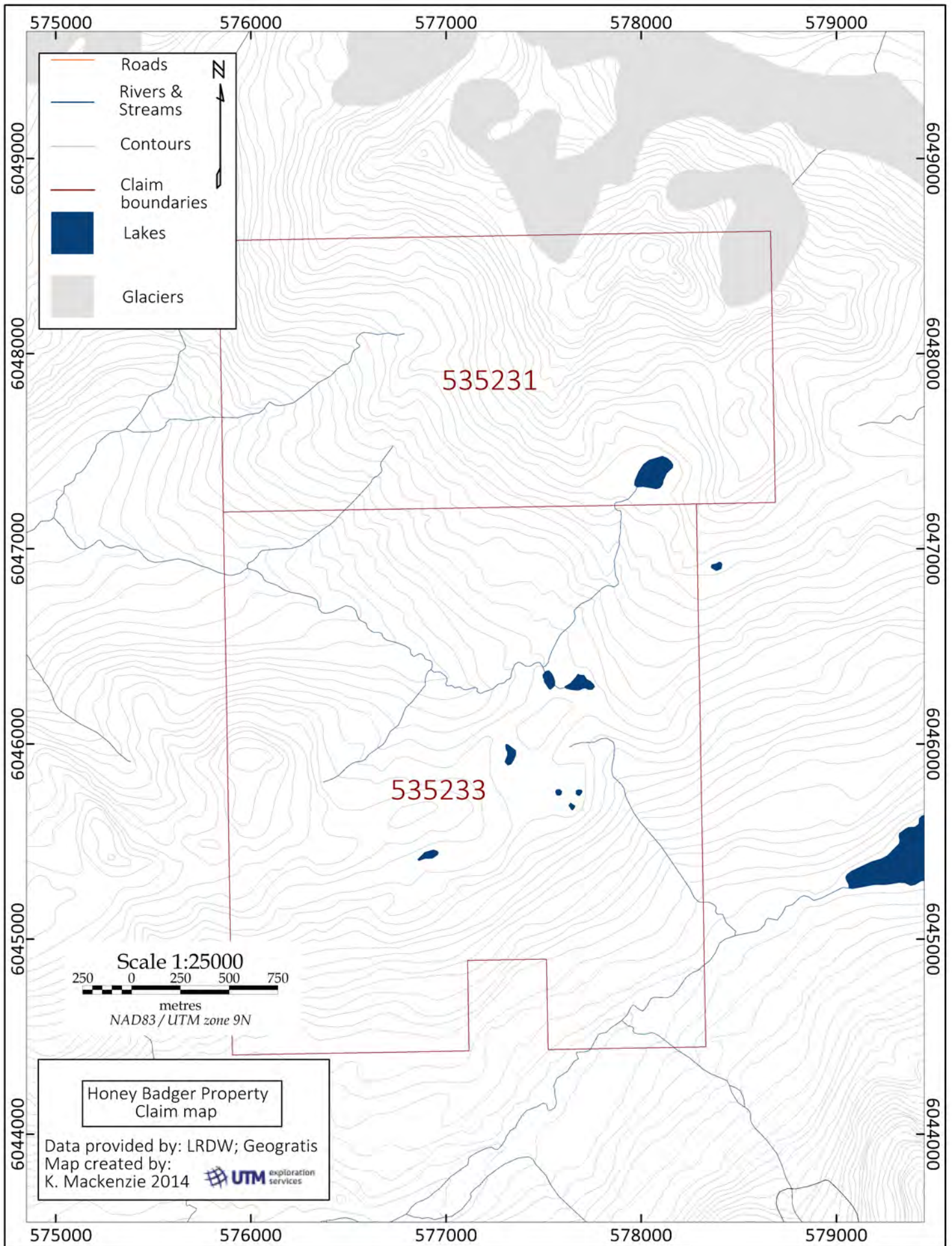


Figure 3. Limonite Creek Mineral Tenure Map (25K).

3.3 Physiography and Climate

The property sits on the northern ridge of Telkwa Pass 50km southwest of Smithers, British Columbia at approximately 1295m elevation (average). The property covers an area of exposed rugged mountainous outcrop, glaciated peaks, as well as heavily wooded sections. Elevation ranges from approximately 1120m to 1595m. Vegetation varies from dense coniferous forest in the lower regions to glaciated sections in the north and northeast higher regions. The areas between these two drastically different regions are where you find moss and grass covered alpine meadows.

Snow accumulations are typical for this area, which limits surface exploration to the summer and early fall months. Weather is a major factor for access by helicopter, with low cloud coverage and fog restricting access to even the lower elevations of the property at times.

4. History

(Millinoff, 2006)

Two relevant minfile records for the Limonite Creek prospect are minfile numbers 093L 075 and 093L 323, for a developed prospect and a showing. The developed prospect consists of bog iron ore with a calculated tonnage of 3,175,200 t of 44% Iron, based on 27 drill holes in 1957 (British Columbia, Minister of Mines Annual Report 1957, p.12). This iron ore deposit is located within crown grants south of the current mineral tenures 535233 and 535231.

The showing consists of the copper mineralization found along the ridge (Ridge Zone) above Limonite Creek within British Columbia assessment reports 20370, 21739 and 23016. This showing is located within mineral tenure 535231.

In 1992, Cyprus Canada Inc. geologically mapped and sampled the Ridge Zone. They also completed an EM survey and a drill program of 394.5 meters, consisting of three diamond drill holes. This work also included petrographic studies. Their exploration target was a high sulphidation or acid-sulphate type Cu/Au/Ag deposit. The 1992 program resulted in the discovery of an intense, pyritic, aluminous alteration zone; the Many Bear Zone. This zone was drilled to test a linear EM anomaly. Drill results were hampered by overall poor recovery, and samples recovered were mostly low in copper. Soil Sampling conducted during this 1992

program found anomalous copper (200-2456ppm). This anomalous copper in soils area was located on the north side of the grid, in the vicinity of limonite. A later, 1997 geochemical grid (Telkwa Gold Corp, W. Thompson, Oct.22/97) delineated anomalous copper in soils just across the stream, northwest of the 1992 copper enriched soil anomalies. The geological mapping program in 1992 identified alteration minerals on the surface consisting of almost total host rock replacement to sericite, quartz, andalucite, pyrite and lazulite with lesser amounts of specular hematite, corundum, rutile, and trace chalcopyrite.

In 1994, work done by Limonite Creek Limited Partnership consisted of further geological mapping, an induced polarization survey, and the completion of nine diamond drill holes. This work included 3 km of new grid lines cut and chained and 9 km of grid lines that were cut in 1992 were cleaned and re-chained. The grid area and a broad perimeter surrounding the grid were geologically mapped during the field season of 1994.

An IP survey was conducted during July 1994 as a second phase of geophysical work, as a follow up to transient electromagnetic (TEM) surveys which were conducted by Cyprus Canada Inc. in 1992.

The I.P. survey delineated a large chargeability high which correlates well with mapped zones of advanced argillic alteration and several smaller I.P. anomalies which correlate with TEM conductors and with possible breccia zones. Some of the I.P. anomalies and two limonitic quartz breccias were subsequently tested by diamond drilling.

Nine diamond drill holes were completed in 1994 for a total length of 1163.0 meters (3814.6 ft.). Drilling was done by J.T. Thomas Drilling Ltd. of Smithers, B.C. using a Longyear 38 diamond drill with NQ equipment.

Throughout most of the drilling, core recovery was less than 40 percent. The unusually difficult ground conditions also had an adverse impact on the drill equipment. A total of 69 drill rods (690 feet) were lost in the holes and could not be recovered and 26 more were "belled" and ruined. Several core barrels and diamond bits were lost as were 470 feet of casing and several diamond casing shoes. An inordinate amount of drill mud (772 bags) and chemical additives (287 bags) were required in trying to stabilize the holes. Three holes were abandoned because the drill rods stuck and were ultimately lost in the holes (DDH 94-5, 7 and 9) and three other holes were terminated prematurely in order to prevent the loss of the drill rods (DDH 94-3, 6 and 8).

It is concluded therefore that the level of weathering along the ridge between Limonite Creek and Many Bear Creek extends to a depth of about 90 meters below the present surface. Pyrite which occurred in quartz veins above that level was oxidized and leached, producing sulphuric acid solutions and released iron into solution. It should be noted here, that the IP survey, which was thought to have been effective to a depth of about 75 meters, probably did not respond below the level of oxidation and would not have detected sulphide minerals at deeper levels. Very fine grained disseminated pyrite however, is ubiquitous throughout the hydrothermally altered rocks, is fresh and bright, even at the surface, where it is encapsulated on silica or substrate minerals.

In the 1994 drilling program, no ore-grade intersections were encountered, even though hydrothermal alteration of the host rocks is similar to that associated with large, mesothermal precious metal deposits throughout the world.

During the period of August 21, 1996 to September 15, 1996, three diamond drill holes were drilled for a total of 862.9 meters (2830.3 feet). Each of the holes was planned for 1500 feet (457m) depth or to penetrate through the advanced argillic alteration zone or through a high sulphidation zone of mineralization (if one was encountered) and into adjacent wall rock. Drill hole 96-1 was completed successfully and core recovery was 100 percent through a zone of argillic alteration with pyrite, but drill holes 96-2 and 96-3 terminated prior to planned depth, due to bad ground conditions. Three widely spaced drill holes all inclined at minus 60 degrees with bearings near grid-north encountered wide intersections of fine-grained to extremely fine-grained pyrite in amounts to 25 percent. Rocks displaying prominent advanced argillic alteration were encountered in DDH 96-2, downward from elevation 1247 meters and continued to the bottom of the hole at elevation 1106 meters. Covellite (CuS) occurrences are noted in thin sections at elevations 1151 meters. Covellite, colusite (Cu, Fe, Mo, Sn)₄(S,As,Te)₃₋₄ and sphalerite (ZnS) occur in minor to trace amounts through the intervals to the bottom of the hole. It is noted that an extensive deposit of vuggy silica occurred in DDH 96-2 between elevations 1164 to 1119 meters. Calculated width of the zone is 26 meters. Diamond drill holes 96-1 and 96-3 encountered strong and pervasive argillic alteration with pyrite contents to 20 percent throughout broad sections. However, no ore grade intersections were found in the 1996 drilling.

Exploration activities conducted during 1997 included a helicopter-borne geophysical survey over the Bear claim group. Telkwa Gold Corporation contracted out to Frontier Geophysics the acquisition of magnetic, electromagnetic and VLF

data to assist in the interpretation of structures and alteration zones and to expand on ground geophysics carried out in previous years.

As a follow-up to the geophysical survey which was completed in March, 1997, the Corporation undertook a modest field program consisting of geochemical soil sampling on the Bear claim group during August to examine an area of anomalous geophysical response. Results of the geochemical survey were plotted and revealed anomalous copper, zinc and silver, parallel to the major structures. As well as an area measuring 200 meters by more than 600 meters of anomalous arsenic with coincident antimony and elevated gold.

In 1997 a report entitled “The Style and Origin of Alteration of the Limonite Creek Property, Central British Columbia “ by C.L.Deyell, J.F.H.Thompson, L.A.Groat, J.K.Mortensen, R.M.Friedman and W.D.Thompson was published in Geological Fieldwork,1997, British Columbia Ministry of Employment and Investment. This report summarized research over two field seasons on the property that included sampling of drill core, mineralogical classification of alteration, limited geochemistry and age dating of intrusions that occur in the area of alteration. A subsequent paper entitled, “Age and origin of advanced argillic alteration zones and related exotic limonite deposits in the Limonite Creek area, central British Columbia”, by C.L. Deyell, J.F.H. Thompson, R.M. Friedman and L.A. Groat was published in the Canadian Journal of Earth Sciences, Vol.37 in 2000.

5. Geological Setting

(Millinoff, 2006):

5.1 Regional Geology

The Limonite Creek property is located in the Stikinia tectonic terrane. According to McMillan et al. (1995):

The Stikinia terrane consists of Devonian to Jurassic, arc-related volcanic and sedimentary strata and coeval plutonic suites that are co-magmatic with the volcanic rocks. Stikinia includes the Devonian to Permian Stikine Assemblage, the Triassic Stuhini and Lewes River groups, the Early to Middle Jurassic Hazelton Group, the Early to Middle Jurassic Laberge, Inklin and Tawakoni Groups of the Whitehorse Trough and several post-accretionary volcanic and sedimentary sequences. Stuhini volcanism is largely of Late Triassic age. The Stuhini Group is overlain (unconformably?) by the Hazelton Group, a mixed package of volcanic

rocks that range from basalt to rhyolite and include subaerial and submarine facies. Both the Triassic and Jurassic arc events are associated with the formation of important porphyry deposits.

Deyell et.al. (2000) describes the regional geology as follows:

Regionally, volcanic rocks in Howson and Telkwa ranges have been assigned to the Telkwa Formation, which forms the basal part of the Hazelton Group of Early to Middle Jurassic age. It consists of a varied assemblage of submarine and subaerial calc-alkaline volcanic rocks, which have been subdivided into five facies (Tipper & Richards, 1976). The Howson subaerial facies has been mapped in the Howson range and much of the Telkwa range. It consists of a well-bedded, slightly deformed, pyroclastic, flow and sedimentary rocks, dominantly of andesitic to dacitic composition. Although extensively altered, the volcanic rocks exposed in the Telkwa Pass appear to be lithologically similar to the unaltered rocks exposed farther north and east and consequently have been assigned an Early to Middle Jurassic age. Poorly defined protoliths and lack of clear stratigraphic relationships hinder definitive correlations.

Volcanic rocks of the Telkwa Formation are intruded locally by calc-alkaline stocks and batholiths of Early Jurassic age. These Topley intrusions (Woodsworth et.al.1991) are thought to be cogenetic with the Telkwa Formation and have K-Ar ages ranging from 173 to 205 Ma (Tipper and Richards, 1976). The batholith consists of mainly tonalite and granodiorite and has a K-Ar age of 202 +/-6 Ma. This Lower Jurassic suite extends westward into the Coast Mountains where it is intruded by Cretaceous and lower Tertiary intrusions of the Coast Plutonic Complex (Gareau et.al.1997).

Younger intrusions in this region include the Late Cretaceous Buckley and Eocene Nanika intrusive suites of the western Skeena Arch, as well as the Eocene Babine igneous suite in the Babine Lake area to the east (Carter, 1976). Coeval Upper Cretaceous volcanic rocks of the Brian Boru Formation are locally preserved in the western Skeena Arch, and Eocene volcanics of the Ootsa Lake Fm. are widespread across the west-central British Columbia region. Both the Late Cretaceous and Eocene intrusive suites are associated with mineral deposits in this region.

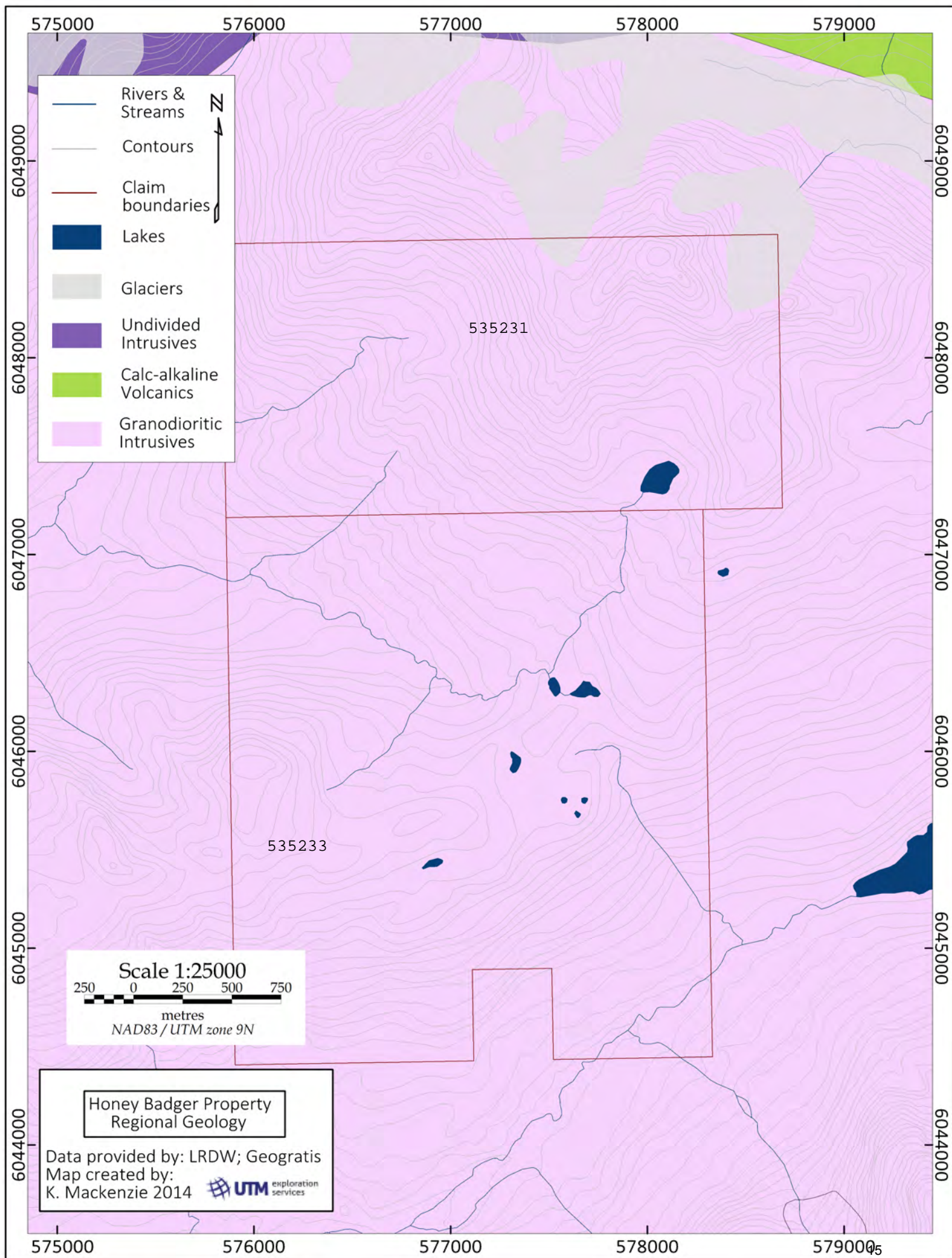


Figure 4. Regional Geology Map.

5.2 Local Geology

(Millinoff, 2006):

The prospect area as defined by the 1992-1994 grid area is underlain by a variety of green and lesser maroon rhyodacite, dacite and andesitic tuffs and flows. Age dating of intrusions (C.L. Deyell, et.al. 2000) at Limonite Creek specifically indicates that the volcanic rocks in this locality are Late Triassic or older, thus predating the Hazelton Group volcanics (Telkwa Fm.) and placing these volcanics in the Triassic Stuhini Group.

Volcanic rocks on the property are intruded by Late Triassic, coarse to medium grained, diorite to granodiorite, directly east of the main alteration zone at the Limonite Creek property. Deyell et.al. (2000) reports a U-Pb age estimate of 212.0 +/- 0.6 Ma age date for the intrusive. This date provides a maximum age for the alteration observed on the Limonite Creek property.

A very weakly altered, biotite feldspar porphyry forms the largest intrusion cut by the alteration zone. This porphyry gave a U-Pb age of 52.2 +/-0.1 Ma (Deyell et.al.1998).

Toward the west of the 1992-94 grid area, the volcanics are bounded by slightly porphyritic, granodiorite containing phenocrysts of plagioclase and grains of quartz and biotite in a very fine grained groundmass dominated by quartz and K-feldspar. According to Deyell (et.al. 2000), neither this intrusion nor the adjacent volcanic rocks are altered.

Several other kinds of intrusive rocks occur and these are mostly in the eastern half of the map area. These may be divided into three groups of intrusives; hypabyssal intrusive rocks, hypabyssal volcanic rocks and various mafic to felsic dikes.

Alteration in the Limonite Creek property may be older than 145 Ma and magmatic suites in the region with alteration systems likely related to Limonite Creek are of late Triassic to Middle Jurassic age (210-175Ma). According to Deyell et.al. (2000), alteration at Limonite Creek is significantly older than the Tertiary Equity Silver Deposit. The host rocks for alteration at Limonite Creek are Late Triassic or older and regional stratigraphy needs to be reassessed (Deyell et.al.2000).

According to Tompson (1997), the aluminous alteration at Limonite Creek occurs adjacent to and north of the zone of argillic and advanced argillic alteration. Aluminous alteration is characterized by the presence of minor to significant amounts of corundum, andalusite and at Limonite Creek, lazulite and reflects a

higher temperature environment of alteration than exists in argillic and advanced argillic alteration. Aluminous alteration is considered to have developed deeper in the hydrothermal system than argillic alteration or advanced argillic alteration and may be associated with a porphyry copper environment, similar to the El Salvador deposit in Chile.

Tompson (1997) goes on to state that the aluminous alteration zone at Limonite Creek is separated from the advanced argillic and argillic zones by a probable fault. This fault is believed to have telescoped the argillic and advanced argillic zone downward against the deeper aluminous altered rocks.

Because aluminous alteration is known to occur above some porphyry copper deposits, exploration measures were taken to evaluate the potential of a porphyry copper target north of the zone of aluminous alteration, centered on the slopes to the north of Many Bear Creek.

6. Exploration

6.1 Methodology and Procedure

Figures 5 & 6 show the sample locations for both rock and water samples, respectively.

6.1.1 Rock Sampling

Between July 14th and July 19th, 2014, Richard Beck and Howard Inkster of UTM Exploration Services Ltd. conducted reconnaissance prospecting, watering sampling and a reclamation program on behalf of Honey Badger Exploration Inc.

Ten rock samples were taken over the Limonite Creek property. Select results are shown in Table 2, with UTM coordinates. Complete list of assay results are found in Appendix I.

All samples were taken from outcrop. The sampling areas were pre-determined points that were chosen as areas of interest to best represent alteration variations in and around the exotic limonite deposits. All samples were photographed before being placed in their 12x20 6mm poly bag. The poly bags had the sample number written on the outside to match the sample tag that was placed inside the bag, which

was then sealed with a zap strap. All samples were located and marked using a handheld Garmin GPS.

After the samples were taken a small aluminum butter tag with sample number and date was left behind at each sample site, secured with bright orange flagging tape. All samples were submitted to ACME Labs for whole rock and ICP analysis. A complete description of the ACME analytical techniques is presented in Appendix II and the certificate of analysis are attached as Appendix I. ACME Labs are an ISO---9000 certified laboratory.

The design of the program was to collect samples for the purpose of whole rock analysis in order to better study the alteration of the varying rocks sampled. ICP analysis was included in the sampling package.

Table 2. 2014 Rock Samples with Whole Rock and ICP Analyses.

Sample #	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	MgO%	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Fe%
1049701	62.07	16.13	5.72	2.44	0.5	46.9	2.8	97	<0.1	2.86
1049702	0.73	0.29	74.88	<0.01	<0.1	169.2	0.2	9	<0.1	>40.00
1049703	91.01	2.95	2.34	<0.01	4.6	32	0.6	<1	0.3	1.46
1049704	77.26	7.78	1.33	<0.01	1.9	8.5	0.4	<1	<0.1	0.89
1049705	89.88	0.99	5.85	<0.01	13.8	35	1.2	1	<0.1	3.75
1049706	61.33	16.71	6.02	3.31	2.6	45.8	1.3	122	<0.1	2.96
1049707	53.68	20.64	9.79	0.54	3.2	129.5	1.8	7	<0.1	5.21
1049708	0.36	0.07	66.03	<0.01	<0.1	16.8	<0.1	3	<0.1	>40.00
1049709	55.72	18.13	8.32	4.51	4.2	40.6	1.8	114	<0.1	4.49
1049710	55.96	18.78	8.96	6.8	2.4	14.8	2.1	77	<0.1	4.3

* All samples from tenure # 535233.

Table 3. 2014 Rock Sample Field Notes.

Sample ID	Easting	Northing	Field Comments
HB1 (1049701)	577601	6047213	biotite feldspar porphyry; rich with plagioclase and biotite; minor actinolite observed? Interstitial epidote alteration t/o groundmass; micro fractures coated with hematite
HB11 (1049702)	576826	6046470	Limonite - samples of rock appear to have schistose texture almost fibrous; altered micas?; protolith here appears to be andesite as determined from fresher pieces deep within the samples observed
HB9.5 (1049706)	577097	6046313	rhyolite breccia?; sericite altered with abundant qtz; cherty looking dark coloured xenoliths t/o - perhaps select portions of unaltered rhyolite; mica t/o has a shimmering sheen that gives the rock a schistose appearance on surface
HB9 (1049705)	577215	6045993	tan coloured, abundant stockwork veining, weakly mineralized with <1% diss pyrite; sericite and quartz altered; mod dense hard rock
HB8 (1049703)	576865	6045814	fractured brecciated limonitic rock; rock is very similar to that of sample HB5 in both appearance and alteration; hornfels? "cooked" sampled beside very old DDH
HB7 (1049704)	576439	6045409	Diorite? Qtz rich mod. Feld; interstitial "rotten" dark brown blebs t/o groundmass assumed to be relic weathered pyrite
HB5 (1049707)	576717	6045314	strongly altered, appears "cooked" hornfels?; most likely an andesite in origin but may be rhyolite; weakly pyrite mineralized trace; goethite present; the rock also appears layered and fractured giving it a bumpy/blocky appearance
HB2 (1049709)	577041	6045701	Limonite -dark red purple colour t/o/ very light weight; has a frothy appearance similar to that of a manto along a skarn; goethite t/o
HB4 (1049708)	577097	6045646	Andesite - strongly siliceous; 1-3% diss pyrite t/o; dense, hard, competent rock; mm scale Fe stained weathered rind; homogenous t/o
HB3 (1049710)	577680	6045994	Andesite - chlorite altered t/o; homogenous; minor epidote; trace pyrite observed; mm scale Fe stained weathered rind; localized presence of possible sericite?

* All samples from tenure # 535233.

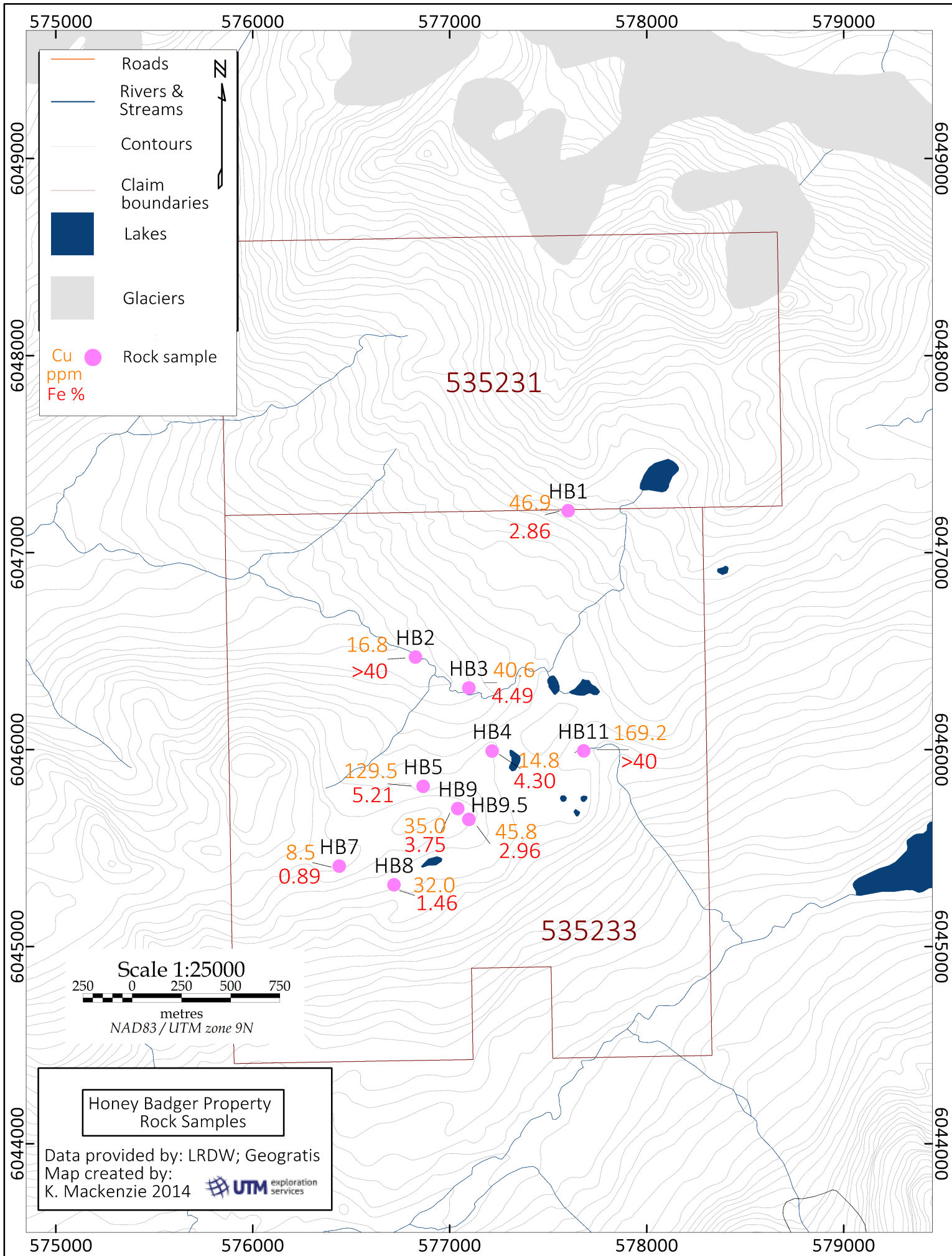


Figure 5. Rock Sample Location Map.

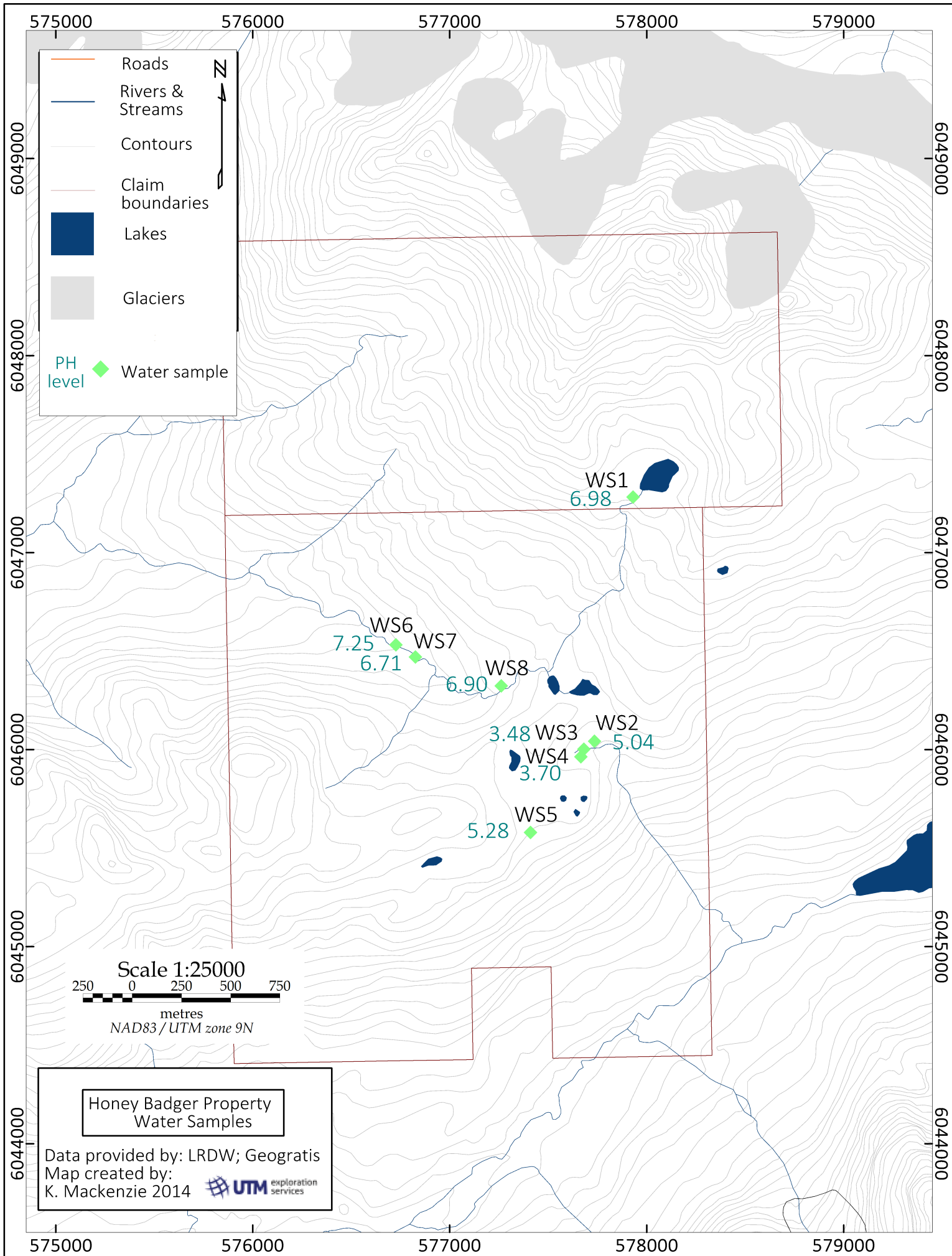


Figure 6. Water Sample Location Map.

6.1.2 Water Samples

In addition to collecting rock samples UTM personnel successfully collected water samples from across the property, many within the same area as the rock samples.

Eight water samples were collected during the program. Water samples were taken mostly from free-running streams. A small, sterilized plastic water-sampling bottle was used to collect the samples. All water samples were then tested for pH levels using an Extech pH/Conductivity meter. Water samples were tested back at the UTM office in Smithers. Details on the pH meter are listed in Appendix III. Results for water samples and their individual locations are shown in Table 4.

Table 4. Water Sample pH Readings.

Water Sample ID	Easting	Northing	pH level
WS1	577931	6047282	6.98
WS2	577735	6046043	5.04
WS3	577681	6046002	3.48
WS4	577666	6045964	3.70
WS5	577410	6045580	5.28
WS6	576727	6046532	7.25
WS7	576826	6046470	6.71
WS8	577261	6046324	6.90

* All samples from tenure # 535233 except WS1, from #535231.

6.1.3 Reclamation

During the six-day program UTM personnel successfully cleaned up the majority of the historical camp. Upon arrival to the old site, there were twelve old wood-framed buildings of varying sizes spread across an approximate 200m² area. All that remained onsite were weathered wooden frames and floors of a once thriving exploration camp.

All buildings were torn down, torn apart and sorted into numerous burn piles. All garbage was cleaned up and removed from site. Any non-burnable items were also collected, bagged and removed from site; i.e. old wiring, stovepipes, metal pieces, etc.

After each building was torn down and the wood removed from the site to a specific burn pile, the ground beneath the old wooden buildings was then raked, scoured with rake and shovels as well as walked over with a rolling magnet to collect all miscellaneous nails and other metals bits. Deadfall trees and deadfall shrubbery and grasses were then strewn across the cleaned ground to facilitate additional and better decomposition in efforts to bring the areas back to their original state. See Appendix V for photos of the reclamation process.

7. Sampling

7.1 Sampling Method and Approach

See section 6.2 for details of on-site sampling methods. After sample collection, samples were bagged, sealed with a sample list, and stored by UTM personnel until they were delivered to ACME Labs in Smithers, BC.

7.2 Sample Preparation, Analyses, and Security

Lab methodology is described in Appendix II.

7.3 Data Verification

No standards or blanks were submitted, although ACME runs their own tests regularly.

7.4 Results

All assay results may be found in Appendix I. Sample Location map may be perused in Figure 4.

8. Interpretation and Conclusion

Initial preview and reading of the historical material available have all suggested the possibility of a copper deposit within property. Soil sampling from past exploration programs shows potential to lie a short distance to the southwest of the two existing exotic limonite zones; geophysical surveys have intimated conductors in the same areas.

The regional geological map found online using Mapplace.ca suggests the entire claim region is a granodiorite intrusive of the Topley Plutonic Suite; however, we know this to not be entirely true as historical mapping has outlined andesitic rocks of Hazelton Group, rhyolites, biotite feldspar porphyries and diorites all surrounding two extensive zones of limonite.

The Mapplace.ca regional airborne geophysics also show the area as a large mag-low both in the Total Field Magnetics and the Vertical Derivative. The Hazelton andesites are typically presented as mag-highs in the Smithers and surrounding areas and this is often because of the presence of pyrrhotite within the groundmass. It can be assumed here that the level of alteration that has occurred has devoured any magnetic mineral and today we are presented with a somewhat false mag-low.

The 1992 Assessment Report # 22590 is an excellent example of detailed mapping and attention to detail on the Limonite Creek property, and this report should be the initial stepping stone and starting point for any future work. Much of what was observed in the field for the purpose of this report matched the work conducted in 1992.

The 2014 sampling was limited but widespread and therefore it is difficult to create a greater interpretation of what is going on. Yet, with that said, this author believes that the data collected can certainly be drawn to make a number of educated assumptions that can possibly be put to work in future exploration programs.

There were ten rock samples taken across 2km north-south and 1.2 km east-west. Of all of the samples, two were limonite proper and their whole analysis was expected as it has been presented: a lot of iron and little of anything else. However, it should be noted that sample HB11 (sample 1049702) presented with 169.2ppm Cu. I believe the source of this comes from upslope to the southwest. The strongest presence of SiO₂ occurred in three samples, 1049703 – 1049705, all of which lie on northeast trending ridgeline, the same ridgeline that has seen soil sampling, geophysics and drilling in historical years. Samples 1049701, 06, 07, 09 and 1049710 are the samples that exhibit elevated aluminous values and all of these samples are also lying along a northeast trend, but off to the northwestern edge of the ridgeline.

Stratigraphy, geophysical conductors, geophysical magnetics images, topography and now whole rock analysis (though this should be taken as an assumption solely based on the limited amount of samples collected and their collective

density/location to each other) all indicate something of interest occurring along this northeast trend and within the body of the main deposit areas.

Historical programs have created a lot of excellent work that, in my opinion only, has only scratched the surface. With each year of exploration, beginning as far back as 1969, no two exploration years have utilized their collective data to effectively answer the bigger question: is there a source to this limonite alteration and if the age of these rocks and the mineral assemblages of these rocks and the alteration patterns of these rocks all appear very similar to Equity Silver Mine, then where is the source?

9. Recommendations

The results of the 2014 program were revealing in that they provided a small amount of data to an already larger collection of data. The following is a brief suggested program for the 2015 season:

- ✓ Amass all of the existing data collected to date into a single, updated, format. Create spreadsheets, create maps, utilize new GIS technologies and create a workable database.
- ✓ Expanded soil sampling over the areas between the two limonite zones and as far southwest of these zones as possible
- ✓ Re-log and re-sample portions of the core from years past (this core is all stored on site just 200m southwest of the old camp)
- ✓ Possible airborne geophysical survey with EM, MAG and deep seeded capabilities – VTEM?
- ✓ Additional infill, due diligence mapping but this time take an XRF handheld unit in the field for direct onsite analysis.

An estimated budget of approximately \$150,000 - \$200,000 is recommended for the Limonite Creek property.

10. Statement of Costs

Honey Badger Exploration Inc.					
Sampling/Reclamation Program					
Limonite Creek Property					
Personnel (Name)* / Position	Field Days (list actual days)	Days	Rate	Subtotal	
Richard Beck - project manager	July 14-19th	6	\$685.00	\$4,110.00	
Howard Inkster - field assistant	July 14-19th	6	\$465.00	\$2,790.00	
				\$6,900.00	\$6,900.00
Office Studies	List Personnel				
		Hours	Rate	Subtotal	
Report preparation	A. Ledwon - PGeo	6.0	\$105.00	\$630.00	
Report preparation	R.Beck	31.0	\$55.00	\$1,705.00	
Report preparation	GIS	6.0	\$65.00	\$390.00	
				\$2,335.00	\$2,335.00
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal	
Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment			\$0.00	\$0.00	
Soil			\$0.00	\$0.00	
Rock			\$0.00	\$0.00	
Water			\$0.00	\$0.00	
Biogeochemistry			\$0.00	\$0.00	
Whole rock		10.0	\$60.00	\$600.00	
Petrology			\$0.00	\$0.00	
				\$600.00	\$600.00
Transportation		No.	Rate	Subtotal	
Airfare			\$0.00	\$0.00	
Taxi			\$0.00	\$0.00	
truck rental			\$0.00	\$0.00	
kilometers			\$0.00	\$0.00	
ATV			\$0.00	\$0.00	
fuel			\$0.00	\$0.00	
Helicopter (hours)		8	\$0.00	\$8,546.72	
Fuel (litres/hour)			\$0.00	\$0.00	
				\$8,546.72	\$8,546.72
Accommodation & Food	Rates per day	No.	Rate	Subtotal	
Camp		6.00	\$90.00	\$540.00	
Meals		6.00	\$70.00	\$420.00	
				\$960.00	\$960.00
Miscellaneous					
Propane				\$40.00	
gasoline				\$60.00	
Field supplies				\$295.00	
pre-field organizing		4.00	\$58.00	\$232.00	
post-field clean-up		8.00	\$58.00	\$464.00	
				\$1,091.00	\$1,091.00
Equipment Rentals					
Sattelite phone/radios		6.00	\$12.60	\$75.60	
Camp kit		6.00	\$90.00	\$540.00	
				\$615.60	\$615.60
TOTAL Expenditures	w/o taxes				\$21,048.32

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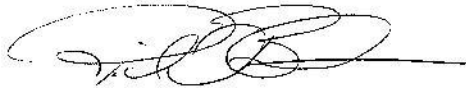
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12. Statement of Qualifications

I, Richard Beck, residing at 4901 Slack Road, Smithers, B.C., do hereby certify that:

- I am part owner of and currently employed as the President by UTM Exploration Services of Smithers, British Columbia;
- I attended Dalhousie University from 1985-1989, specializing in geology;
- Between 1987 and 1990, and 1996 to present I have been continuously employed as a junior geologist/project manager/senior geologist in the mineral exploration sector;
- I did visit the property and jointly supervised the program.

Dated at Smithers, British Columbia, this 10th day of October 2014.

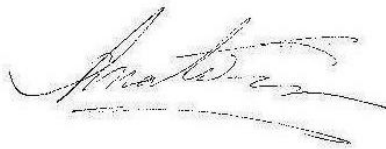
A handwritten signature in black ink, appearing to read 'Richard Beck', with a long horizontal line extending to the right.

Richard Beck, President
UTM Exploration Services Ltd.

I, Anastasia Ledwon, residing at 4901 Slack Road, Smithers, B.C., do hereby certify that:

- I am part owner of and currently employed as the CEO and Professional Geoscientist by UTM Exploration Services of Smithers, British Columbia;
- I graduated from the University of Victoria in 1997 with a B.Sc (Honours) (Distinction) in Earth and Ocean Sciences;
- I am a member of the Association of Professional Engineers and Geoscientists of BC and have been since 2009;
- Between 1994 and 2001 I worked in the field of geological research and since 2005 I have been continuously employed as a junior geologist/project manager/senior geologist/manager in the mineral exploration sector;
- I did not visit the property but did jointly supervise the program.

Dated at Smithers, British Columbia, this 10th day of October 2014.

A handwritten signature in cursive script, appearing to read 'Anastasia Ledwon', with a horizontal line underneath.

Anastasia Ledwon, P.Geo and CEO
UTM Exploration Services Ltd.

Appendix I: Assay Certificates



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Bureau Veritas Commodities Canada Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
 PHONE (604) 253-3158

Client: UTM Exploration Services Ltd.
 104-1165 Main Street
 Box 5037
 Smithers BC V0J 2N0 CANADA

Submitted By: Richard Beck
 Receiving Lab: Canada-Smithers
 Received: September 24, 2014
 Report Date: October 03, 2014
 Page: 1 of 2

CERTIFICATE OF ANALYSIS

SMI14000710.1

CLIENT JOB INFORMATION

Project: HB
 Shipment ID:
 P.O. Number
 Number of Samples: 10

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
 DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: UTM Exploration Services Ltd.
 104-1165 Main Street
 Box 5037
 Smithers BC V0J 2N0
 CANADA

CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	10	Crush, split and pulverize 250 g rock to 200 mesh			SMI
LF202	10	Whole Rock Analysis Majors and Trace Elements	0.2	Completed	VAN
AQ200	10	1:1:1 Aqua Regia digestion ICP-analysis	0.5	Completed	VAN

ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: **UTM Exploration Services Ltd.**

104-1165 Main Street

Box 5037

Smithers BC V0J 2N0 CANADA

Project: HB

Report Date: October 03, 2014

Page: 2 of 2

Part: 1 of 5

CERTIFICATE OF ANALYSIS

SMI14000710.1

Method	WGHT	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1	
1049701	Rock	2.11	62.07	16.13	5.72	2.44	3.04	3.58	3.26	0.66	0.16	0.10	0.004	<20	15	2.5	99.71	1185	<1	14.5	0.5
1049702	Rock	2.05	0.73	0.29	74.88	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	24.1	99.96	3	<1	0.8	<0.1
1049703	Rock	1.89	91.01	2.95	2.34	<0.01	0.02	0.02	0.09	1.64	0.05	<0.01	0.004	<20	<1	1.7	99.85	968	<1	4.1	<0.1
1049704	Rock	1.75	77.26	7.78	1.33	<0.01	0.04	0.95	0.78	0.81	0.11	<0.01	0.002	<20	30	10.7	99.80	579	<1	0.7	<0.1
1049705	Rock	2.10	89.88	0.99	5.85	<0.01	0.01	0.06	0.16	0.90	0.03	<0.01	<0.002	<20	16	1.8	99.70	2579	<1	0.9	<0.1
1049706	Rock	2.11	61.33	16.71	6.02	3.31	3.28	3.05	1.53	0.73	0.16	0.16	0.007	28	17	3.5	99.75	632	<1	5.1	0.5
1049707	Rock	2.47	53.68	20.64	9.79	0.54	0.89	0.68	4.88	0.89	1.01	0.02	0.005	<20	36	6.6	99.58	2634	1	0.2	1.6
1049708	Rock	1.25	0.36	0.07	66.03	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	33.5	99.97	5	<1	0.6	<0.1
1049709	Rock	1.35	55.72	18.13	8.32	4.51	3.59	3.48	0.87	0.77	0.28	0.19	<0.002	<20	18	3.9	99.73	607	2	21.5	0.5
1049710	Rock	1.58	55.96	18.78	8.96	6.80	0.05	0.71	1.88	0.79	0.08	0.05	0.011	42	27	5.7	99.79	137	<1	11.6	1.0



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Project: HB

Report Date: October 03, 2014

Page: 2 of 2

Part: 2 of 5

CERTIFICATE OF ANALYSIS

SMI14000710.1

	Method Analyte Unit MDL	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	
		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05	
1049701	Rock	17.6	4.4	6.2	67.2	1	348.6	0.6	5.5	1.9	147	2.5	142.2	16.5	20.1	35.5	4.44	17.0	3.62	0.86	3.50	
1049702	Rock	<0.5	<0.1	<0.1	<0.1	<1	0.5	<0.1	<0.2	<0.1	<8	<0.5	0.6	0.1	0.6	0.2	<0.02	<0.3	<0.05	<0.02	0.09	
1049703	Rock	6.6	0.3	7.1	0.4	1	346.1	0.3	0.2	<0.1	60	1.2	6.0	0.2	1.8	2.5	0.24	0.7	0.12	<0.02	0.09	
1049704	Rock	7.8	11.8	5.9	<0.1	<1	477.7	0.5	4.0	2.3	132	0.8	405.8	7.5	9.6	14.5	1.62	5.8	0.85	0.15	0.48	
1049705	Rock	0.8	0.3	4.3	1.1	<1	47.0	0.3	0.6	0.2	46	<0.5	8.0	3.0	5.5	6.6	0.71	2.7	0.50	0.04	0.51	
1049706	Rock	16.2	4.1	5.9	33.8	<1	429.3	0.5	4.7	2.2	173	0.7	136.0	13.3	14.9	27.8	3.54	14.0	3.13	0.87	2.86	
1049707	Rock	26.0	1.8	3.3	96.1	<1	238.5	0.2	2.2	0.8	339	<0.5	59.0	11.8	8.7	17.5	2.43	10.2	2.61	0.64	2.34	
1049708	Rock	<0.5	<0.1	<0.1	<0.1	<1	1.1	<0.1	<0.2	<0.1	23	<0.5	0.6	0.2	0.4	<0.1	<0.02	<0.3	<0.05	<0.02	0.09	
1049709	Rock	18.6	2.5	4.4	23.1	<1	469.2	0.2	1.7	0.8	196	0.5	80.8	15.2	11.2	22.1	2.97	12.6	2.92	0.92	3.00	
1049710	Rock	20.7	2.3	3.6	44.5	<1	72.5	0.2	2.5	1.2	272	0.6	82.3	8.3	12.9	22.1	2.87	11.2	1.68	0.38	1.19	



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Project: HB

Report Date: October 03, 2014

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CERTIFICATE OF ANALYSIS

SMI14000710.1

	Method Analyte Unit MDL	LF200	LF200	LF200	LF200	LF200	LF200	LF200	TC000	TC000	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
		Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb
		0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	1	0.01	0.5
1049701	Rock	0.54	3.13	0.60	1.90	0.28	1.88	0.32	0.14	<0.02	0.5	46.9	2.8	97	<0.1	13.6	12.4	546	2.86	0.7	1.1
1049702	Rock	0.02	0.07	<0.02	<0.03	<0.01	<0.05	<0.01	1.82	1.06	<0.1	169.2	0.2	9	<0.1	0.2	0.8	9	>40	<0.5	<0.5
1049703	Rock	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01	0.03	0.26	4.6	32.0	0.6	<1	0.3	2.8	3.4	18	1.46	9.6	6.7
1049704	Rock	0.09	0.95	0.33	1.39	0.28	2.17	0.36	0.02	3.38	1.9	8.5	0.4	<1	<0.1	0.6	0.3	12	0.89	<0.5	0.8
1049705	Rock	0.09	0.52	0.13	0.42	0.07	0.41	0.06	0.08	0.09	13.8	35.0	1.2	1	<0.1	0.7	0.9	12	3.75	8.6	7.9
1049706	Rock	0.46	2.60	0.55	1.54	0.25	1.59	0.26	0.03	<0.02	2.6	45.8	1.3	122	<0.1	26.0	5.2	942	2.96	0.8	1.2
1049707	Rock	0.38	2.09	0.48	1.37	0.19	1.35	0.22	0.30	0.11	3.2	129.5	1.8	7	<0.1	1.1	0.1	56	5.21	6.0	5.8
1049708	Rock	0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01	4.11	2.21	<0.1	16.8	<0.1	3	<0.1	0.2	0.4	3	>40	<0.5	<0.5
1049709	Rock	0.47	2.79	0.63	1.68	0.26	1.81	0.28	0.03	1.41	4.2	40.6	1.8	114	<0.1	7.8	20.5	1258	4.49	4.6	8.5
1049710	Rock	0.20	1.50	0.34	1.09	0.18	1.29	0.21	0.04	0.23	2.4	14.8	2.1	77	<0.1	38.2	10.4	302	4.30	1.4	1.9



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Project: HB

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CERTIFICATE OF ANALYSIS

SMI14000710.1

	Method Analyte Unit MDL	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200
		Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc
		ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm
		0.1	1	0.1	0.1	0.1	2	0.01	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1
1049701	Rock	3.9	32	0.1	<0.1	<0.1	85	0.66	0.066	4	18	1.03	49	0.047	<20	1.12	0.035	0.11	<0.1	<0.01	5.1
1049702	Rock	<0.1	<1	<0.1	<0.1	<0.1	6	<0.01	0.009	<1	<1	<0.01	<1	<0.001	<20	0.12	0.002	<0.01	<0.1	<0.01	0.5
1049703	Rock	<0.1	12	<0.1	1.1	3.9	4	<0.01	0.006	<1	4	<0.01	792	<0.001	<20	0.04	0.002	<0.01	<0.1	0.35	<0.1
1049704	Rock	0.1	16	<0.1	<0.1	0.2	4	<0.01	0.003	<1	1	<0.01	18	0.001	<20	0.16	0.031	0.03	<0.1	0.01	0.3
1049705	Rock	<0.1	13	<0.1	0.6	2.9	5	<0.01	0.007	<1	2	<0.01	2478	0.002	<20	0.05	0.005	0.01	<0.1	0.06	0.5
1049706	Rock	2.3	27	<0.1	<0.1	0.1	61	0.31	0.061	4	41	1.75	39	0.164	<20	2.09	0.025	0.10	0.1	<0.01	3.8
1049707	Rock	1.3	14	<0.1	<0.1	<0.1	26	0.02	0.383	1	10	0.14	75	0.029	<20	0.57	0.033	0.11	<0.1	<0.01	5.0
1049708	Rock	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	0.007	<1	<1	<0.01	1	<0.001	<20	0.02	0.002	<0.01	<0.1	0.01	0.1
1049709	Rock	0.2	19	<0.1	<0.1	0.5	76	0.37	0.106	2	6	2.39	31	0.081	<20	2.87	0.062	0.06	<0.1	<0.01	3.1
1049710	Rock	0.2	41	<0.1	<0.1	0.2	108	0.02	0.027	<1	43	3.24	32	0.003	<20	3.79	0.029	0.11	<0.1	<0.01	6.6



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CERTIFICATE OF ANALYSIS

SMI14000710.1

Method	Analyte	AQ200	AQ200	AQ200	AQ200	AQ200
		Ti	S	Ga	Se	Te
Unit		ppm	%	ppm	ppm	ppm
MDL		0.1	0.05	1	0.5	0.2
1049701	Rock	<0.1	<0.05	4	<0.5	<0.2
1049702	Rock	<0.1	1.01	<1	0.7	<0.2
1049703	Rock	<0.1	0.21	<1	6.2	0.9
1049704	Rock	<0.1	0.26	<1	3.8	0.2
1049705	Rock	<0.1	0.08	<1	>100	11.5
1049706	Rock	<0.1	<0.05	5	0.6	0.3
1049707	Rock	<0.1	0.10	3	15.0	0.5
1049708	Rock	<0.1	1.92	<1	<0.5	<0.2
1049709	Rock	<0.1	1.32	8	3.5	1.3
1049710	Rock	<0.1	0.20	10	0.9	<0.2



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QUALITY CONTROL REPORT

SMI14000710.1

Method	WGHT	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200
Analyte	Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs	
Unit	kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm	
MDL	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1	
1049707	Rock	2.47	53.68	20.64	9.79	0.54	0.89	0.68	4.88	0.89	1.01	0.02	0.005	<20	36	6.6	99.58	2634	1	0.2	1.6
Pulp Duplicates																					
1049702	Rock	2.05	0.73	0.29	74.88	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	24.1	99.96	3	<1	0.8	<0.1
REP 1049702	QC																				
1049710	Rock	1.58	55.96	18.78	8.96	6.80	0.05	0.71	1.88	0.79	0.08	0.05	0.011	42	27	5.7	99.79	137	<1	11.6	1.0
REP 1049710	QC		55.62	18.99	8.98	6.85	0.05	0.71	1.89	0.81	0.09	0.05	0.012	39	27	5.7	99.78	132	2	12.2	1.1
Reference Materials																					
STD DS10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS45EA	Standard																				
STD SO-18	Standard		58.25	14.08	7.58	3.37	6.35	3.66	2.11	0.69	0.78	0.39	0.544	46	24	1.9	99.71	530	<1	26.9	7.2
STD SO-18	Standard		58.36	14.03	7.55	3.37	6.32	3.64	2.13	0.68	0.79	0.39	0.546	34	24	1.9	99.71	542	1	27.5	7.8
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD DS10 Expected																					
STD OREAS45EA Expected																					
STD SO-18 Expected			58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	44	25			514		26.2	7.1
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	0.0	0.04	<1	<1	<0.2	<0.1
Prep Wash																					
G1-SMI	Prep Blank		69.80	14.29	3.25	0.97	2.69	4.36	2.11	0.36	0.10	0.09	<0.002	<20	8	1.8	99.82	883	<1	5.1	0.3
G1-SMI	Prep Blank		70.65	14.06	2.98	0.84	2.64	4.32	2.15	0.35	0.09	0.08	<0.002	<20	7	1.7	99.83	894	1	4.2	0.2

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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Project: HB
Report Date: October 03, 2014

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QUALITY CONTROL REPORT

SMI14000710.1

Method	Analyte	Unit	MDL	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200	LF200			
				Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
				0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05	
1049707	Rock			26.0	1.8	3.3	96.1	<1	238.5	0.2	2.2	0.8	339	<0.5	59.0	11.8	8.7	17.5	2.43	10.2	2.61	0.64	2.34	
Pulp Duplicates																								
1049702	Rock			<0.5	<0.1	<0.1	<0.1	<1	0.5	<0.1	<0.2	<0.1	<8	<0.5	0.6	0.1	0.6	0.2	<0.02	<0.3	<0.05	<0.02	0.09	
REP 1049702	QC																							
1049710	Rock			20.7	2.3	3.6	44.5	<1	72.5	0.2	2.5	1.2	272	0.6	82.3	8.3	12.9	22.1	2.87	11.2	1.68	0.38	1.19	
REP 1049710	QC			20.3	2.5	3.6	43.9	<1	73.7	0.2	2.6	1.2	276	<0.5	85.3	8.9	12.3	23.8	2.93	11.7	1.66	0.38	1.23	
Reference Materials																								
STD DS10	Standard																							
STD GS311-1	Standard																							
STD GS910-4	Standard																							
STD OREAS45EA	Standard																							
STD SO-18	Standard			19.0	10.1	20.9	28.9	15	417.2	7.2	9.9	16.5	194	15.4	318.5	30.6	13.0	26.3	3.40	14.3	3.01	0.87	3.14	
STD SO-18	Standard			16.8	10.0	20.1	28.2	15	407.5	7.5	9.5	16.2	192	16.3	314.6	29.7	13.2	26.5	3.28	13.3	3.04	0.86	2.84	
STD GS311-1 Expected																								
STD GS910-4 Expected																								
STD DS10 Expected																								
STD OREAS45EA Expected																								
STD SO-18 Expected				17.6	9.8	19.3	28.7	15	407.4	7.4	9.9	16.4	200	14.8	290	29	12.3	27.1	3.45	14	3	0.89	2.93	
BLK	Blank																							
BLK	Blank																							
BLK	Blank			<0.5	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.2	<0.1	<8	<0.5	<0.1	<0.1	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05	
Prep Wash																								
G1-SMI	Prep Blank			16.0	3.7	5.9	40.4	<1	224.5	0.4	3.3	1.4	43	0.5	144.2	18.1	17.2	28.6	3.27	13.4	2.65	0.75	2.74	
G1-SMI	Prep Blank			14.6	3.8	6.1	42.8	<1	226.0	0.5	3.1	1.5	35	<0.5	143.9	18.1	14.5	25.9	3.04	12.0	2.50	0.78	2.67	



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QUALITY CONTROL REPORT

SMI14000710.1

Method	LF200	LF200	LF200	LF200	LF200	LF200	LF200	TC000	TC000	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
Analyte	Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	
MDL	0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	
1049707	Rock	0.38	2.09	0.48	1.37	0.19	1.35	0.22	0.30	0.11	3.2	129.5	1.8	7	<0.1	1.1	0.1	56	5.21	6.0	5.8
Pulp Duplicates																					
1049702	Rock	0.02	0.07	<0.02	<0.03	<0.01	<0.05	<0.01	1.82	1.06	<0.1	169.2	0.2	9	<0.1	0.2	0.8	9	>40	<0.5	<0.5
REP 1049702	QC								1.83	1.06											
1049710	Rock	0.20	1.50	0.34	1.09	0.18	1.29	0.21	0.04	0.23	2.4	14.8	2.1	77	<0.1	38.2	10.4	302	4.30	1.4	1.9
REP 1049710	QC	0.20	1.38	0.33	1.19	0.18	1.28	0.22			2.5	14.0	2.1	76	<0.1	37.1	10.3	300	4.24	1.6	1.2
Reference Materials																					
STD DS10	Standard										13.7	159.5	160.1	376	1.8	79.1	13.2	891	2.71	44.5	85.9
STD GS311-1	Standard							1.03	2.38												
STD GS910-4	Standard							2.73	8.18												
STD OREAS45EA	Standard										1.4	690.7	14.3	31	0.3	385.5	51.6	407	23.16	9.6	52.4
STD SO-18	Standard	0.51	3.05	0.61	1.99	0.28	1.83	0.27													
STD SO-18	Standard	0.50	2.98	0.62	1.88	0.28	1.73	0.29													
STD GS311-1 Expected								1.02	2.35												
STD GS910-4 Expected								2.65	8.27												
STD DS10 Expected											14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9
STD OREAS45EA Expected											1.39	709	14.3	28.9	0.26	381	52	400	23.51	9.1	53
STD SO-18 Expected		0.53	3	0.62	1.84	0.27	1.79	0.27													
BLK	Blank							<0.02	<0.02												
BLK	Blank										<0.1	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	
BLK	Blank	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01													
Prep Wash																					
G1-SMI	Prep Blank	0.47	2.96	0.63	1.97	0.31	2.25	0.37	0.11	0.03	0.7	3.6	1.1	34	<0.1	1.8	4.4	503	1.87	0.9	1.5
G1-SMI	Prep Blank	0.46	2.93	0.61	2.05	0.32	2.35	0.37	0.07	<0.02	0.7	3.9	0.9	30	<0.1	1.8	4.1	422	1.72	0.9	0.6



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QUALITY CONTROL REPORT

SMI14000710.1

Method	Analyte	Unit	MDL	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200		
				Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc
				ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm		
1049707	Rock			1.3	14	<0.1	<0.1	<0.1	26	0.02	0.383	1	10	0.14	75	0.029	<20	0.57	0.033	0.11	<0.1	<0.01	5.0
Pulp Duplicates																							
1049702	Rock			<0.1	<1	<0.1	<0.1	<0.1	6	<0.01	0.009	<1	<1	<0.01	<1	<0.001	<20	0.12	0.002	<0.01	<0.1	<0.01	0.5
REP 1049702	QC																						
1049710	Rock			0.2	41	<0.1	<0.1	0.2	108	0.02	0.027	<1	43	3.24	32	0.003	<20	3.79	0.029	0.11	<0.1	<0.01	6.6
REP 1049710	QC			0.2	40	<0.1	<0.1	0.2	110	0.02	0.027	<1	43	3.21	31	0.004	<20	3.82	0.029	0.11	<0.1	<0.01	6.5
Reference Materials																							
STD DS10	Standard			7.1	60	2.5	7.9	11.4	41	1.06	0.073	16	55	0.77	419	0.066	<20	1.00	0.064	0.34	3.2	0.29	2.7
STD GS311-1	Standard																						
STD GS910-4	Standard																						
STD OREAS45EA	Standard			10.1	3	<0.1	0.3	0.2	298	0.03	0.026	7	913	0.09	139	0.085	<20	3.07	0.017	0.06	<0.1	<0.01	73.6
STD SO-18	Standard																						
STD SO-18	Standard																						
STD GS311-1 Expected																							
STD GS910-4 Expected																							
STD DS10 Expected				7.5	67.1	2.49	8.23	11.65	43	1.0625	0.073	17.5	54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8
STD OREAS45EA Expected				10.7	3.5	0.02	0.2	0.26	303	0.036	0.029	6.57	849	0.095	148	0.0875		3.13	0.02	0.053			78
STD SO-18 Expected																							
BLK	Blank																						
BLK	Blank			<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1
BLK	Blank																						
Prep Wash																							
G1-SMI	Prep Blank			2.2	21	<0.1	<0.1	<0.1	23	0.70	0.040	5	4	0.50	57	0.056	<20	0.89	0.067	0.07	<0.1	<0.01	2.4
G1-SMI	Prep Blank			2.1	19	<0.1	<0.1	<0.1	22	0.62	0.039	5	4	0.43	55	0.053	<20	0.88	0.069	0.07	<0.1	<0.01	2.1



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QUALITY CONTROL REPORT

SMI14000710.1

Method	Analyte	AQ200	AQ200	AQ200	AQ200	AQ200
		Tl	S	Ga	Se	Te
Unit		ppm	%	ppm	ppm	ppm
MDL		0.1	0.05	1	0.5	0.2
1049707	Rock	<0.1	0.10	3	15.0	0.5
Pulp Duplicates						
1049702	Rock	<0.1	1.01	<1	0.7	<0.2
REP 1049702	QC					
1049710	Rock	<0.1	0.20	10	0.9	<0.2
REP 1049710	QC	<0.1	0.20	9	0.6	<0.2
Reference Materials						
STD DS10	Standard	5.1	0.29	4	2.2	5.0
STD GS311-1	Standard					
STD GS910-4	Standard					
STD OREAS45EA	Standard	0.1	<0.05	12	0.8	<0.2
STD SO-18	Standard					
STD SO-18	Standard					
STD GS311-1 Expected						
STD GS910-4 Expected						
STD DS10 Expected		5.1	0.29	4.3	2.3	5.01
STD OREAS45EA Expected		0.072	0.036	11.7	0.6	0.07
STD SO-18 Expected						
BLK	Blank					
BLK	Blank	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank					
Prep Wash						
G1-SMI	Prep Blank	<0.1	<0.05	4	<0.5	<0.2
G1-SMI	Prep Blank	<0.1	<0.05	3	<0.5	<0.2

Appendix II: Lab Methodologies



LF100, LF200, LF300

Package Description	Lithochemical Whole Rock Fusion
Sample Digestion	Lithium metaborate/tetraborate fusion
Instrumentation Method	ICP-ES (LF300, LF200), ICP-MS (LF200, LF100)
Legacy Code	4A, 4B and 4A4B
Applicability	Non-mineralized Rock and Drill Core

METHOD DESCRIPTION

Prepared sample is mixed with $\text{LiBO}_2/\text{Li}_2\text{B}_4\text{O}_7$ flux. Crucibles are fused in a furnace. The cooled bead is dissolved in ACS grade nitric acid and analyzed by ICP and/or ICP-MS. Loss on ignition (LOI) is determined by igniting a sample split then measuring the weight loss. Total Carbon and Sulphur may be included and is determined by the Leco method (TC003). The LF202 package includes an additional 14 elements from an aqua regia digestion AQ200 to provide Au and volatile elements which do not report as part of the LF200 package.

Element	LF300/LF200 Detection	Upper Limit
SiO_2	0.01 %	100 %
Al_2O_3	0.01 %	100 %
Fe_2O_3	0.04 %	100 %
CaO	0.01 %	100 %
MgO	0.01 %	100 %
Na_2O	0.01 %	100 %
K_2O	0.04 %	100 %
MnO	0.01 %	100 %
TiO_2	0.01 %	100 %
P_2O_5	0.01 %	100 %
Cr_2O_3	0.002%	100 %
Ba	5 ppm	5 %
LOI	0.1 %	100%
LF300-EXT		
Ce	30 ppm	50000 ppm
Co	20 ppm	10000 ppm
Cu	5 ppm	10000 ppm
Zn	5 ppm	10000 ppm



LF100/LF200 Elements by ICPMS

Element	Detection Limit	Upper Limit
Be	1 ppm	10000 ppm
Ce	0.1 ppm	50000 ppm
Co	0.2 ppm	10000 ppm
Cs	0.1 ppm	10000 ppm
Dy	0.05 ppm	10000 ppm
Er	0.03 ppm	10000 ppm
Eu	0.02 ppm	10000 ppm
Ga	0.5 ppm	10000 ppm
Gd	0.05 ppm	10000 ppm
Hf	0.1 ppm	10000 ppm
Ho	0.02 ppm	10000 ppm
La	0.1 ppm	50000 ppm
Lu	0.01 ppm	10000 ppm
Nb	0.1 ppm	50000 ppm
Nd	0.3 ppm	10000 ppm
Ni	20 ppm	10000 ppm
Pr	0.02 ppm	10000 ppm
Rb	0.1 ppm	10000 ppm
Sc	1 ppm	10000 ppm
Sm	0.05 ppm	10000 ppm
Sn	1 ppm	10000 ppm
Sr	0.5 ppm	50000 ppm
Ta	0.1 ppm	50000 ppm
Tb	0.01 ppm	10000 ppm
Th	0.2 ppm	10000 ppm
Tm	0.01 ppm	10000 ppm
U	0.1 ppm	10000 ppm
V	8 ppm	10000 ppm
W	0.5 ppm	10000 ppm
Y	0.1 ppm	50000 ppm
Yb	0.05 ppm	10000 ppm
Zr	0.1 ppm	50000 ppm

AQ200 Add on Elements for LF202

Element	Detection Limit	Upper Limit
Ag	0.1 ppm	100 ppm
As	0.5 ppm	10000 ppm
Au	0.5 ppb	100000 ppb
Bi	0.1 ppm	2000 ppm
Cd	0.1 ppm	2000 ppm
Cu	0.1 ppm	10000 ppm
Hg	0.01 ppm	50 ppm
Mo	0.1 ppm	2000 ppm
Ni	0.1 ppm	10000 ppm
Pb	0.1 ppm	10000 ppm
Sb	0.1 ppm	2000 ppm
Se	0.5 ppm	100 ppm
Tl	0.1 ppm	1000 ppm
Zn	1 ppm	10000 ppm

Appendix III: pH Meter Specifications

Waterproof ExStik[®] II pH/Conductivity Meter

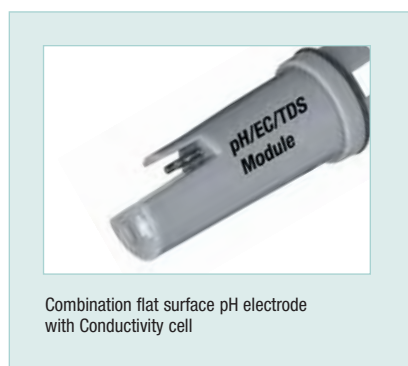
Combination rugged Flat Surface pH electrode
Innovative design with flat surface technology for quick on-the-spot
pH measurements combined with autoranging high accuracy Conductivity cell

Features:

- Measures 5 parameters including Conductivity, TDS, Salinity, pH, and Temperature using one electrode
- 9 units of measure: pH, $\mu\text{S}/\text{cm}$, mS/cm , ppm, ppt, mg/L , g/L , $^{\circ}\text{C}$, $^{\circ}\text{F}$
- Analog bargraph indicates trends
- Memory stores up to 25 labeled readings
- Adjustable Conductivity to TDS ratio from 0.4 to 1.0; 0.5 fixed Salinity ratio
- RENEW feature alerts user when electrode needs replacement
- Auto power off and low battery indicator
- Waterproof to IP57
- EC500 meter includes electrode, protective sensor cap, sample cup with cap, four 3V CR-2032 batteries, and 48" (1.2m) neckstrap.
- **Order Conductivity standards and pH buffers separately**
- EC510 Kit includes EC500, $84\mu\text{S}/\text{cm}$, $1413\mu\text{S}/\text{cm}$, $12880\mu\text{S}/\text{cm}$ Conductivity calibration standards, pH buffer pouches (1 each of 4, 7, 10pH plus rinse solution), weighted base, 3 sample cups with caps, and case — \$19 Savings



EC510 Kit



Combination flat surface pH electrode with Conductivity cell

Ordering Information:

- EC500**Waterproof ExStik[®] II pH/Conductivity Meter
EC510Waterproof ExStik[®] II pH/Conductivity Meter Kit
EC505Spare ExStik[®] II pH/Conductivity cell module for EC500
EC-84-P..... $84\mu\text{S}$ Conductivity Standard (2 bottles - 1 pint each)
EC-1413-P..... $1413\mu\text{S}$ Conductivity Standard (2 bottles - 1 pint each)
EC-12880-P..... $12880\mu\text{S}$ Conductivity Standard (2 bottles - 1 pint each)
PH4-PpH 4 Buffer Solution (2 bottles - 1 pint each)
PH7-PpH 7 Buffer Solution (2 bottles - 1 pint each)
PH10-PpH 10 Buffer Solution (2 bottles - 1 pint each)

Specifications	Range	Max Resolution	Basic Accuracy
Conductivity	0 to $199\mu\text{S}/\text{cm}$, 200 to $1999\mu\text{S}/\text{cm}$, 2.00 to $19.99\text{mS}/\text{cm}$	$0.1\mu\text{S}/\text{cm}$	$\pm 2\%$ FS
TDS/Salinity	0 to 99.9ppm (mg/L), 100-999ppm (mg/L) 1.00 to 9.99ppt	0.1ppm (mg/L)	$\pm 2\%$ FS
pH	0.00 to 14.00pH	0.01pH	$\pm 0.01\text{pH}$
Temperature	23° to 194°F (-5 to 90°C)	$0.1^{\circ}\text{F}/^{\circ}\text{C}$	$\pm 1.8^{\circ}\text{F}/1^{\circ}\text{C}$
Waterproof	IP57		
Memory	25 datasets		
Dimensions	1.4 x 7.3 x 1.6" (36 x 186 x 41mm)		
Weight	3.8oz (110g)		

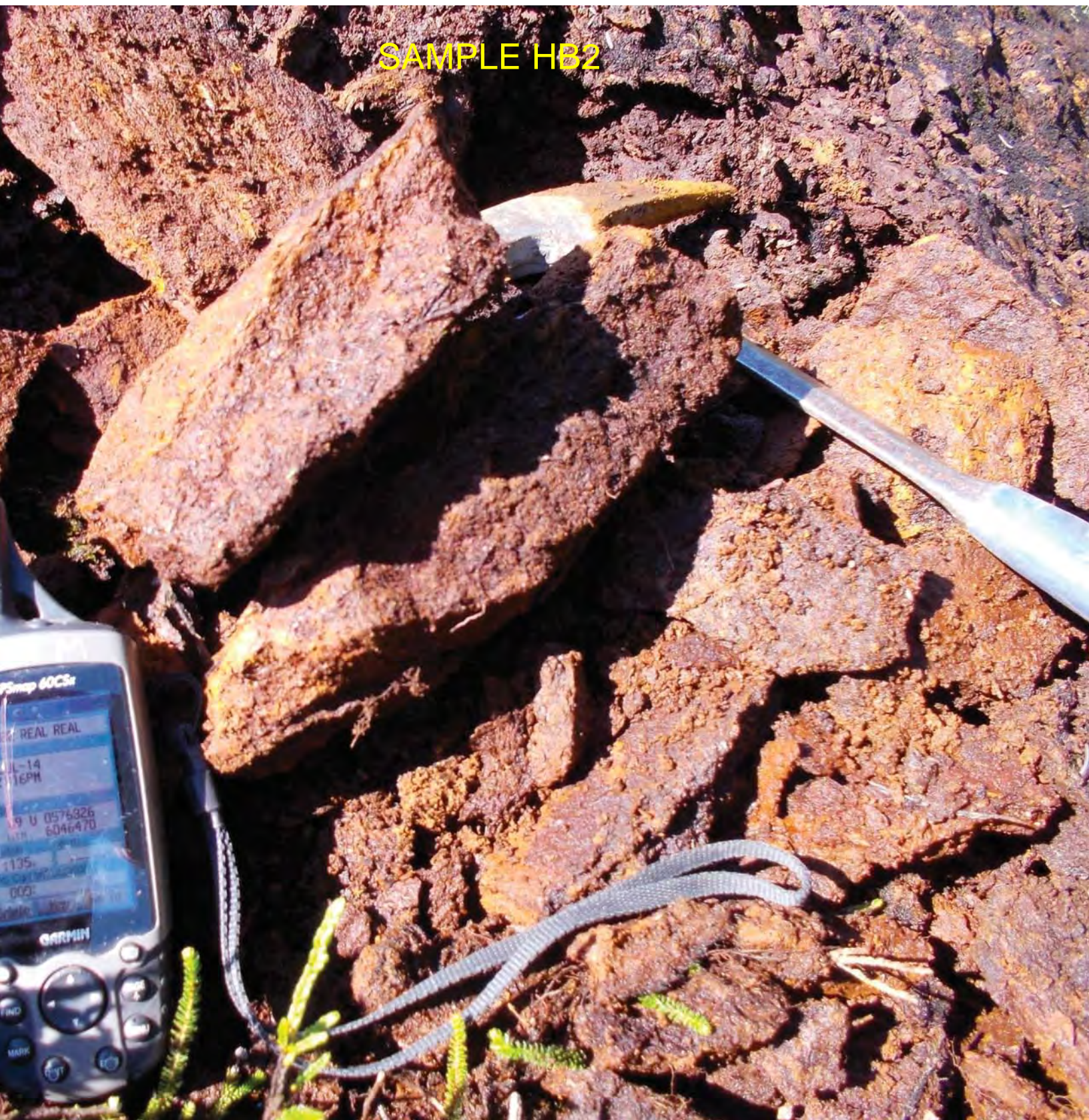


Appendix IV: Rock Sample Photos

SAMPLE HB1



SAMPLE HB2

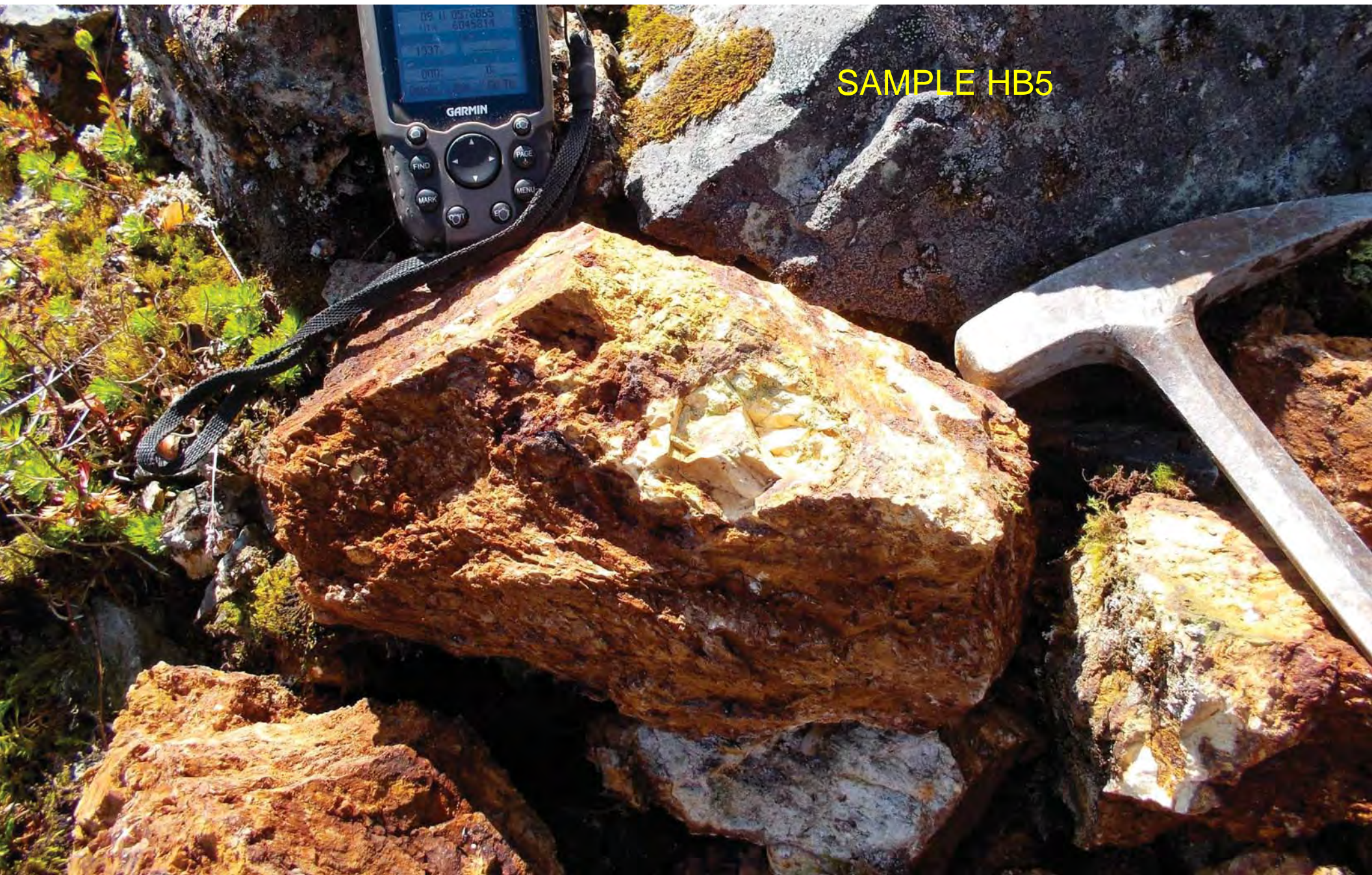


SAMPLE HB3



SAMPLE HB4



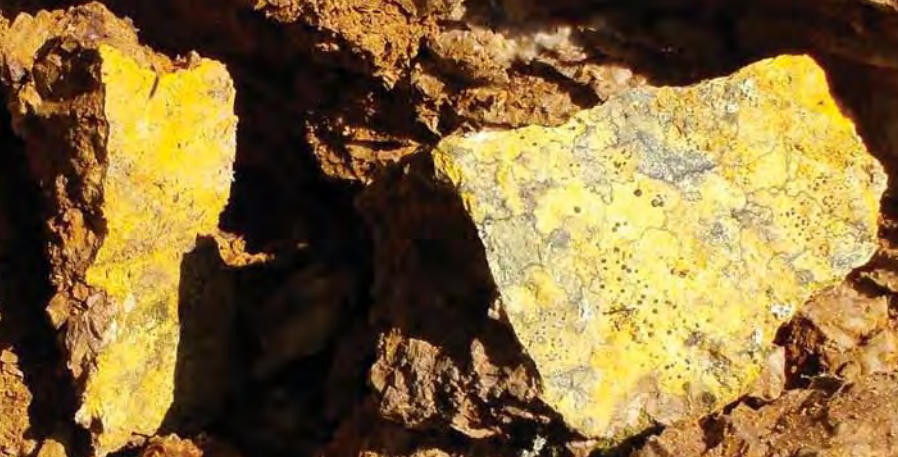


SAMPLE HB5

SAMPLE HB7



SAMPLE HB8



SAMPLE HB9



SAMPLE HB9.5



SAMPLE HB11



Appendix V: Reclamation photos



















