BRITISH COLUMBIA

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)]	TOTAL COST
DIAMOND DRILLING ON THE EVELYN COPPER PROSPECT	$ 30,333.81

AUTHOR(S) ANTHONY L'ORSA SIGNATURE(S) ____________

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) MX-1-818 YEAR OF WORK 2009-2010

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) EVENT 4803819

PROPERTY NAME EVELYN COPPER PROSPECT (OR LCS)

CLAIM NAME(S) (on which work was done) 665643

COMMODITIES SOUGHT COPPER

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN NEW DISCOVERY

MINING DIVISION OMINECA NTS 93L/14W

LATITUDE 54 o 53 ' 21 " LONGITUDE 127 o 17 ' 41 " (at centre of work)

OWNER(S)

1) STEVEN FOURNIER 2) WESLEY LYCHAK

MAILING ADDRESS

TITAN DIAMOND DRILLING
9131 EVELYN STN ROAD, SMITHERS, BC, V0J 2N1

BOX 2865
SMITHERS, BC, V0J 2N0

OPERATOR(S) [who paid for the work]

1) STEVEN FOURNIER 2) WESLEY LYCHAK

MAILING ADDRESS

AS ABOVE

AS ABOVE

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

New discovery of native copper in basalt of the Lower Jurassic Hazelton Group. Redbed copper.
No sulphide minerals associated with copper.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS FIRST REPORT

(OVER)

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	Two whole rock and 8 geochemical analyses	665643	$414.20
Other			
DRILLING (total metres; number of holes, size)			
Core	247.52 meters in 5 holes. NQ	665643	$29,678.22
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic	Vancouver Petrographics Ltd	665643	$241.39
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	$30,333.81

Diamond Drilling Report

on the

Evelyn Copper Prospect

(LCS claims)

near Smithers

Omineca Mining Division

British Columbia

Latitude: 54° 53' North
Longitude: 127° 17' West

NTS 093L/14W
BCGS 093L084

Event 4803819

Assessment Report

Prepared for Owners

Steven Fournier and Wesley Lychak

by

Anthony L'Orsa, P.Geo.

15 January 2011

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SUMMARY

A volcanic redbed copper deposit was discovered by Steven Fournier and Wesley Lychak on Mr Lychak's farm near Smithers in 2009. Six short diamond drill holes tested the discovery area. Five of the holes are included in this preliminary report.

All holes encountered an amygdaloidal basalt flow complex, the upper part of which, as currently exposed, locally hosts native copper in calcite-±epidote-quartz veins and in fracture-controlled disseminations. Aside from malachite, no other copper minerals have been noted and no sulphides have been found in the copper zone. The host rocks are assigned to the Hazelton Group and are related to a centre of basaltic volcanism on top of andesitic red tuffs of the Eagle Peak Formation (Red Tuff Member of the Nilkitkwa Formation).

INTRODUCTION

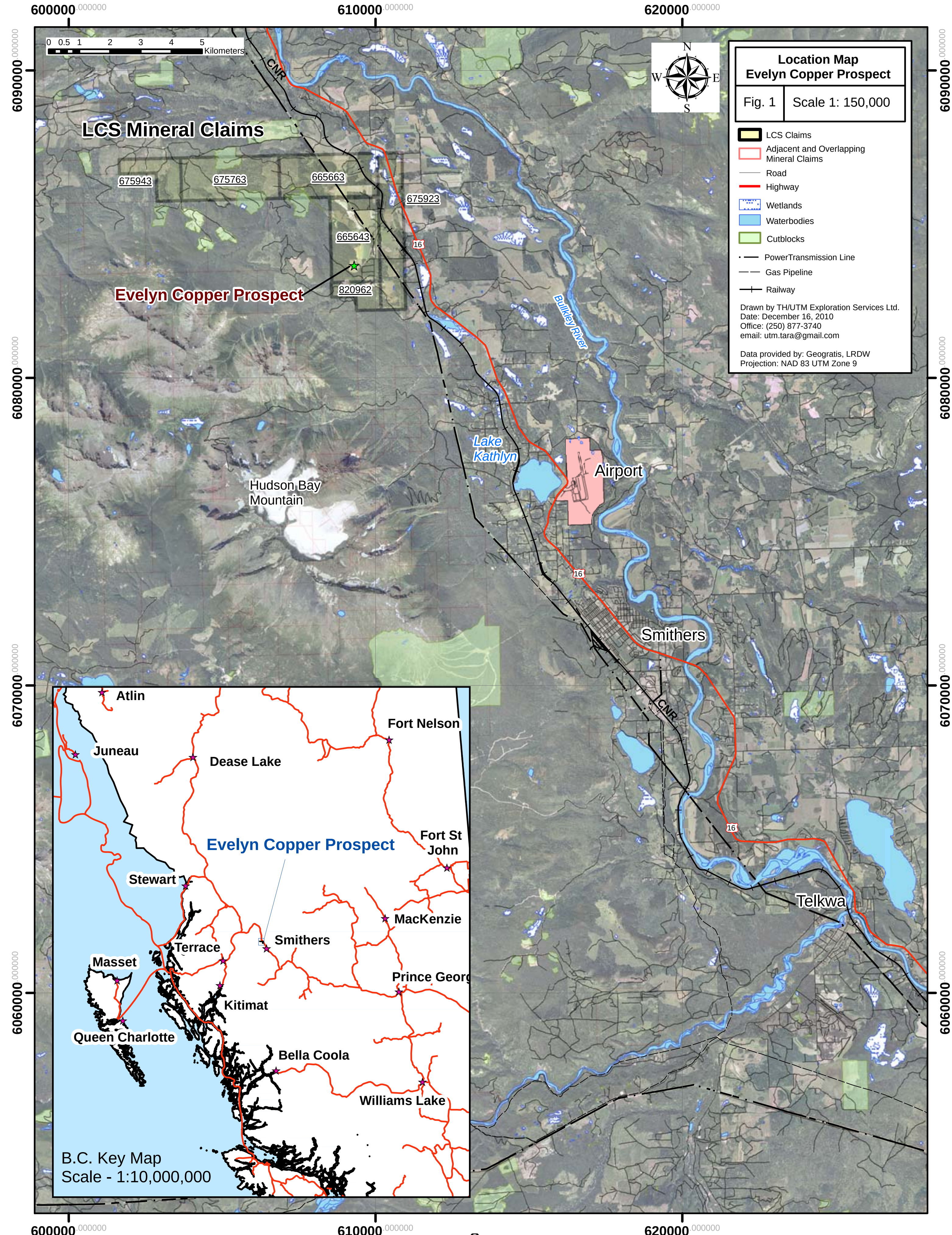
This preliminary report accompanies the logs of five diamond drill holes drilled to initiate testing of a newly discovered volcanic redbed copper occurrence. Diamond drilling was planned and carried out by the owners who provided site coordinates using a Garmin GPS 60. They also provided hole attitudes and a statement of costs. All the work was done in a small area on Lychak's farm. Drill hole collar elevations were obtained from Google Earth. After the work was completed, I was asked to log the core from five of the six holes drilled on the property.

PROPERTY DESCRIPTION AND LOCATION

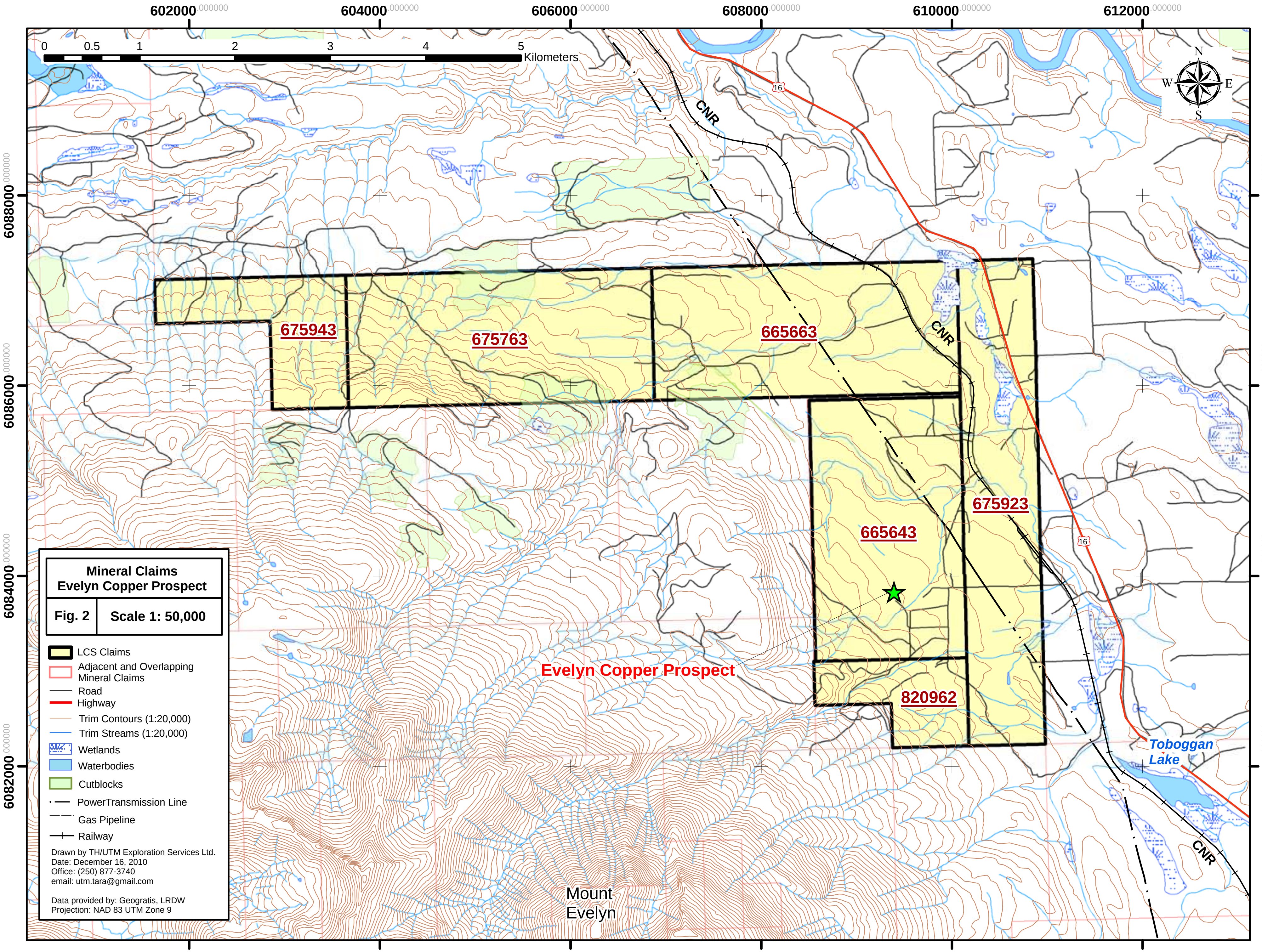
The Evelyn Copper Prospect (or Last Chance Saloon Copper Property) comprises six mineral claims covering 2027.15 hectares. The claims are listed in the table below and are shown in Figures 1, 2 and 3. The 2013 expiry dates shown below are conditional upon the acceptance of this report.

Tenure	Name	Recorded	Area in ha	Expiry
665643		2009/Nov/05	446.48	2013/Dec/31
665663	LCS	2009/Nov/05	446.25	2013/Dec/31
675763	LCS	2009/Nov/28	446.20	2013/Dec/31
675923	LCS	2009/Nov/28	409.25	2013/Dec/31
675943	LCS	2009/Nov/28	167.31	2013/Dec/31
820962	LCS	2010/July/18	111.66	2011/July/18

The claims are owned, unencumbered, by Stephen Fournier and Wesley Lychak, of Smithers, B.C., as equal partners.



Location Map
Evelyn Copper Prospect
Fig. 1
Scale 1: 150,000
LCS Mineral Claims
675943
675763
665663
675923
665643
820962
Evelyn Copper Prospect
LCS Claims
Adjacent and Overlapping Mineral Claims
Road
Highway
Wetlands
Waterbodies
Cutblocks
PowerTransmission Line
Gas Pipeline
Railway
Drawn by TH/UTM Exploration Services Ltd.
Date: December 16, 2010
Office: (250) 877-3740
email: utm.tara@gmail.com
Data provided by: Geogratis, LRDW
Projection: NAD 83 UTM Zone 9
Bulkley River
Lake Kathlyn
Airport
Hudson Bay Mountain
Smithers
Telkwa
CNR
16
Kilometers
600000
610000
620000
6090000
6080000
6070000
6060000
B.C. Key Map
Scale - 1:10,000,000
Atlin
Juneau
Dease Lake
Fort Nelson
Fort St John
Evelyn Copper Prospect
Stewart
MacKenzie
Terrace
Smithers
Masset
Prince Georg
Kitimat
Queen Charlotte
Bella Coola
Williams Lake



Mineral Claims
Evelyn Copper Prospect
Fig. 2
Scale 1: 50,000
LCS Claims
Adjacent and Overlapping Mineral Claims
Road
Highway
Trim Contours (1:20,000)
Trim Streams (1:20,000)
Wetlands
Waterbodies
Cutblocks
PowerTransmission Line
Gas Pipeline
Railway
Drawn by TH/UTM Exploration Services Ltd.
Date: December 16, 2010
Office: (250) 877-3740
email: utm.tara@gmail.com
Data provided by: Geogratis, LRDW
Projection: NAD 83 UTM Zone 9
0 0.5 1 2 3 4 5 Kilometers
675943
675763
665663
665643
675923
820962
Evelyn Copper Prospect
CNR
16
Toboggan Lake
Mount Evelyn
N
S
E
W
602000.000000
604000.000000
606000.000000
608000.000000
610000.000000
612000.000000
6082000.000000
6084000.000000
6086000.000000
6088000.000000

The copper discovery is in the southern part of mineral tenure 665643 and on District Lot 5441A, about 13 km in a direct line northwest of Smithers. Native copper is found in newly-exposed outcrop on this tenure at latitude 54° 53’ 21’’ North and 127° 17’ 41’’ West, UTM Zone 9 0609365E-6083815N (NAD83). The area is shown on NTS map 93L/14W (BCGS map 093L084). The elevation of the discovery outcrop is about 544 m above sea level and on the farm of Wesley Lychak. Five contiguous claims cover adjacent prospective areas (Figure 2).

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The discovery area is easily accessed by two-wheel drive vehicles from Smithers by way of Highway 16 West. From the Main Street/Highway 16 intersection in Smithers it is 5.3km to the Smithers airport turnoff and a further 8.8km to the Johnson/Owens Road turnoff (turning lane at Toboggan Creek Hatchery sign) at Evelyn, a total road distance from Smithers Main Street of 14.1km. From the turnoff, follow Johnson/Owens Road west across the railway tracks, then turn left on Pope Road and follow it around the sharp corner to Raufer Road. Turn right on Raufer Road and the first driveway on the right leads to Wesley Lychak’s shop and house. Copper is found in outcrop 50m north of the house. Several logging roads provide access to other parts of the claims area.

Visitors are asked to contact Mr Lychak before entering his property.

Weather data are collected at Smithers airport where average daily temperatures range from about -9°C in January to +15°C in July. Average snow depth reaches about 36cm in February and rainfall averages approximately354mm annually (Environment Canada, 2011).

Smithers has a population of about 5,600 and is the commercial centre of the Bulkley Valley. The town is served by daily flights to and from Vancouver by Air Canada Jazz and Hawkair. Central Mountain Air provides scheduled flights to Terrace and Prince George.

Highway 16, the CN railway and a 138kV power transmission line cross the claims. There is a CN railway siding 1.85 km east of the copper showing. There is also a small fish hatchery on Toboggan Creek, about 1.69 km east northeast of the showing and northeast of the railway siding.

The claims lie on the western side of the Bulkley Valley. They cover almost flat to moderately hilly farmland and wooded areas in the eastern and north-eastern claims. To the west and north-west, the claims extend up the forested lower slopes of Mount Evelyn. The claims range in elevation from about 450 m to 980 m above sea level. Deciduous and coniferous trees are common in the valley. Aspen, willow, alder, cottonwood and birch are dominant deciduous species. The valley conifers are mostly represented by pine, spruce and subalpine fir. Conifers dominate on the mountain slopes and in the northwestern claims area, where there has been extensive logging locally and the main species are spruce, subalpine fir, pine and hemlock.

HISTORY

The copper occurrence was discovered by Steve Fournier and Wesley Lychak in 2009. They recorded five mineral claims and did some prospecting and 155m of diamond drilling in four holes that year. In 2010 they recorded an additional claim and drilled a total of 145m in two diamond drill holes.

GEOLOGICAL SETTING

Regional Geology. The oldest rocks in the general area of the Evelyn copper prospect are island arc volcanic and sedimentary rocks of the Lower to Middle Jurassic Hazelton Group, which form a part of the accreted Stikine terrane. These rocks are followed in age by largely sandy successor basin formations of the Middle to Upper Jurassic Bowser Lake Group and the Lower Cretaceous Skeena Group that were deposited as sediments were shed from landmasses rising as Stikinia and other terranes collided with North America during Middle to Late Jurassic time. Continued subduction and pressure from advancing Pacific plates during Cretaceous-early Paleogene time resulted in the development of the Skeena fold and thrust belt and in an episode of igneous activity that formed the Bulkley plutonic suite and continental volcanic rocks of the Kasalka Group. A shift in Pacific plate movement from a northerly to a northwesterly direction in Eocene time was accompanied by a transtensional regime resulting in the episode of intense volcanism that emplaced the bimodal Ootsa Lake-Endako volcanic assemblages and the development of basin-and-range structures that account for the Bulkley Valley graben and adjacent fault-block mountain ranges (Tipper and Richards, 1976; Souther, 1992; Gabrielse and Yorath, 1992; Struik and MacIntyre, 2001; Crawford, et al., 2005; Massey, et al., 2005).

There are three major suites of granitic intrusive rocks in the region: the Topley plutonic suite (Late Triassic to Middle Jurassic), the Bulkley plutonic suite (Late Cretaceous) and the Nanika plutonic suite (Eocene), as outlined by Carter (1981). The Bulkley plutonic suite is represented by a northerly-trending series of intrusions that host, or are associated with, several porphyry copper-molybdenum systems including the Huckleberry mine and the molybdenum and tungsten-bearing system of the Davidson deposit.

Major faults in the area include faults associated with the Bulkley Valley graben and adjacent fault-block mountain ranges. There are also several major thrust faults related to tectonic plate collisions (Tipper, 1976; Massey, et al., 2005).

Local and Property Geology. The LCS mineral claims have yet to be specifically mapped and only one outcrop was seen during my visit to the claims. The claims are underlain by volcanic and sedimentary rocks of the Hazelton Group in the southern and western areas.

Sediments of the Bowser and Skeena Groups are mapped in the northern and eastern parts of the claims (Tipper 1976, Massey, et al., 2005, MacIntyre and L'Orsa, 2009). See Figure 3. In the copper discovery area, diamond drilling described in this report revealed a complex of seven or more hematitic and amygdaloidal basaltic flows apparently conformably underlain by a strikingly red hematitic andesite tuff. Native copper is present mainly in the uppermost basalt flow, the top of which has been removed by erosion. The basalt flow complex appears to reach a preserved thickness of about 40 metres in the discovery area. An attempt was made in the log of diamond drill hole LCS10-2 to subdivide this complex (Appendix 1). The tops of individual flows have more abundant amygdules and are generally more hematitic than the bottoms of overlying flows. Amygdule fillings are mostly calcite, but also may include chlorite, hematite, specularite (rims), quartz, probable zeolites and, at the top of the basalt complex, epidote. The results of a whole rock analysis of a relatively fresh sample, collected from the copper-bearing flow, plot in the basalt field on the total alkalis vs silica (TAS) diagram (analysis in Appendix 2). A thin section study of an unusually coarse part of the upper basalt flow labelled the rock a diabase (Appendix 3). The basalt flows are conformably underlain by a conspicuously red tuff that plots in the andesite field on the TAS diagram (analysis in Appendix 2).

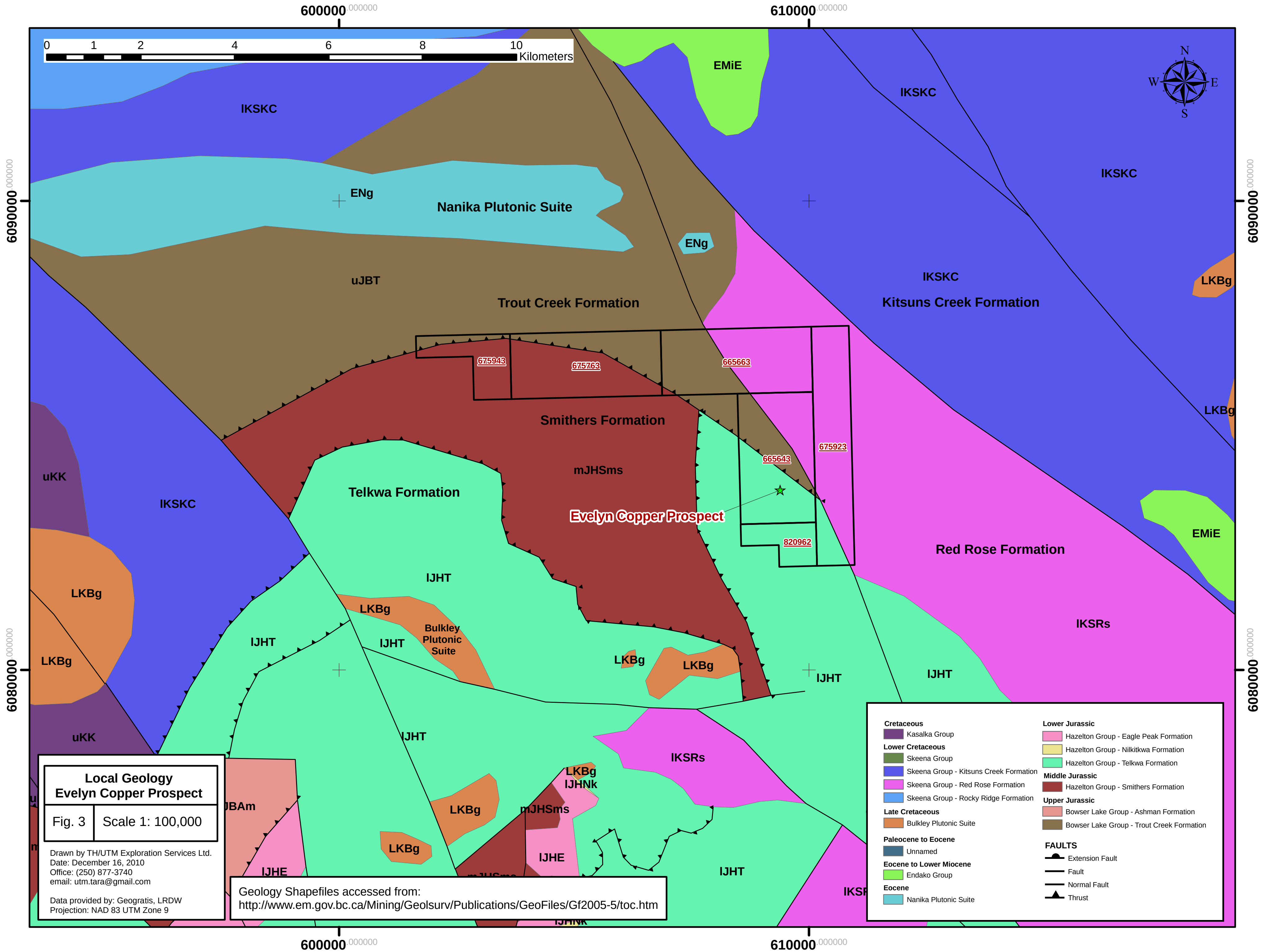
Calcite veins are ubiquitous in both basalt and red andesite tuff, but there are fewer veins in the andesite tuff. There are several generations of calcite veins. In some of the veins, calcite fluoresces red to red-orange under a short-wave ultraviolet lamp. Locally, iron carbonates are present with calcite. Probable zeolites are also associated with calcite in places. Minor clear quartz was noted in some of the calcite veins in the upper basalt flow, including the copper-bearing veins. Calcite-epidote-quartz- ± native copper veins are locally present in the copper-bearing flow and are found in newly-exposed outcrop at the LCS09-3/4 diamond drill site.

Several fault zones were seen in the core and slickensides are common on fractures. All fractures contain more or less calcite. A strong fault zone was noted in LCS09-4, including tectonic breccia. The breccia exhibits no evidence of significant hydrothermal fluid flow but is spatially associated with an abrupt uplift of the underlying red tuff.

All the drill holes ended in andesitic red tuff. See the drill logs in Appendix 1 for more detailed descriptions of these rocks.

DEPOSIT TYPES

The Evelyn copper prospect is a volcanic redbed deposit. These deposits are commonly, but not always (Cabral and Beaudoin, 2007), hosted by volcanic rocks and associated sediments deposited in a subaerial to shallow marine environment. For a concise outline of deposits currently assigned to this class, see Lefebure and Church (1996). There are several volcanic redbed prospects in the Smithers-Terrace area, an example of which is Kelly Creek on the Zymoetz (Copper) River (Beckett, 2004). Sustut Copper is a locally well known deposit of this type in the Omineca Mountains that contains an estimated


600000
610000
6090000
6080000
0 1 2 4 6 8 10
Kilometers
N
W
E
S
IKSKC
EMiE
ENg
Nanika Plutonic Suite
uJBT
Trout Creek Formation
Kitsuns Creek Formation
LKBg
675943
675763
665663
665643
675923
820962
Smithers Formation
mJHSms
Telkwa Formation
Evelyn Copper Prospect
Red Rose Formation
uKK
IJHT
Bulkley Plutonic Suite
IKSRs
IJHNk
IJHE
JBAm
Local Geology
Evelyn Copper Prospect
Fig. 3
Scale 1: 100,000
Drawn by TH/UTM Exploration Services Ltd.
Date: December 16, 2010
Office: (250) 877-3740
email: utm.tara@gmail.com
Data provided by: Geogratis, LRDW
Projection: NAD 83 UTM Zone 9
Geology Shapefiles accessed from:
http://www.em.gov.bc.ca/Mining/Geolsurv/Publications/GeoFiles/Gf2005-5/toc.htm
Cretaceous
Kasalka Group
Lower Cretaceous
Skeena Group
Skeena Group - Kitsuns Creek Formation
Skeena Group - Red Rose Formation
Skeena Group - Rocky Ridge Formation
Late Cretaceous
Bulkley Plutonic Suite
Paleocene to Eocene
Unnamed
Eocene to Lower Miocene
Endako Group
Eocene
Nanika Plutonic Suite
Lower Jurassic
Hazelton Group - Eagle Peak Formation
Hazelton Group - Nilkitkwa Formation
Hazelton Group - Telkwa Formation
Middle Jurassic
Hazelton Group - Smithers Formation
Upper Jurassic
Bowser Lake Group - Ashman Formation
Bowser Lake Group - Trout Creek Formation
FAULTS
Extension Fault
Fault
Normal Fault
Thrust

resource of 8,561,000 tonnes grading 1.615% copper at a 0.65% copper cut-off (Minfile, 2010, Wilton and Sinclair, 1988). The most economically significant deposits assigned to this general type mined to date are in the Keweenaw Peninsula area of northern Michigan, where native copper occurs in basaltic flows and interbedded conglomerates. Total production from the Michigan deposits between 1845 and 1967 is estimated at about 4,900,000 tonnes of copper from several mines (White, 1968).

The LCS claims also have potential for the occurrence of porphyry systems associated with intrusive rocks of the Bulkley plutonic suite.

MINERALIZATION

Native copper occurs in small amounts in calcite-±epidote-quartz veins, in thin calcite veins with minor quartz and in fracture-controlled disseminations. The coarsest copper (example: mass measuring 4mm x 1mm x 0.2mm) was noted in calcite veins with a little clear quartz. A fracture-controlled dissemination in LCS09-3 in the thin-section sample measures 0.8mm x 0.2mm on the cut surface. No sulphide minerals were recognized except just above the basal contact of the basalt flow complex in LCS10-1 where small amounts of an unidentified fine-grained metallic mineral (sulphosalt?) were noted. The host rocks are basalt at the eroded top of a complex of basalt flows. At the LCS09-3/4 drill site, native copper, malachite and a few calcite-epidote-quartz veins are also present in outcrop.

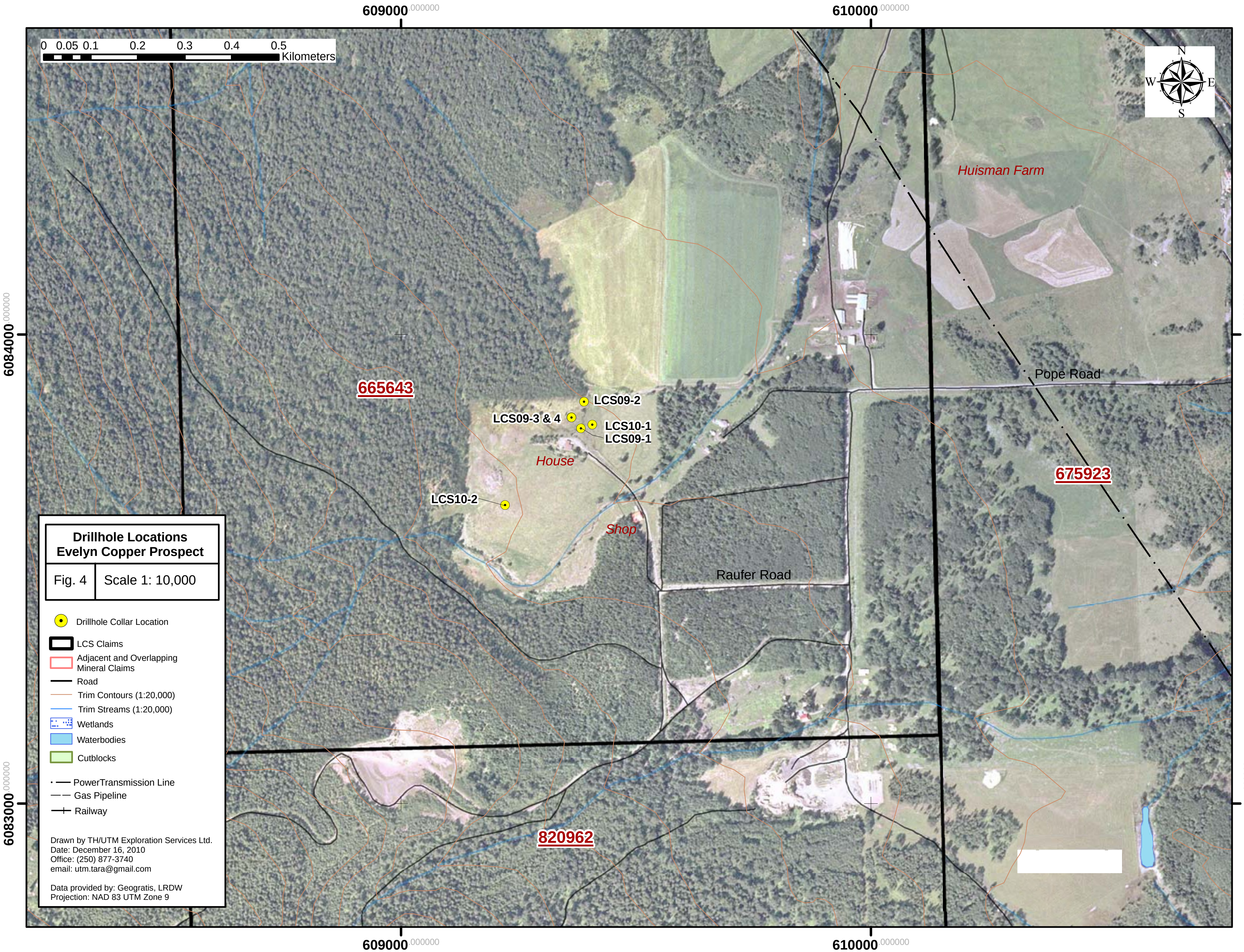
EXPLORATION

Aside from the exploration drilling covered by this report, the owners spent several days doing some reconnaissance prospecting without significant results. Outcrops are rare near the drill sites. Wes Lychak reported finding a pebble carrying a mass of native copper about 5mm wide in creek gravel very approximately 175m west of drill hole LCS10-2.

DRILLING

The work was done by Titan Diamond Drilling Ltd of Smithers, B.C. The drill runner was Steven Fournier. A Longyear 38 drill was used for the 2009 holes and a B20 drill was used in 2010. The core size is NQ. Water for drilling was collected from a farm dugout on site, except for hole LCS10-2, where water was obtained from a small creek. The core is stored in a secure steel container by Titan Diamond Drilling at their office at Evelyn, about 15 km northwest of Smithers. All the casing was pulled.

The core logged totalled 247.52 meters. The drill logs are in Appendix 1. Drill hole LCS09-1 has not yet been logged. However, this hole apparently cut the thickest part of the basalt complex intersected thus far and carries native copper.


609000
610000
0 0.05 0.1 0.2 0.3 0.4 0.5
Kilometers
N
S
W
E
Huisman Farm
6084000
Pope Road
665643
LCS09-2
LCS09-3 & 4
LCS10-1
LCS09-1
House
675923
LCS10-2
Shop
Raufer Road
Drillhole Locations
Evelyn Copper Prospect
Fig. 4
Scale 1: 10,000
Drillhole Collar Location
LCS Claims
Adjacent and Overlapping Mineral Claims
Road
Trim Contours (1:20,000)
Trim Streams (1:20,000)
Wetlands
Waterbodies
Cutblocks
PowerTransmission Line
Gas Pipeline
Railway
Drawn by TH/UTM Exploration Services Ltd.
Date: December 16, 2010
Office: (250) 877-3740
email: utm.tara@gmail.com
Data provided by: Geogratis, LRDW
Projection: NAD 83 UTM Zone 9
6083000
820962

SAMPLING

The core has not been assayed, but one outcrop grab and five short sawn core samples were collected by the owners and analysed by Acme Analytical Laboratories (Vancouver) Ltd, using an aqua regia digestion and ICP-MS (Group 1DX). Three of the samples yielded anomalous results for copper and some other metals. The grab sample results exceeded the upper copper detection limit of the method (10,000 ppm) and returned 23 g/t silver (Sample marked LCS-1 GRAB on Acme certificate SMI09000407.2). In addition, I had Acme run the same analytical method on the samples used in the whole rock analyses on background core from the copper zone in LCS09-3 (25.8 ppm Cu) and the underlying red andesite tuff in LCS10-1 (2.0 ppm Cu). Certificates of analysis are in Appendix 2.

ADJACENT PROPERTIES

The LCS claims adjoin a large package of mineral claims owned by Lions Gate Metals Inc. (MacIntyre, 2005) that covers areas of interest around the Davidson molybdenum deposit and north into the Evelyn area. The Davidson system is centered about 8.5km to the south of LCS diamond drill holes and includes the largest known undeveloped molybdenum deposit in Canada (resource estimate of 77.2 million tonnes grading 0.169% Mo at a 0.12% Mo cutoff) and associated epithermal deposits (Atkinson,1995, Bright and Jonson, 1976, Thompson Creek Metals, 2010). Several apparently volcanic redbed copper occurrences have been found in the Hudson Bay Mountain area including: Canadian Citizen, Smithers Copper and a vein on the Silver Lake claims group (Kindle, 1954). An old prospect once known as the Trixie should be within 1200m of the LCS showing. The prospect displays a small amount of malachite and returned an assay of 10% zinc (Lay, 1926, Kindle, 1954).

INTERPRETATION AND CONCLUSIONS

Native copper occurs in fractures with calcite, local epidote and minor quartz, and as fracture-controlled disseminations. The copper is found in the upper part of a basalt flow that may be the top unit of an eroded basalt flow complex. The remnants of an epidote zone containing native copper were found in outcrop at the LCS09-3 drill site and at the top of diamond drill holes LCS10-1 and LCS09-3. Small amounts of native copper also occur below that zone. The environment of deposition is subaerial or shallow marine and the underlying andesitic red tuff looks like the Eagle Peak Formation of MacIntyre, et al. (1994), earlier described as the Red Tuff Member of the Nilkitkwa Formation (Tipper and Richards,1976). This is a volcanic redbed copper deposit with economic potential that warrants a closer look.

In the area where the drilling was done, the top of the basalt flow complex, including parts of the copper-bearing zone, has been lost to erosion.

The rocks are not acid generating. Calcite is abundant and sulphides are extremely rare. No sulphides were noted in the copper zone.

More analyses remain to be done, not only to test for copper, but also to try to establish a geochemical signature that may be useful in a subsequent exploration program.

RECOMMENDATIONS

1. Geochemical (aqua regia digestion ICP-MS) analyses of the top two metres of drill holes LCS 09-1, 3 and 4 and of LCS 10-1 and 2 should be undertaken to test metals content and to help define a geochemical signature. Care must be taken to cut core across potential copper-bearing veins that may be at low angles to the core axis.

2. Log drill hole LCS09-1.

3. Carry out a reconnaissance geochemical program plus prospecting and mapping in selected areas.

REFERENCES

Atkinson, D., 1995. The Glacier Gulch (Hudson Bay Mountain or Yorke-Hardy) porphyry molybdenum-tungsten deposit, west-central British Columbia, *in* Schroeter, T.G., ed., Porphyry Deposits of the Northwestern Cordillera of North America: Canadian Institute of Mining, Metallurgy and Petroleum, pages 704-707.

Beckett, R., 2004. Summary Report, Kelly Project: Aumega Discoveries Ltd, company report, 25 pages plus maps.

Bright, M.J. and Jonson, D.C., 1976. Glacier Gulch (Yorke-Hardy), *in* Sutherland Brown, A., ed., Porphyry Deposits of the Canadian Cordillera: Canadian Institute of Mining and Metallurgy, Special Volume 15, pages 455-461.

Cabral, A.R. and Beaudoin, G., 2007. Volcanic red-bed copper mineralization related to submarine basalt alteration, Mont Alexandre, Quebec Appalachians, Canada: Mineralium Deposita, v. 42, no. 8, pages 901-912.

Carter, N.C., 1981. Porphyry Copper and Molybdenum Deposits West-Central British Columbia: B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 64, 150 pages.

Crawford, M.L., Crawford, W.A. and Lindline, J., 2005. 105 Million years of igneous activity, Wrangell, Alaska, to Prince Rupert, British Columbia: Canadian Journal of Earth Sciences, v. 42, pages 1097-1116.

Environment Canada, 2011.
http://www.climate.weatheroffice.gc.ca/climate_normals/results_e.html?StnID=487&autofwd=1

Fournier, S. and Lychak, W., 2010. Last Chance Saloon Copper Property: Private Report, 21 pages.

Gabrielse, H. and Yorath, C.J., 1991. Tectonic synthesis, *in* Gabrielse H. and Yorath C.J., eds., Geology of the Cordilleran Orogen in Canada: Geological Survey of Canada, Geology of Canada, no.4, pages 677-705.

Kindle, E.D., 1954. Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia: Geological Survey of Canada, Memoir 223, 148 pages.

Kirkham, R.V., 1969. A mineralogical and geochemical study of the zonal distribution of ores in the Hudson Bay Mountain Range, British Columbia: Unpublished Ph.D. dissertation, University of Wisconsin, Wisconsin, 152 pages.

Lay, D., 1927. Trixie *in* Annual Report of the Minister of Mines for the year ended 31st December 1926: Bureau of Mines, page A 131.

Lefebure, D. V. and Church, B. N., 1996. Volcanic Redbed Cu *in* Lefebure, D.V. and Höy, T., eds., Selected British Columbia Mineral Deposit Profiles, vol. 1 – Metallic Deposits: British Columbia Geological Survey, Open File 1996-13, pages 5-7.

MacIntyre, D. G., 2005, Geological Report on the Hudson Bay Mountain Property: 43-101 report for Aumega Discoveries Ltd., 74 pages.

MacIntyre, D.G., Ash, C.H., and Britton, J.M., 1994. Geological compilation, Skeena-Nass area, west central British Columbia (NTS 93E,L,M; 94D; 103G,H,I,J,O,P; 104A,B): British Columbia Geological Survey, map legend, Open File 1994-14, 28 pages.

MacIntyre, D.G. and L'Orsa, A.T., 2009. Geological, lithogeochemical and petrographic report on the Davidson property near Smithers, B.C.: Assesment report (30657) for Blue Pearl Mining Inc., 143 pages.

Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T., 2005. Geology of British Columbia: B.C. Ministry of Energy, Mines and Petroleum Resources, Geoscience map 2005-3.

Minfile, 2010. http://minfile.gov.bc.ca/ 094D 063.

Souther, J.G., 1991. Volcanic regimes, *in* Gabrielse H., and Yorath, C.J., eds., Geology of the Cordilleran Orogen in Canada: Geological Survey of Canada, Geology of Canada, no.4, pages 457-490.

Struik, L.C. and MacIntyre, D.G., 2001. Introduction to the special issue of Canadian Journal of Earth Sciences: The Nechako NATMAP Project of the central Canadian Cordillera: Canadian Journal of Earth Sciences, v.38, pages 485-494.

Thompson Creek Metals Co., 2010. Web site http://www.thompsoncreekmetals.com/s/Davidson.asp.

Tipper, H.W., 1976. Smithers map area, British Columbia: Geological Survey of Canada, O.F. 351 (geological map).

Tipper, H.W. and Richards, T.A., 1976. Jurassic stratigraphy and history of north-central British Columbia: Geological Survey of Canada, Bulletin 270, 73 pages.

White, W.S., 1968. The Native-Copper Deposits of Northern Michigan *in* Ridge, J.D., ed. Ore Deposits of the United States, 1933-1967: The American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., New York, v. 1, pages 303-325.

Wilton, D.H.C. and Sinclair, A.J., 1988. Ore petrology and genesis of a strata-bound disseminated copper deposit at Sustut, British Columbia: Economic Geology, v. 83, pages 30-45.

STATEMENT OF COSTS

Diamond Drilling LCS09-2,3 and 4;102.13m @ $88.56/m…… …$ 9,044.63
Excavator; site preparation and moves; 12 hrs @ $125/hr………… 1,500.00
Mob/demob: low bed and 5-ton Hiab; 4hrs @ $15/hr……………… 580.00
Drill core storage: 1.5 months @ $25/month………………………. 37.50
Analyses at Acme: 6 samples, Group 1DX…………………………. 242.24
Core saw rental from CJL: 2 days…………………………………... 20.00

Diamond Drilling LCS10-1 and 2; 145.39m @ $94.34/m………. 13,716.09
Drill moves, mob/demob; 5-ton Hiab; 18hrs @ $105/hr…………... 1,890.00
Snowplowing drill site: D6; 1hr @ $140/hr………………………... 140.00
Drill core storage: 12 months @ $25/month ……………………….. 300.00
Fournier and Lychak report preparation: 1.5 days @ $100/day……. 150.00

Consultant Costs: Thin section and report; Vancouver Petrographics. 241.39
Whole rock analyses, Acme: 2 samples; prep, analyses, surcharge… 171.96
Maps: Tara Holmes………………………………………………….. 300.00
Core logging and report: A. L'Orsa ………………………………… 2,000.00
TOTAL $30,333.81

STATEMENT OF QUALIFICATIONS

I, Anthony T. L’Orsa, P.Geo., independent geologist with a business address at 8858 Adams Road, Smithers, British Columbia, certify that:

1. I am a graduate of Tulane University, New Orleans, Louisiana, U.S.A., with the degrees of Bachelor of Science (1961) and Master of Science (1964) in geology.

2. I have practised my profession in mineral exploration since 1962 in western Canada, Australia and Mexico.

3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Licence 19157), a fellow of the Geological Association of Canada, a member of the Society of Economic Geologists and a member of the Society for Geology Applied to Mineral Deposits.

4. I am a qualified person, as defined in National Instrument 43-101.

Anthony L’Orsa, P.Geo.

Smithers, B.C., 15 January 2011

APPENDIX 1

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS09-2.**

Core Size: NQ. Drill: Longyear 38.

Location: NAD83 UTM 0609389E/6083857N**. Elevation:** 541m **Azimuth:** 184°. **Dip:** -60°. **Started:** November 2009**. Completed:** November 2009**.**

Length: 25m **Logged by:** A. L'Orsa

Meters			Description	Analyses in ppm					
From	To				Cu	Pb	Zn	Ag	Mo
0	6.10		Casing						
6.10	8.53		Brecciated coarse-grained hematitic basalt flow. Colour; shades of light grey to light olive greys. Local rust from iron carbonates. No sulphides. Hematite disseminated in basalt about 10%; local hematite in veins. Very small amounts of disseminated specularite. Includes fragments of iron carbonate + calcite veins and later calcite veins, plus minor fine-grained volcanics. Fragments generally angular. At least three carbonate events, including late breccia fillings. Calcite locally accompanied by very small amounts of clear quartz. No direct measurement of basal contact attitude, but see below.						
8.53	24.99 EOH		Andesitic red tuff. Dusky red. Includes a few rounded to angular fragments of a darker red tuff, mostly less than 3mm diameter and common soft white calcareous fragments (including altered feldspar?). Few amygdules with calcite or chlorite fillings. No sulphides. Rare, very fine-grained disseminations of specularite. Thin (most < 1mm wide), commonly discontinuous, white calcite veins common, many of which are subparallel to core axis, cut and offset by a set of calcite veins at high angles to CA. Zones of abundant large (cm-scale) calcite veins at top contact and at 9, 13.7-14 and 18.3-20m. Slickensides on vein walls beside (all?) calcite veins; multiple sets of slickensides up to 90° from each other. Fault with gouge at 17.4m appears to be at 75° to CA. Calcite vein, 40° to CA and 4cm wide at 5cm below top contact of red tuff, suggests attitude of this contact.						
			RQD for this hole is generally very poor to poor.						

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS09-3.**

Core Size: NQ. Drill: LY38.

Location: NAD83 UTM 0609363E/6083822N**. Elevation:** 545m **Azimuth:** 202°. **Dip:** -48°. **Started:** November 2009**. Completed:** November 2009**.**

Length: 65.85m **Logged by:** A. L'Orsa

Meters			Description		Analyses in ppm				
From	To				Cu	Pb	Zn	Ag	Mo
0	3.66		Casing						
3.66	9.30		Amygdaloidal basalt flow. Colour: medium grey. Minor rust. Amygdule distribution varies and locally amygdules are absent. Generally coarse-grained and hematitic. Thin section cut at 5.18m where flow is coarsest-grained; petrographer concluded rock is a diabase (report attached). A gradational intraflow contact between coarse and finer-grained zones at about 75° to core axis (CA). Small amounts of fracture-controlled (eg ±35° CA) disseminated native copper noted (eg 0.8 x 0.2mm). Several generations of calcite veins. Few epidote ±calcite veins (eg ≤5mm wide, 25° to CA; one in thin section) cut and are cut by calcite veins (eg 60° CA, ≤10mm wide). Amygdule fillings calcite>chlorite. Some amygdules are concentrically zoned. No magnetite detected. No sulphides noted. Dusky red hematite disseminated ≤20% and locally found in small, irregular veins. Specularite (?) rare, fine-grained, disseminated. Fault zone 5.3-7.8m; fault 35° CA at 6m; rock locally brecciated, local gouge, locally extremely soft. RQD poor to very poor.						
			Whole Rock Analysis; 7.9m. Freshest rock this unit. Includes a few discontinuous calcite veinlets up to 0.1mm wide. Rock plots in the basalt field on the TAS diagram. SMI10000806.1						
			Geochemical Analysis; whole rock analysis sample at 7.9m. AR digestion; ICP-MS.		25.8	2.1	60	<0.1	0.2
			Geochemical Analysis: 8.38-8.50m. By owners. Mkd LCS-DRILL-4 on certificate SMI09000407.2. Core sawn. AR digestion; ICP-MS		231	3.6	81	<0.1	0.3
9.30	25.54		Amygdaloidal hematitic flow; blackish red to medium dark grey in colour. Most amygdules have white calcite fillings; a few contain quartz or quartz and calcite; hematite also present in places. Locally amygdules comprise ≤30% of rock; a few ≤15mm diameter. Some amygdules are concentrically zoned. A linear amygdule concentration at 20° to CA noted. Fault zones: 10.8m, ±60° CA, 6cm wide plus associated soft rock; 12.8m, 1cm gouge, 45° CA; 25.3-25.45m, includes gouge, 45°? CA. Sulphides apparently absent.						

Evelyn Copper Prospect LCS Claims

Diamond Drill Hole: LCS09-3. Core Size: NQ. Drill: LY38.

Meters			Description		Analyses in ppm				
From	To				Cu	Pb	Zn	Ag	Mo
25.54	62.79		Interbedded hematitic basaltic amygdaloidal flows continue, including the top coarse-grained unit. Colours include dark to medium dark greys, brownish greys, and blackish red. Flow tops carry the most amygdules (up to 30%) and the most hematite. Amygdule fillings are mostly calcite, but some carry calcite and clear quartz, and locally hematite. Linear concentrations of amygdules cross the core at 40° to CA (30.5m). Hematite occurs mainly as disseminations and as small veins (wispy locally) and small masses. Very fine-grained disseminated specularite(?) gives rock a peppery look in places and locally forms rims around red hematite. Minor magnetite occurs in a few spots, eg 36.7m. Calcite veins are common; some include clear quartz on walls and minor feldspar in filling. Minor gypsum(?) also present in some calcite veins. No sulphides evident. Fault zones: 25.3-25.45m fault at 45° (?) CA with breccia and gouge marks top contact of upper flow; 35.4-35.8 breccia, many calcite veins, top of breccia ~80° to CA, base 35° to CA; 38.4m breccia and calcite veins at 45° to CA, cut by calcite veins subparallel to CA, main fault 45mm wide; 39.8m hematite-rich fault + breccia at 60° CA marks top of a flow; at 41.8m one cm of gouge plus adjacent soft rock marks another flow top; 46m hematitic breccia at 45° to CA with fragments (including calcite) in a fine-grained red hematite matrix, 1cm wide; 52.7m breccia 5cm wide at 40° to CA with epidote and flow fragments plus calcite veins; 54m narrow breccia 30° to CA with angular volcanic fragments and rock flour matrix; 57-58m many white calcite veins plus breccia ~subparallel to CA; 61.4-62.8m many calcite veins and local breccia. Slickensides are found on walls of innumerable small fractures commonly occupied by calcite veins. Some fracture planes display multiple directions of slickensides up to 90° to each other. RQD fair to very poor.						
			Geochemical analysis: grab by owners at 30.4m; marked LCS-DRILL-5 on Acme certificate SMI09000407.2 in Appendix 2. AR digestion; ICP-MS		20.2	4.6	30	<0.1	0.5

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS09-3. Core Size: NQ. Drill: LY38.**

Meters			Description	Analyses in ppm					
From	To				Cu	Pb	Zn	Ag	Mo
62.79	65.84 EOH		Andesitic red tuff. Top contact marked by a tectonic breccia 5cm wide and 25° to core axis. Tuff colour is dusky red. Fragments include a soft white mineral (not calcite and hardness <3), and a few feldspars. Few amygdules with calcite or chlorite fillings. Thin (most < 1mm wide), commonly discontinuous, white calcite veins common, many of which are subparallel to core axis. In places, calcite veins also contain minor amounts of an unknown clear to white nonmetallic mineral, hardness about 4.5. Slickensides common on fracture planes beside calcite veins. No sulphides.						

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS09-4.**

Core Size: NQ. **Drill:** Longyear 38.
Location: NAD83 UTM 0609363E/6083822N. **Elevation:** 545m **Azimuth:** 202°. **Dip:** -83°. **Started:** November 2009. **Completed:** November 2009.
Length: 11.28 m **Logged by:** A. L'Orsa

Meters					Analyses in ppm				
From	To		Description		Cu	Pb	Zn	Ag	Mo
0	3.66		Casing						
3.66	5.91		Basalt flow. Few amygdules. Generally coarse-grained and hematitic. Generally rusty from weathering of iron carbonates in veinlets and disseminations. No sulphides noted. White calcite in veinlets and disseminations; few vugs in veinlets with euhedral calcite crystals. No magnetite noted. Hematite disseminated ±10%. Native copper, seen in nearby outcrops, may be present but not obvious. Rock locally brecciated, locally extremely soft; very poor RQD.						
5.91	8.63		Mixed blackish-red hematitic vesicular flow and tectonic breccia. Top contact 65° to core axis. Breccia includes fragments of white calcite veins, red tuff and very few fragments of clear to white quartz. The fragments range from very angular to subrounded (at least). Local consolidated rock flour. Strong fault zone 8.23 to 8.62m, part of which is at 10° to core axis. Sulphides apparently absent. Minor disseminated specularite.						
8.63	11.28 EOH		Andesitic red tuff. Colour is dusky red (±Munsell 10R 3/4). Includes rounded to angular fragments of a darker red tuff, mostly < 3mm and about 3% locally. Few amygdules with calcite or chlorite fillings. Thin (most < 1mm wide), commonly discontinuous, white calcite veins ubiquitous, many of which are subparallel to core axis. Slickensides on some fracture planes beside calcite veins.						
			Geochemical analysis by owners: 8.69-8.90 metres (21cm). AR digestion; ICP-MS		5.0	31.1	134	<0.1	0.2

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS10-1**

Location: NAD83 UTM 0609405E/6083808N. **Collar Elevation:** 543m. **Azimuth:** . **Inclination:** 90°
Length: 96.62 **m.** **Core Size:** NQ. **Drill:** B20. **Started:** June 2010. **Completed:** June 2010. **Logged by:** A. L'Orsa

Metres			Description	
From	To			
0	6.7		Casing	
6.7	17.68		Hematitic basalt flow. Colour generally light grey to pale yellowish brown. Amygaloidal to massive. Amygdules are ≤12mm wide, generally calcite-filled, but locally they have chlorite rims and calcite fillings or are filled with chlorite or include hematite with calcite or (at top) are epidote-filled. Locally amygdules comprise >10% of the rock. Feldspar laths can exceed 2mm in places. Hematite is disseminated (>10% locally) and occurs in a few veins. Specular hematite occurs in fine-grained disseminations ≤1% and locally forms rims around disseminated red hematite. Looks like the same basalt that was sampled for a whole rock analysis in LCS09-3. No sulphides and no magnetite detected. Small amounts of native copper occur in calcite-epidote-quartz veins ≤1 cm wide and at low angles to CA in top few cm of hole. Broken core at top, but epidote zone appears to end by 7 m. Very little copper was found below the epidote in calcite-quartz veins up to about 2mm wide and 20-70° to CA. Example at 8.2m: white calcite>> clear quartz vein up to 2mm wide and subparallel to CA with a mass of native copper measuring 4 x 1 x 0.2mm and another mass of copper of similar size nearby in same vein. A few specks of copper were noted in a hematite vein that cuts some calcite-quartz veins, all cut by a calcite vein at 15° to CA. Two generations of Cu veins were seen plus a few very fine-grained disseminations (up to about 0.3mm). This hole was not assayed. Calcite veins are common and some fluoresce red to red-orange. Locally the veins also contain minor clear quartz and also red hematite in places. Probable zeolites (laumontite/leonhardite) are present in some calcite veins. A strong zone of calcite veins occurs at 7-7.9m, parallel to CA; vuggy with euhedral calcite crystals and a red-orange fluorescence. Slickensides are common on fractures, including calcite vein walls. Fault zone 14.4-16.67m, soft rock, discontinuous; base 50° CA. Bedding: sharp, slightly irregular contact at 17.68m, 20° to CA, between massive pale yellowish brown flow (above) and a dusky red hematitic highly amygdaloidal (≤30%) flow top with abundant disseminated hematite and a few hematite veinlets. This flow is underlain at 17.68m by a dusky red hematitic flow with up to 30% amygdules at the top. The contact is sharp, slightly irregular, 20° to CA and marked by a 1mm-wide band of hematite.	

Metres			Description	
From	To			
17.68	30.27		Interbedded hematitic amygdaloidal basaltic flows. Not differentiated. Colours; shades of grey, yellowish brown to dark reddish brown to dusky red. Disseminated red hematite, 7 to 30%, concentrated especially in upper parts of individual flows. Disseminated chlorite in places; eg 3%, but up to 15%. Amygdules concentrated mainly in upper parts of flows. Calcite-filled amygdules occupy up to 30% of core in places and reach up to 15mm in diameter (eg 27.7m; calcite fillings plus a pale green mineral, prehnite?, plus local chlorite). Some amydules have hematitic rims and some contain minor hematite. No pyrite and no magnetite detected. Small amounts of an unidentified grey metallic mineral with a grey streak occur as disseminations and masses in a zone 8cm long by 1cm wide and 55° to subparallel to CA just above the basal contact. Calcite veins are ubiquitous. Some display a red fluorescence. Lesser amounts of iron carbonates are also present in some veins and amygdules, as are probable zeolites. There are at least two generations of calcite veins. The first generation comprises the thickest veins (1cm wide in places) and they cut the core generally at high angles to the CA. The second calcite vein event comprises generally <1mm veins that cut the core at low angles to CA. Examples: 1mm wide veins 70° CA are cut by <1mm veins 20° CA at 25.3m and veins up to 1cm wide at 30°-05° to CA are cut by veins <1mm wide subparallel to CA at about 28.5m. And there are local high concentrations of calcite veins, eg at: 23.16-23.71m, 0-90° CA. Just above the basal contact, the late calcite veins fluoresce red. Evidence of faulting is widespread. Probably all fractures exhibit slickensides. Main faults: zone about 6cm wide with minor gouge at 22.3m, 60° to CA; 23.16m, 2cm gouge plus adjacent soft rock, 40° CA. Tectonic breccia 1cm wide at 70° CA with massive white calcite filling at 28.3m. Basal contact is irregular; 15°(?) to CA. Picked at 30.27m but zone starts about 28.8m where rounded to subrounded fragments of underlying red tuff displaying hematitic reaction rims were first noticed in the basal flow. Geochemical analysis by owners at 29.57m on next page (Acme SMI09000407.2).	

Evelyn Copper Prospect LCS Claims

Diamond Drill Hole: LCS10-1. Core Size: NQ. Drill: LY38.

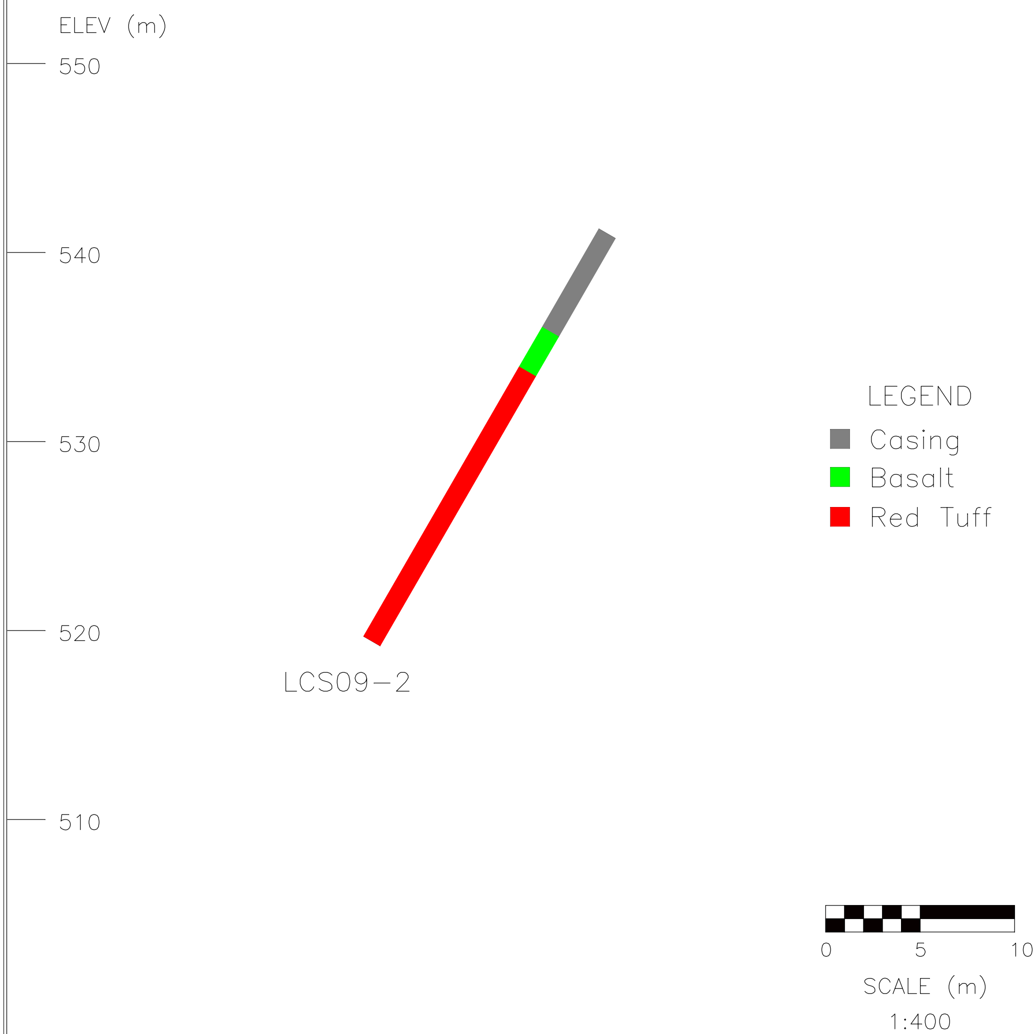
Meters				Analyses in ppm					
From	To		Description		Cu	Pb	Zn	Ag	Mo
30.27	96.62 EOH		Andesitic red tuff. Colour is dusky red (± Munsell 10R 3/3). Generally fine-grained with a few coarse angular to rounded reddish tuff fragments (e.g. 1.5mm). Other fragments include angular white calcareous clasts up to 10 %; [angular altered (soft) feldspar(?) crystals.] Chlorite disseminated and rare. Local very fine-grained pyrite? There is a low magnetic response in places. **Whole rock analysis**; 32.61m; marked 10-1/107; Acme certificate SMI10000806.1. Sample plots in the andesite field on the TAS diagram. Sample looks fresh but includes a few discontinuous calcite veins up to 0.1mm wide. Fine-grained disseminated calcite common in matrix. Discontinuous white calcite fracture fillings are abundant; some fluoresce red. Fewer calcite veins than in basalt flows above. Vein sets include veins 70-90° CA and up to 6cm wide, plus local breccia filling, and <1mm wide and 25° CA. Around 42.11m, a 4cm-wide zone of several veins crosses core at 45° CA and includes local breccia with calcite filling. At 44.81-45m, white calcite veins up to1cm wide run subparallel to CA. Examples near the bottom of the hole include lensy calcite vein up to 5mm wide at 55° CA at 87.36m accompanied by sympathetic calcite veins; 3cm-wide swarm of calcite veins subparallel to CA for 25cm along core around 96m. A fault cuts core at 55° to axis at 40 m with 5mm gouge. 47.24-47.85 m badly broken core. Discontinuous zone of faults, 65-70° CA 68-90.5m, includes sections of soft rock and a 3cm-wide brecciated calcite vein 60° CA, with gouge and rock flour filling at 77.42m. Minor talc is present in places.						
			Geochemical analysis; whole rock sample at 32.61m. AR digestion; ICP-MS		2.0	51.3	127	<0.1	<0.1
			Geochemical analysis at 29.57m mkd LCS-DRILL-2; certificate SMI09000407.2. ICP-MS		896	7.9	212	0.8	0.3
			Geochemical analysis at 39.33m mkd LCS-DRILL-1; -- "--; AR digestion; ICP-MS		42.1	12.0	51	<0.1	0.2
			RQD for this hole is generally poor to very poor. Core recovery is excellent.						

Evelyn Copper Prospect LCS Claims **Diamond Drill Hole: LCS10-2**

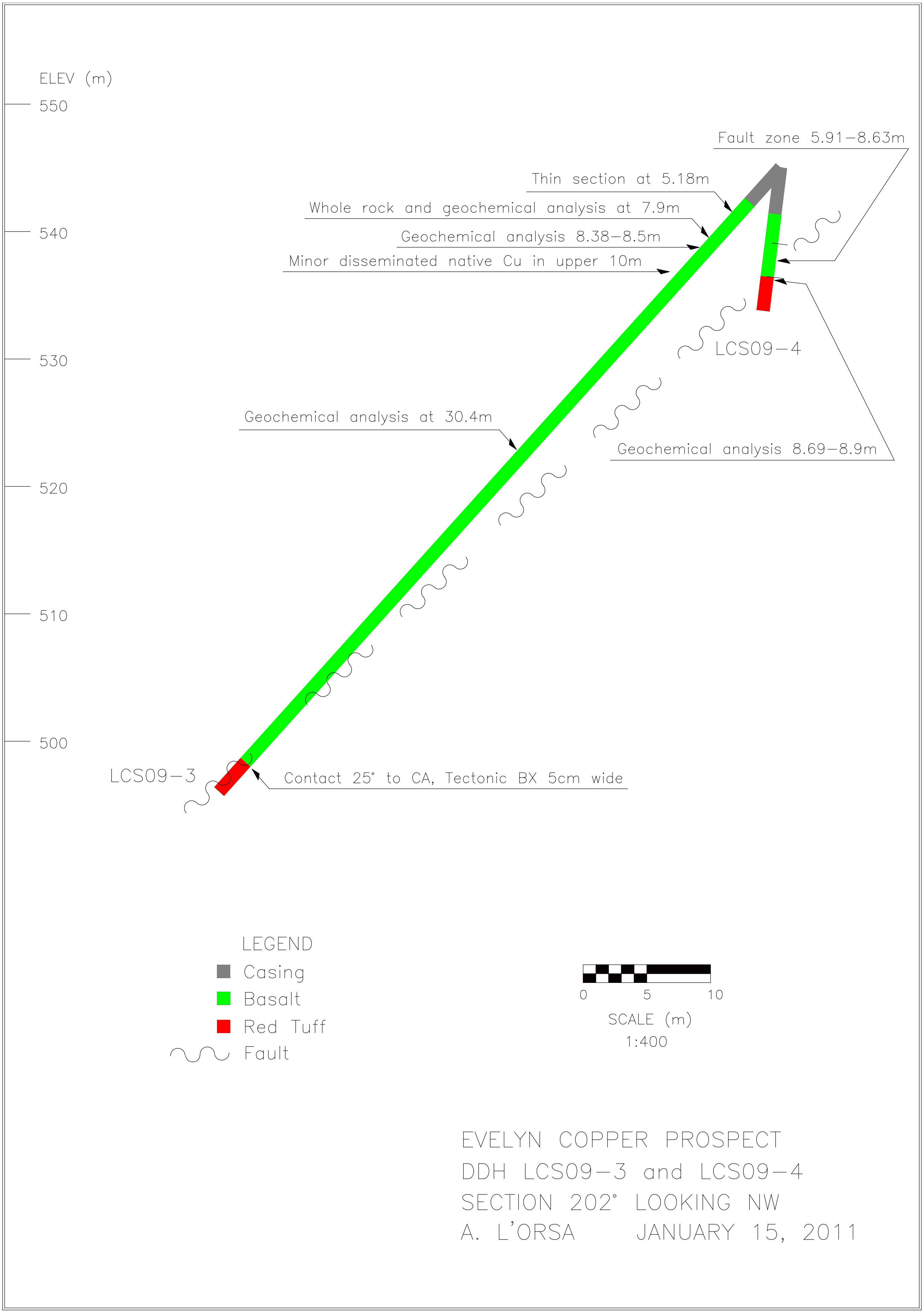
Location: NAD83 UTM 0609220E/6083638N. **Collar Elevation:** 561m. **Azimuth:** 0. **Inclination:** 90°
Length: 48.77 **m.** **Core Size:** NQ. **Drill:** B20. **Started:** June 2010. **Completed:** June 2010. **Logged by:** A. L'Orsa

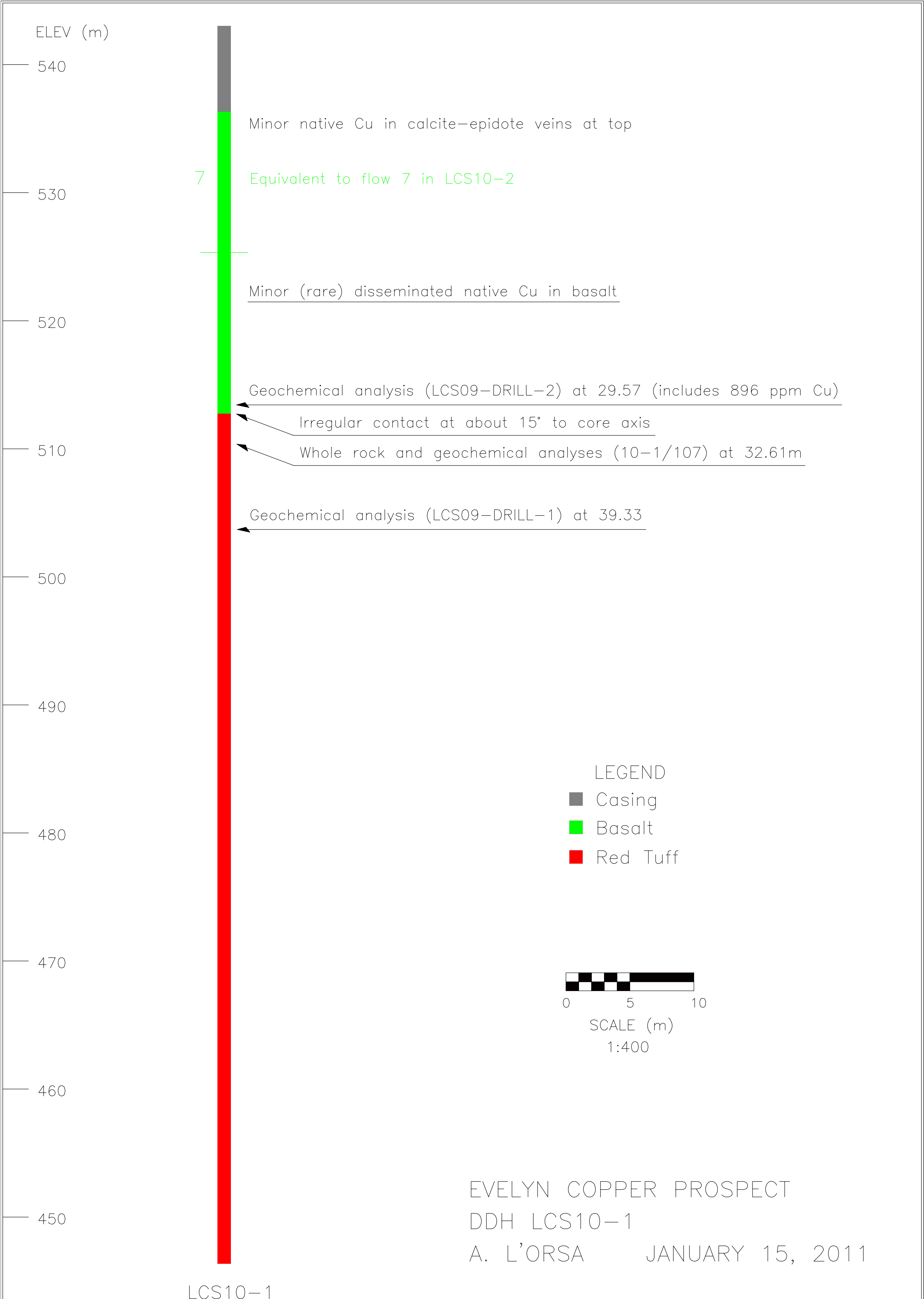
Metres			Description	
From	To			
0	11		Casing. *This log includes a tentative breakdown of the basalt flow complex. Some contact picks debateable.*	
11	17.43		Basalt flow 7. Coarse-grained. Colour brownish grey to greyish red. Few amygdules, especially near base, calcite-filled. Top of flow lost to erosion. Disseminated hematite up to 20%. Disseminated chlorite about 5% in places. Small amounts of magnetite locally. Few calcite>>quartz veins, including 30° to core axis (CA). Basal contact 60° to CA. Fault 11.28-11.37m, 50° CA; gouge and soft rock. Rock bleached to 10cm above. Resembles copper-bearing basalt at top of diamond drill holes LCS09-3 and LCS10-1, but no copper seen.	
17.43	20.3		Basalt flow 6. Dusky red hematitic amygdaloidal flow top. Brownish grey below. Amygdules, up to ~15mm wide and up to 20%, mostly calcite-filled, but some include chlorite. A few pipe amygdules. Amygdules rare below 18.6m. Calcite-hematite vein, 7mm wide and 40° to CA. Calcite vein with unidentified green mineral, 1cm wide and 70° to CA. Basal contact may be 50° to CA.	
20.3	22.1		Basalt flow 5. May be a display of intraflow movement? Amygdules at top; generally <5mm (to ~10mm) and about 10%; gone by 21.55m. Calcite fillings. Hematitic top. Calcite veins; eg ≤ 2mm wide and 0° CA.	
22.1	25.05		Basalt flow 4. Amygdaloidal (to 10%, few >10mm) hematitic top. Amygdules almost gone by 23.65m. Few iron carbonate plus calcite veins up to 1.5cm wide and at 50° CA, cut by white calcite vein that is 1cm wide and at 50° CA. Basal contact irregular, 40°? CA.	
25.05	26.61		Basalt flow 3. Amygdaloidal (amy. about 5mm wide and 20%) hematitic top. Few amygdules 26.06-26.36m. General colour brownish grey. Basal contact 45° CA.	
26.61	28.10		Basalt flow 2. Amygdules up to 30% in top. Dusky red hematitic top; medium dark grey below. Weakly magnetic locally. Few calcite veins 0 to 80° CA. Impressive red zeolite(??)>>calcite-filled irregular cavities, dimensions of several cm. Fault zone at base; gouge, broken, slickensides 75° CA.	
28.10	32.77		Basalt flow 1. Amygdaloidal hematitic flow(s); dusky red. Abundant amygdules in top 61cm, then few to 30.48 and then abundant again. Carbonate vein examples: 31.46m, 3cm wide and 45° CA; 31.61m, 1.5cm wide calcite + iron carbonate and 15°CA; 31.8m, 1.5cm wide carbonate + hematite at 70° CA. Broken core at basal contact with red tuff; contact attitude unknown.	

Metres			Description	
From	To			
32.77	48.77 EOH		Andesitic red tuff. See whole rock analysis from LCS10-1. Colour is generally dusky red (± Munsell 10R 3/3). Rock is fine-grained with a few coarse tuff fragments, angular to rounded; lapilli (≤2.5cm) are rare. Fragments include a pale red tuff with quartz (1), dark green chloritic clasts and white ±calcareous fragments. Vague mottled layering 65° CA 41.75-42m and locally below. Closely-spaced fractures in multiple directions with slickensides also in multiple directions. Fractures coated by thin discontinuous layers of talc and small amounts of calcite. Talc very common in this hole. Minor disseminated calcite. Calcite veins common in places; eg 36.79-37.5 mostly <1mm wide veins; 39.32-42.5m calcite veins up to 2cm wide at 25°-35° and 65° CA. Includes discontinuous gash veins. Rock is crumbly in many section; RQD poor to very poor. Recovery excellent.	

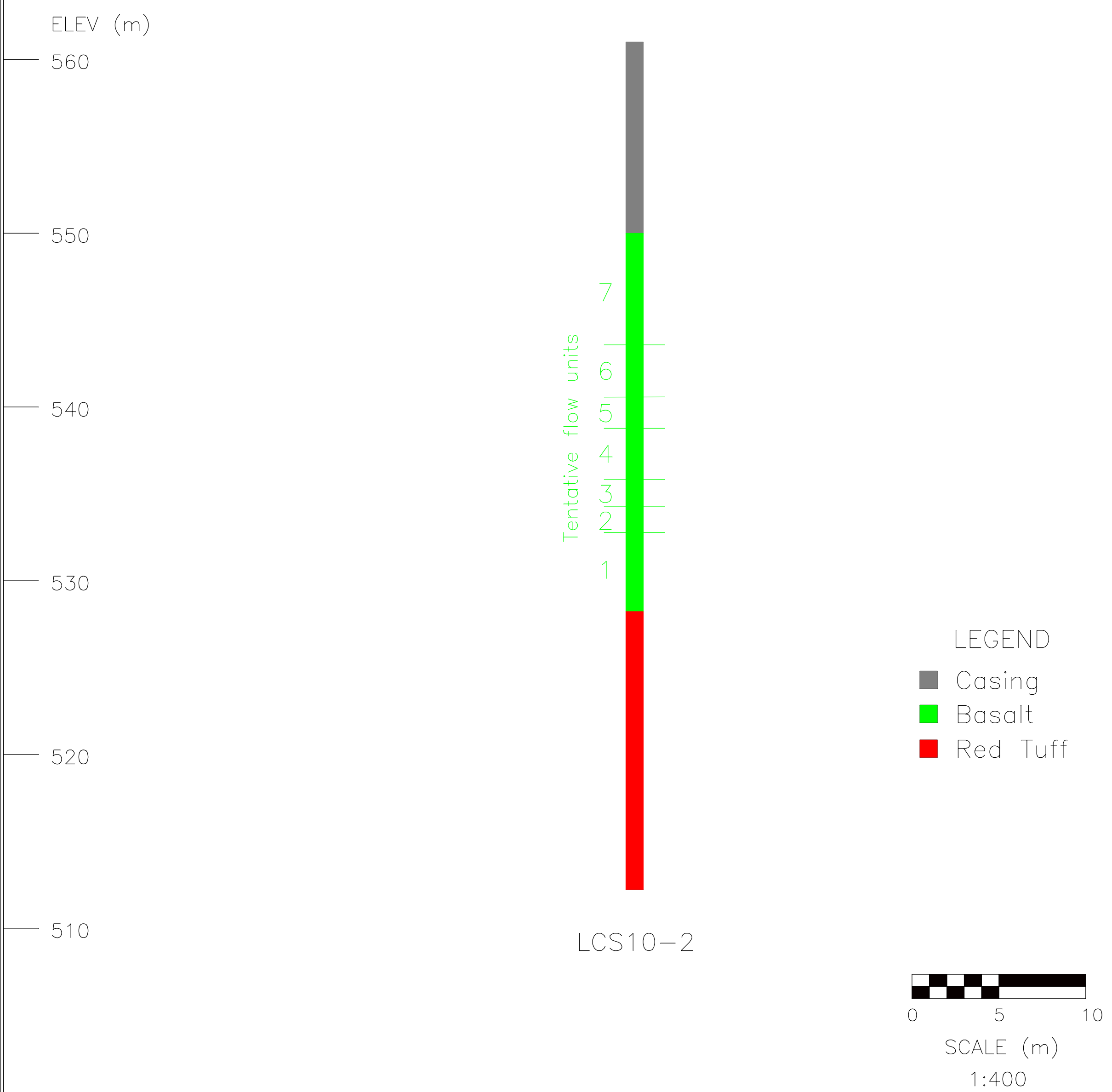


EVELYN COPPER PROSPECT
DDH LCS09-2
SECTION 184° LOOKING WEST
A. L'ORSA JANUARY 15, 2011


ELEV (m)
550
540
530
520
510
500
Fault zone 5.91–8.63m
Thin section at 5.18m
Whole rock and geochemical analysis at 7.9m
Geochemical analysis 8.38–8.5m
Minor disseminated native Cu in upper 10m
LCS09–4
Geochemical analysis at 30.4m
Geochemical analysis 8.69–8.9m
LCS09–3
Contact 25° to CA, Tectonic BX 5cm wide
LEGEND
Casing
Basalt
Red Tuff
Fault
0
5
10
SCALE (m)
1:400
EVELYN COPPER PROSPECT
DDH LCS09–3 and LCS09–4
SECTION 202° LOOKING NW
A. L'ORSA JANUARY 15, 2011



EVELYN COPPER PROSPECT
DDH LCS10–1
A. L'ORSA JANUARY 15, 2011



EVELYN COPPER PROSPECT
DDH LCS10-2
A. L'ORSA JANUARY 15, 2011

APPENDIX 2

Client: Titan Diamond Drilling Ltd.
9131 Evelyn Station Rd.
Smithers BC V0J 2N1 Canada

AcmeLabs

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Project: LCS-09
Report Date: December 06, 2009

CERTIFICATE OF ANALYSIS

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
LCS-1 GRAB	Rock	0.76	0.3	>10000	14.0	70	21.5	46.7	15.2	1427	3.14	2652	0.2	1.2	0.1	37	0.6	0.5	<0.1	157	7.22
LCS-DRILL - 1	Drill Core	0.41	0.2	47.1	12.0	51	<0.1	162.5	45.8	1368	5.74	6.1	<0.1	1.4	0.1	210	0.1	0.5	<0.1	130	6.34
LCS-DRILL - 2	Drill Core	0.34	0.3	896.2	7.9	212	0.8	121.7	39.4	1291	4.72	10.5	0.3	1.9	0.1	88	0.8	0.4	<0.1	168	7.79
LCS-DRILL - 3	Drill Core	0.58	0.2	5.0	31.1	134	<0.1	8.5	9.4	613	2.83	16.6	0.2	0.6	0.7	112	0.6	2.3	<0.1	44	2.60
LCS-DRILL - 4	Drill Core	0.35	0.3	231.3	3.6	81	<0.1	118.9	52.2	2310	7.13	6.6	<0.1	<0.5	0.1	272	0.3	2.3	<0.1	248	5.26
LCS-DRILL - 5	Drill Core	0.70	0.5	20.2	4.6	30	<0.1	65.2	22.1	1036	4.10	12.4	0.4	1.0	<0.1	72	0.7	1.2	<0.1	224	9.78

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Client: **Titan Diamond Drilling Ltd.**
9131 Evelyn Station Rd
Smithers BC V0J 2N1 Canada

Project: LCS-09
Report Date: December 06, 2009

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	7AR	7AR	7AR
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Mo	Cu	Pb
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.001	0.001	0.01
LCS-1 GRAB	Rock	0.018	2	139	0.75	59	0.031	4	1.32	0.058	0.01	<0.1	2.80	13.4	<0.1	<0.05	4	<0.5	<0.001	6.770	<0.01
LCS- DRILL - 1	Drill Core	0.024	1	99	3.77	129	0.043	9	5.79	0.494	0.37	<0.1	<0.01	16.1	<0.1	<0.05	8	<0.5	N.A	N.A	N.A
LCS- DRILL - 2	Drill Core	0.019	1	183	2.68	67	0.083	7	2.06	0.081	0.03	<0.1	0.09	17.6	<0.1	<0.05	7	<0.5	<0.001	0.085	<0.01
LCS- DRILL - 3	Drill Core	0.001	2	5	0.93	122	0.006	3	0.99	0.059	0.06	<0.1	<0.01	8.7	<0.1	<0.05	2	<0.5	N.A	N.A	N.A
LCS- DRILL - 4	Drill Core	0.036	2	156	3.12	136	0.023	7	2.54	0.024	0.03	<0.1	<0.01	33.4	<0.1	<0.05	9	<0.5	N.A.	N.A.	N.A.
LCS- DRILL - 5	Drill Core	0.019	1	125	1.08	288	0.132	73	3.97	0.057	0.12	<0.1	<0.01	17.8	<0.1	<0.05	14	<0.5	N.A	N.A	N.A

Client: Titan Diamond Drilling Ltd.
9131 Evelyn Station Rd.
Smithers BC V0J 2N1 Canada

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Project: LCS-09
Report Date: December 06, 2009

	Method	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR	7AR
	Analyte	Zn	Ag	Ni	Co	Mn	Fe	As	Sr	Cd	Sb	Bi	Ca	P	Cr	Mg	Al	Na	K	W	
	Unit	%	gm/mt	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	MDL	0.01	2	0.001	0.001	0.01	0.01	0.01	0.001	0.001	0.001	0.01	0.01	0.001	0.001	0.01	0.01	0.01	0.01	0.001	0.001
LCS-1 GRAB	Rock	<0.01	23	0.005	0.001	0.14	3.54	0.28	0.003	<0.001	<0.001	<0.01	7.20	0.018	0.013	0.73	0.96	0.08	0.01	<0.001	<0.001
LCS- DRILL - 1	Drill Core	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
LCS- DRILL - 2	Drill Core	0.02	<2	0.013	0.004	0.13	5.27	<0.01	0.009	<0.001	<0.001	<0.01	7.92	0.020	0.017	2.62	1.99	0.10	0.04	<0.001	<0.001
LCS- DRILL - 3	Drill Core	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
LCS- DRILL - 4	Drill Core	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
LCS- DRILL - 5	Drill Core	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

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Client: **Titan Diamond Drilling Ltd.**
9131 Evelyn Station Rd.
Smithers BC V0J 2N1 Canada

Project: LCS-09
Report Date: December 06, 2009

	Method	7AR
	Analyte	S
	Unit	%
	MDL	0.05
LCS-1 GRAB	Rock	<0.05
LCS- DRILL - 1	Drill Core	N.A.
LCS- DRILL - 2	Drill Core	<0.05
LCS- DRILL - 3	Drill Core	N.A.
LCS- DRILL - 4	Drill Core	N.A.
LCS- DRILL - 5	Drill Core	N.A.

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Client: **L'Orsa, Anthony**
Box 1024
Smithers BC V0J 2N0 Canada

Submitted By: Anthony L'Orsa
Receiving Lab: Canada-Smithers
Received: November 08, 2010
Report Date: November 25, 2010

CERTIFICATE OF ANALYSIS SMI10000806.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 2

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	2	Crush, split and pulverize 250 g rock to 200 mesh			SMI
4A4B	2	Whole Rock Analysis Majors and Trace Elements	0.2	Completed	VAN

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
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.

ADDITIONAL COMMENTS

Invoice To: L'Orsa, Anthony
Box 1024
Smithers BC V0J 2N0
Canada

CC:

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.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

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Client: L'Orsa, Anthony
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Smithers BC V0J 2N0 Canada

Project: None Given
Report Date: November 25, 2010

CERTIFICATE OF ANALYSIS SMI10000806.1

	Method	WGHT	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B
	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
09-3/26	Rock	0.07	43.48	18.08	11.08	5.68	6.06	3.98	0.50	0.85	0.07	0.19	0.033	149	42	9.6	99.61	542	<1	47.8	14.9
10-1/107	Rock	0.08	58.31	16.98	8.39	1.95	2.65	0.72	2.62	0.86	0.03	0.11	0.006	<20	28	7.1	99.71	833	<1	14.1	13.8

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Client: L'Orsa, Anthony
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Project: None Given
Report Date: November 25, 2010

CERTIFICATE OF ANALYSIS SMI10000806.1

	Method	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B
	Analyte	Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	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
09-3/26	Rock	13.7	1.1	0.8	17.4	<1	687.4	<0.1	0.2	0.1	275	<0.5	43.7	12.9	1.5	4.8	0.80	4.1	1.12	0.48	1.84
10-1/107	Rock	18.8	2.9	3.2	86.2	<1	168.5	0.2	1.9	1.4	67	0.9	102.3	29.9	8.6	19.5	2.72	11.8	2.98	1.07	4.21

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Client: **L'Orsa, Anthony**
Box 1024
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Project: None Given
Report Date: November 25, 2010

CERTIFICATE OF ANALYSIS SMI10000806.1

	Method	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	2A Leco	2A Leco	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au
	Unit	ppm	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	0.5	0.1	0.1	0.1	0.1	0.5
09-3/26	Rock	0.29	2.11	0.46	1.45	0.19	1.37	0.21	1.16	<0.02	0.2	25.8	2.1	60	138.7	7.2	0.2	0.5	<0.1	<0.1	1.7
10-1/107	Rock	0.68	4.87	1.09	3.38	0.48	3.56	0.55	0.80	<0.02	<0.1	2.0	51.3	127	3.4	14.2	0.6	1.2	<0.1	<0.1	<0.5

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Client: **L'Orsa, Anthony**
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Project: None Given
Report Date: November 25, 2010

CERTIFICATE OF ANALYSIS SMI10000806.1

	Method	1DX	1DX	1DX
	Analyte	Hg	Tl	Se
	Unit	ppm	ppm	ppm
	MDL	0.01	0.1	0.5
09-3/26	Rock	0.01	<0.1	<0.5
10-1/107	Rock	<0.01	<0.1	<0.5

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Client: **L'Orsa, Anthony**
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Smithers BC V0J 2N0 Canada

Project: None Given
Report Date: November 25, 2010

QUALITY CONTROL REPORT SMI10000806.1

	Method	WGHT	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B
	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
Pulp Duplicates																					
REP G1	QC																				
Reference Materials																					
STD CSC	Standard																				
STD DS7	Standard																				
STD DS8	Standard																				
STD OREAS45PA	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard		58.12	13.97	7.61	3.37	6.35	3.70	2.16	0.69	0.84	0.40	0.553	42	25	1.9	99.68	490	<1	26.7	6.8
STD SO-18	Standard		57.98	14.03	7.61	3.35	6.32	3.68	2.14	0.69	0.83	0.39	0.552	34	25	1.9	99.47	492	1	26.8	6.8
STD CSC Expected																					
STD OREAS76A Expected																					
STD DS7 Expected																					
STD OREAS45PA Expected																					
STD DS8 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		0.20	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	0.0	0.20	<1	<1	<0.2	<0.1
Prep Wash																					
G1	Prep Blank		66.32	15.52	3.43	1.27	3.44	3.46	3.76	0.39	0.18	0.10	0.004	<20	6	0.9	98.77	1054	2	4.6	4.2
G1	Prep Blank																				

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Project: None Given
Report Date: November 25, 2010

QUALITY CONTROL REPORT SMI10000806.1

	Method	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B
	Analyte	Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	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
Pulp Duplicates																					
REP G1	QC																				
Reference Materials																					
STD CSC	Standard																				
STD DS7	Standard																				
STD DS8	Standard																				
STD OREAS45PA	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard	17.0	8.8	21.1	27.1	14	388.8	6.6	9.4	15.1	212	13.6	277.5	29.9	11.4	25.7	3.14	11.9	2.29	0.80	2.64
STD SO-18	Standard	17.0	8.9	21.2	27.1	14	382.7	6.7	9.4	14.9	215	13.6	275.6	30.1	11.2	24.9	3.09	12.8	2.31	0.80	2.66
STD CSC Expected																					
STD OREAS76A Expected																					
STD DS7 Expected																					
STD OREAS45PA Expected																					
STD DS8 Expected																					
STD SO-18 Expected		17.6	9.8	21.3	28.7	15	407.4	7.4	9.9	16.4	200	14.8	280	31	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	0.9	<0.1	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05
Prep Wash																					
G1	Prep Blank	17.5	3.7	23.2	130.7	1	746.7	1.3	8.6	3.5	55	<0.5	136.0	16.8	27.5	56.7	6.21	22.2	3.35	1.01	2.66
G1	Prep Blank																				

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Project: None Given
Report Date: November 25, 2010

QUALITY CONTROL REPORT SMI10000806.1

	Method	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	4A-4B	2A Leco	2A Leco	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au
	Unit	ppm	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	0.5	0.1	0.1	0.1	0.1	0.5
Pulp Duplicates																					
REP G1	QC										<0.1	1.9	2.5	50	4.2	<0.5	<0.1	<0.1	0.3	<0.1	0.8
Reference Materials																					
STD CSC	Standard								3.16	3.92											
STD DS7	Standard										19.6	106.0	65.9	395	55.2	55.1	6.4	3.6	4.4	1.0	61.8
STD DS8	Standard										12.7	106.1	117.7	304	37.9	26.2	2.1	3.6	6.1	1.9	92.6
STD OREAS45PA	Standard										0.8	601.6	16.9	122	293.1	4.0	0.1	<0.1	0.2	0.3	38.8
STD OREAS76A	Standard								0.16	17.74											
STD SO-18	Standard	0.40	2.68	0.57	1.64	0.22	1.63	0.25													
STD SO-18	Standard	0.41	2.69	0.56	1.62	0.22	1.63	0.25													
STD CSC Expected									2.94	4.25											
STD OREAS76A Expected									0.16	18											
STD DS7 Expected											20.5	109	70.6	411	56	50	6.4	4.6	4.5	0.9	70
STD OREAS45PA Expected											0.9	600	19	119	281	4.2	0.09	0.13	0.18	0.3	43
STD DS8 Expected											12.87	113	126	313	40.6	27.73	2.35	4.89	6.67	1.71	99
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	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5
BLK	Blank	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01													
Prep Wash																					
G1	Prep Blank	0.41	2.44	0.50	1.53	0.23	1.72	0.28	0.02	<0.02											
G1	Prep Blank										<0.1	1.8	2.6	50	3.8	<0.5	<0.1	<0.1	0.3	<0.1	1.7

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
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Client: **L'Orsa, Anthony**
Box 1024
Smithers BC V0J 2N0 Canada

Project: None Given
Report Date: November 25, 2010

QUALITY CONTROL REPORT SMI10000806.1

	Method	1DX	1DX	1DX
	Analyte	Hg	Tl	Se
	Unit	ppm	ppm	ppm
	MDL	0.01	0.1	0.5
Pulp Duplicates				
REP G1	QC	0.01	0.3	<0.5
Reference Materials				
STD CSC	Standard			
STD DS7	Standard	0.22	4.1	3.5
STD DS8	Standard	0.17	5.2	4.8
STD OREAS45PA	Standard	0.03	<0.1	<0.5
STD OREAS76A	Standard			
STD SO-18	Standard			
STD SO-18	Standard			
STD CSC Expected				
STD OREAS76A Expected				
STD DS7 Expected		0.21	4.2	3.5
STD OREAS45PA Expected		0.03	0.07	0.54
STD DS8 Expected		0.192	5.58	5.9
STD SO-18 Expected				
BLK	Blank			
BLK	Blank	<0.01	<0.1	<0.5
BLK	Blank			
Prep Wash				
G1	Prep Blank			
G1	Prep Blank	0.03	0.3	<0.5

APPENDIX 3

Vancouver Petrographics Ltd.
8080 GLOVER ROAD, LANGLEY, B.C. V1M 3S3
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Website: www.vanpetro.com

Report for: Antony L'Orsa, P.Geo.
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Report 100945

November 22, 2010

Samples:

One rock sample (LCS), was submitted by Antony L'Orsa, with a request for petrographic study.

The sample is a moderately to strongly altered, hypabyssal rock with an intergranular microstructure characterized by euhedral plagioclase and interstitial opaque minerals, possibly replacing magmatic ferromagnesian minerals. The rock is crosscut and locally replaced by epidote, calcite, a minor amount of chlorite and minor remobilized opaque minerals. Because of the relict intergranular texture displayed by plagioclase and the interpreted presence of ferromagnesian minerals, now substituted by opaque minerals, the rock is interpreted to be a diabase.

The detailed description of the sample, a set of photomicrographs and a glossary of microstructural terms are attached below.

Respectfully submitted

F. Colombo, Ph.D., P.Geo.

Sample: LCS

(Calcite-epidote altered) diabase

The sample shows relicts of intergranular microstructure with space between plagioclase laths mostly containing opaque minerals. The sample is strongly to intensely altered by calcite and is crosscut by a subparallel set of veins and veinlets of epidote, calcite and minor, possibly remobilized, opaque minerals. Calcite veins crosscut the epidote veins and calcite destroys the magmatic intergranular microstructure.

mineral	***modal %***			***main size range (mm)***
Calcite-epidote alterd diabase	***81***			
plagioclase (albite)	*55*	-	*60*	~0.5
opaque minerals	*10*	-	12	0.5-0.6, rarely up to 1
calcite (I and II)	*8*	-	10	up to 1.2
(ferromagnesian mineral?): chlorite, carbonate	*5*	-	8	0.2
epidote	*1*			0.5
chlorite	*tr*			<0.02
veins	***9***			
epidote	5	-	7	up to 0..5
calcite	3	-	4	up to 1
chlorite	tr			<0.02
opaque minerals	tr			up to 0.4

Plagioclase occurs as euhedral laths with a high aspect ratio, generally higher than 3:1, and an average grain-size of 0.5 mm. The crystals are randomly oriented and moderately to strongly altered by a homogeneous dispersion of cryptocrystalline material, possibly epidote and/or carbonate.

Calcite occurs in veins and veinlets, preferentially replaces plagioclase, and forms irregular to amoeboid replacement domains up to 3 mm in size. Within the plagioclase, calcite forms irregular microcrystalline aggregates. Within the vein and veinlets it may occur together with epidote, and if so calcite forms euhedral crystals up to 1.2 mm, generally with a high aspect ratio (4:1 or higher) and possibly replacing epidote or previous carbonates associated with epidote in the veins. Calcite constitutes calcite-only veins (up to 0.6 mm in thickness) where it is generally oriented perpendicularly to the vein walls. Calcite veins crosscut and post-date epidote veins. Finally calcite forms irregular to amoeboid replacement domains where the magmatic microstructure is completely replaced.

Opaque minerals occupy the intergranular spaces left by the plagioclase during the magmatic crystallization. Their domains generally have a grain size average of 0.5-0.6 mm and, in a few instances, reach 1 mm in size; in most cases the opaque minerals rim a pseudomorphed mineral, possibly ferromagnesian, that is partially to completely substituted by chlorite and carbonate. In a few instances the presence of relict **olivine**, rimmed by opaque minerals, is suspected by the straight extinction and the high birefringence colours.

Epidote mostly occurs within veins and veinlets. Epidote veins are subparallel with a maximum thickness of 2 mm. Within the veins, which are mostly monomineralic, epidote is oriented perpendicularly to the vein walls with anhedral crystals up to 0.5 mm in size occasionally with a thin (~0.1 mm) median zone of opaque minerals and chlorite. Epidote is also dispersed within the rock, and is particularly prevalent surrounding epidote veins, nucleating within the interstices of the plagioclase or rimming the plagioclase laths.

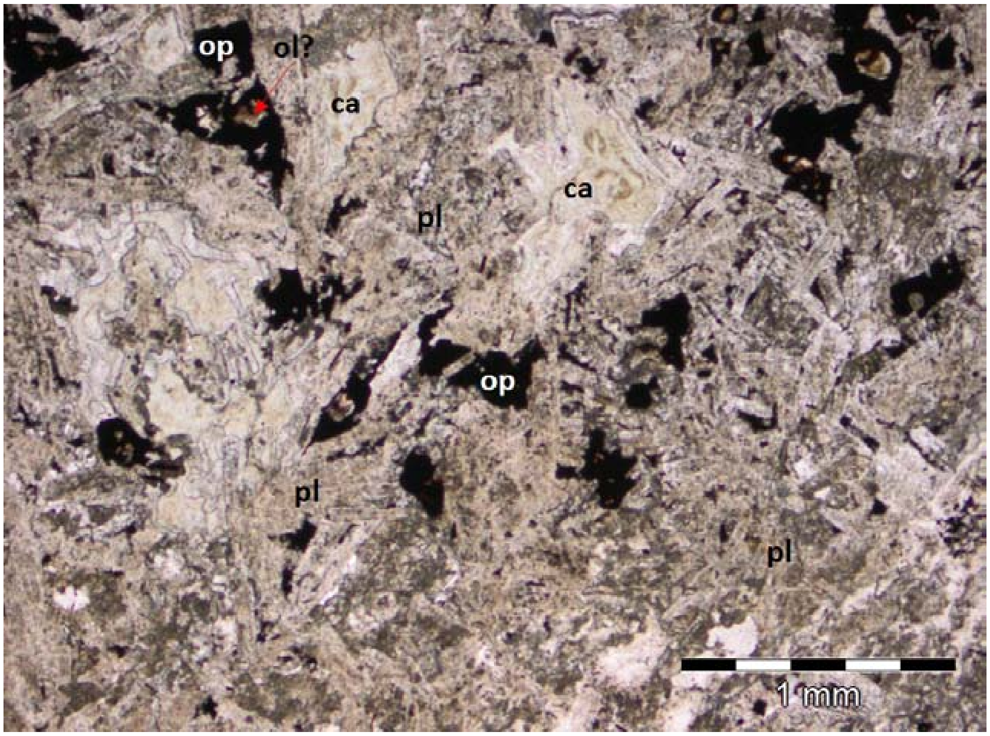

Figure 1: Photomicrograph showing intergranular microstructure with plagioclase (pl), opaque minerals (op), possibly olivine (ol) relicts armoured in opaque minerals. Monomineralic domain of calcite (ca) partially replaced the primary microstructure. Plane polarized transmitted light.

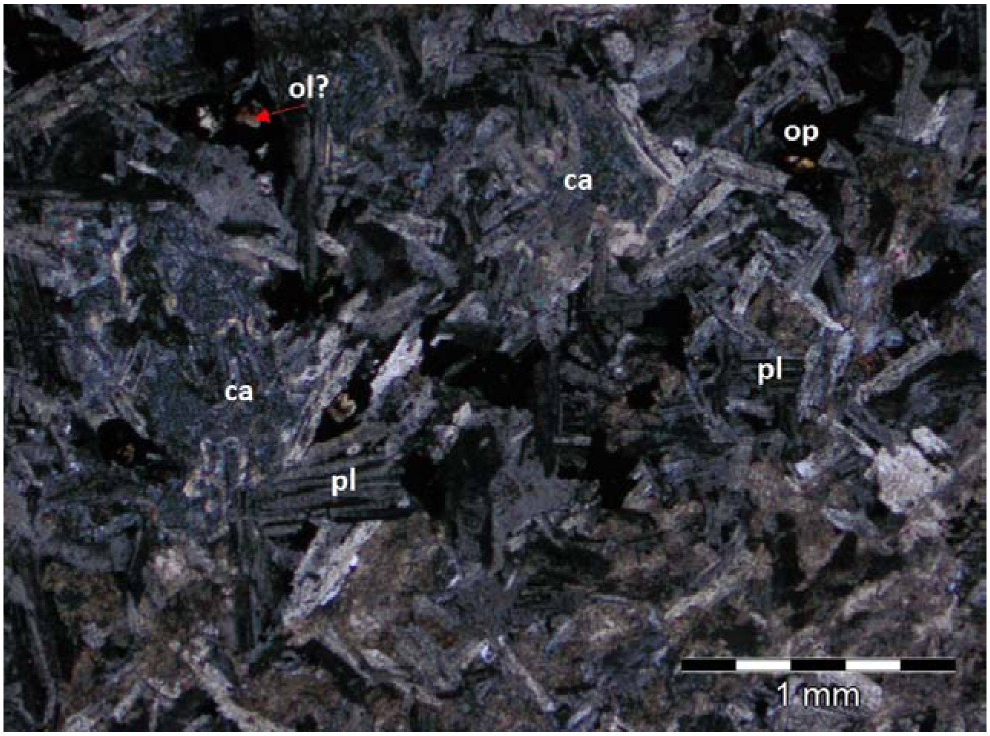

Figure 2: Same detail as Figure 1. Crossed polars transmitted light.

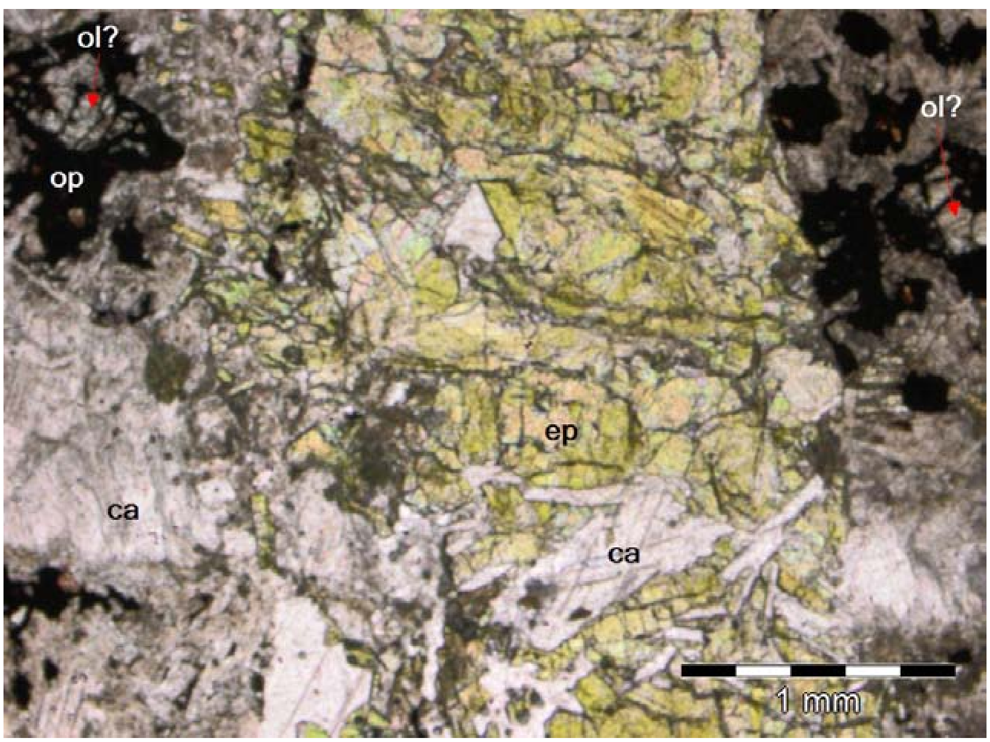

Figure 1: Photomicrograph showing an epidote-rich vein (ep) crosscut by a calcite (ca) vein. The crystallization of opaque minerals (op), rimming possible olivine (ol), pre-dates the epidote and calcite veining events. Plane polarized transmitted light.

Glossary of microstructural terms

Amoeboid: With strongly curved and lobate grain boundaries, interloking grain boundaries; like an amoeba.

Aspect ratio: Ratio of length to width of crystals and grains.

Intergranular: Describes the microstructure of mafic igneous rocks in which interstices (q.v.) between feldspar laths are occupied by small, relatively equant grains of pyroxene, olivine or opaque oxide minerals.

Interstices: Angular cavities or interspace fillings between feldspar laths in igneous rocks. The singular is interstice.

Hypabyssal: An igneous rock that is emplaced at medium to shallow depths within the crust and contain intermediate grain size and in some instances porphyritic microstructure.