Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geochemical, Prospecting

TOTAL COST: $ 23,903.24

AUTHOR(S): Jacques Houle, P.Eng.

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2011

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 4862849 4862856, 4862857 / 2011/May/13

PROPERTY NAME: Mt. Sicker, Sognidoro, Volcanics

CLAIM NAME(S) (on which the work was done): 513291, 517577, 516629 / 513288, 516626 / 550746

COMMODITIES SOUGHT: Copper, Lead, Zinc, Silver, Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092B001,-002,-003,-004,-028,-040,-041,-086,-087,-088,-089; 092C-144,-156

MINING DIVISION: Victoria

NTS/BCGS: 092B081, 092B082, 092C100

LATITUDE: 48 ° 52 ' 3 " **LONGITUDE:** 123 ° 44 ' 55 " **(at centre of work)**

OWNER(S):

1) Connie McCombs

2) Rock-Con Resources Inc.

MAILING ADDRESS:

OPERATOR(S) [who paid for the work]:

1) Knappett Industries (2006) Ltd.

2)

MAILING ADDRESS:

PO Box 37090, RPO Country Club
Nanaimo, B.C. V9T 6N4

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

chert, siliclastics, volcaniclastics, calc-alkaline volcanics, gabbro, diorite, mississippian, permian, devonian, triassic, volcanogenic massive sulphides, quartz-sulphide veins

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: refer to Table 3 in technical report

Next Page

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			$ 3,442.13
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying		513291,517577,516629/513288,516628	$ 9,971.86
Petrographic			
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 Technical Report			$ 10,489.25
		TOTAL COST:	$ 23,903.24

Assessment Report for

Prospecting and Geochemistry

On the

Vancouver Island South Group Properties

Victoria Mining Division, British Columbia, Canada

Mt. Sicker Property

BCGS Map Sheets 092B081,-082

UTM Zone 10N 441500E, 5413000N

Sognidoro Property

BCGS Map Sheet 092C100

UTM Zone 10N 421500E, 5422000N

Volcanics Property

BCGS Map Sheet 092B082

UTM Zone 10N 446500E, 5413250N

For

Rock-Con Resources Inc.

P.O. Box 37090, RPO Country Club, Nanaimo, B.C. V9T 6N4

By

Jacques Houle, P.Eng.

6552 Peregrine Road, Nanaimo, B.C. V9V 1P8

May 31, 2011

Contents

Figures – Mt. Sicker Property

Figures – Sognidoro Property

Figures – Volcanics Property

Appendices

Introduction

Property location, access and physiography

The South Group Properties consist of four non-contiguous groups of cell mineral claims located west of city of Duncan and north of the Cowichan River, near the southeast coast of Vancouver Island. Three of the four properties which are the subject of this report are located in the Victoria Mining Division, and are approximately centred at NAD 83 UTM Zone 10N co-ordinates on the following BCGS map sheets:

- Mt. Sicker Property – 441500E, 5413000N – 092B081 & 092B082
- Sognidoro Property – 421500E, 5422000N – 092C100
- Volcanics Property - 446500E, 5413250N – 092B082

The eastern portion of the Mt. Sicker Property is accessed from the Trans-Canada Highway 1 west along Mt. Sicker Road and various old mining roads and newer logging roads along the east side of the Chemainus River. The western portion of the Property is accessed from Highway 1 west along Copper Canyon Main along the west side of the Chemainus River.

The Sognidoro Property can be accessed either from Highway 1 west along Copper Canyon Main, or north from Highway 18 along the Duncan Access Road, and then west along Copper Canyon Main which becomes the Chemainus River Road following the north side of the Chemainus River. The eastern portion of the Sognidoro Property is accessed from the Chemainus River Road north along Rheinhart Road; the western portion of the Property is accessed north along logging roads C16, C17, and C18.

The Volcanics Property is accessed from the Trans-Canada Highway 1 west along Mt. Sicker Road and various old mining roads and newer logging roads along the north side of Mt. Sicker.

The topography of the South Group Properties is generally similar, and consists of rounded mountains incised by moderately steep canyons, with elevations ranging from less than 100 metres to just over 1000 metres. The climate is mild and wet during the fall to spring period, and warm and dry in the summer, with snow accumulations of several metres generally persisting through the winter at elevations above 500 metres.

Property definitions, owner, operator, geology and history

The owner of the South Group Properties is Connie McCombs, and the operator is Rock- Con Resources Inc., through an agreement with Ms. McCombs. See Figures 1 and 2 for mineral tenure and infrastructure maps of the properties at 1:100,000 scale.

The cell mineral claims which constitute the Vancouver Island South Group Properties, with details and status as of the date of this report, are listed in Table 1 below:

Table 1 – Cell Mineral Claims and Status as of May 20, 2011

Tenure Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Status	Area (ha)
Mt. Sicker Property							
501465	L109	131341 (100%)	092B	2005/jan/12	2013/jul/05	GOOD	21.241
501774	L108	131341 (100%)	092B	2005/jan/12	2013/jul/05	GOOD	21.239
510156	055A055D	131341 (100%)	092B	2005/apr/04	2013/jul/05	GOOD	42.48
513291		131341 (100%)	092B	2005/may/25	2013/jul/05	GOOD	84.988
513390		131341 (100%)	092B	2005/may/26	2013/jul/05	GOOD	84.96
516629		131341 (100%)	092B	2005/jul/10	2013/jul/05	GOOD	382.371
516963		131341 (100%)	092B	2005/jul/11	2013/jul/05	GOOD	42.487
516972		131341 (100%)	092B	2005/jul/11	2013/jul/05	GOOD	42.494
516976		131341 (100%)	092B	2005/jul/11	2013/jul/05	GOOD	21.244
516980		131341 (100%)	092B	2005/jul/11	2013/jul/05	GOOD	84.951
517577	LENORATYEE	131341 (100%)	092B	2005/jul/12	2013/jul/05	GOOD	42.496
533072	HOLYOAK	131341 (100%)	092B	2006/apr/26	2013/jul/05	GOOD	127.422
Subtotal Mt. Sicker Property							**998.373**
Volcanics Property							
550746	VOLCANICS	131341 (100%)	092B	2007/jan/30	2015/may/17	GOOD	106.2599
Subtotal Volcanics Property							**106.2599**
Sognidoro Property							
502283	Mya	131341 (100%)	092C	2005/jan/12	2012/apr/30	GOOD	169.696
513288		131341 (100%)	092C	2005/may/25	2012/apr/30	GOOD	169.664
513295		131341 (100%)	092C	2005/may/25	2012/apr/30	GOOD	84.85
513414		131341 (100%)	092C	2005/may/27	2012/apr/30	GOOD	42.426
513426		131341 (100%)	092C	2005/may/27	2012/apr/30	GOOD	63.653
513451		131341 (100%)	092C	2005/may/27	2012/apr/30	GOOD	254.639
513485	MIKE	131341 (100%)	092C	2005/may/27	2012/apr/30	GOOD	339.494
514351	KIDS EAST	131341 (100%)	092C	2005/jun/11	2012/apr/30	GOOD	84.847
514360	DEPOSIT S	131341 (100%)	092C	2005/jun/11	2012/apr/30	GOOD	63.667
514369	JAS	131341 (100%)	092C	2005/jun/11	2012/apr/30	GOOD	63.622
516626		131341 (100%)	092C	2005/jul/10	2012/apr/30	GOOD	593.939
516665		131341 (100%)	092C	2005/jul/11	2012/apr/30	GOOD	42.441
516667		131341 (100%)	092C	2005/jul/11	2012/apr/30	GOOD	21.218
530544	DOME	131341 (100%)	092C	2006/mar/25	2012/apr/30	GOOD	63.67
567273	MARIA	131341 (100%)	092C	2007/oct/02	2012/apr/30	GOOD	42.422
854527	WEST 14	131341 (100%)	092C	2011/may/14	2012/may/14	GOOD	318.2614
854528	NORTH3	131341 (100%)	092C	2011/may/14	2012/may/14	GOOD	63.6114
Subtotal Sognidoro Property							**2482.121**
Meade Property							
504209	Meade	131341 (100%)	092C	2005/jan/18	2013/nov/29	GOOD	85.029
843606	WEST 2	131341 (100%)	092C	2011/jan/19	2012/jan/19	GOOD	42.5115
Subtotal Meade Property							**127.5405**

According to the BCGS 2005 MapPlace Geology shown in Figure 3, the South Group Properties are underlain by rock types with map unit colours, nomenclature, lithologies, and structural/stratigraphic relationships as follows:

uKN – Upper Cretaceous Nanaimo Group – undifferentiated sedimentary rocks

- Erosional Unconformity, locally Fault Contact -

EMJIgd – Early to Middle Jurassic Island Plutonic Suite – granodioritic intrusive rocks

- Intrusive Contact -

LTrMH – Late Triassic Mount Hall – gabbroic to dioritic intrusive rocks

- Intrusive, locally Fault Contact -

MPnBFch – Mississippian to Permian Buttle Lake Group - Fourth Lake Formation – chert, siliceous argillite, siliclastic rocks

- Conformity, locally Fault Contact -

uDSiM – Middle to Upper Devonian Sicker Group – McLaughlin Ridge Formation – volcaniclastic rocks

- Conformable Contact -

uDSIN – Middle to Upper Devonian Sicker Group – Nitinat Formation – calc-alkaline volcanic rocks (Meade Property only)

The main host rocks for volcanogenic massive sulphide mineralization on Vancouver Island are those of the Mississippian to Devonian age Buttle Lake and Sicker Groups. In the area of the South Group Properties, the McLaughlin Ridge Formation of the Devonian Sicker Group is the main host of volcanogenic massive sulphide (VMS) mineralization; and quartz-sulphide mineralization can also be hosted in the Late Triassic Mount Hall gabbroic to dioritic rocks. The detailed reports for all BC MINFILE occurrences situated on the South Group Properties are listed in Table 2; the BC ARIS reports from historic work in the immediate area of the South Group Properties is listed in Table 3; and the appropriate BC Mineral Deposit Profiles (G-06 Noranda-Kuroko VMS and I05 Polymetallic Veins) for the mineral occurrences on the South Group Properties appear in Appendix 8. It should be noted that much of the historical data for

the Mt. Sicker Property was done on crown granted mineral claims and/or predates the ARIS system and is therefore not well documented, but much data is available online in the BC Minister of Mines Reports, and in the BC Property File data.

Table 2 – BC MINFILE Occurrences situated on the South Group Properties

MINFILE Number	MINFILE Name	Status	Mineral Deposit Type	Commodities	Stratigraphic Age and Host Rock	Property
092B 001	Lenora	Past Producer	G06 – Noranda-Kuroko VMS	Cu, Au, Ag, Pb, Zn, Cd, Barite	Devonian McLaughlin Ridge - volcanics	Mt. Sicker
092B 002	Tyee	Past Producer	G06 – Noranda-Kuroko VMS	Cu, Au, Ag, Pb, Zn, Cd, Barite	Devonian McLaughlin Ridge - volcanics	Mt. Sicker
092B 003	Richard III	Past Producer	G06 – Noranda-Kuroko VMS	Cu, Au, Ag, Pb, Zn, Cd, Barite	Devonian McLaughlin Ridge - volcanics	Mt. Sicker
092B 004	Victoria	Past Producer	G06 – Noranda-Kuroko VMS	Cu, Au, Ag	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 028	Rose	Showing	Metamorphic	Mica, Sericite	Devonian McLaughlin Ridge – sediments	Mt. Sicker
092B 040	Sharon Copper	Prospect	G06 – Noranda-Kuroko VMS	Cu	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 041	Water Power-Brenton	Showing	G06 – Noranda-Kuroko VMS	Cu, Ag	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 086	Copper Canyon	Showing	none stated	Cu	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 087	Key City	Prospect	none stated	Cu	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 088	Queen Bee	Showing	G06 – Noranda-Kuroko VMS	Cu, Zn, Au	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092B 089	Belle	Showing	G06 – Noranda-Kuroko VMS	Cu	Devonian McLaughlin Ridge – volcanics	Mt. Sicker
092C 057	Meade Creek	Past Producer	C01 – Surficial Placers	Au	Gravel, unconsolidated sediments	Meade
092C 144	Sognidoro	Prospect	I05 – Polymetallic veins Ag-Pb-Zn-Au; Q05 – Jasper	Au, Ag, Cu, Magnetite, Gemstones, Pb, Zn, Mo	Carboniferous Fourth Lake - sediments	Sognidoro
092C 156	Soul Quarry	Showing	Industrial Mineral	Dimension Stone, Marble, Jasper	Devonian McLaughlin Ridge – volcanics	Sognidoro

Table 3 – ARIS Reports publicly available as of May 20, 2011

Report Number	Year	Author	Owner/Operator	Work Program / MINFILE Number	Property
00936	1967	Tikkanen, G.D.	Cominco Ltd.	Geophysical (ground) / 092B040, 092B041, 092B041	Mt. Sicker
01104	1967	Sheppard, E.P., Basco, D.M.	Mt. Sicker Mines Ltd.	Geological / 092B001, 092B002, 092B003, 092B004, 092B087	Mt. Sicker
01714	1968	Sheppard, E.P.	Mt. Sicker Mines Ltd.	Geophysical (ground) / 092B001, 092B002, 092B003, 092B004, 092B087	Mt. Sicker
03099	1971	Whittles, A.B.L., Loring, F.C.	Kinneard, G., Whittles, A.B.L., Loring, F.C.	Geophysical (ground), Geochemical / 092B004, 092B086	Mt. Sicker
03741	1972	Not specified	Mt. Sicker Mines Ltd.	Linecutting /no MINFILE	Mt. Sicker
03950	1972	Watson, I.M.	Mt. Sicker Mines Ltd. / Ducanex Resources Ltd.	Geological / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089	Mt. Sicker
03951	1972	Walcott, P.E.	Mt. Sicker Mines Ltd. / Ducanex Resources Ltd.	Geophysical (ground) / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089	Mt. Sicker
04626	1973	Whittles, A.B.L.	Kinneard, G., Whittles, A.B.L., Loring, F.C.	Geophysical (ground), Geological, Geochemical / 092B004, 092B086	Mt. Sicker
05164	1974	Carter, J.S.	Dresser Minerals Division	Diamond Drilling (4 holes totalling 830 m.) / 092B001, 092B002, 092B003	Mt. Sicker
06216	1976?	Deighton, J.R.	Deighton, J.R.	Geological / 092B028, 092B040, 092B041	Mt. Sicker
06518	1977	Deighton, J.R.	Deighton, J.R.	Geological / 092B028, 092B040, 092B041	Mt. Sicker
06548	1977	Somerville, R.	Imperial Oil Ltd.	Geochemical, Geophysical (ground) / 092B028, 092B040, 092B041	Mt. Sicker
06599	1977	Deighton, J.R.	Deighton, J.R.	Geochemistry / 092B086	Mt. Sicker
06600	1977	Deighton, J.R.	Deighton, J.R.	Geological / 092B004, 092B086	Mt. Sicker
06699	1978	Deighton, J.R., Vyselaar, J.	Deighton, J.R., Utah Mines Ltd.	Geological, Geophysical (ground) / 092B028, 092B041	Mt. Sicker
06972	1978	Whittles, A.B.L.	Loring, F.C.	Geophysical (ground), Geological / 092B004, 092B086	Mt. Sicker
07183	1979	Pauwels, A.	Union Miniere Explorations and Mining Corp. Ltd.	Geophysical (ground) / 092B004, 092B086, 092B110	Mt. Sicker
07273	1979	Pauwels, A.	Union Miniere Explorations and Mining Corp. Ltd.	Geochemical / 092B041	Mt. Sicker
07323	1979	Somerville, R.	Esso Minerals Canada	Diamond Drilling (448 m. in 6 holes) / 092B028, 092B040, 092B041, 092B110	Mt. Sicker

07434	1979	Pauwels, A.	Union Miniere Explorations and Mining Corp. Ltd.	Geochemical / 092B004, 092B086	Mt. Sicker
07714	1979	Ronning, P.A., Allen, G.	Postuk, P., S.E.R.E.M. Ltd.	Geological, Geochemical / 092B088, 092B089	Mt. Sicker
07875	1980	Allen, G., van Houten, C.G., Ronning, P.	S.E.R.E.M. Ltd., Mt. Sicker Mines Ltd.	Geological, Geochemical / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B099	Mt. Sicker
08264	1980	van Houten, C.G., Ronning, P.	S.E.R.E.M. Ltd., Mt. Sicker Mines Ltd.	Diamond Drilling (1,236 m. in 7 holes) / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B099	Mt. Sicker
11329	1983	Sorbara, J.P.	Cominco Ltd.	Geological, Geochemical / 092B028, 092B041	Mt. Sicker
12172	1984	Davidson, A.J.	Corporation Falconbridge Copper	Diamond Drilling (176 m. in 1 hole) / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
12317	1984	Davidson, A.J.	Corporation Falconbridge Copper	Diamond Drilling (394 m. in 2 holes) / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
12379	1984	Britten, R.	Esso Resources Canada Ltd.	Geological, Geochemical / 092B040, 092B110	Mt. Sicker
13744	1985	Hendrickson, G.A.	Esso Resources Canada Ltd.,Kidd Creek Mines Ltd.	Geophysical / 092B040, 092B110	Mt. Sicker
14411	1986	Enns, S.G.	Esso Resources Canada Ltd.,Kidd Creek Mines Ltd.	Diamond Drilling (1,534 m. in 7 holes) / 092B040, 092B110	Mt. Sicker
14735	1986	Lefebure, D.V.	Corporation Falconbridge Copper	Diamond Drilling (1,502 m. in 5 holes) / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
15719	1987	Gibson, H.L.	Corporation Falconbridge Copper	Diamond Drilling (3,115 m. in 11 holes) / 092B001, 092B002, 092B003, 092B004, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
16716	1987	Wells, G.S.	Minnova Inc.	Diamond Drilling (3,217 m. in 15 holes / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
16871	1987	Wells, G.S.	Minnova Inc.	Diamond Drilling (176 m. in 1 hole / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
17649	1988	Klemmer, S.G.	Esso Resources Canada Ltd., Falconbridge Ltd.	Diamond Drilling (195 m. in 1 hole / 092B040, 092B110	Mt. Sicker

17834	1988	Wells, G.S.	Minnova Inc.	Diamond Drilling (477 m. in 1 hole / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
17836	1988	Wells, G.S.	Minnova Inc.	Diamond Drilling (151 m. in 1 hole / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
18859	1989	Wells, G.S.	Minnova Inc.	Diamond Drilling (3,103 m. in 8 holes / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
19754	1990	Wells, G.S.	Minnova Inc.	Diamond Drilling (763 m. in 3 holes / 092B001, 092B002, 092B003, 092B004, 092B086, 092B087, 092B088, 092B089, 092B090	Mt. Sicker
19765	1989	Stewart, R., Vande-Guchte, M.	Falconbridge Ltd.	Diamond Drilling (1,056 in 2 holes) / 092B028, 092B041	Mt. Sicker
00935	1966	Tikkanen, G.D.	Cominco Ltd.	Geophysical (ground) / no MINFILE	Sognidoro
11097	1983	Quin, S.P., De Carle, R.	Imperial Metals Corporation	Geophysical (airborne) / no MINFILE	Sognidoro
11098	1983	Quin, S.P.	Imperial Metals Corporation	Geological, Geochemical / no MINFILE	Sognidoro
11401	1983	Zastavnikovich, S.	Canamin Resources Ltd.	Geochemical / 092C144	Sognidoro
11564	1983	Freeze, A.C.	Cominco Ltd.	Geological, Geochemical / no MINFILE	Sognidoro
12173	1984	Stevens, E.	Stevens, E.	Prospecting / no MINFILE	Sognidoro
12378	1984	Quin, S.P., De Carle, R.	Imperial Metals Corporation	Geophysical (airborne) / no MINFILE	Sognidoro
12909	1984	Francis, A.	Francis, A.	Prospecting / no MINFILE	Sognidoro
13468	1985	Clark, A.M.S.	Imperial Metals Corp.	Geophysical (ground) / no MNFILE	
13568	1984	McDougall, J.J.	Canamin Resources Ltd.	Geological, Geochemical / 092C144	Sognidoro
14793	1985	Clark, A.M.S.	Imperial Metals Corp.	Geological, Geophysical, Geochemical / no MINFILE	Sognidoro
15082	1985	Poloni, J.R.	Trek Resources Ltd.	Geochemical, Diamond Drilling (123 m. in 1 hole) / no MINFILE	Sognidoro
15883	1987	Specogna, M.	Canamin Resources Ltd.	Geophysical (ground) / 092C144	Sognidoro
16478	1987	Baknes, M., Gorc, D.	Imperial Metals Corp.	Geological, Geochemical / no MINFILE	Sognidoro
16802	1987	Thomae, B.Y., Hawkins, T.G.	Canamin Resources Ltd.	Geological, Geochemical / 092C144	Sognidoro
17447	1988	Francis, A.	Francis, A.	Prospecting, Geochemical / no MINFILE	Sognidoro

18731	1989	Body, T.W.	Trek Resources Ltd.	Geochemical, Percussion Drilling (24 holes totalling 394 m.) / no MINFILE	Sognidoro
11841	1983	Burge, C.	Lieberman, P.	Geochemical, Diamond Drilling (2 holes totalling 107 m.) / no MINFILE	Volcanics
14891	1986	Neale, T., Hawkins, T.G.	International Cherokee Dev. Ltd.	Geological, Geochemical / 092C057	Meade
16122	1987	Thomae, B.Y., Allen, G.J.	International Cherokee Dev. Ltd.	Geological, Geochemical / 092C057	Meade
18640	1989	Yip, G.	International Cherokee Dev. Ltd.	Geochemical, Geological / 092C057	Meade

The history of the Mt. Sicker Property is long and very complex, and is summarized in the Capsule Geology of the first eleven BC MINFILE reports listed in Table 2, along with the last three covering the other three properties: Sognidoro, Volcanics and Meade. Periodic snapshots of early history (pre-1965) are available in the provincial and federal reports and publications referenced in the bibliographies of the MINFILE reports. More detailed recent history (post-1965) for all the South Group Properties is available in the BC ARIS reports listed in Table 3. A brief summary of the early history for the Mt. Sicker Property is as follows:

1895 to 1898 – prospecting, discovery, staking and underground mine development of the Mt. Sicker sulphide deposit, including three of the four MINFILE past producers: Lenora, Tyee, and Richard 3, (092B001-003) covered by the Mt. Sicker Property.

1897 to 1903 – prospecting, discovery, staking and underground development of the MINFILE past producer Victoria (092B004), the western continuation of the Mt. Sicker sulphide deposit east of the Chemainus River, covered by the Mt. Sicker Property.

1898 to 1964 – intermittent, combined production from the 4 past producers covered by the Mt. Sicker Property totalling 277,517 tonnes averaging 3.4% copper, 0.14% lead, 1.6% zinc, 90 g/t silver and 4.2 g/t gold from sulphide ore, shipped to smelters at Crofton, B.C. and Tacoma, U.S.A.

1897 to 1920 – prospecting, discovery, staking and surface exploration of the MINFILE showing Belle (092B089) located north of the Mt. Sicker sulphide deposit, covered by the Mt. Sicker Property.

1897 to 1924 - prospecting, discovery, staking and underground exploration of the MINFILE past producer Key City (092B087), a portion of the Mt. Sicker sulphide deposit between the Lenora and Victoria past producers, covered by the Mt. Sicker Property.

1898 to 1903 – prospecting, discovery, staking and underground exploration of the MINFILE showing Queen Bee (092B088), located near the Belle showing, north of the Mt. Sicker sulphide deposit, and covered by the Mt. Sicker Property.

1902 to 1928 – prospecting, discovery, staking and underground exploration of the MINFILE showing Copper Canyon (092B086), the western continuation of the Mt. Sicker sulphide deposit located west of the Chemainus River and the Lenora past producer, and covered by the Mt. Sicker Property.

1903 to 1927 – prospecting, discovery, staking and underground exploration of the MINFILE prospect Sharon (092B040), located northwest of the Mt. Sicker deposit, and covered by the Mt. Sicker Property.

1903 to 1923 – prospecting, discovery, staking and surface exploration of the MINFILE showing Water Power – Brenton (092B041), located northeast of the Sharon prospect, and covered by the Mt. Sicker Property.

List of Claims and Work Completed

Mt. Sicker Property:

Prospecting, outcrop and float rock sampling, rock geochemistry, data compilation and report writing were completed periodically between October 10, 2010 and May 31, 2011. Field work was completed on cell mineral claims 513291, 517577 and 516629, by Mr. Brant Protasiewich and Mr. Harry Young, and consisted of traveling by pickup trucks along logging roads, traversing on foot, prospecting and sampling using hand tools. Forty six (46) select rock samples were taken from 4 areas (Lenora, Victoria, Copper Canyon and Queen Bee), and shipped in 6 batches to ALS Canada in Vancouver. Samples were analyzed for 51 element ICP geochemistry, plus 7 for gold geochemistry, and the following for over limit assays by element: 2 for gold, 10 for silver, 26 for copper, 4 for lead, and 14 for zinc.

Sognidoro Property:

Prospecting, outcrop and float rock sampling, rock geochemistry, data compilation and report writing were completed periodically between September 18, 2010 and May 31, 2011. Field work was completed on cell mineral claims 513288 and 516626, by Mr. Brant Protasiewich and Mr. Harry Young, and consisted of traveling by pickup trucks along logging roads, traversing on foot, prospecting and sampling using hand tools. Ten (10) select rock samples were taken from 2 areas (Sogni and Trek), and shipped in

2 batches to ALS Canada in Vancouver. Samples were analyzed for 51 element ICP geochemistry, plus gold geochemistry, and the following for over limit assays by element: 1for gold, and 2 for copper.

Volcanics Property:

Prospecting, outcrop and float rock sampling, rock geochemistry, data compilation and report writing was completed between March 17, 2011 and May 31, 2011 by Mr. Brant Protasiewich and Mr. Harry Young. Field work was completed on cell mineral claim 550746 by Mr. Brant Protasiewich and Mr. Harry Young, and consisted of traveling by pickup trucks along logging roads, traversing on foot, prospecting and sampling using hand tools. Seven (7) select rock samples were taken, and shipped to ALS Canada in Vancouver. Samples were analyzed for 51 element ICP geochemistry.

For all sixty three (63) samples from the three properties, ample location data was compiled by Ms. Connie McCombs, rock sample descriptions were completed by Mr. Brant Protasiewich, cost data was compiled by Mr. Rocky Ostaffy and the author, and the technical data was compiled, maps plotted, and the report written by the author.

Technical data, interpretation, conclusions, recommendations

Rock Sample Highlights – Mt. Sicker Property

Rock sample locations relative to cell mineral claims boundaries appear in Figure 5, and sample locations and selected elevated geochemistry values for the four (4) sampling areas appear as Figures 6 to 23 inclusive. Tables of rock sample locations, descriptions, geochemistry and geochemistry highlights appear in Appendix 1, and analytical certificates from ALS Minerals appear in Appendix 4.

All 46 samples taken consisted of sulphide-bearing rocks, with 35 of 46 samples exceeding 10% sulphur. Most samples yielded elevated values of target (gold, silver, copper, lead, zinc) and/or indicator elements for volcanogenic massive sulphide deposits, including:

- 18 of 46 samples exceeding 1 ppm gold, up to 21.1 ppm gold
- 32 of 46 samples exceeding 10 ppm silver, up to 337 ppm silver
- 39 of 46 samples exceeding 500 ppm copper, up to 28.9% copper
- 14 of 46 samples exceeding 500 ppm lead, up to 2.78% lead
- 26 of 46 samples exceeding 500 ppm zinc, including 2 exceeding 30% zinc

- Multiple samples with elevated values in arsenic, barium, bismuth, cobalt, gallium, mercury, indium, molybdenum, phosphorus, antimony, selenium, tellurium and/or yttrium

The geochemistry results from the selected rock samples confirm the presence, and economic base and precious metal grades of volcanogenic massive sulphide mineralization at the historic mine workings on the Mt. Sicker Property.

More systematic technical work is warranted on the Mt. Sicker Property, including:

- Geo-referencing, 3-D compilation and modeling of historic underground workings and selected historic exploration data
- Systematic modern exploration, initially from surface and possibly involving rehabilitation and utilization of historic underground workings
- Initiation of baseline environmental studies to determine impacts of historic industrial (including mining and forestry) and residential infrastructure on the property prior to any possible future disturbance by current owners/operators

Rock Sample Highlights – Sognidoro Property

Rock sample locations relative to cell mineral claims boundaries appear in Figure 24, and sample locations and selected elevated geochemistry values for the two (2) sampling areas appear as Figures 25 to 30 inclusive. Tables of rock sample locations, descriptions, geochemistry and geochemistry highlights appear in Appendix 2, and analytical certificates from ALS Minerals appear in Appendix 4.

Most of the ten (10) samples taken consisted of sulphide-bearing rocks which yielded elevated values of some target (gold, copper) and/or indicator elements for volcanogenic massive sulphide deposits or polymetallic vein deposits, including:

- 2 of 10 samples exceeding 1 ppm gold, up to 2.34 ppm gold
- 4 of 10 samples exceeding 2000 ppm copper, up to 1.845% copper
- One or more samples with elevated values in arsenic, gallium, nickel and/or phosphorus

The geochemistry results from the selected rock samples confirm the presence of volcanogenic sulphide and/or polymetallic vein mineralization on the Sognidoro Property.

More systematic technical work is warranted on the Sognidoro Property, including:

- Geo-referencing and compilation of historic exploration data

- Grid-based soil geochemistry and geological mapping across the northern portion of the Sognidoro Property encompassing the 2 areas of known mineralization

Rock Sample Highlights – Volcanics Property

Rock sample locations relative to cell mineral claims boundaries appear in Figure 31, and elevated geochemistry values for copper in ppm appears in Figure 32. Tables of rock sample locations, descriptions, geochemistry and geochemistry highlights appear in Appendix 3, and analytical certificates from ALS Minerals appear in Appendix 4.

Most of the seven (7) samples taken consisted of lean, sulphide-bearing rocks which yielded weakly elevated values of one target (copper) and/or indicator elements for volcanogenic massive sulphide deposits or polymetallic vein deposits, including:

- 1 of 7 samples exceeding 500 ppm copper, up to 1080 ppm copper
- One or more samples with elevated values in bismuth, gallium, nickel and/or lithium

The elevated copper value in one rock sample and the favourable geological setting of the Volcanics Property suggest the possibility of volcanogenic sulphide and/or polymetallic vein mineralization on the Volcanics Property.

More systematic technical work is warranted on the Volcanics Property, including:

- Geo-referencing and compilation of historic exploration data
- Grid-based soil geochemistry and geological mapping over the Property

Qualifications of Author

I, Jacques Houle, P.Eng., do hereby certify that:

1. I am currently employed as a consulting geologist by:
   Jacques Houle, P.Eng. Mineral Exploration Consulting

   6552 Peregrine Road

   Nanaimo, British Columbia, Canada V9V 1P8

2. I graduated with a B.A.Sc. degree in Geological Engineering with specialization in Mineral Exploration from the University of Toronto in 1978.

3. I am a member of the Association of Professional Engineers and Geoscientists of B.C.

4. I have worked as a geologist for 33 years since graduating from university.

5. I am the author responsible for the preparation of the Technical Report titled "Assessment Report for Prospecting and Geochemistry on the Vancouver Island South Group Properties" for Rock-Con Resources Ltd. dated May 20, 2011.

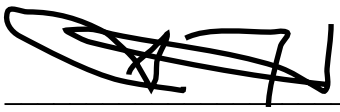
6. I have had prior involvement with the Properties that are the subject of the Assessment Report, as an acquaintance of the late Mr. Alan Francis, and Ms. Connie McCombs. I visited the Sognidoro Property when I was Regional Geologist with the B.C. Ministry of Energy and Mines.

7. I am not aware of any material fact or material change with respect to the subject matter of the Assessment Report that is not reflected in the Assessment Report, the omission to disclose which makes the Assessment Report misleading.

8. I hold no financial interest and no shares, nor do I expect to receive or acquire any interest or shares in Rock-Con Resources Inc.

9. I am independent of Rock-Con Resources Inc.

Dated this 31st day of May, 2011



Signature of Author

Jacques Houle, P.Eng.

Printed name of Author

Seal of Author

References

B. C. Ministry of Energy and Mines websites:

Assessment Reports
http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx

Geological Survey Publications
http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/Pages/default.aspx

Landowner Notification
http://www.empr.gov.bc.ca/Titles/MineralTitles/Admin/Notices/Pages/LandownerNotification.aspx

MapPlace
http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/Pages/default.aspx

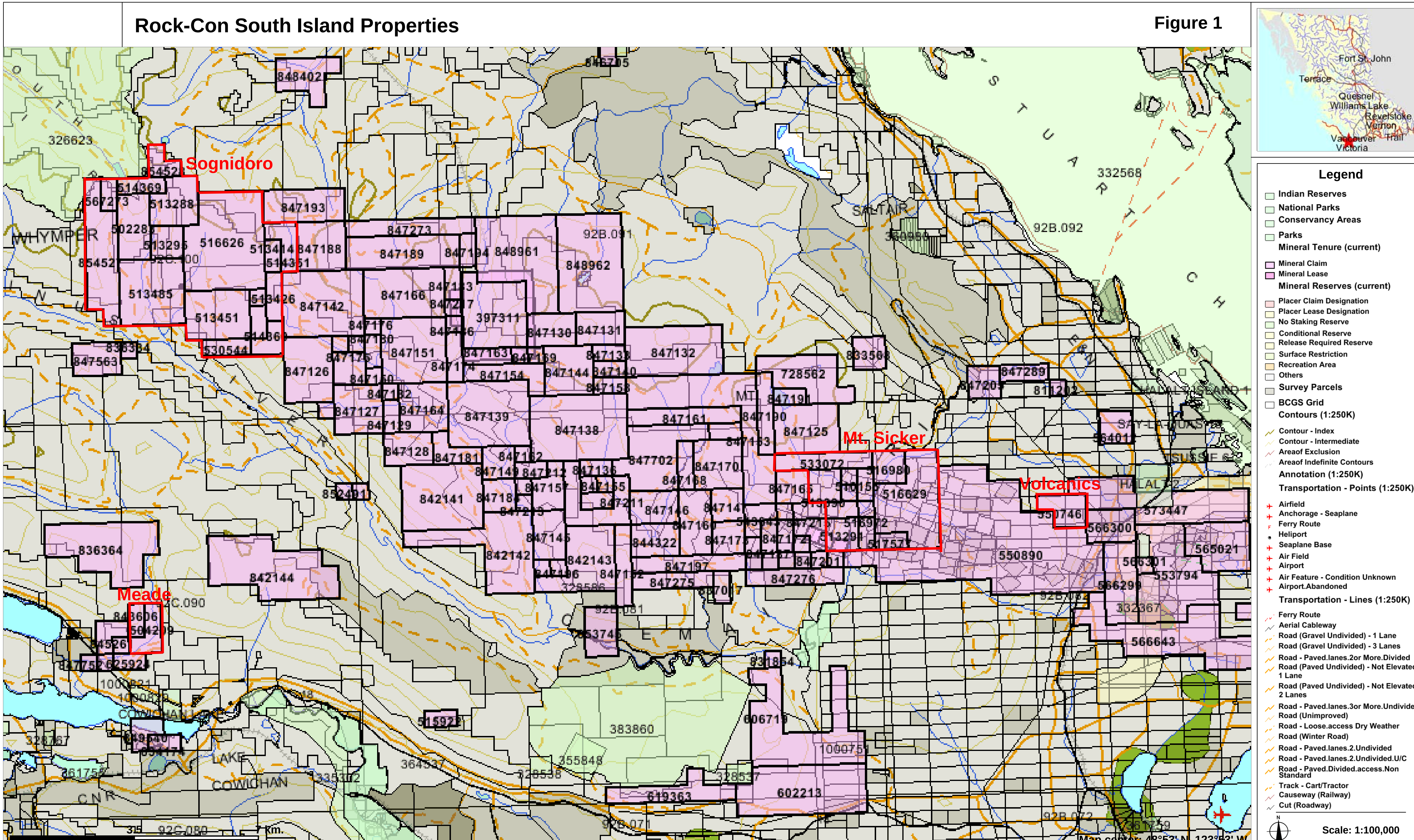
Mineral Deposit Profiles
http://www.empr.gov.bc.ca/Mining/Geoscience/MineralDepositProfiles/Pages/default.aspx

MINFILE
http://www.empr.gov.bc.ca/Mining/Geoscience/MINFILE/Pages/default.aspx

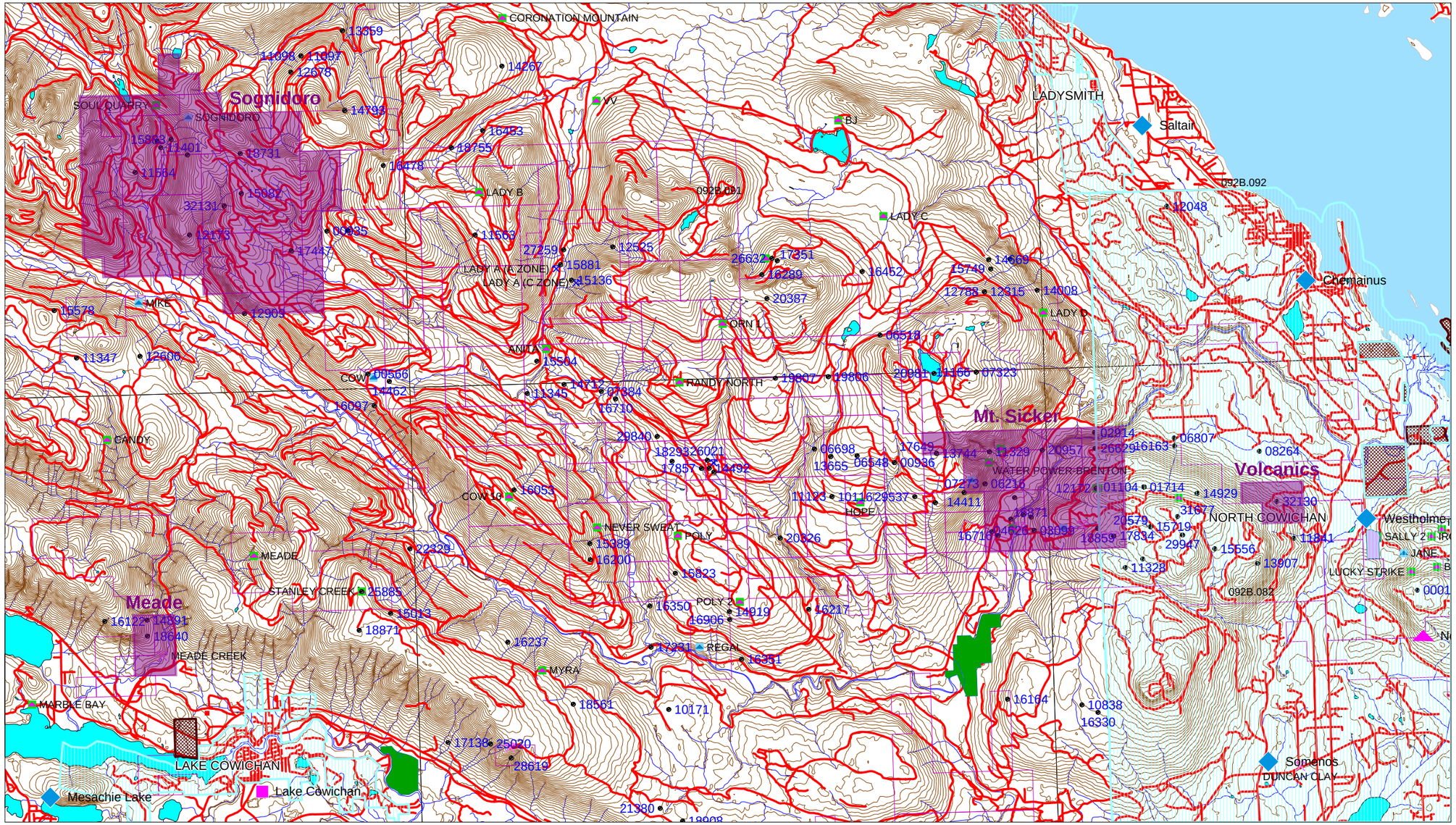
Mineral Titles Online
https://www.mtonline.gov.bc.ca/mtov/home.do

Rock-Con South Island Properties

Figure 1



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.



SCALE 1 : 100,000

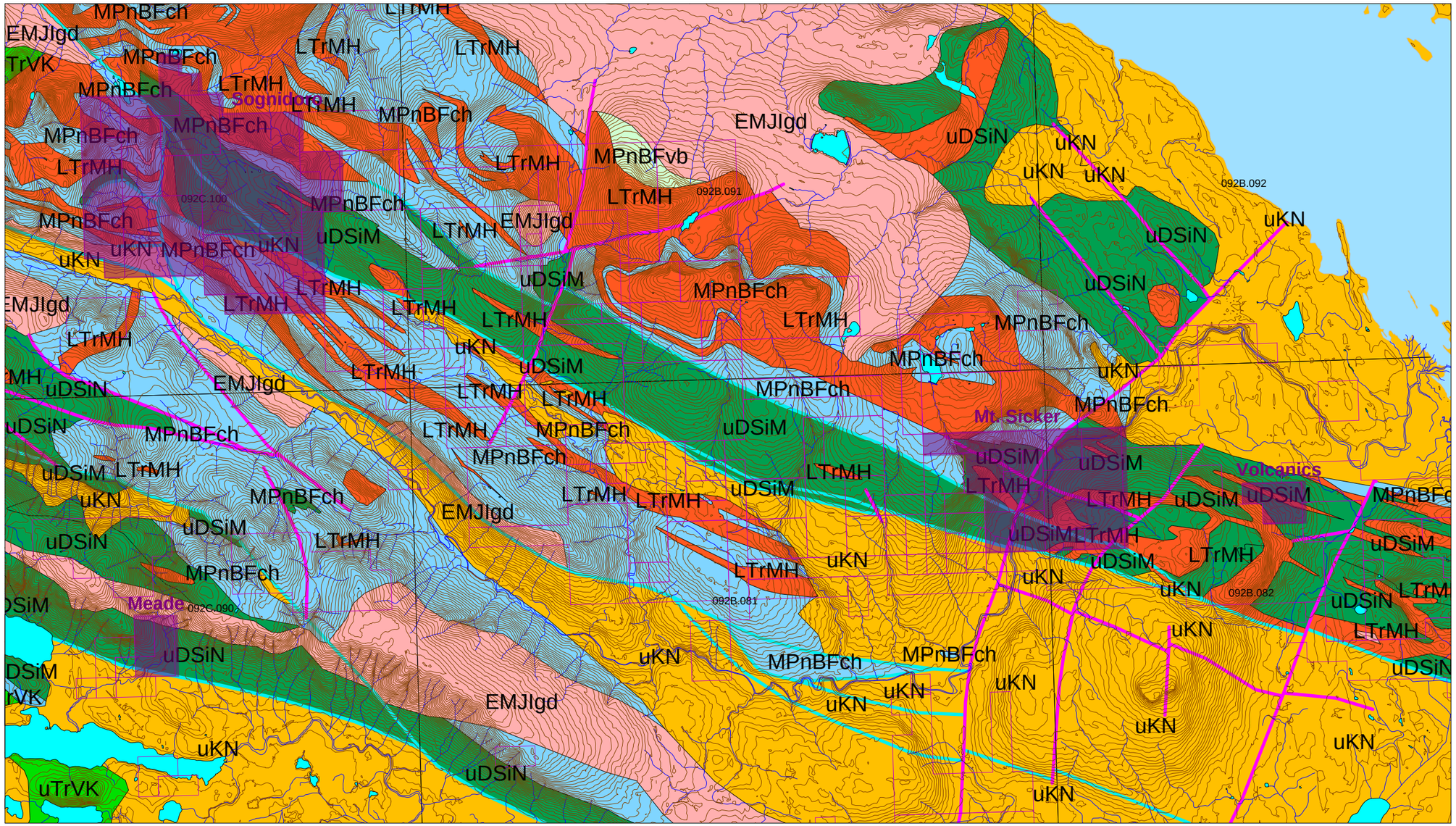
2 0 2 4 6

KILOMETERS

Rock-Con South Island Properties
Infrastructure (MapPlace)

Figure 2

N



SCALE 1 : 100,000

2 0 2 4 6

KILOMETERS

Rock-Con South Island Properties
Geology (MapPlace BCGS 2005)

For Geology Legend
See Page 7 in report

Figure 3

N

Sognidoro

Meade

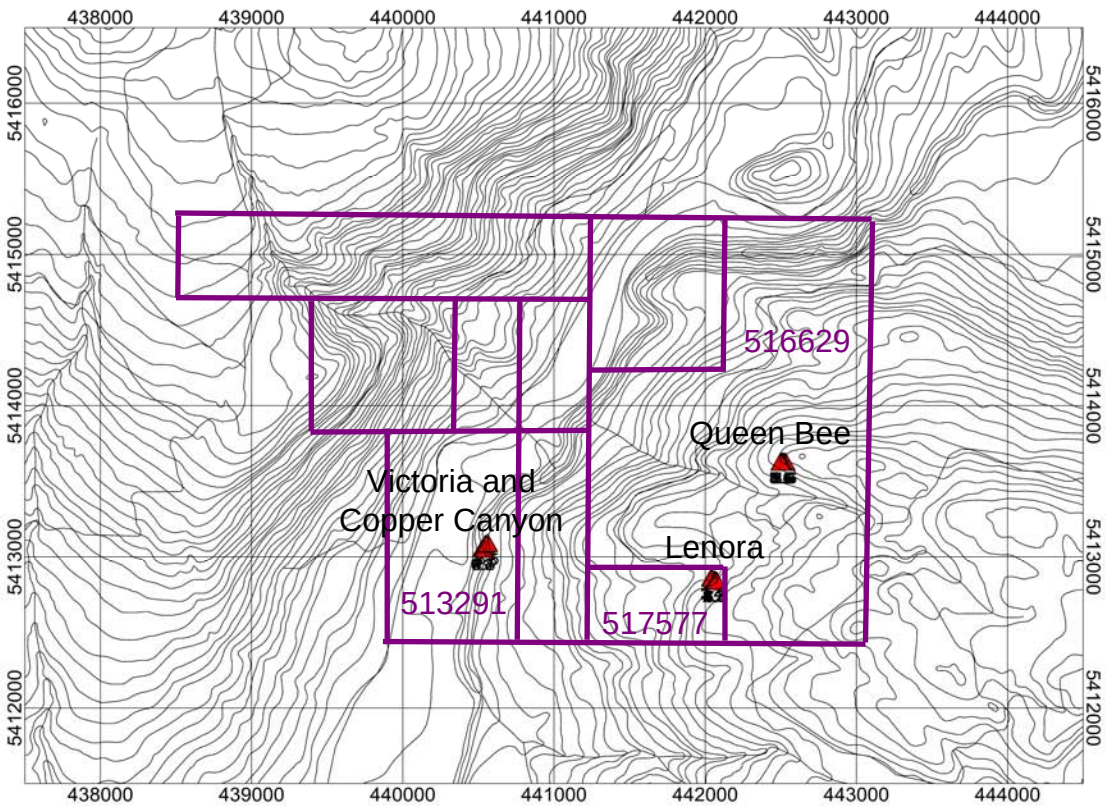
Mt. Sicker

Volcanics

1000 0 1000 2000 3000
(meters)
NAD83 / UTM zone 10N

Rock-Con South Island Properties
2010/2011 Rock Sample Locations

Figure 4



500 0 500 1000 1500

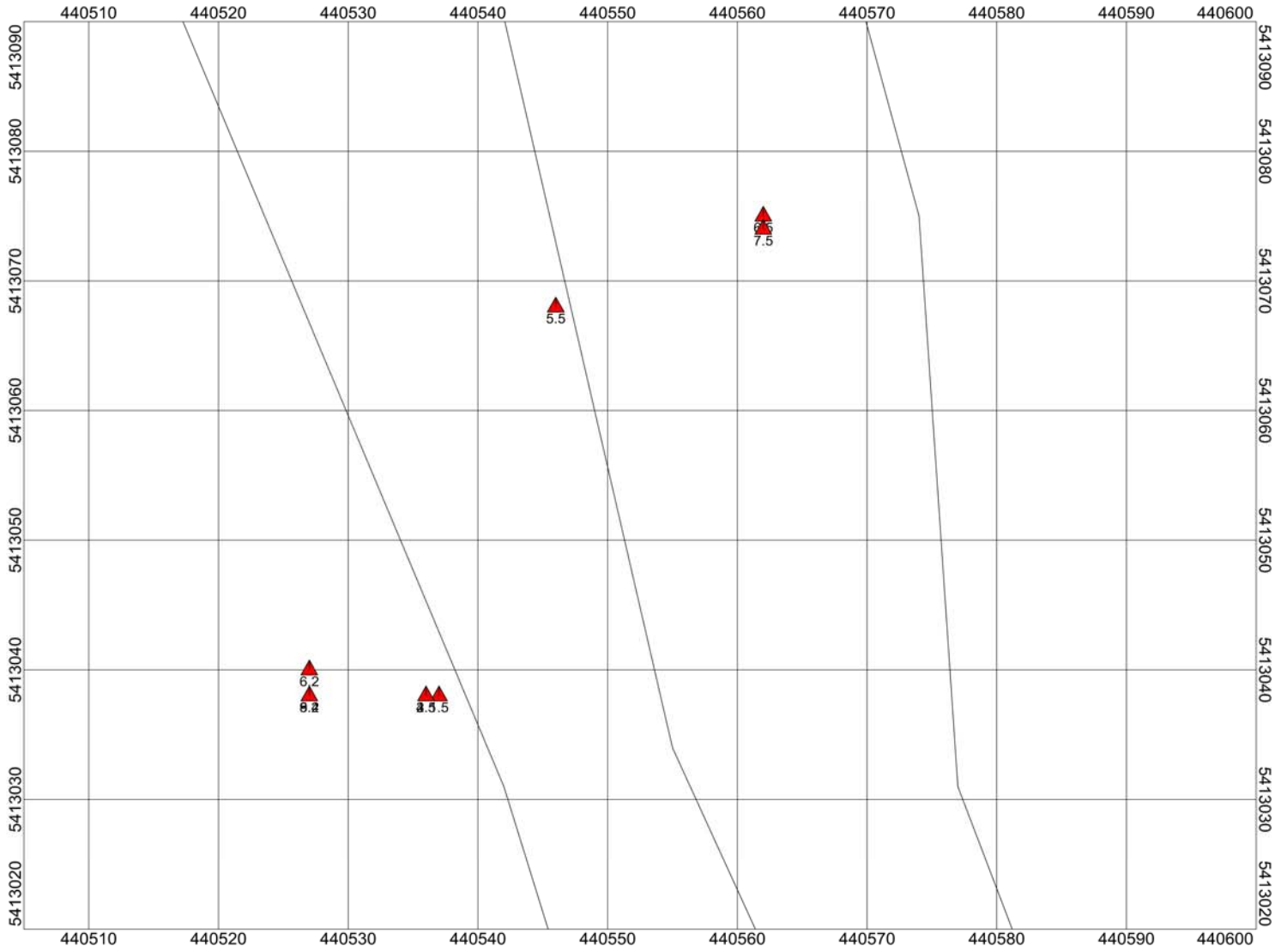
(meters)

NAD83 / UTM zone 10N

Rock-Con Mt. Sicker Property

2010/2011 Rock Sample Locations

Figure 5



Rock-Con Mt. Sicker Property

Victoria and Copper Canyon Areas

2010 Rock Sample Locations

Figure 6

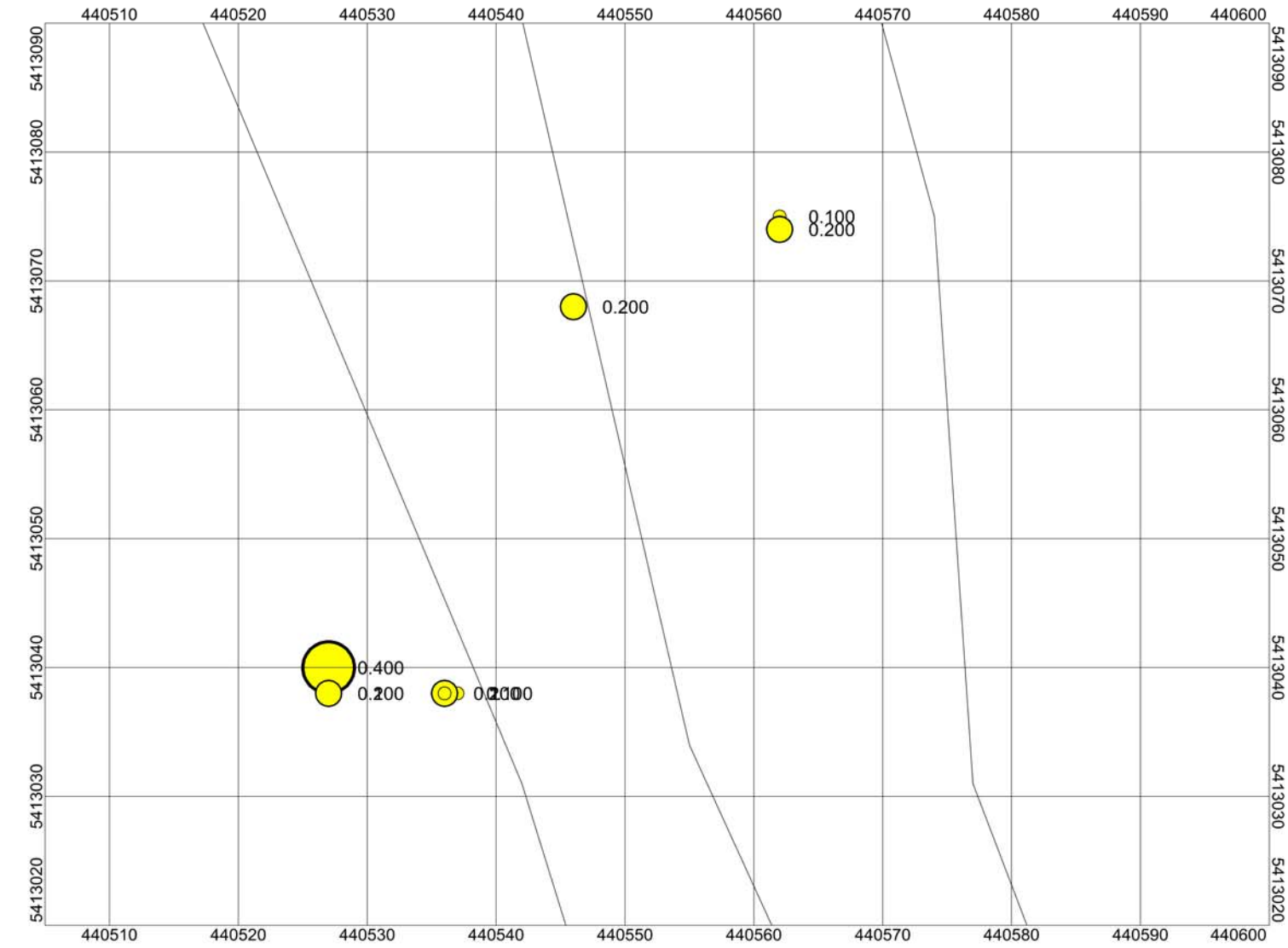


Figure 7

Rock-Con Mt. Sicker Property

Victoria and Copper Canyon Areas

Gold ppm in Rocks

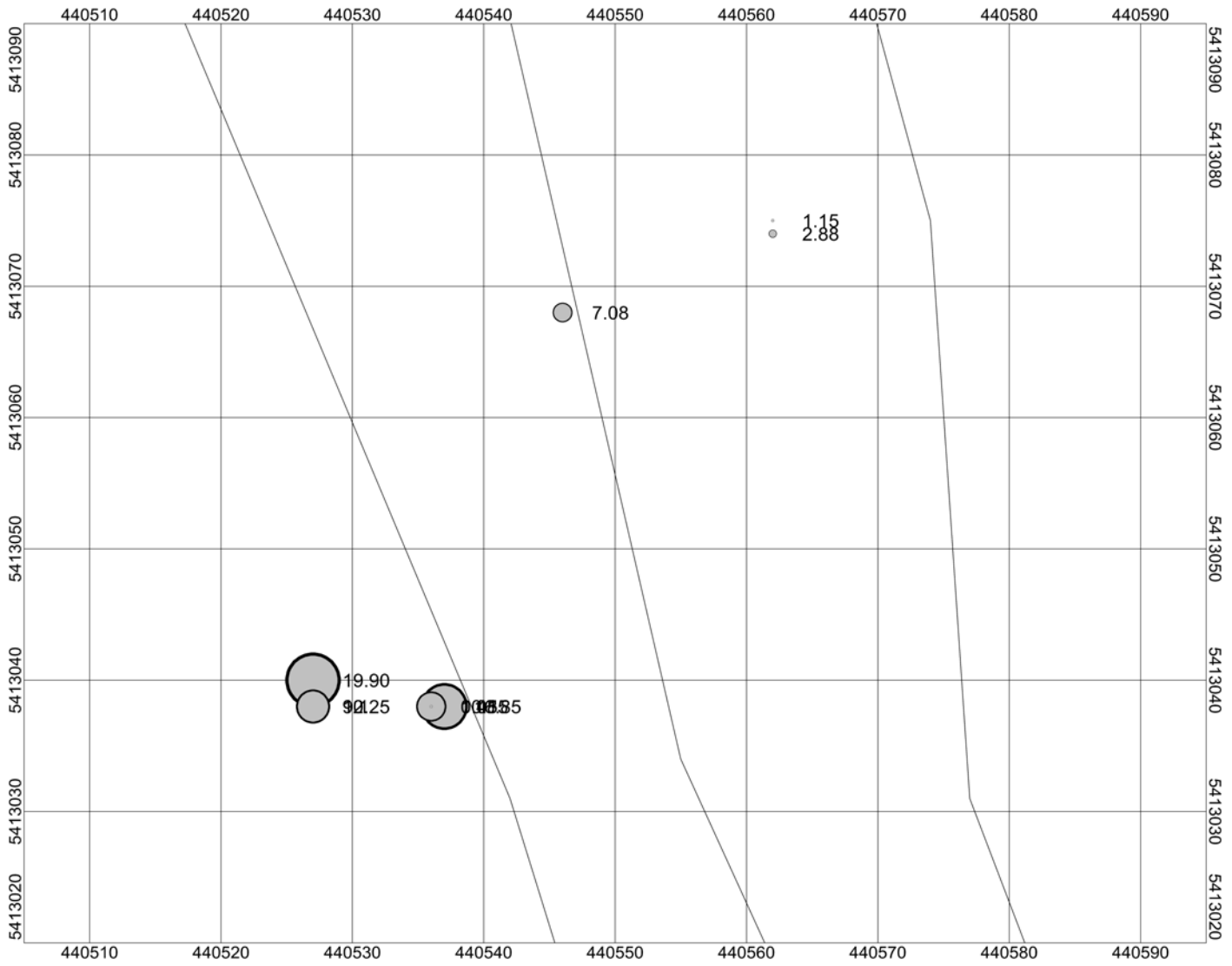


Figure 8

Rock-Con Mt. Sicker Property

Victoria and Copper Canyon Areas

Silver ppm in Rocks

Ag ppm

15

10

5

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N

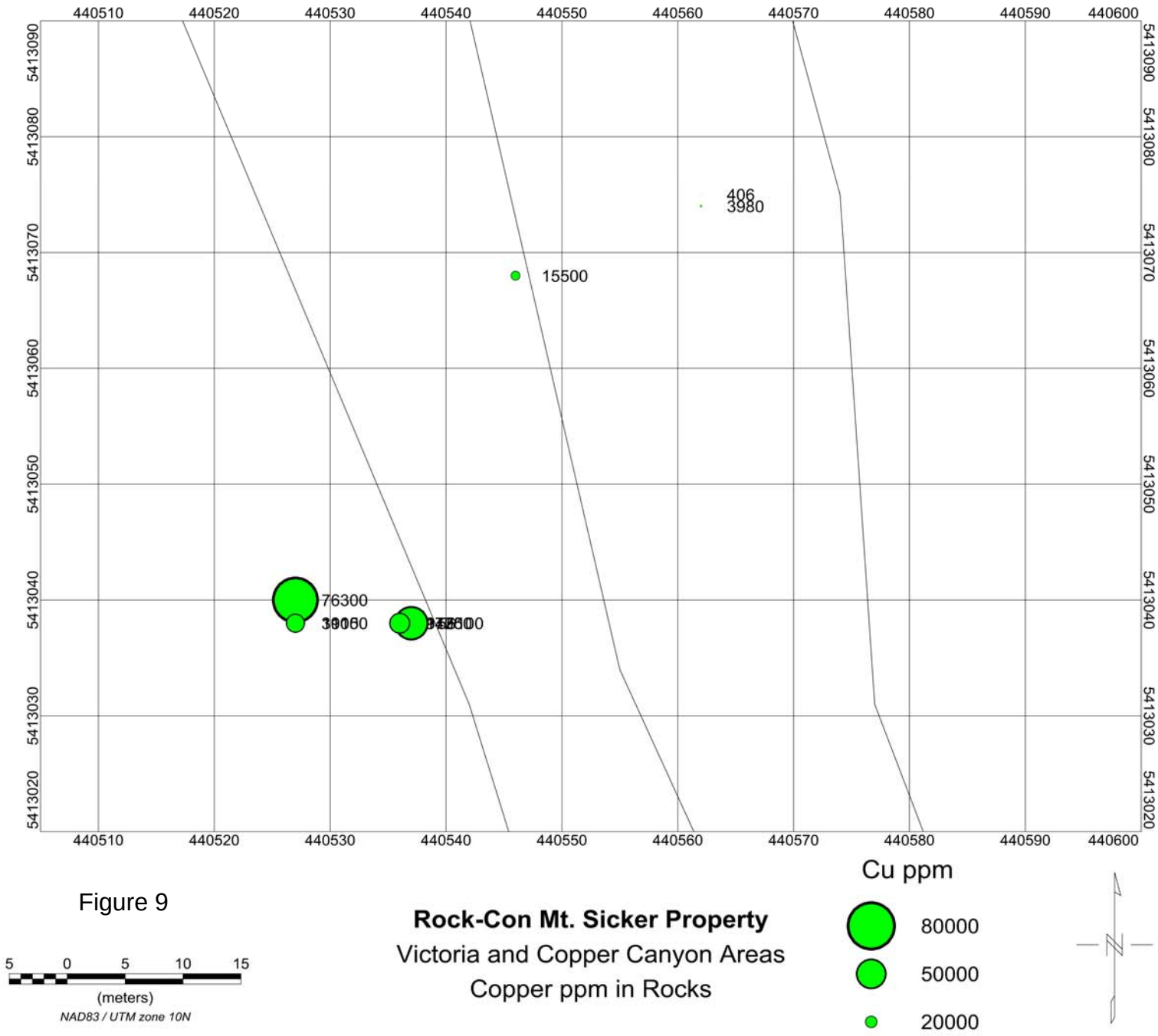

440510
440520
440530
440540
440550
440560
440570
440580
440590
440600
5413090
5413080
5413070
5413060
5413050
5413040
5413030
5413020
406
3980
15500
76300
Cu ppm
80000
50000
20000
5 0 5 10 15
(meters)
NAD83 / UTM zone 10N
Rock-Con Mt. Sicker Property
Victoria and Copper Canyon Areas
Copper ppm in Rocks

Figure 9

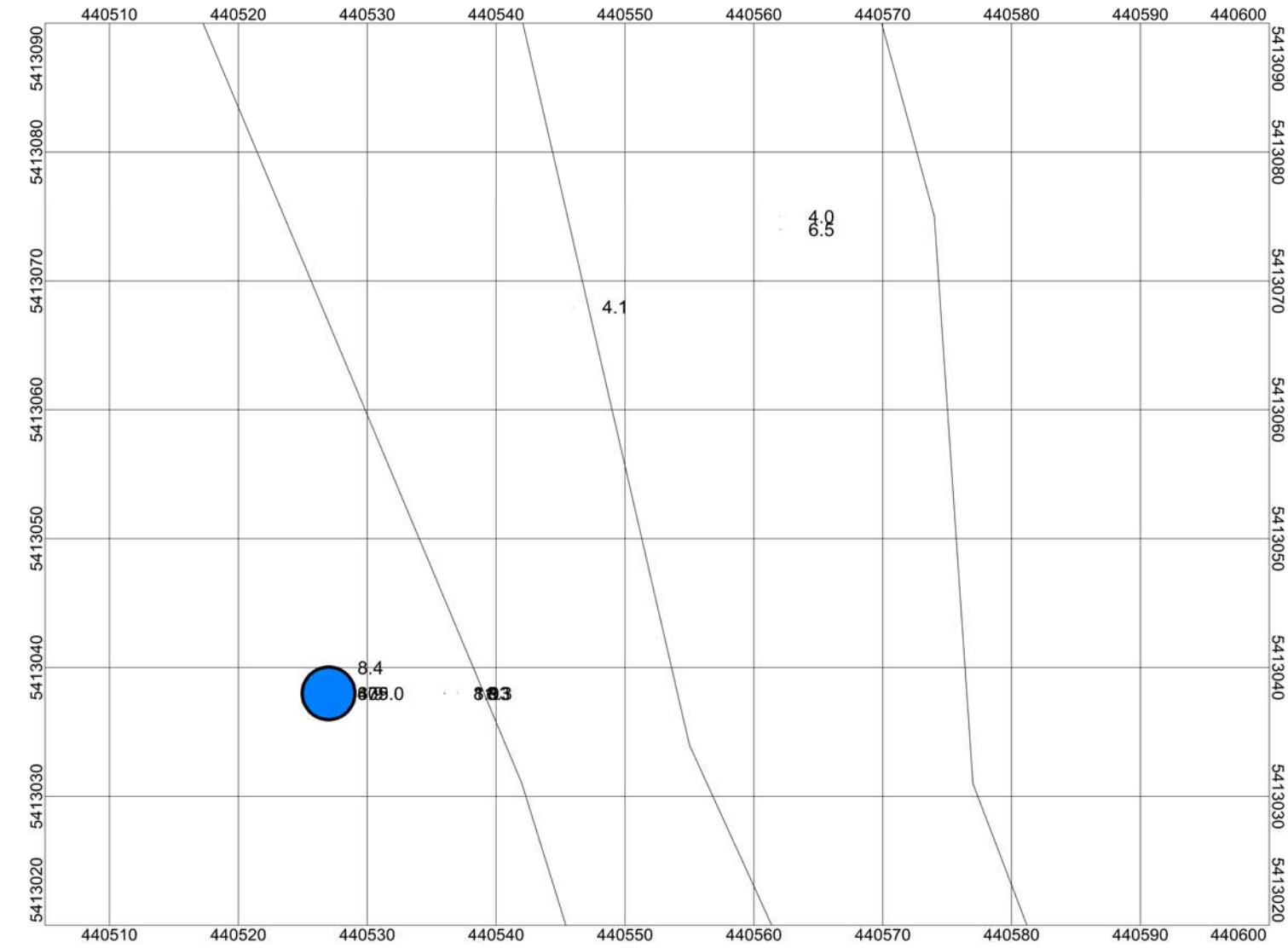


Figure 10

Rock-Con Mt. Sicker Property

Victoria and Copper Canyon Areas

Lead ppm in Rocks

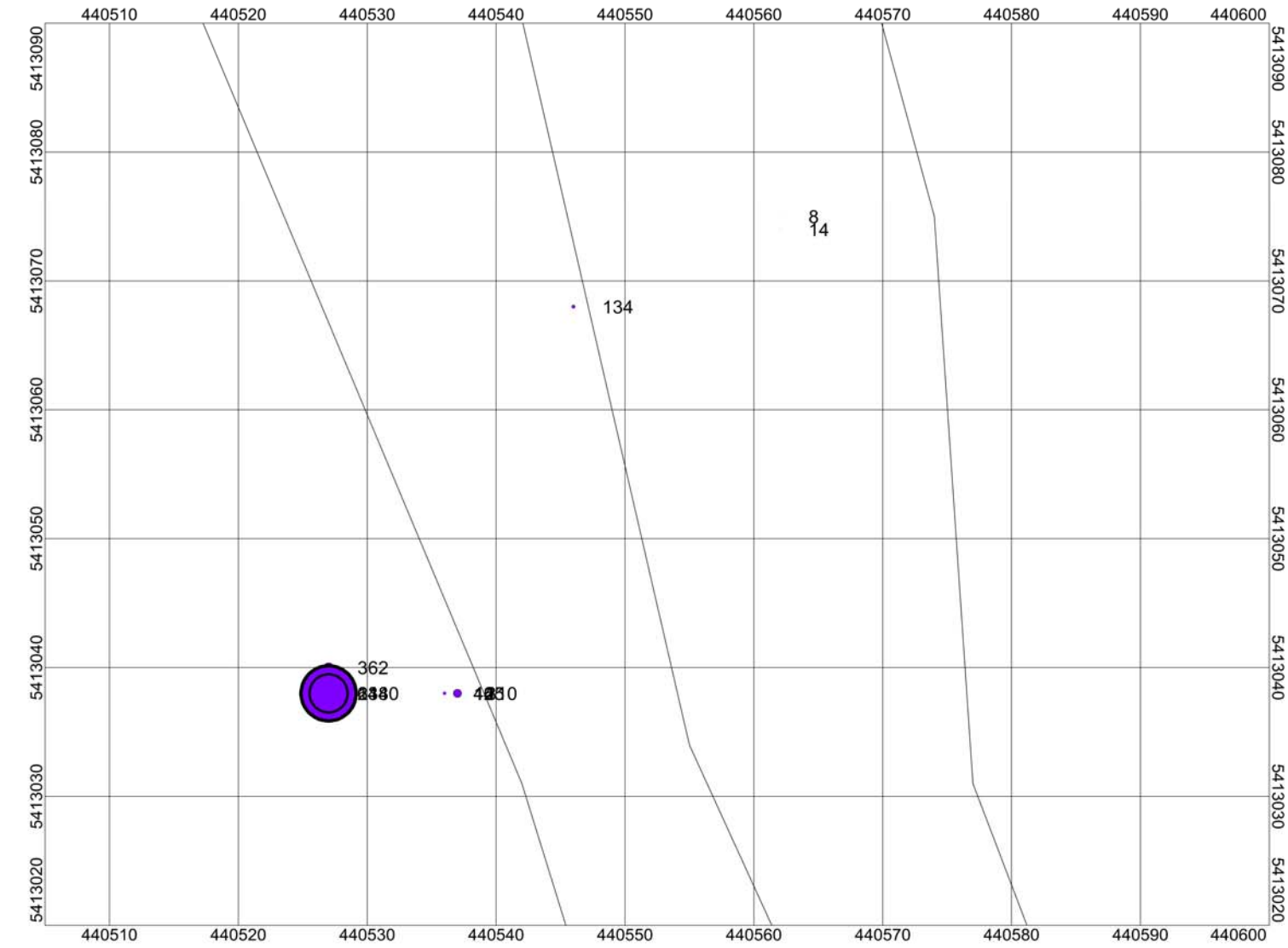


Figure 11

Rock-Con Mt. Sicker Property

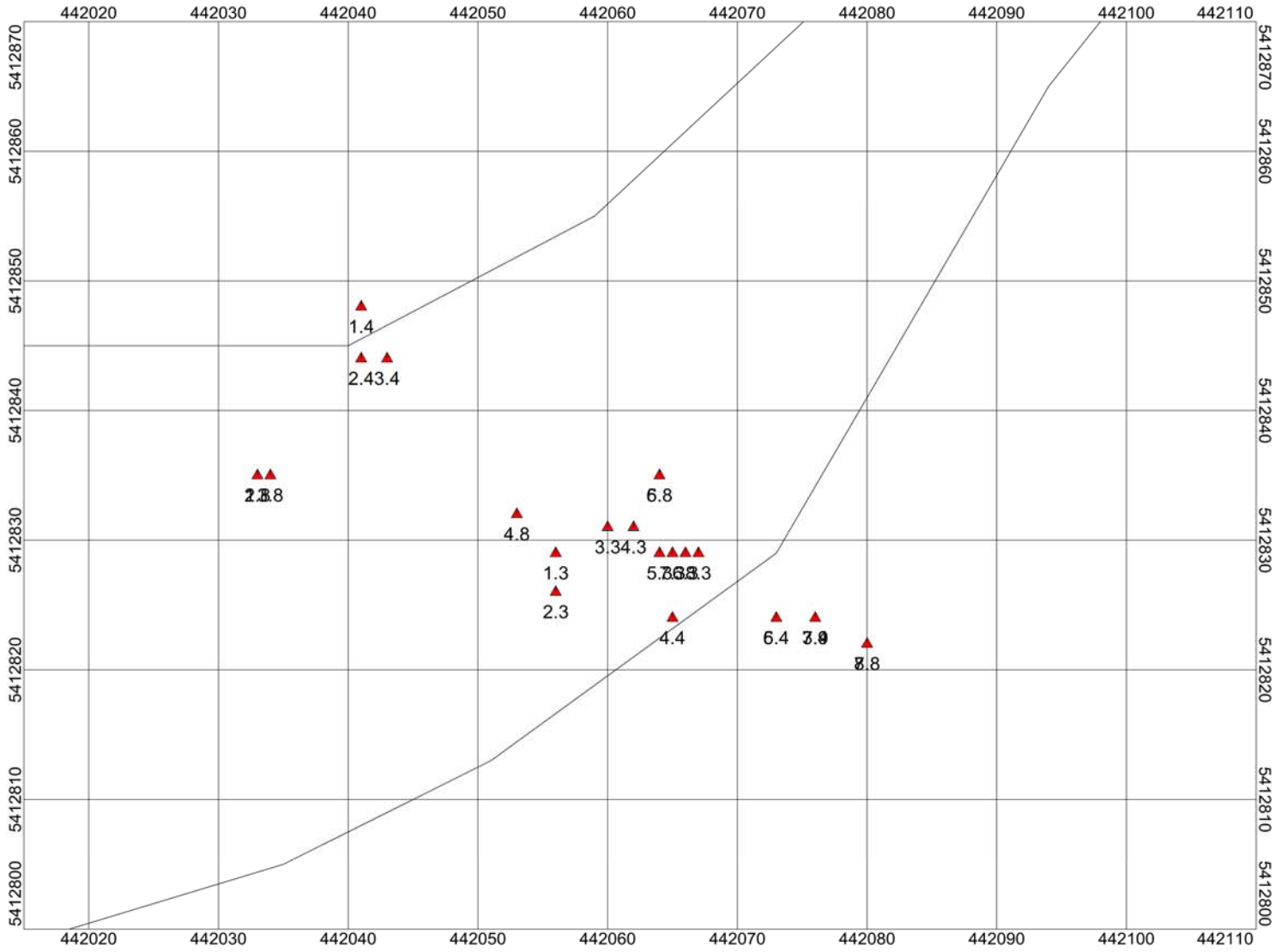
Victoria and Copper Canyon Areas

Zinc ppm in Rocks

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N



Rock-Con Mt. Sicker Property

Lenora Area

2010-2011 Rock Sample Locations

Figure 12

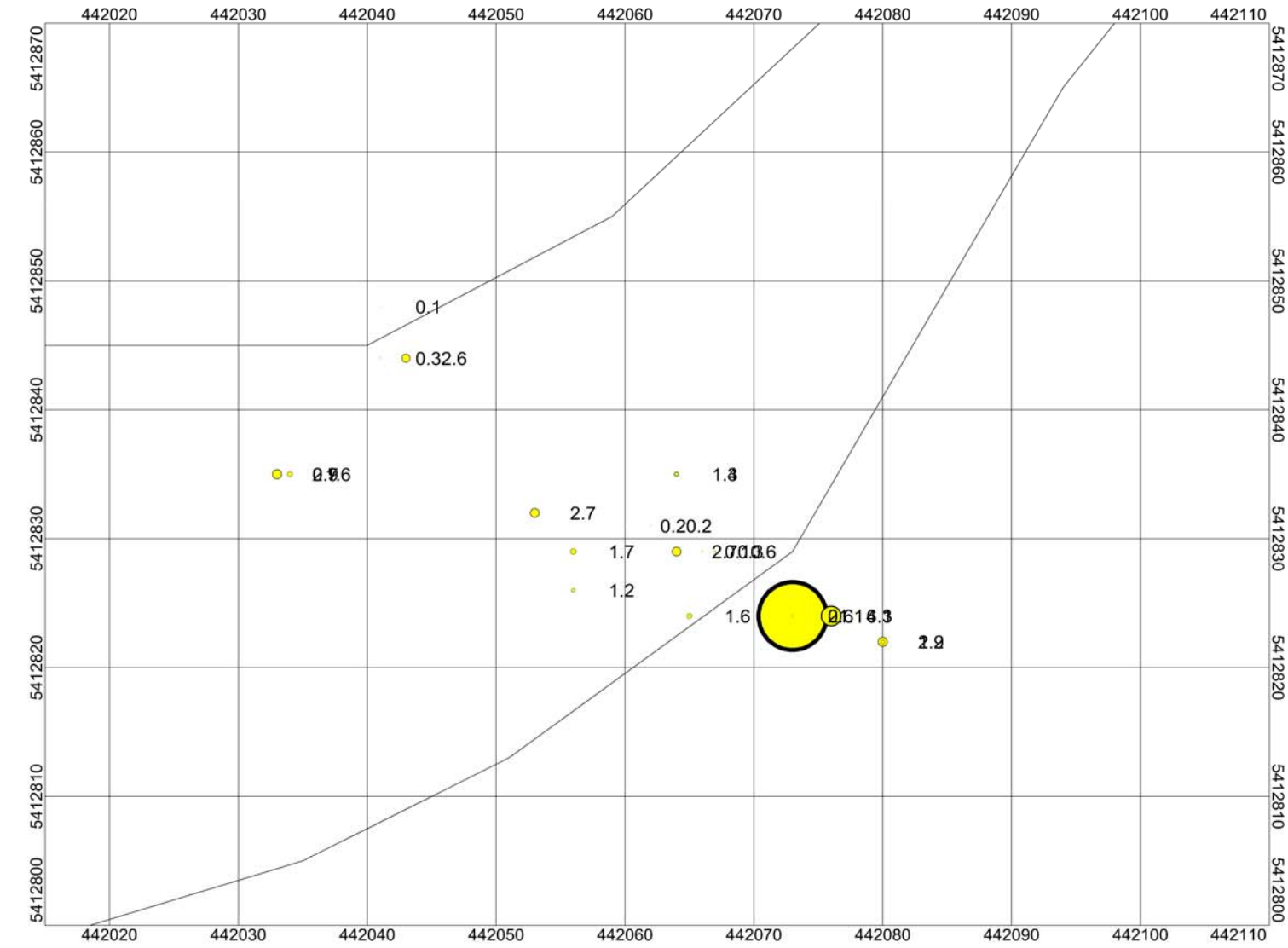


Figure 13

Rock-Con Mt. Sicker Property

Lenora Area

Gold ppm in Rocks

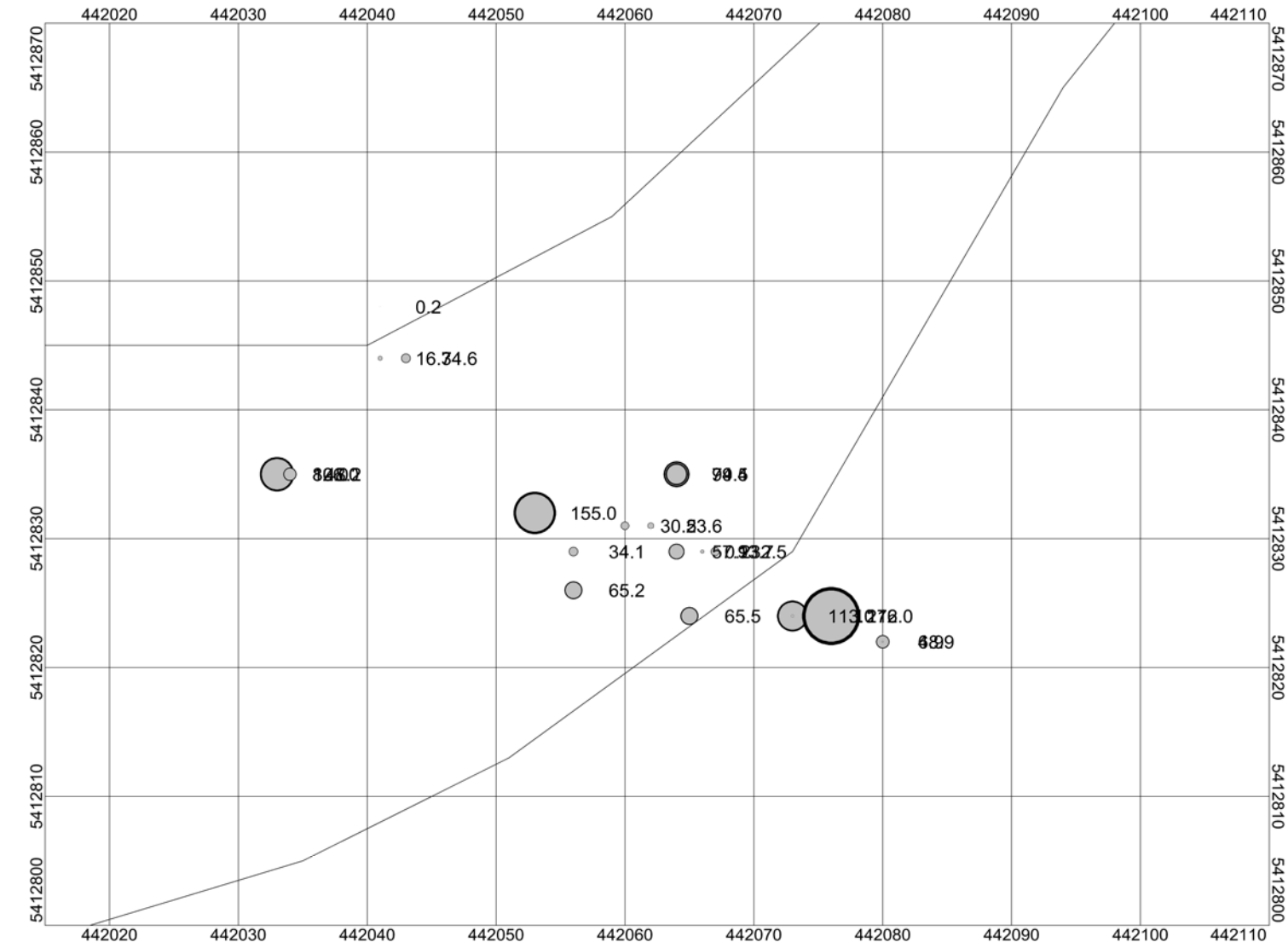


Figure 14

Rock-Con Mt. Sicker Property

Lenora Area

Silver ppm in Rocks

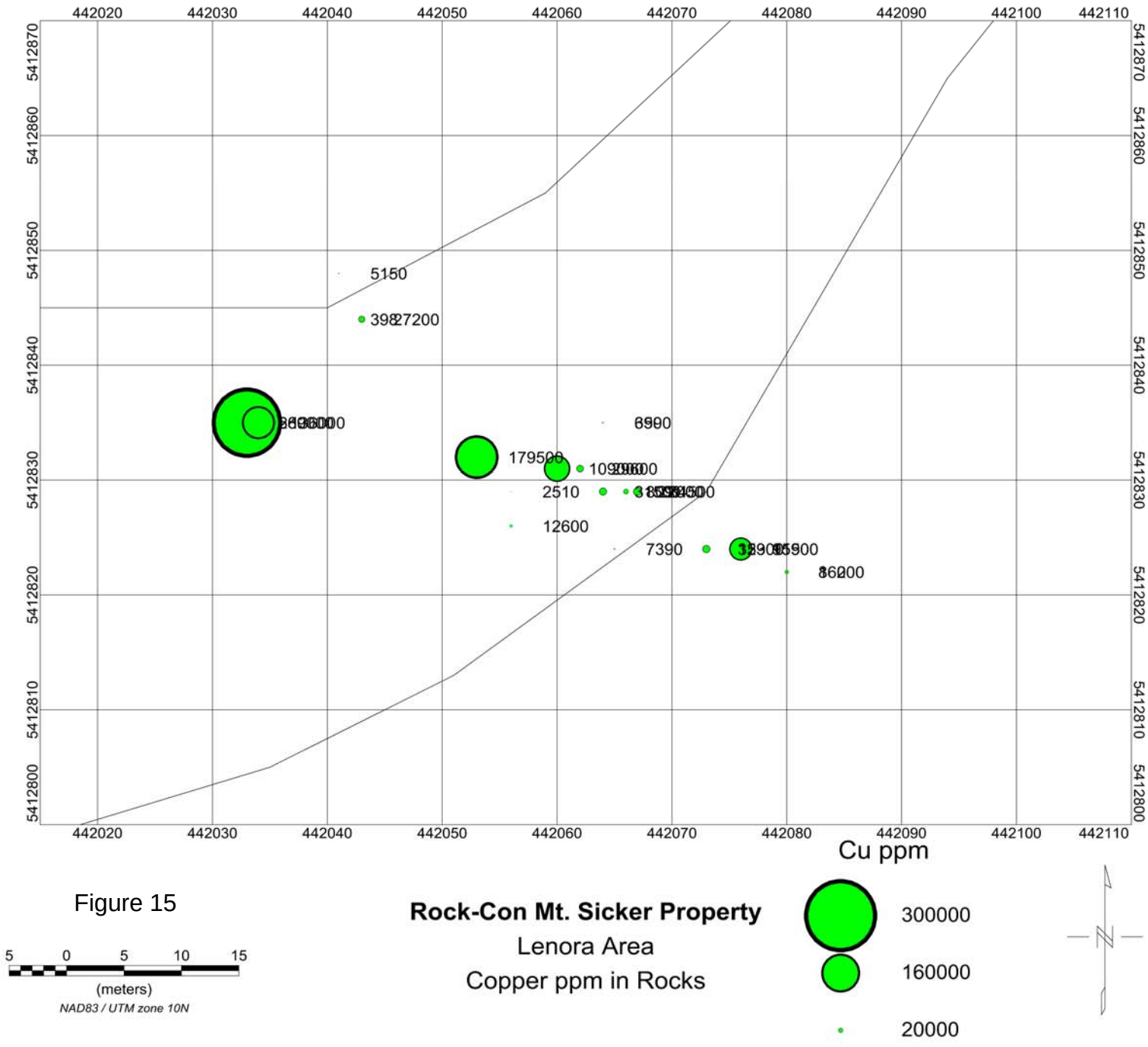

442020
442030
442040
442050
442060
442070
442080
442090
442100
442110
5412870
5412860
5412850
5412840
5412830
5412820
5412810
5412800
5150
39827200
6990
179500
2510
12600
7390
Cu ppm
300000
160000
20000
5 0 5 10 15
(meters)
NAD83 / UTM zone 10N
Rock-Con Mt. Sicker Property
Lenora Area
Copper ppm in Rocks

Figure 15

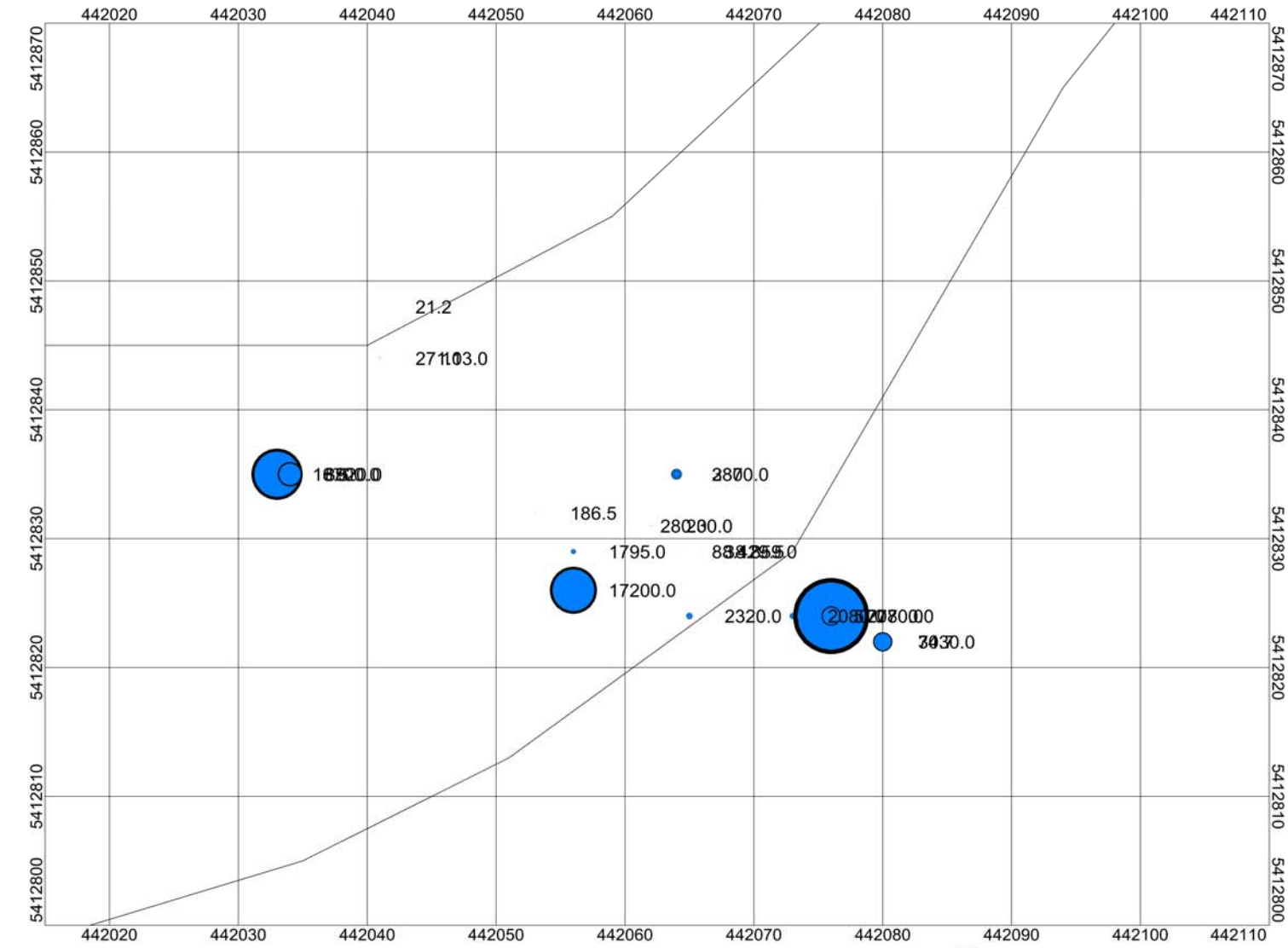

442020
442030
442040
442050
442060
442070
442080
442090
442100
442110
5412870
5412860
5412850
5412840
5412830
5412820
5412810
5412800
21.2
186.5
1795.0
17200.0
2320.0
Pb ppm
25000
13000
1000
5 0 5 10 15
(meters)
NAD83 / UTM zone 10N
Rock-Con Mt. Sicker Property
Lenora Area
Lead ppm in Rocks

Figure 16

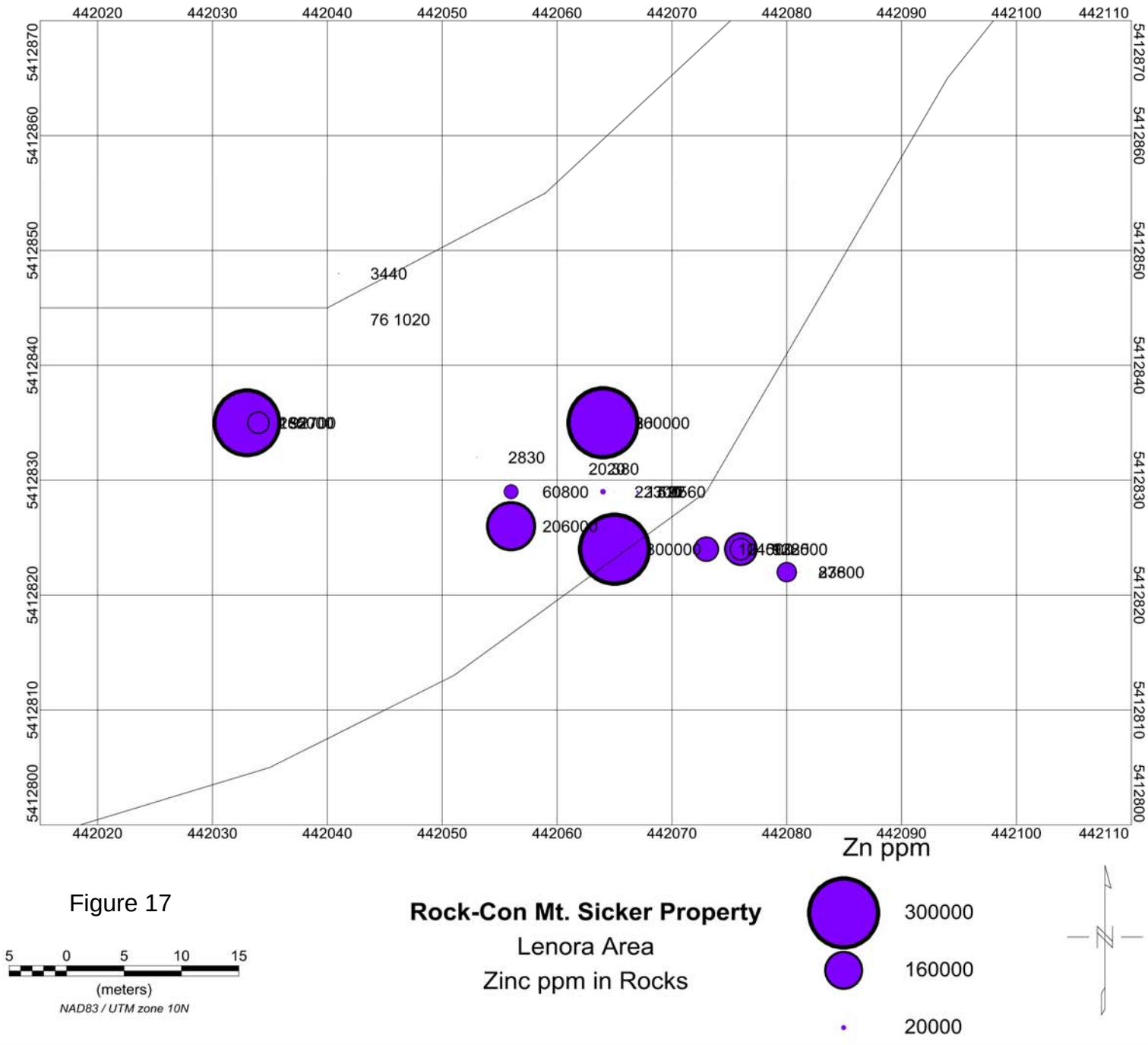
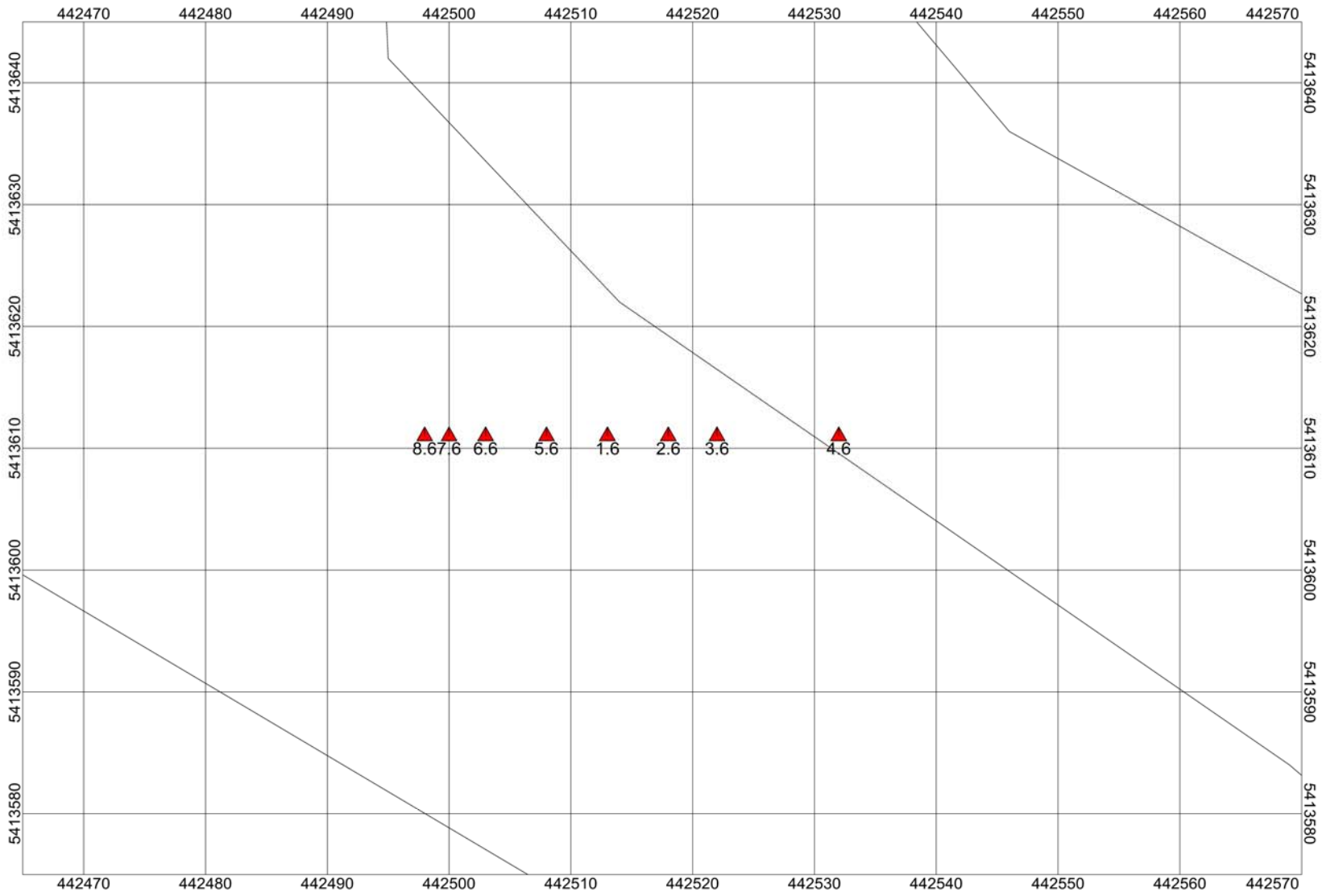

442020
442030
442040
442050
442060
442070
442080
442090
442100
442110
5412870
5412860
5412850
5412840
5412830
5412820
5412810
5412800
3440
76 1020
2830
60800
206000
Zn ppm
300000
160000
20000
Rock-Con Mt. Sicker Property
Lenora Area
Zinc ppm in Rocks
5 0 5 10 15
(meters)
NAD83 / UTM zone 10N

Figure 17



Rock-Con Mt. Sicker Property

Queen Bee Area

2011 Rock Sample Locations

Figure 18

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N

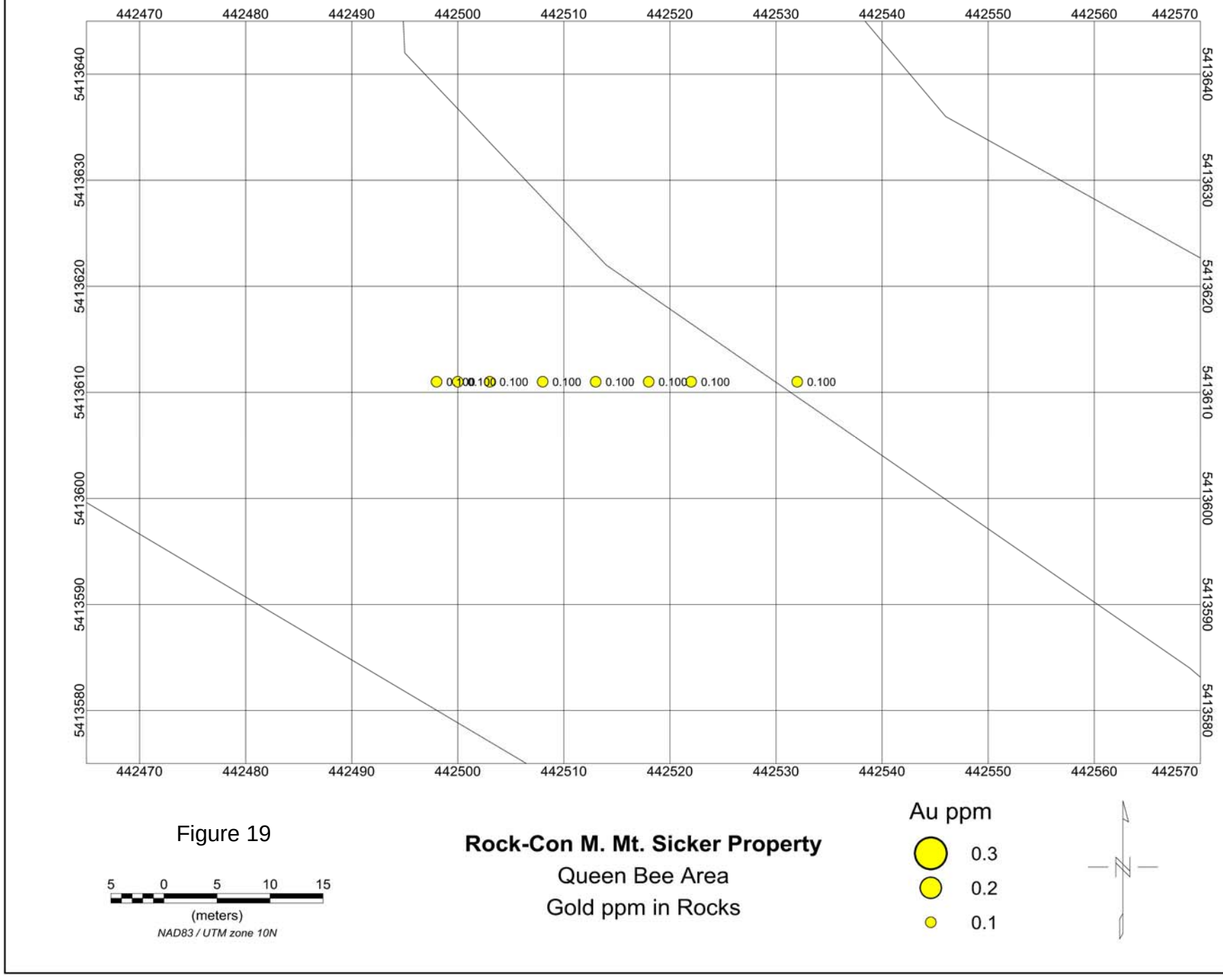


Figure 19

Rock-Con M. Mt. Sicker Property

Queen Bee Area

Gold ppm in Rocks

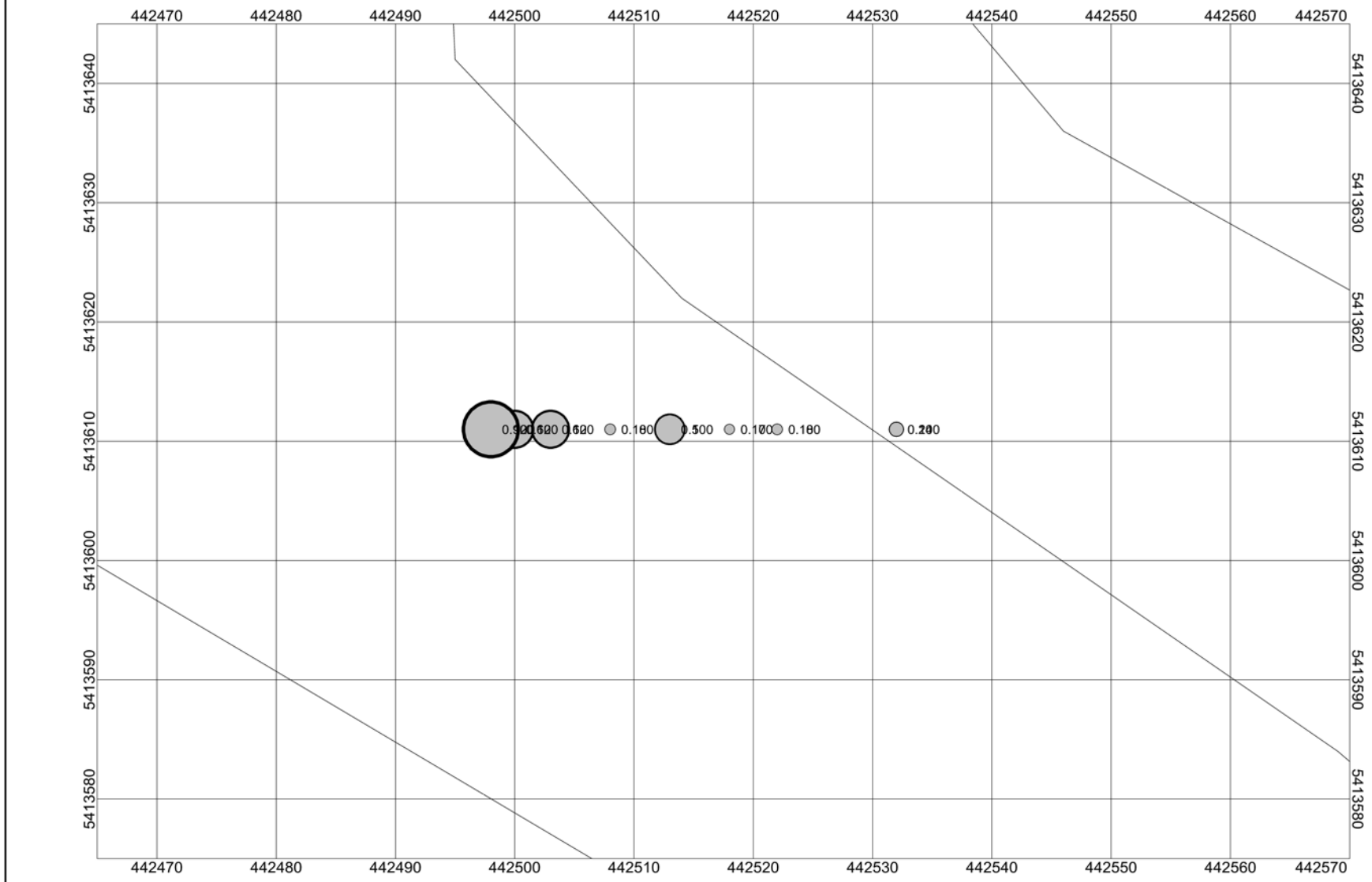

442470
442480
442490
442500
442510
442520
442530
442540
442550
442560
442570
5413640
5413630
5413620
5413610
5413600
5413590
5413580
0.160
0.500
0.160
0.160
0.200
5 0 5 10 15
(meters)
NAD83 / UTM zone 10N
Ag ppm
0.7
0.4
0.1
Rock-Con M. Mt. Sicker Property
Queen Bee Area
Silver ppm in Rocks

Figure 20

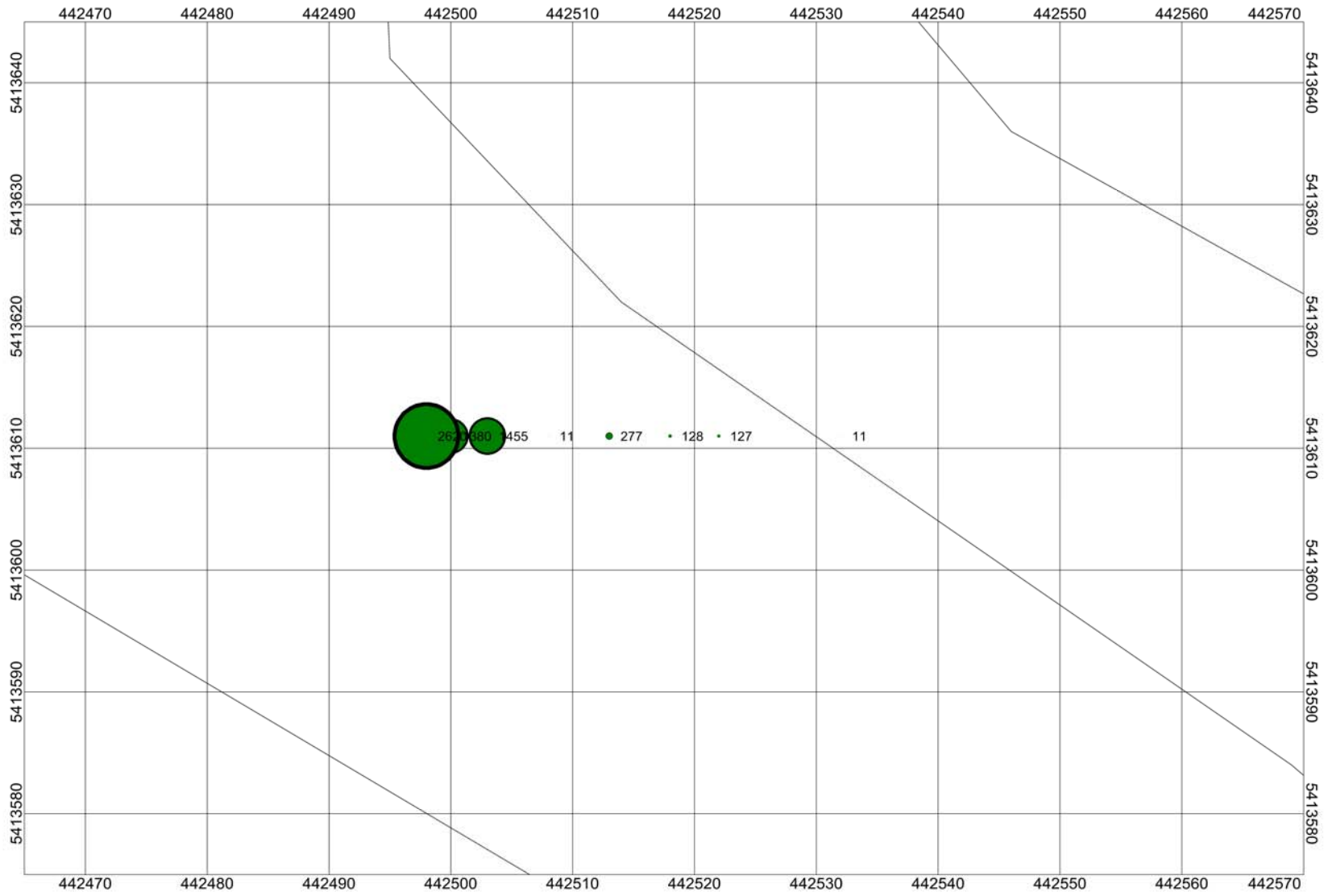


Figure 21

Rock-Con M. Mt. Sicker Property

Queen Bee Area

Copper ppm in Rocks

Cu ppm

2500

1500

500

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N

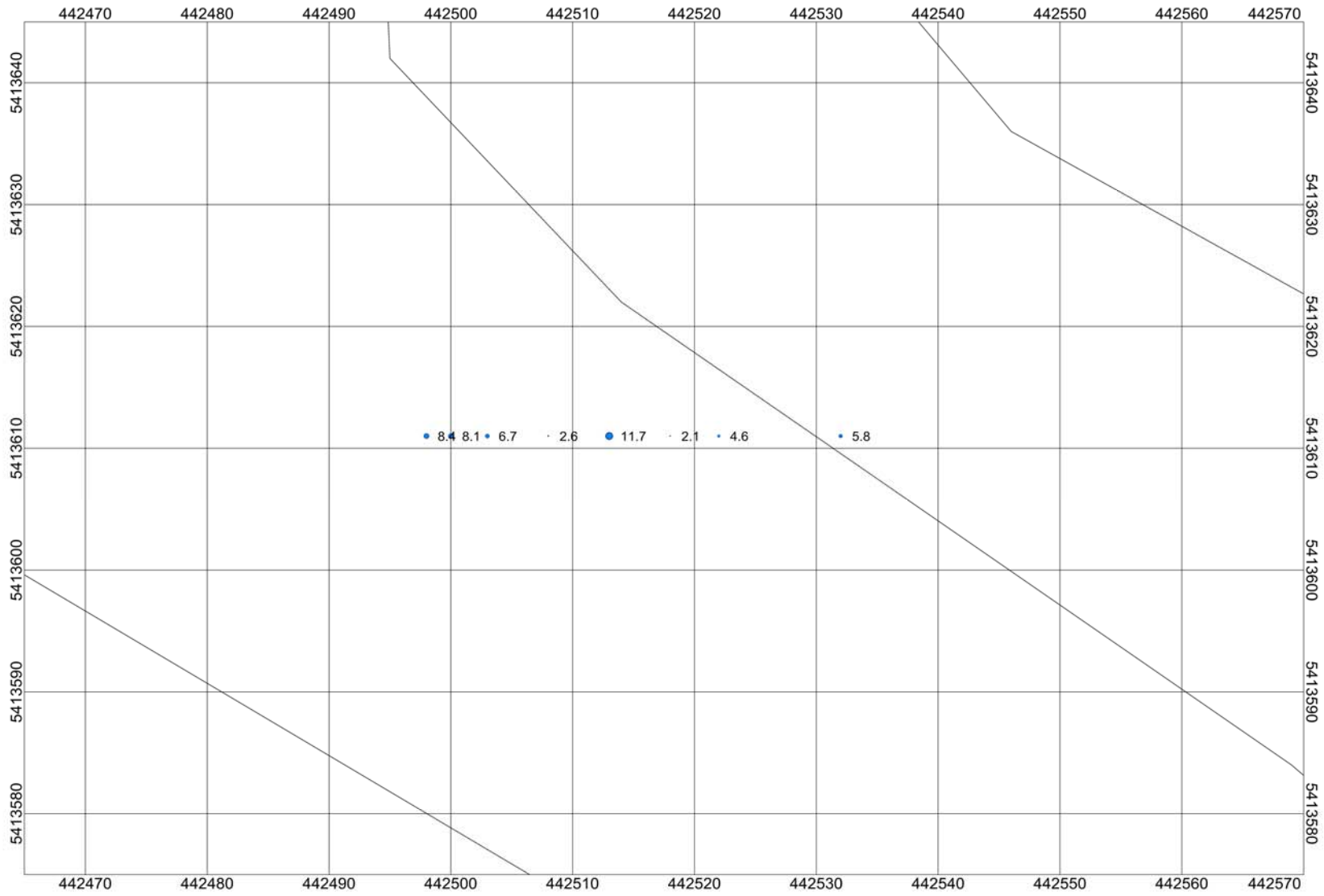


Figure 22

Rock-Con M. Mt. Sicker Property

Queen Bee Area

Lead ppm in Rocks

Pb ppm

10

6

2

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N

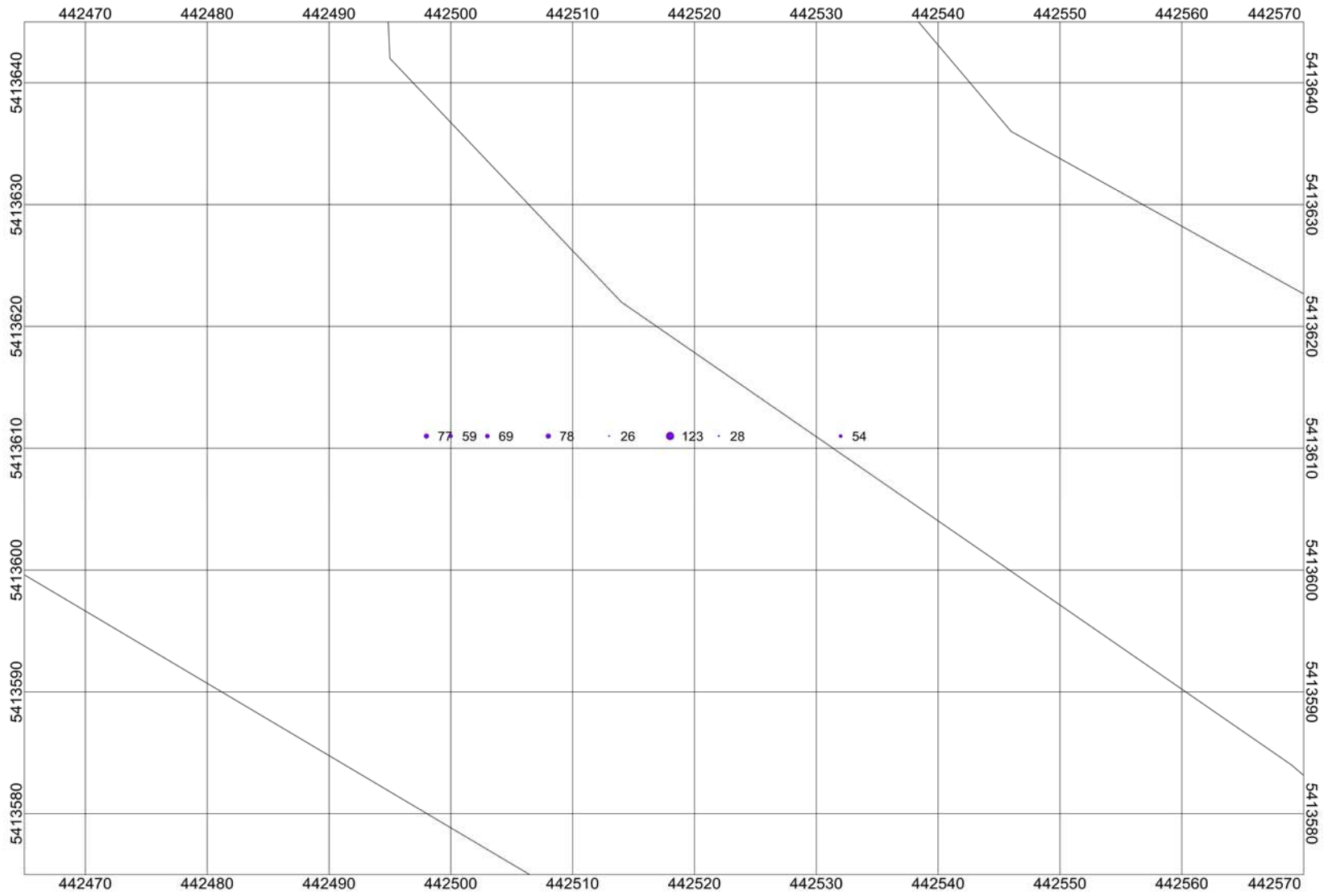


Figure 23

Rock-Con M. Mt. Sicker Property

Queen Bee Area

Zinc ppm in Rocks

5 0 5 10 15

(meters)

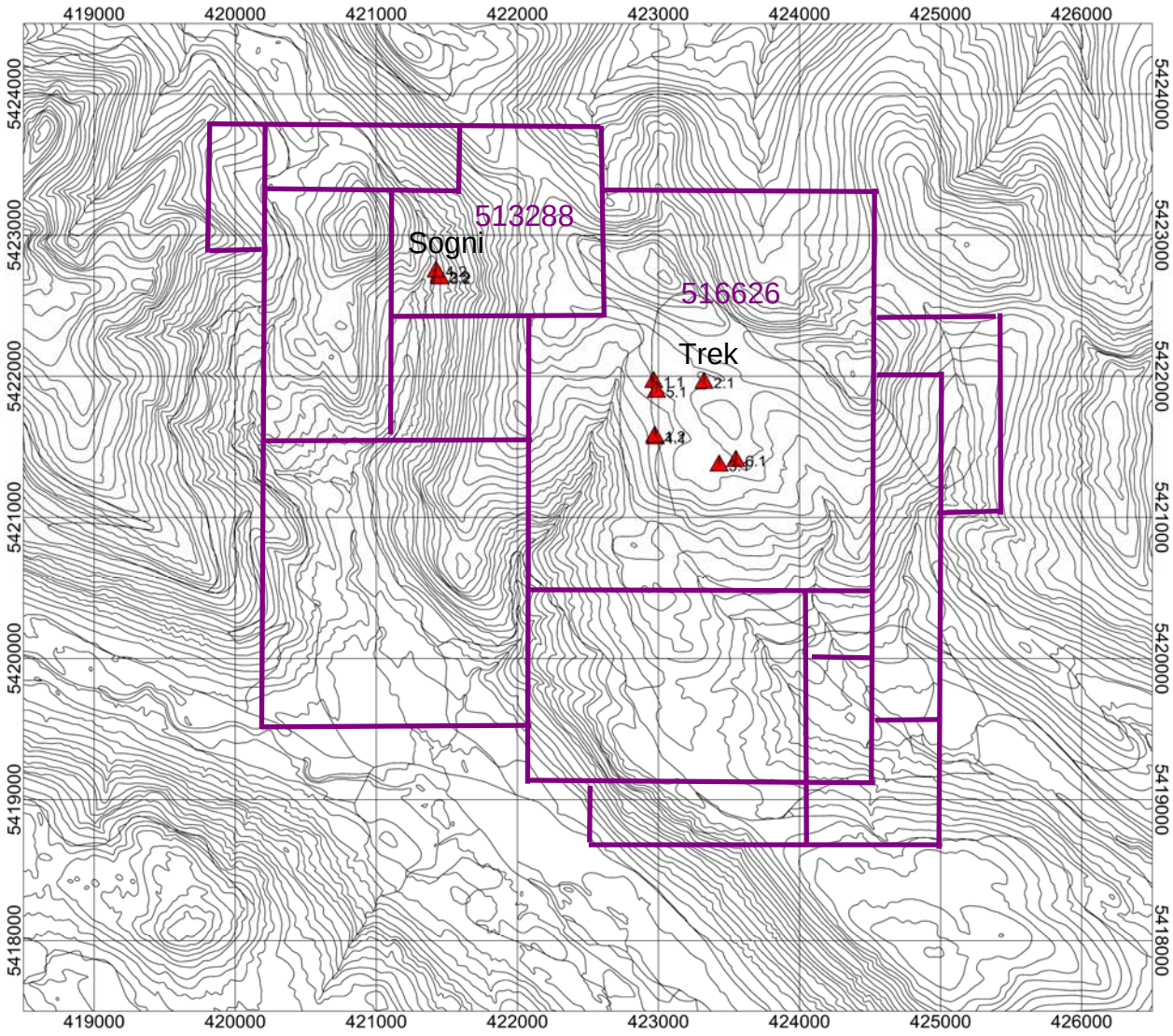
NAD83 / UTM zone 10N

Zn ppm

125

75

25



500 0 500 1000 1500

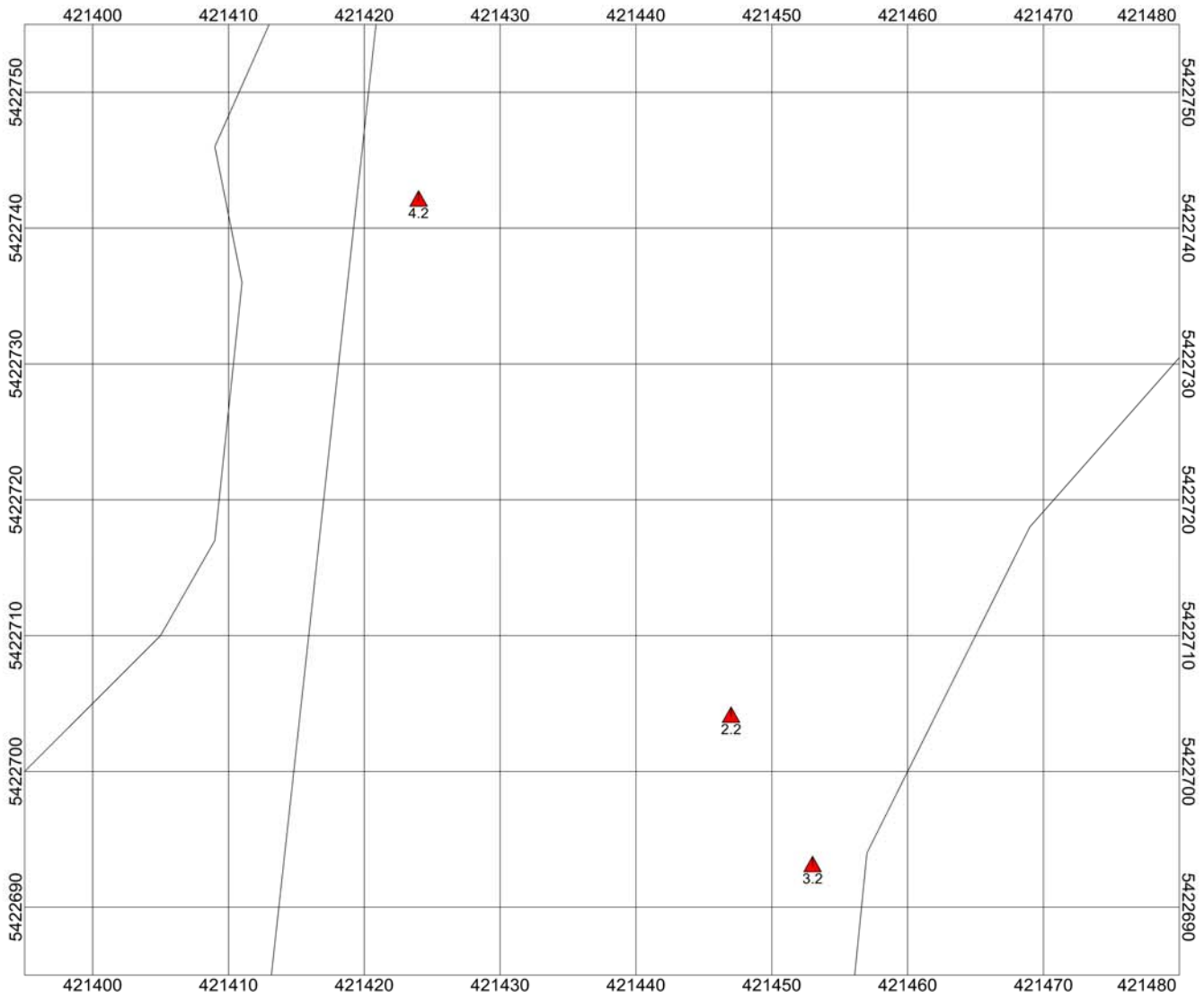
(meters)

NAD83 / UTM zone 10N

Rock-Con Sognidoro Property

2010 Rock Sample Locations

Figure 24



5 0 5 10 15
(meters)
NAD83 / UTM zone 10N

Rock-Con Sognidoro Property
Sogni Area
2010 Rock Sample Locations

Figure 25

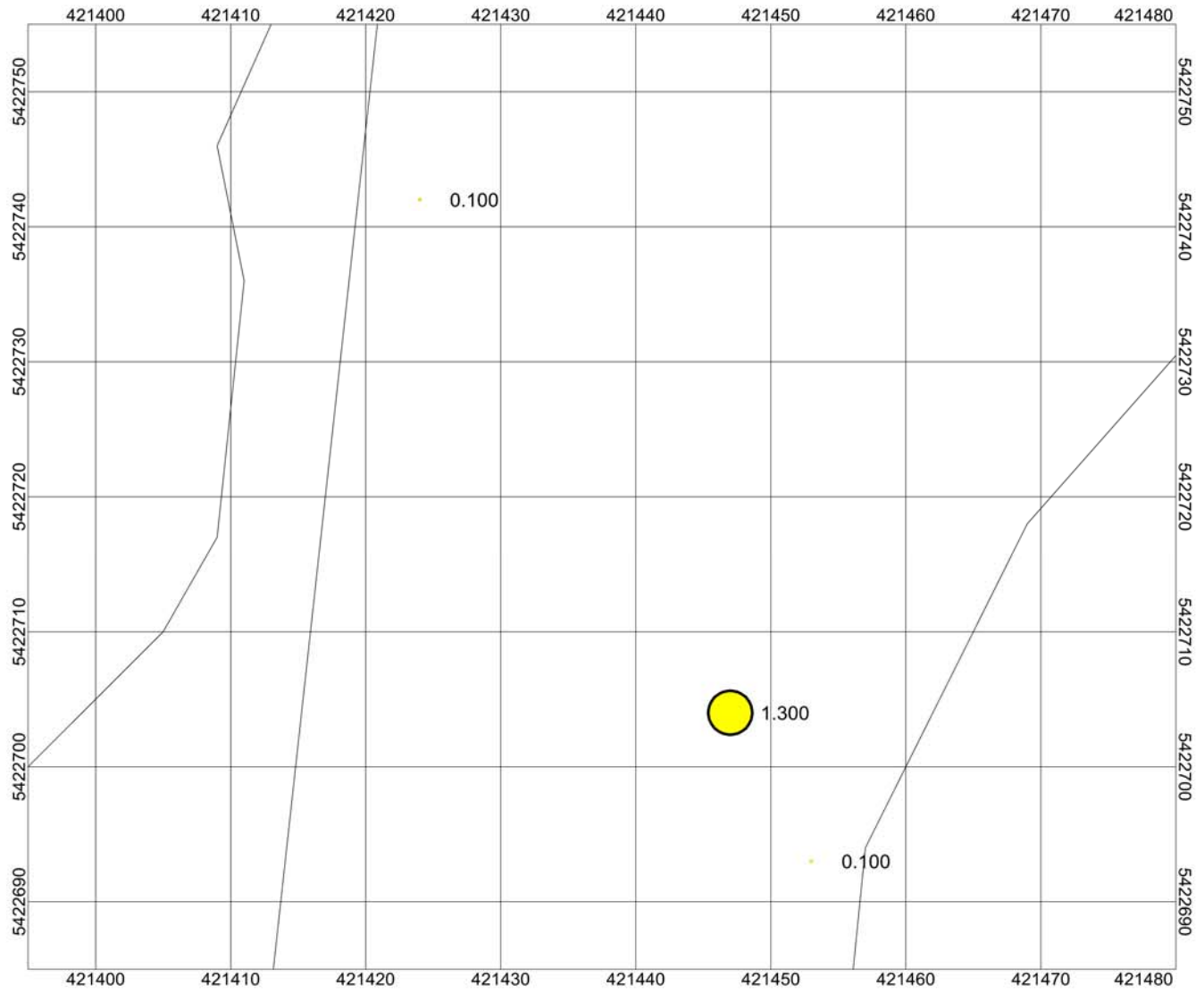


Figure 26

Rock-Con Sognidoro Property

Sogni Area

Gold ppm in Rocks

Au ppm

1.3

0.7

0.1

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N

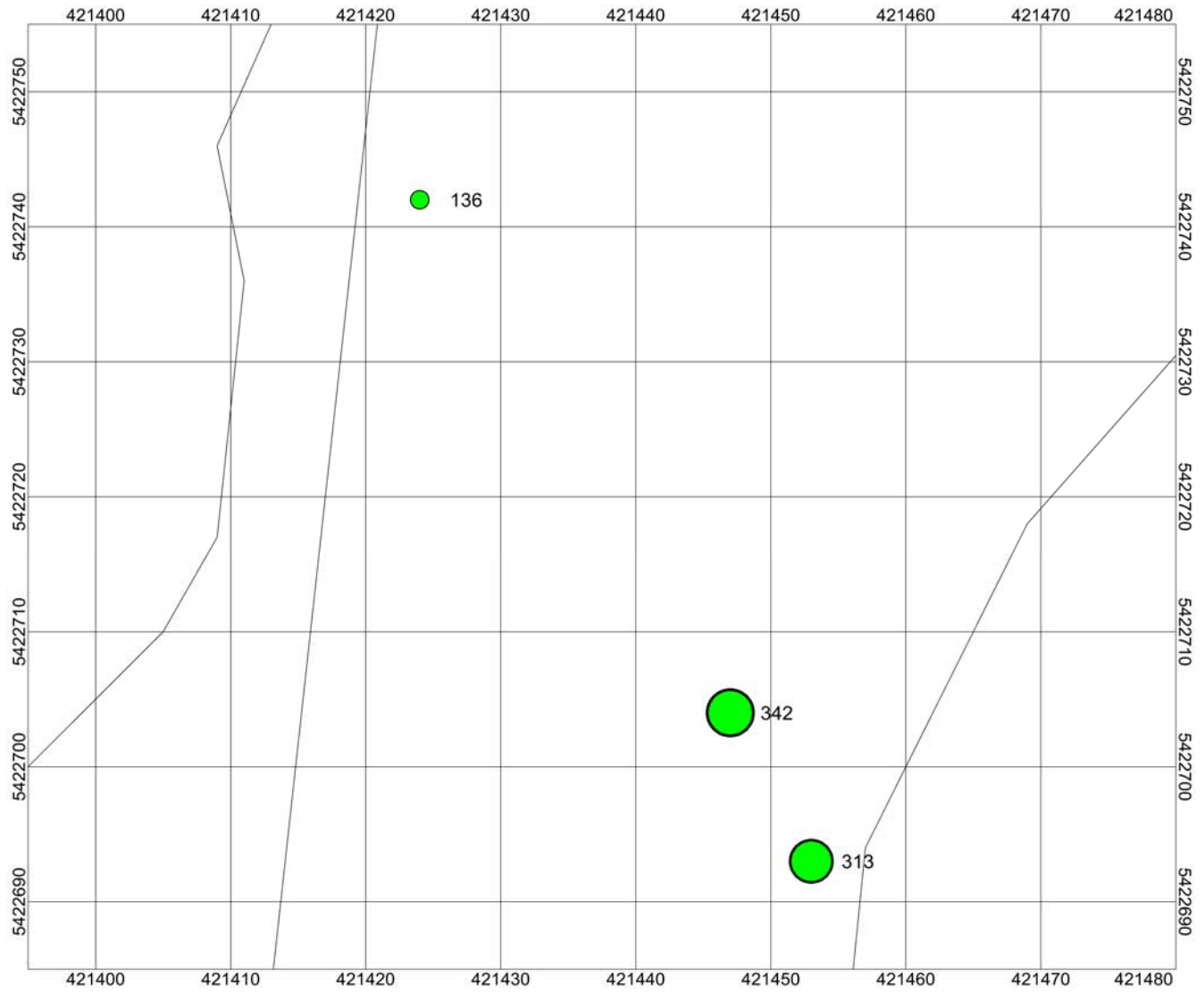


Figure 27

Rock-Con Sognidoro Property

Sogni Area

Copper ppm in Rocks

Cu ppm

300

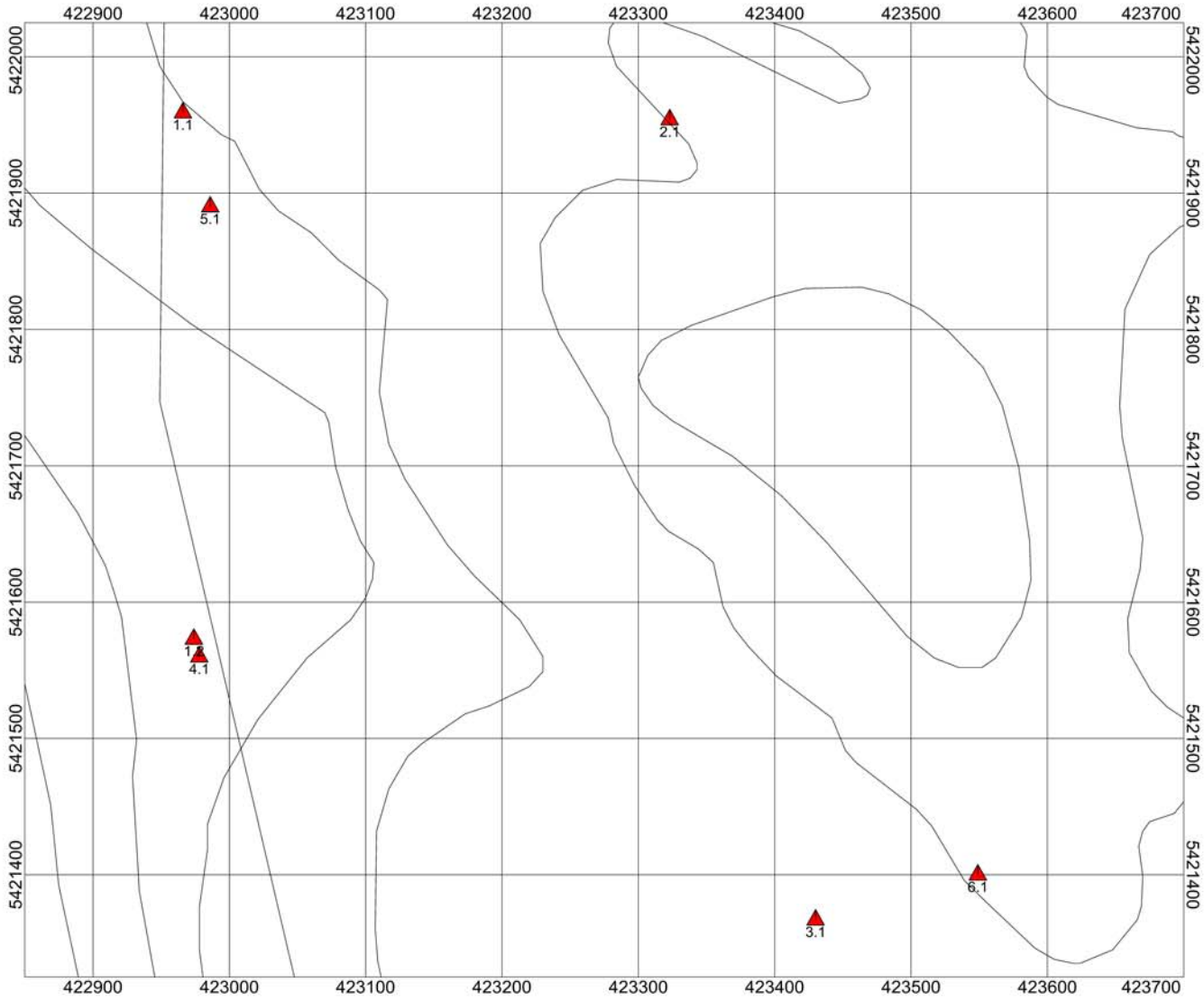
200

100

5 0 5 10 15

(meters)

NAD83 / UTM zone 10N



50 0 50 100 150

(meters)

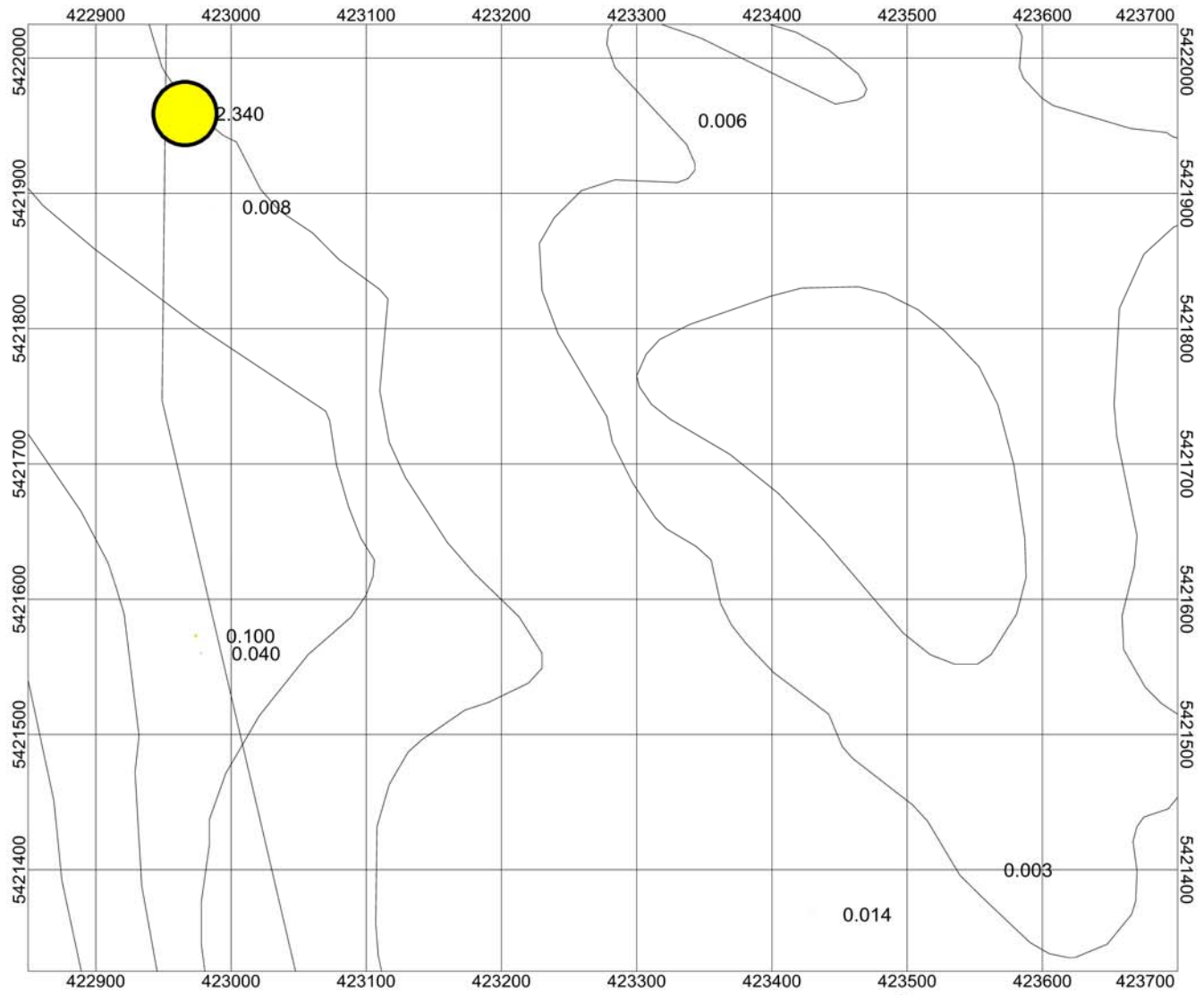
NAD83 / UTM zone 10N

Rock-Con Sognidoro Property

Trek Area

2010 Rock Sample Locations

Figure 28



Au ppm

2.5

1.3

0.1

Figure 29

Rock-Con Sognidoro Property

Trek Area

Gold ppm in Rocks

50 0 50 100 150

(meters)

NAD83 / UTM zone 10N

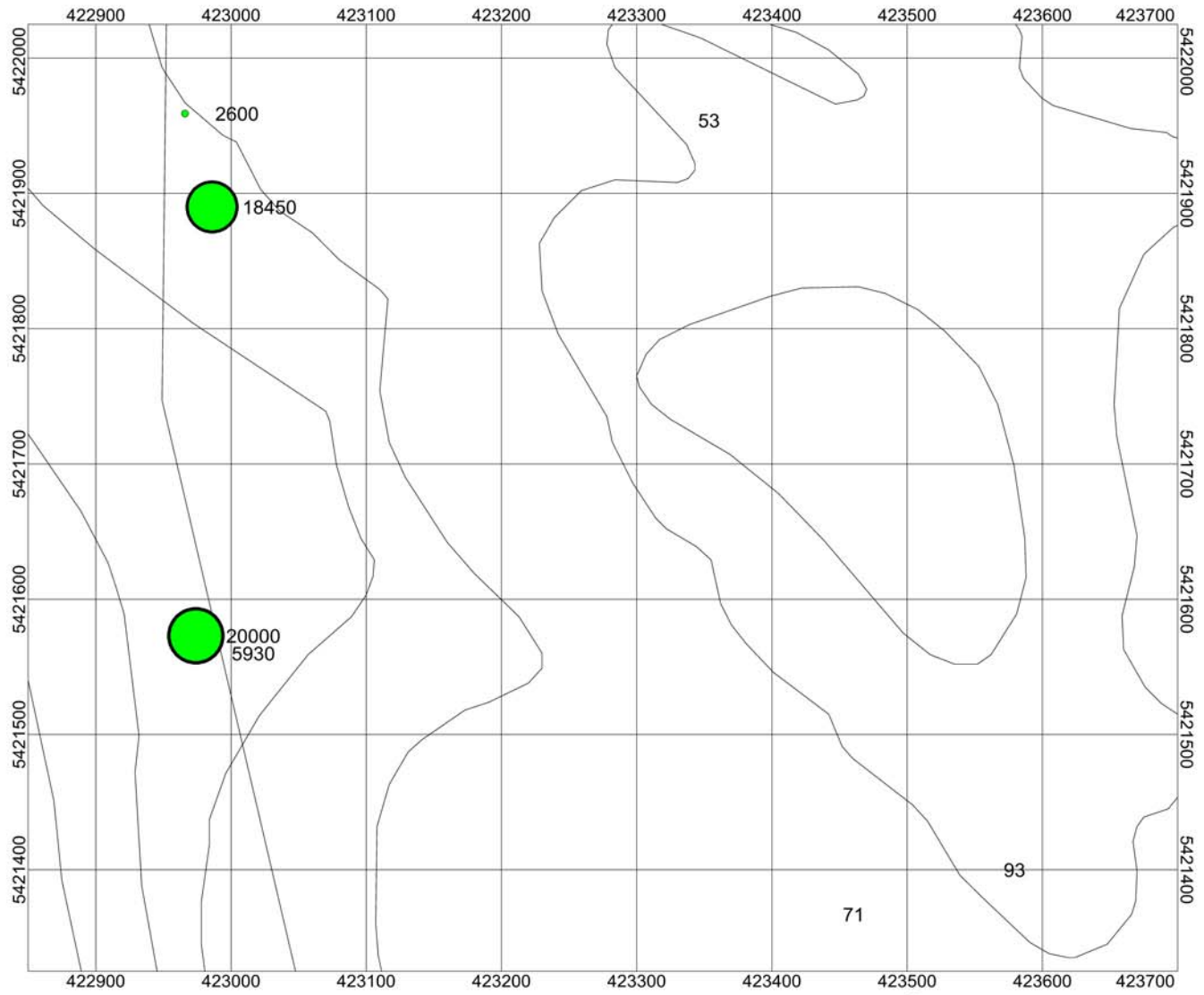
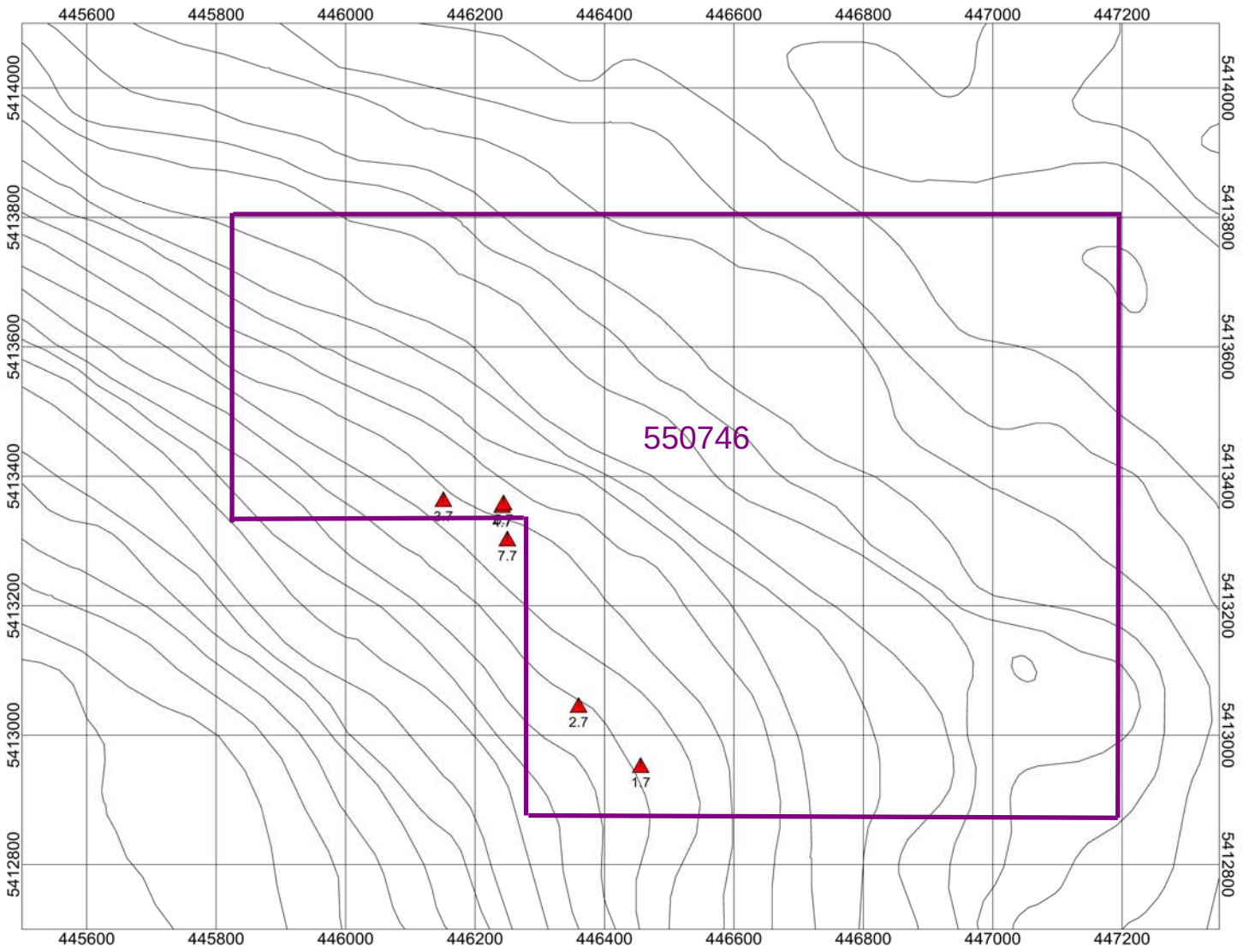


Figure 30

Rock-Con Sognidoro Property

Trek Area

Copper ppm in Rocks



100 0 100 200 300
(meters)
NAD83 / UTM zone 10N

Rock-Con Volcanics Property
Rock Sample Locations
2011 Sampling

Figure 31

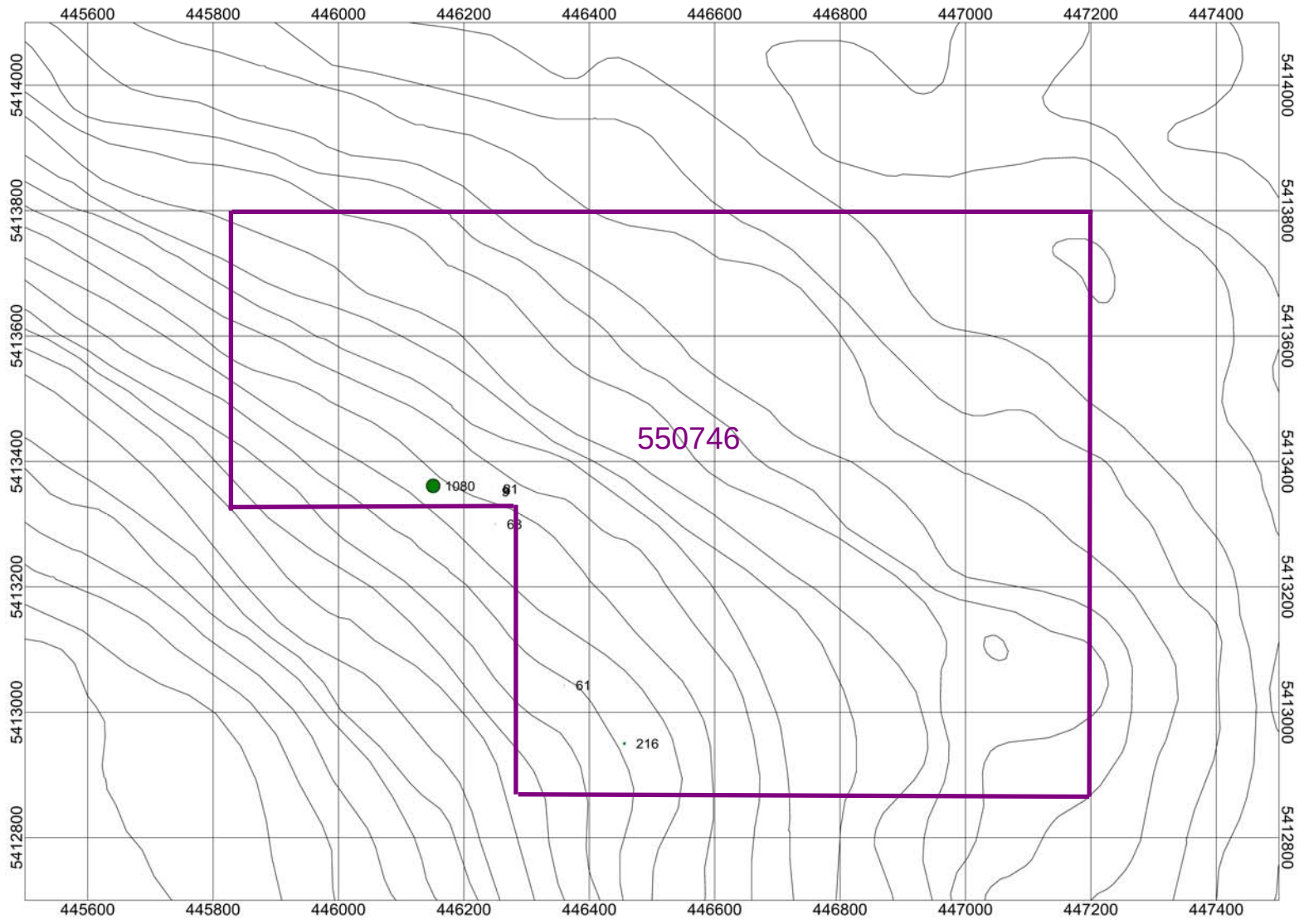


Figure 32

100 0 100 200 300
(meters)
NAD83 / UTM zone 10N

Rock-Con Volcanics Property
Cu ppm in Rocks
2011 Sampling

Cu ppm
1000
600
200

N

Appendix 1

2010 & 2011 Rock Sample Data – Mt. Sicker Property

Rock Sample Locations

Rock Sample Descriptions

Rock Sample Geochemistry Details

Rock Sample Geochemistry Highlights

2010&2011 Rock Sample Locations for Rock-Con Properties

Sample #	Sample #	Date	Sampler	Property	Location	Details	UTM Zone	Easting	Northing	Elevation
5B	5.2	10-Oct-10	Brant & Harry	Mt.Sicker	Copper Canyon adit	Mouth of adit	10N	440527	5413038	
6B	6.2	10-Oct-10	Brant & Harry	Mt.Sicker	Down stream from Copper Canyon adit	Quartz vien at river	10N	440527	5413040	
1C	1.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442056	5412829	
2C	2.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442056	5412826	
3C	3.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442060	5412831	
4C	4.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442062	5412831	
5C	5.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442064	5412829	
6C	6.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442066	5412829	
7C	7.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442065	5412829	
8C	8.3	14-Nov-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442067	5412829	
1D	1.4	05-Dec-10	Brant & Harry	Mt.Sicker	Lenora adit	chip sample from 15 feet in Graphite Schist Lenora adit	10N	442041	5412848	
2D	2.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample from the road at the end of Lenora pit	10N	442041	5412844	
3D	3.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample from the road at the end of Lenora pit	10N	442043	5412844	
4D	4.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442065	5412824	
5D	5.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442073	5412824	
6D	6.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442073	5412824	
7D	7.4	05-Dec-10	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip samples across 6 meters 25 meters	10N	442076	5412824	
8D	8.4	05-Dec-10	Brant & Harry	Mt.Sicker	Copper Canyon adit enterance	Mouth of adit chip from 1.5 ft.aross east side Quartz vien	10N	440527	5413038	
9D	9.4	05-Dec-10	Brant & Harry	Mt.Sicker	Copper Canyon adit enterance	Mouth of adit chip from 1.5 ft.aross Quartz west side vien	10N	440527	5413038	
1E	1.5	11-Dec-10	Brant & Harry	Mt.Sicker	Victoria 1 adit enterance	Mouth of adit chip from 2 ft across from 8 ft mineralized zone	10N	440537	5413038	
2E	2.5	11-Dec-10	Brant & Harry	Mt.Sicker	Victoria 1 adit enterance	Mouth of adit chip from 2 to 4 ft across from 8 ft mineralized zone	10N	440536	5413038	
3E	3.5	11-Dec-10	Brant & Harry	Mt.Sicker	Victoria 2 taillings at enterance	Mouth of adit tailling pile	10N	440536	5413038	
4E	4.5	11-Dec-10	Brant & Harry	Mt.Sicker	Victoria 1 adit enterance	Mouth of adit chip from 4 to 6 ft across from 8 ft mineralized zone	10N	440536	5413038	
5E	5.5	11-Dec-10	Brant & Harry	Mt.Sicker	Near Victoria adit	chip from Quartz vien near river	10N	440546	5413068	
6E	6.5	11-Dec-10	Brant & Harry	Mt.Sicker	down stream from Victoria adit	chip from Quartz vien near river	10N	440562	5413075	
7E	7.5	11-Dec-10	Brant & Harry	Mt.Sicker	down stream from Victoria adit	chip from Quartz vien near river	10N	440562	5413074	
	1.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	from inside adit 5 m. into adit	10N	442513	5413611	
	2.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	from inside adit 10 m. into adit	10N	442518	5413611	
	3.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	from inside adit 14 m. into adit	10N	442522	5413611	
	4.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	from inside adit 24 m. into adit	10N	442532	5413611	
	5.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	from inside adit	10N	442508	5413611	
	6.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	tailings 5 m. west of adit portal	10N	442503	5413611	
	7.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	tailings from lower side of railway grade - below adit portal	10N	442500	5413611	
	8.6	05-Feb-11	Brant & Harry	Mt.Sicker	Queen Bee adit area	tailings same as 8.7 - 10 m. west	10N	442498	5413611	
	1.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample of quartz to grey felsic rock	10N	442033	5412835	
	2.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample of grey felsic rock to quartz	10N	442033	5412835	
	3.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample of grey felsic 1m from sample 8.2	10N	442034	5412835	
	4.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample from 6 " quartz vein	10N	442053	5412832	455
	5.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample from quartz vein	10N	442064	5412835	462
	6.8	21-Mar-11	Brant & Harry	Mt.Sicker	Mt Sicker Lenora pit.near adit	chip sample from 1' vein	10N	442064	5412835	462
	7.8	21-Mar-11	Brant & Harry	Mt.Sicker	on road near Lenora pit	chip sample from grey felsic contact to quartz	10N	442080	5412822	469
	8.8	21-Mar-11	Brant & Harry	Mt.Sicker	on road near Lenora pit	chip sample from quartz contact to grey felsic	10N	442080	5412822	469
	1.9	24-Mar-11	Brant & Harry	Mt.Sicker	tailings- green water adit. Lenora #2 adit	tailings. grab sample	10N	442029	5412888	437
	2.9	24-Mar-11	Brant & Harry	Mt.Sicker	green water adit. Lenora #2 adit	grab sample from adit entrance	10N	442029	5412888	437
	3.9	24-Mar-11	Brant & Harry	Mt.Sicker	grey felsic. outcrop- on road	rock chip sample from outcrop on road	10N	442076	5412824	469
	4.9	24-Mar-11	Brant & Harry	Mt.Sicker	tailings green water adit. Lenora #2 adit	tailings grab sample	10N	442029	5412888	437

2010&2011 Rock Sample Descriptions for Rock-Con Properties

Sample #	Sample #	Property	Descriptions
5B	5.2	Mt.Sicker	2 - 5 % native Cu. 25% Fe. in quartz vein. .45 m width
6B	6.2	Mt.Sicker	5 - 8 % chalcopyrite. 10% Fe in 6 " quartz vein
1C	1.3	Mt.Sicker	Greywacke. Grey, white and brown banded numerous fine cross cutting veins. malachite and Fe oxidation
2C	2.3	Mt.Sicker	Greywacke. .5 m west of sample 1.3
3C	3.3	Mt.Sicker	20 cm quartz seam. 10% visible native Cu. 15 - 20% fine cubic Fe sulphide pale schist
4C	4.3	Mt.Sicker	15 cm quartz vein. 3 - 5% chalcopyrite. Similar to sample 3.3
5C	5.3	Mt.Sicker	5 - 8 % chalcopyrite. 15 % Fe fine sulphides. 15 cm quartz vein in pale schist
6C	6.3	Mt.Sicker	15 cm quartz vein 3 - 5% chalcopyrite. 15% Fe fine sulphides in pale schist
7C	7.3	Mt.Sicker	10 % malachite oxidation in pale schist
8C	8.3	Mt.Sicker	15 cm quartz vein. In pale schist 3 - 5% chalcopyrite with native Cu
1D	1.4	Mt.Sicker	Graphitic schist 10 cm quartz vein with malachite oxidation. 5% Mg sulphides
2D	2.4	Mt.Sicker	Pale schist with 20 cm massive sulphide vein with 25% Fe 10% fine dark sulphide finely diminished Cu
3D	3.4	Mt.Sicker	contact to greywacke to pale schist. 60% quartz 40% chalcopyrite
4D	4.4	Mt.Sicker	15 cm quartz vein contact pale schist. 30% brassy Zn sulphides. 10% black fine sulphides
5D	5.4	Mt.Sicker	Greywacke contact to pale schist. 90% fine sulphides
6D	6.4	Mt.Sicker	10 cm quartz vein. 15% fine sulphides
7D	7.4	Mt.Sicker	Greywacke. Numerous quartz veins cross cutting 80% very fine sulphides
8D	8.4	Mt.Sicker	60% fine sulphides 20% coarse sulphides. 1% visible native Cu
9D	9.4	Mt.Sicker	similar to sample 8.4
1E	1.5	Mt.Sicker	90% sulphides, 10% quartz, 3 - 5% chalcopyrite.
2E	2.5	Mt.Sicker	similar to sample 1.5
3E	3.5	Mt.Sicker	pale schist 20% fine sulphides throughout, similar to sample set C ,1 through 8.
4E	4.5	Mt.Sicker	similar to samples 1.5 and 2.5.
5E	5.5	Mt.Sicker	15 cm quartz vein with 3 - 5% chalcopyrite, 8% Fe, 2 - 3% fine dark sulphides, 80% quartz
6E	6.5	Mt.Sicker	80% quartz, 10% fine Fe sulphides, 2% chalcopyrite.
7E	7.5	Mt.Sicker	85% quartz 10 -15% Fe with 1% dark fine sulphides.
	1.6	Mt.Sicker	Fe sulphides. 1 - 3% finely diminished dark sulphides 1 - 3% chalcopyrite with chocolate colored oxidation in quartz
	2.6	Mt.Sicker	95% quartz. 5% fine sulphides with Fe and chalky oxidation
	3.6	Mt.Sicker	95% quartz. 5% chalcopyrite
	4.6	Mt.Sicker	20% quartz. 20% brassy sulphides- medium grain. 60% fine sulphides
	5.6	Mt.Sicker	90% fine-grained dark sulphides. 10% finely diminished chalcopyrite throughout
	6.6	Mt.Sicker	20% chalcopyrite. 40% fine sulphides. 40% quartz with chocolate colored oxidation
	7.6	Mt.Sicker	20% chalcopyrite. 40% fine sulphides. 40% quartz with chocolate colored oxidation
	8.6	Mt.Sicker	20% chalcopyrite. 40% fine sulphides. 40% quartz with chocolate colored oxidation
	1.8	Mt.Sicker	5 - 10 % chalcopyrite 1 - 2 % fine sphalerite with malachite bornite azurite 1 - 3 % oxidized on surface in quartz
	2.8	Mt.Sicker	40 - 50 % fine metallic mineral with 5 - 10 % chalcopyrite diminished throughout in grey felsic rock
	3.8	Mt.Sicker	50 - 60 % chalcopyrite 1 - 3 % fine sphalerite in grey felsic rock
	4.8	Mt.Sicker	5 - 10 % chalcopyrite 1 - 2 % fine sphalerite in quartz
	5.8	Mt.Sicker	5 - 10 % fine sphalerite 1 - 3 % chalcopyrite in quartz
	6.8	Mt.Sicker	50 - 60 % medium grained sphalerite with 3 - 5 % chalcopyrite in quartz
	7.8	Mt.Sicker	30 - 40 % fine grey mineral 5 - 10 % fine chalcopyrite in grey felsic rock
	8.8	Mt.Sicker	3 - 5 % chalcopyrite in quartz
	1.9	Mt.Sicker	60% oxidized with 5 - 10% fine grained chalcopyrite. 3 - 5% dark sulphides 1 - 3% visible bornite
	2.9	Mt.Sicker	20 - 30% fine chalcopyrite. 3 - 5% fine grained dark mineral. 3% oxidized bornite
	3.9	Mt.Sicker	grey felsic. fine grained 20 - 30% chalcopyrite. 5 - 10% sphalerite
	4.9	Mt.Sicker	70% oxidized with bornite and azurite in a fine grained felsic rock

Rock Geochemistry		Method	Au-GRA22	Au-AA24	Au-AA23	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	SAMPLE	Analyte	Au	Au	Au	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd
Certificate #	DESCRIPTION	Unit	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
VA10150596	5B					10.25	0.22	31.7	<0.2	<10	<10	<0.05	26.2	0.46	3
VA10150596	6B					19.9	0.29	12.3	0.4	<10	30	<0.05	19.45	3.67	16.2
VA10170845 / VA10200241	1C			1.74		34.1	0.03	37.6	2	<10	20	<0.05	25.7	0.46	310
VA10170845 / VA10200241	2C			1.175		65.2	0.13	57	1.2	<10	120	<0.05	11.7	17.15	>1000
VA10170845	3C					30.5	0.05	253	0.2	<10	10	<0.05	7.79	1.91	8.37
VA10170845	4C					23.6	0.07	342	0.2	<10	10	<0.05	6.19	2.21	1.67
VA10170845 / VA10200241	5C			2.74		57.9	0.12	80.7	3.3	<10	10	<0.05	4.29	0.02	114.5
VA10170845	6C					13.65	0.06	167	0.3	<10	10	<0.05	2.4	1.09	2.77
VA10170845	7C					0.23	0.76	6.3	<0.2	<10	2640	0.09	0.04	4.29	9.33
VA10170845	8C					32.5	2.42	38.5	0.6	<10	50	0.12	3.62	2.51	48.4
VA10185687	1D					0.23	1.81	26	<0.2	<10	80	0.12	0.35	10.85	46
VA10185687	2D					16.7	0.42	20.1	0.3	<10	30	<0.05	3.1	0.04	0.5
VA10185687/VA10200243	3D			2.57		34.6	0.27	90.9	1.8	<10	20	<0.05	2.36	1.38	6.6
VA10185687/VA10200243	4D			1.585		65.5	0.11	236	1.7	<10	20	<0.05	17.3	0.99	>1000
VA10185687/VA10200243	5D		21.1	>10.0		>100	0.21	87.9	16.9	<10	80	<0.05	47.3	0.6	504
VA10185687	6D					11.1	0.34	41.8	0.6	<10	30	0.06	1.14	0.08	11.65
VA10185687/VA10200243	7D			4.28		>100	0.05	208	4.8	<10	10	<0.05	3.78	0.27	658
VA10185687	8D					9.12	0.17	27.8	0.2	<10	10	<0.05	13.6	0.38	10.65
VA10185687	9D					12.25	0.26	36.2	0.2	<10	30	<0.05	45	0.84	11.05
VA11001995	1E					16.85	0.87	44.8	<0.2	<10	10	<0.05	63.5	2.87	22.2
VA11001995	2E					10.85	0.76	52.9	<0.2	<10	20	<0.05	28.8	3.38	9.45
VA11001995	3E					0.41	0.63	55.1	0.2	<10	20	<0.05	3	0.05	0.09
VA11001995	4E					1.05	1.13	21.9	<0.2	<10	10	<0.05	9.79	4.12	0.56
VA11001995	5E					7.08	0.8	11.2	0.2	<10	40	<0.05	2.89	0.99	7.53
VA11001995	6E					1.15	0.13	11.8	<0.2	<10	10	<0.05	2.86	0.32	0.2
VA11001995	7E					2.88	0.32	67.2	0.2	<10	10	<0.05	5.03	0.4	1.07
VA11021571	1.6					0.5	1.44	122.5	<0.2	<10	20	0.11	0.11	0.52	0.03
VA11021571	2.6					0.17	1.09	57.2	<0.2	<10	80	0.46	0.07	4.47	0.64
VA11021571	3.6					0.18	1.37	97.3	<0.2	<10	40	0.11	0.04	0.72	0.02
VA11021571	4.6					0.24	3.53	16.3	<0.2	<10	30	0.13	0.92	0.62	0.03
VA11021571	5.6					0.18	5.06	56.1	<0.2	<10	20	0.39	0.04	3.77	0.08
VA11021571	6.6					0.62	3.86	88.6	<0.2	<10	30	0.27	0.39	0.75	0.13
VA11021571	7.6					0.62	4.18	78.3	<0.2	<10	30	0.25	0.54	0.53	0.1
VA11021571	8.6					0.92	4.74	129	<0.2	<10	40	0.3	0.52	1.08	0.21
VA11053516	1.8					80	0.16	57.2	0.7	<10	30	<0.05	0.44	0.85	17.55
VA11053516	2.8			2.87		>100	0.25	54.2	2.8	<10	60	<0.05	37.2	8.05	>1000
VA11053516	3.8			1.59		48.2	0.33	253	1.6	<10	10	<0.05	20.9	6.2	562
VA11053516	4.8			2.74		>100	0.15	124	2.5	<10	30	<0.05	6.6	0.04	11.2
VA11053516	5.8			1.385		94.4	0.14	114.5	1.2	<10	20	<0.05	28.9	0.09	>1000
VA11053516	6.8			1.25		79.5	0.12	185	1.2	<10	20	<0.05	13.6	0.76	>1000
VA11053516	7.8			2.87		48.9	0.05	126.5	2.6	<10	20	<0.05	17.95	0.41	433
VA11053516	8.8			1.235		6.92	0.11	75.8	1.1	<10	20	<0.05	0.35	0.54	22.8
VA11053516	1.9		13.4	>10.0		>100	0.13	2260	12.4	<10	40	<0.05	67.5	2.1	220
VA11053516	2.9			3.09		>100	0.04	1735	2.3	<10	110	<0.05	1.6	4.07	44.1
VA11053516	3.9			6.09		>100	0.38	1065	5.4	<10	40	<0.05	74.4	1.6	455
VA11053516	4.9			2.21		>100	0.54	488	1.9	<10	40	<0.05	29.2	3.52	741

Rock Geochemistry		ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	SAMPLE	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
Certificate #	DESCRIPTION	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
VA10150596	5B	0.92	127	11	<0.05	>10000	24.8	0.73	0.98	<0.02	0.54	0.043	<0.01	0.5	0.7	0.15	228	9.63	0.01	1.08	1.7	<10
VA10150596	6B	4.68	3.6	3	0.06	>10000	11.25	0.87	0.24	0.02	0.32	0.812	0.04	2.5	0.6	0.16	1940	25.3	0.01	0.25	0.6	40
VA10170845 / VA10200241	1C	0.09	0.8	<1	0.08	2510	22.4	1.58	0.48	<0.02	7.82	1.845	0.02	<0.2	0.1	0.01	23	107.5	0.02	0.19	36.6	10
VA10170845 / VA10200241	2C	10.55	2.4	<1	0.05	>10000	3.51	14.9	0.27	0.03	31.9	0.249	0.03	9.3	0.6	0.11	874	345	0.02	0.06	19.2	20
VA10170845	3C	2.23	3.3	<1	0.05	>10000	14.8	1.16	0.25	<0.02	0.45	0.215	0.02	1.1	0.4	0.07	123	54.2	0.02	0.14	1.5	30
VA10170845	4C	3.8	8.5	<1	0.08	>10000	17.15	0.64	0.31	0.02	0.27	0.252	0.02	1.6	0.4	0.05	144	59.6	0.03	0.16	3.2	50
VA10170845 / VA10200241	5C	4.38	10.1	<1	0.1	>10000	13.9	1.28	0.29	0.06	5.97	0.342	0.05	2.3	1.3	0.01	14	161	0.01	0.13	21.7	10
VA10170845	6C	2.2	10.4	<1	0.08	>10000	14.15	0.51	0.26	0.02	0.23	0.124	0.03	1.2	0.1	0.02	75	89.9	0.03	0.14	5.6	10
VA10170845	7C	11.9	1.4	<1	0.2	809	1.17	1.63	<0.05	0.04	0.02	<0.005	0.09	7	2.9	0.64	687	1.46	0.01	<0.05	0.6	100
VA10170845	8C	2.46	0.8	2	0.07	>10000	4.35	6.56	0.1	0.07	0.87	0.149	0.22	0.6	0.5	0.92	465	14.9	0.07	<0.05	1.2	330
VA10185687	1D	18.3	15.8	1	0.13	5150	6.23	3.2	0.1	0.08	0.07	0.07	0.22	10.3	7.3	4.69	2520	1.14	0.02	0.1	4.3	270
VA10185687	2D	1.26	6.6	<1	0.09	398	23.7	1.18	0.29	0.02	0.06	0.017	0.2	0.4	0.4	0.05	37	478	0.02	0.19	3.3	<10
VA10185687/VA10200243	3D	3.87	2.9	3	0.12	>10000	9.48	0.78	0.11	0.11	0.53	0.049	0.09	2	0.3	0.05	205	178	0.04	0.13	4	10
VA10185687/VA10200243	4D	1.4	27.5	<1	<0.05	7390	8.01	1.33	0.26	<0.02	59	3.19	0.02	0.7	0.5	0.11	337	2.52	0.01	0.12	17.2	10
VA10185687/VA10200243	5D	0.07	1.8	<1	0.13	>10000	20.9	6.09	0.31	<0.02	16	2.14	0.07	<0.2	0.5	0.1	107	110.5	0.01	0.17	28.2	10
VA10185687	6D	2.81	56.2	3	0.11	1590	11.55	0.9	0.11	0.02	1.13	0.067	0.16	1.5	0.1	0.01	59	173.5	0.01	0.09	30.4	10
VA10185687/VA10200243	7D	0.12	0.7	<1	0.06	>10000	2.02	7.91	0.08	<0.02	18.1	0.148	0.03	<0.2	0.1	0.01	53	95.1	<0.01	<0.05	2.8	10
VA10185687	8D	0.44	99.9	<1	<0.05	>10000	23.8	0.52	0.57	<0.02	1.32	0.033	0.05	0.2	0.2	0.05	149	14.85	0.01	0.18	20.4	<10
VA10185687	9D	0.64	111	<1	<0.05	>10000	25.9	0.74	0.69	<0.02	0.99	0.102	0.01	0.2	0.5	0.21	328	9.8	0.01	0.16	0.7	10
VA11001995	1E	0.96	21.8	<1	<0.05	>10000	25.5	1.75	0.38	<0.02	0.17	2.59	0.01	0.6	0.9	0.68	1400	5.62	0.01	0.28	3	20
VA11001995	2E	0.97	35.8	<1	<0.05	>10000	26.9	1.5	0.39	<0.02	0.14	0.899	0.03	0.6	0.8	0.56	1380	18.7	0.01	0.29	3.1	90
VA11001995	3E	1.53	161	<1	0.13	977	23.7	1.21	0.44	0.02	2.75	0.012	0.2	0.6	0.4	0.28	81	18.45	0.01	0.41	1.9	30
VA11001995	4E	2.44	72.6	<1	<0.05	1705	24.8	2.14	0.45	<0.02	0.05	0.071	0.01	1.5	2	0.85	1830	7.14	0.01	0.33	1.2	50
VA11001995	5E	3.43	20.5	4	0.07	>10000	8.8	1.94	0.13	0.02	0.08	0.384	0.07	2	2.2	0.53	492	8.07	0.01	0.1	1.3	110
VA11001995	6E	0.52	41.1	7	<0.05	406	10.25	0.43	0.2	<0.02	0.03	0.01	0.01	0.3	0.3	0.1	137	6.11	<0.01	0.14	1.2	20
VA11001995	7E	1.15	104	5	0.05	3980	17.8	1.04	0.37	<0.02	0.72	0.098	0.05	0.7	0.3	0.11	176	11.75	<0.01	0.29	2.8	20
VA11021571	1.6	4.25	98.5	2	0.2	277	11.95	3.1	0.22	0.23	0.04	0.017	0.28	1.6	6.9	0.4	466	1.47	0.02	0.48	32.1	1080
VA11021571	2.6	6.14	35.6	<1	0.4	127.5	11.25	2.2	0.16	0.05	0.55	0.031	0.25	2.1	20.1	0.85	1360	2.07	0.01	0.24	7.5	180
VA11021571	3.6	6.55	33.9	2	0.19	126.5	6.18	2.62	0.07	0.33	0.03	0.014	0.33	2.4	4.2	0.43	346	0.76	0.03	0.37	13.4	1720
VA11021571	4.6	1.59	49.4	1	0.1	10.6	15.25	6.32	0.23	0.09	0.41	<0.005	0.09	0.5	13.5	1.22	1030	3.82	0.02	0.44	20.8	150
VA11021571	5.6	7.21	24.2	<1	0.28	11.3	23	10.95	0.52	0.05	0.17	0.011	0.03	2.6	30.3	1.54	1660	3.61	<0.01	0.54	17.2	500
VA11021571	6.6	7.64	386	<1	0.32	1455	18.35	7.98	0.43	0.25	0.11	0.124	0.21	2.7	22.7	1.27	795	5.17	0.01	0.5	11.5	1480
VA11021571	7.6	9.41	543	<1	0.34	1380	22.6	10.6	0.59	0.16	0.18	0.473	0.11	3.4	31.8	1.18	783	5.98	0.01	0.59	13.6	1560
VA11021571	8.6	11.15	393	<1	0.26	2620	22.8	12.55	0.57	0.16	0.19	0.636	0.13	4.3	41.4	1.2	931	9.5	0.01	0.59	13.2	1180
VA11053516	1.8	3.79	9.7	1	<0.05	>10000	9.93	0.35	0.14	0.11	1.39	0.363	0.02	2	0.3	0.14	113	85.5	0.07	0.1	2.6	50
VA11053516	2.8	6.64	2.7	<1	0.1	>10000	6.41	9.81	0.33	0.03	38.9	0.895	0.03	5.5	1.3	0.14	490	399	0.02	0.08	12	40
VA11053516	3.8	5.64	32.3	1	0.05	>10000	23.3	7.36	0.67	<0.02	14.2	1.385	0.02	4.8	1.8	0.2	428	99	0.01	0.24	6.6	20
VA11053516	4.8	2.09	6	<1	0.08	>10000	20	0.61	0.33	0.06	1.67	0.224	0.07	1	0.2	0.01	15	132.5	0.01	0.17	9.9	<10
VA11053516	5.8	0.7	14	3	0.06	>10000	4.26	1.59	0.2	<0.02	28.8	2.08	0.03	0.4	0.5	0.06	72	2.4	0.01	0.07	5.4	60
VA11053516	6.8	1.14	22.5	1	<0.05	6990	7.31	1.54	0.31	<0.02	50.9	3.02	0.02	0.6	0.5	0.09	222	5.57	0.01	0.09	9.5	20
VA11053516	7.8	0.21	2	<1	0.06	>10000	5.07	3.71	0.17	<0.02	13.15	0.318	0.03	<0.2	0.2	0.01	26	163.5	0.01	0.05	7.4	10
VA11053516	8.8	1.27	8.7	7	0.09	8620	2.71	0.43	0.06	<0.02	0.49	0.347	0.07	0.7	0.1	0.02	118	102.5	0.01	0.07	7.3	100
VA11053516	1.9	3.06	1.2	<1	0.18	>10000	24.3	2.99	0.8	<0.02	19.3	2.11	0.07	1.6	0.2	0.33	501	219	0.02	0.18	18.3	10
VA11053516	2.9	3.04	17.8	<1	<0.05	>10000	28.4	1.02	0.46	<0.02	1.46	0.716	<0.01	2.1	0.2	0.28	626	12.5	0.02	0.2	2.4	<10
VA11053516	3.9	0.36	2.3	1	0.15	>10000	15.95	5.34	0.57	0.03	6.02	2.28	0.02	<0.2	2	0.41	253	253	0.02	0.15	13	340
VA11053516	4.9	1.4	2.8	2	0.12	>10000	6.36	16	0.33	0.03	7.99	1.675	0.03	0.4	1.1	0.23	361	158.5	0.03	0.07	7.8	430

Rock Geochemistry		ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	Ag-OG46	Cu-OG46	Pb-OG46	Zn-OG46
	SAMPLE	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Ag	Cu	Pb	Zn
Certificate #	DESCRIPTION	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
VA10150596	5B	6.9	0.1	0.007	>10.0	0.69	0.7	97.2	<0.2	2.2	<0.01	41.6	<0.2	<0.005	0.02	<0.05	10	<0.05	0.62	63	<0.5		1.9		
VA10150596	6B	8.4	0.9	0.001	9.29	1.01	0.7	19.2	1.4	17.7	<0.01	18.05	0.2	<0.005	0.02	<0.05	3	0.05	6.08	362	<0.5		7.63		
VA10170845 / VA10200241	1C	1795	0.4	0.003	>10.0	5.99	0.3	65.4	0.3	23.7	<0.01	20.8	<0.2	<0.005	0.03	0.39	<1	0.09	0.4	>10000	<0.5				6.08
VA10170845 / VA10200241	2C	>10000	0.7	0.015	>10.0	44.8	1.4	76.7	<0.2	177	<0.01	19.15	0.3	<0.005	0.03	1.14	9	0.46	5.05	>10000	0.9		1.26	1.72	20.6
VA10170845	3C	280	0.3	0.001	>10.0	71.9	1.3	19.9	0.5	90	<0.01	4.04	0.3	<0.005	0.02	0.1	2	<0.05	2.45	2020	0.5		10.9		
VA10170845	4C	230	0.4	0.001	>10.0	36.2	0.9	26.2	0.5	43.2	<0.01	4.66	0.3	<0.005	0.03	0.05	2	<0.05	4.26	380	0.7		2.96		
VA10170845 / VA10200241	5C	88.4	0.8	0.013	>10.0	5	0.3	39.1	1.2	1.6	<0.01	8.05	0.2	<0.005	0.04	0.15	2	0.08	0.59	>10000	2.3		3.15		2.23
VA10170845	6C	129.5	0.4	0.002	>10.0	9.96	0.4	25.2	0.4	29.7	<0.01	2.27	<0.2	<0.005	0.03	0.06	1	<0.05	1.45	522	0.7		2.2		
VA10170845	7C	38.8	1.8	<0.001	0.13	0.13	0.5	0.5	<0.2	151	<0.01	0.02	1.3	<0.005	0.02	0.15	2	<0.05	12.85	1710	1.1				
VA10170845	8C	859	2.9	0.004	2.11	34.6	3.8	6.9	0.9	215	<0.01	3.4	0.5	<0.005	0.28	0.44	10	<0.05	6.36	9560	2.8		3.45		
VA10185687	1D	21.2	3.1	<0.001	6.26	0.2	2.9	4.8	1.8	495	0.01	0.57	1.1	<0.005	0.06	0.36	7	0.05	25.6	3440	2				
VA10185687	2D	271	3	0.011	>10.0	2.81	0.4	44.5	0.2	2.3	<0.01	4.15	<0.2	<0.005	0.1	<0.05	6	0.09	0.37	76	0.8				
VA10185687/VA10200243	3D	113	1.4	0.004	>10.0	16.7	0.7	16.2	1.6	42.7	<0.01	4.21	0.5	<0.005	0.06	0.34	2	0.07	2.45	1020	3.4		2.72		
VA10185687/VA10200243	4D	2320	0.3	<0.001	>10.0	20.1	0.3	37	0.2	15.1	<0.01	13.3	<0.2	<0.005	0.05	<0.05	1	<0.05	2.23	>10000	<0.5				>30.0
VA10185687/VA10200243	5D	2080	1.1	0.003	>10.0	11.8	0.3	46.8	0.7	16.1	<0.01	68.4	<0.2	<0.005	0.06	0.43	8	0.14	0.64	>10000	<0.5	113	3.23		10.45
VA10185687	6D	20.5	2.9	0.017	>10.0	5.33	0.4	16	0.3	3.3	<0.01	1.25	<0.2	<0.005	0.11	0.05	2	0.48	0.31	1240	0.6				
VA10185687/VA10200243	7D	>10000	0.6	0.006	>10.0	740	0.2	21.8	<0.2	52.1	<0.01	22.3	0.3	<0.005	0.05	0.37	3	0.11	0.11	>10000	<0.5	176	1.19	2.78	13.85
VA10185687	8D	375	0.9	0.004	>10.0	13.95	0.3	95.2	<0.2	6.3	<0.01	21.8	0.3	<0.005	0.07	<0.05	4	0.06	0.41	2140	<0.5		1.005		
VA10185687	9D	409	0.1	0.006	>10.0	10.75	0.4	115	<0.2	10.3	<0.01	55.6	0.3	<0.005	0.02	<0.05	9	<0.05	0.89	1480	<0.5		3.11		
VA11001995	1E	6.3	0.2	0.002	>10.0	1.22	1.1	38.4	0.6	32.3	<0.01	53.7	<0.2	<0.005	<0.02	<0.05	29	<0.05	1.53	310	<0.5		5.61		
VA11001995	2E	8.1	0.6	0.005	>10.0	1.32	1.1	42.7	0.2	42.5	<0.01	28.7	<0.2	<0.005	<0.02	<0.05	24	<0.05	2.07	125	<0.5		3.42		
VA11001995	3E	3.9	3.4	0.027	>10.0	0.13	0.4	60.5	<0.2	2.3	<0.01	6.63	0.2	<0.005	0.02	0.05	6	<0.05	0.75	14	0.6				
VA11001995	4E	11.3	0.2	0.005	>10.0	0.27	0.9	45.1	<0.2	60.8	<0.01	13.2	0.4	<0.005	<0.02	<0.05	13	<0.05	4.12	46	<0.5				
VA11001995	5E	4.1	1.3	0.007	7.65	0.2	1	17.5	0.4	7.3	<0.01	3.77	0.5	<0.005	<0.02	<0.05	5	0.17	2.22	134	0.7		1.55		
VA11001995	6E	4	0.1	0.008	>10.0	0.15	0.4	24.8	<0.2	2.7	<0.01	4.33	<0.2	<0.005	<0.02	<0.05	1	0.08	0.5	8	<0.5				
VA11001995	7E	6.5	0.9	0.016	>10.0	0.85	0.4	53.7	<0.2	4.4	<0.01	7.11	<0.2	<0.005	0.03	<0.05	4	<0.05	1.28	14	<0.5				
VA11021571	1.6	11.7	5.9	0.047	>10.0	1.98	4.9	14.2	<0.2	17.6	0.01	0.87	0.3	0.174	0.04	1.11	68	0.05	7	26	6.7				
VA11021571	2.6	2.1	5.1	0.005	0.64	11.7	12	1.2	<0.2	79.7	0.01	0.07	0.3	<0.005	0.04	0.16	121	0.05	13.6	123	<0.5				
VA11021571	3.6	4.6	6.9	0.013	4.99	1	7.7	6.6	0.2	12.1	0.01	0.6	0.6	0.286	0.05	1.74	85	0.08	10.95	28	9.6				
VA11021571	4.6	5.8	1.8	0.003	>10.0	0.26	6	4.5	0.4	40.6	0.01	1.28	<0.2	0.204	0.02	0.38	94	0.14	3.97	54	2.3				
VA11021571	5.6	2.6	0.9	0.004	1.85	0.46	19.3	0.7	<0.2	61	0.01	0.02	0.3	0.018	<0.02	0.25	193	<0.05	11.3	78	0.6				
VA11021571	6.6	6.7	3.8	0.001	>10.0	0.83	14.6	35.8	3.6	12.6	0.01	0.39	0.4	0.152	0.07	1.39	115	0.07	12.05	69	6.4				
VA11021571	7.6	8.1	2.1	0.002	>10.0	2.77	17.3	42.7	8.1	9.8	0.01	0.52	0.3	0.067	0.09	1.31	128	0.06	11.4	59	3.9				
VA11021571	8.6	8.4	2.6	0.002	>10.0	4.22	20.2	38.9	10.2	10.3	0.01	0.45	0.4	0.054	0.08	1.52	156	0.05	14.75	77	3.6				
VA11053516	1.8	16.5	0.4	0.004	7.19	3.99	1.1	9.5	1.4	26.7	<0.01	1.82	1.1	<0.005	0.03	0.41	2	0.1	2.08	1650	3.8		8.16		
VA11053516	2.8	>10000	0.5	0.02	>10.0	29.8	0.7	93.4	0.8	102	<0.01	42.3	<0.2	<0.005	0.03	1.37	7	0.45	4.72	>10000	1	126	1.615	1.87	28.2
VA11053516	3.8	8920	0.4	0.004	>10.0	29	0.3	79.6	0.5	79	<0.01	30.8	<0.2	<0.005	0.17	0.5	14	0.1	2.53	>10000	<0.5		0.943		9.27
VA11053516	4.8	186.5	1	0.006	>10.0	9.62	0.2	36.4	0.8	1.1	<0.01	9.52	<0.2	<0.005	0.05	0.09	1	0.09	0.4	2830	2.1	155	10.4		
VA11053516	5.8	3870	0.6	0.001	7.66	24.8	0.3	48	0.3	4.2	<0.01	20.7	0.3	<0.005	0.06	<0.05	1	<0.05	0.27	>10000	<0.5		1.4		26
VA11053516	6.8	2300	0.3	<0.001	>10.0	23.9	0.3	45.1	0.3	7.7	<0.01	10.15	<0.2	<0.005	0.06	<0.05	1	<0.05	1.6	>10000	<0.5				>30.0
VA11053516	7.8	7030	0.6	0.013	>10.0	17.15	0.1	37.2	0.2	59.8	<0.01	20.1	<0.2	<0.005	0.15	0.68	2	0.05	0.16	>10000	<0.5		2.29		8.38
VA11053516	8.8	34.7	1.3	0.007	2.89	4.28	0.3	6.6	0.2	14.8	<0.01	0.68	<0.2	<0.005	0.07	<0.05	1	0.11	0.98	2760	<0.5				
VA11053516	1.9	3170	1.2	0.007	>10.0	68.2	0.2	41.2	0.6	20.5	<0.01	88.7	<0.2	<0.005	0.22	0.07	4	0.44	5.05	>10000	<0.5	337	13.7		5.47
VA11053516	2.9	182	<0.1	0.002	>10.0	97.3	<0.1	21.2	0.9	50.7	<0.01	6.12	<0.2	<0.005	0.06	0.12	6	<0.05	1.94	6850	<0.5	128	17.95		
VA11053516	3.9	7070	0.4	0.009	>10.0	64.3	0.6	60.5	1.6	38	<0.01	46.4	<0.2	<0.005	0.05	1.82	9	0.13	2.51	>10000	0.9	212	9.55		9.22
VA11053516	4.9	>10000	0.5	0.005	>10.0	113.5	1.4	44.4	1.9	40.5	<0.01	24.7	<0.2	<0.005	0.06	0.38	6	0.1	4.18	>10000	1	131	2.29	2.04	15.15

2010&2011 Rock Sample Geochemistry Highlights

Sample #	Sample #	Property	Easting	Northing	Elevation	Au ppm	Ag ppm	As ppm	Ba ppm	Bi ppm	Cd ppm	Co ppm	Cu ppm	Ga ppm	Hg ppm	In ppm	Li ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Te ppm	Y ppm	Zn ppm	Ca %	Fe %	S %
5B	5.2	Mt. Sicker	440527	5413038		<0.2	10.25	31.7	<10	26.2	3	127	19000	0.73	0.54	0.043	0.7	9.63	1.7	<10	6.9	0.69	97.2	41.6	0.62	63	0.46	24.8	>10.0
6B	6.2	Mt. Sicker	440527	5413040		0.4	19.9	12.3	30	19.45	16.2	3.6	76300	0.87	0.32	0.812	0.6	25.3	0.6	40	8.4	1.01	19.2	18.05	6.08	362	3.67	11.25	9.29
1C	1.3	Mt. Sicker	442056	5412829		1.74	34.1	37.6	20	25.7	310	0.8	2510	1.58	7.82	1.845	0.1	107.5	36.6	10	1795	5.99	65.4	20.8	0.4	60800	0.46	22.4	>10.0
2C	2.3	Mt. Sicker	442056	5412826		1.175	65.2	57	120	11.7	>1000	2.4	12600	14.9	31.9	0.249	0.6	345	19.2	20	17200	44.8	76.7	19.15	5.05	206000	17.15	3.51	>10.0
3C	3.3	Mt. Sicker	442060	5412831		0.2	30.5	253	10	7.79	8.37	3.3	109000	1.16	0.45	0.215	0.4	54.2	1.5	30	280	71.9	19.9	4.04	2.45	2020	1.91	14.8	>10.0
4C	4.3	Mt. Sicker	442062	5412831		0.2	23.6	342	10	6.19	1.67	8.5	29600	0.64	0.27	0.252	0.4	59.6	3.2	50	230	36.2	26.2	4.66	4.26	380	2.21	17.15	>10.0
5C	5.3	Mt. Sicker	442064	5412829		2.74	57.9	80.7	10	4.29	114.5	10.1	31500	1.28	5.97	0.342	1.3	161	21.7	10	88.4	5	39.1	8.05	0.59	22300	0.02	13.9	>10.0
6C	6.3	Mt. Sicker	442066	5412829		0.3	13.65	167	10	2.4	2.77	10.4	22000	0.51	0.23	0.124	0.1	89.9	5.6	10	129.5	9.96	25.2	2.27	1.45	522	1.09	14.15	>10.0
7C	7.3	Mt. Sicker	442065	5412829		<0.2	0.23	6.3	2640	0.04	9.33	1.4	809	1.63	0.02	<0.005	2.9	1.46	0.6	100	38.8	0.13	0.5	0.02	12.85	1710	4.29	1.17	0.13
8C	8.3	Mt. Sicker	442067	5412829		0.6	32.5	38.5	50	3.62	48.4	0.8	34500	6.56	0.87	0.149	0.5	14.9	1.2	330	859	34.6	6.9	3.4	6.36	9560	2.51	4.35	2.11
1D	1.4	Mt. Sicker	442041	5412848		<0.2	0.23	26	80	0.35	46	15.8	5150	3.2	0.07	0.07	7.3	1.14	4.3	270	21.2	0.2	4.8	0.57	25.6	3440	10.85	6.23	6.26
2D	2.4	Mt. Sicker	442041	5412844		0.3	16.7	20.1	30	3.1	0.5	6.6	398	1.18	0.06	0.017	0.4	478	3.3	<10	271	2.81	44.5	4.15	0.37	76	0.04	23.7	>10.0
3D	3.4	Mt. Sicker	442043	5412844		2.57	34.6	90.9	20	2.36	6.6	2.9	27200	0.78	0.53	0.049	0.3	178	4	10	113	16.7	16.2	4.21	2.45	1020	1.38	9.48	>10.0
4D	4.4	Mt. Sicker	442065	5412824		1.585	65.5	236	20	17.3	>1000	27.5	7390	1.33	59	3.19	0.5	2.52	17.2	10	2320	20.1	37	13.3	2.23	>300000	0.99	8.01	>10.0
5D	5.4	Mt. Sicker	442073	5412824		21.1	113	87.9	80	47.3	504	1.8	32300	6.09	16	2.14	0.5	110.5	28.2	10	2080	11.8	46.8	68.4	0.64	104500	0.6	20.9	>10.0
6D	6.4	Mt. Sicker	442073	5412824		0.6	11.1	41.8	30	1.14	11.65	56.2	1590	0.9	1.13	0.067	0.1	173.5	30.4	10	20.5	5.33	16	1.25	0.31	1240	0.08	11.55	>10.0
7D	7.4	Mt. Sicker	442076	5412824		4.28	176	208	10	3.78	658	0.7	11900	7.91	18.1	0.148	0.1	95.1	2.8	10	27800	740	21.8	22.3	0.11	138500	0.27	2.02	>10.0
8D	8.4	Mt. Sicker	440527	5413038		0.2	9.12	27.8	10	13.6	10.65	99.9	10050	0.52	1.32	0.033	0.2	14.85	20.4	<10	375	13.95	95.2	21.8	0.41	2140	0.38	23.8	>10.0
9D	9.4	Mt. Sicker	440527	5413038		0.2	12.25	36.2	30	45	11.05	111	31100	0.74	0.99	0.102	0.5	9.8	0.7	10	409	10.75	115	55.6	0.89	1480	0.84	25.9	>10.0
1E	1.5	Mt. Sicker	440537	5413038		<0.2	16.85	44.8	10	63.5	22.2	21.8	56100	1.75	0.17	2.59	0.9	5.62	3	20	6.3	1.22	38.4	53.7	1.53	310	2.87	25.5	>10.0
2E	2.5	Mt. Sicker	440536	5413038		<0.2	10.85	52.9	20	28.8	9.45	35.8	34200	1.5	0.14	0.899	0.8	18.7	3.1	90	8.1	1.32	42.7	28.7	2.07	125	3.38	26.9	>10.0
3E	3.5	Mt. Sicker	440536	5413038		0.2	0.41	55.1	20	3	0.09	161	977	1.21	2.75	0.012	0.4	18.45	1.9	30	3.9	0.13	60.5	6.63	0.75	14	0.05	23.7	>10.0
4E	4.5	Mt. Sicker	440536	5413038		<0.2	1.05	21.9	10	9.79	0.56	72.6	1705	2.14	0.05	0.071	2	7.14	1.2	50	11.3	0.27	45.1	13.2	4.12	46	4.12	24.8	>10.0
5E	5.5	Mt. Sicker	440546	5413068		0.2	7.08	11.2	40	2.89	7.53	20.5	15500	1.94	0.08	0.384	2.2	8.07	1.3	110	4.1	0.2	17.5	3.77	2.22	134	0.99	8.8	7.65
6E	6.5	Mt. Sicker	440562	5413075		<0.2	1.15	11.8	10	2.86	0.2	41.1	406	0.43	0.03	0.01	0.3	6.11	1.2	20	4	0.15	24.8	4.33	0.5	8	0.32	10.25	>10.0
7E	7.5	Mt. Sicker	440562	5413074		0.2	2.88	67.2	10	5.03	1.07	104	3980	1.04	0.72	0.098	0.3	11.75	2.8	20	6.5	0.85	53.7	7.11	1.28	14	0.4	17.8	>10.0
	1.6	Mt. Sicker	442513	5413611		<0.2	0.5	122.5	20	0.11	0.03	98.5	277	3.1	0.04	0.017	6.9	1.47	32.1	1080	11.7	1.98	14.2	0.87	7	26	0.52	11.95	>10.0
	2.6	Mt. Sicker	442518	5413611		<0.2	0.17	57.2	80	0.07	0.64	35.6	127.5	2.2	0.55	0.031	20.1	2.07	7.5	180	2.1	11.7	1.2	0.07	13.6	123	4.47	11.25	0.64
	3.6	Mt. Sicker	442522	5413611		<0.2	0.18	97.3	40	0.04	0.02	33.9	126.5	2.62	0.03	0.014	4.2	0.76	13.4	1720	4.6	1	6.6	0.6	10.95	28	0.72	6.18	4.99
	4.6	Mt. Sicker	442532	5413611		<0.2	0.24	16.3	30	0.92	0.03	49.4	10.6	6.32	0.41	<0.005	13.5	3.82	20.8	150	5.8	0.26	4.5	1.28	3.97	54	0.62	15.25	>10.0
	5.6	Mt. Sicker	442508	5413611		<0.2	0.18	56.1	20	0.04	0.08	24.2	11.3	10.95	0.17	0.011	30.3	3.61	17.2	500	2.6	0.46	0.7	0.02	11.3	78	3.77	23	1.85
	6.6	Mt. Sicker	442503	5413611		<0.2	0.62	88.6	30	0.39	0.13	386	1455	7.98	0.11	0.124	22.7	5.17	11.5	1480	6.7	0.83	35.8	0.39	12.05	69	0.75	18.35	>10.0
	7.6	Mt. Sicker	442500	5413611		<0.2	0.62	78.3	30	0.54	0.1	543	1380	10.6	0.18	0.473	31.8	5.98	13.6	1560	8.1	2.77	42.7	0.52	11.4	59	0.53	22.6	>10.0
	8.6	Mt. Sicker	442498	5413611		<0.2	0.92	129	40	0.52	0.21	393	2620	12.55	0.19	0.636	41.4	9.5	13.2	1180	8.4	4.22	38.9	0.45	14.75	77	1.08	22.8	>10.0
	1.8	Mt.Sicker	442033	5412835		0.7	80	57.2	30	0.44	17.55	9.7	66000	0.35	1.39	0.363	0.3	85.5	2.6	50	16.5	3.99	9.5	1.82	2.08	1650	0.85	9.93	7.19
	2.8	Mt.Sicker	442033	5412835		2.87	126	54.2	60	37.2	>1000	2.7	289000	9.81	38.9	0.895	1.3	399	12	40	18700	29.8	93.4	42.3	4.72	282000	8.05	6.41	>10.0
	3.8	Mt.Sicker	442034	5412835		1.59	48.2	253	10	20.9	562	32.3	136000	7.36	14.2	1.385	1.8	99	6.6	20	8920	29	79.6	30.8	2.53	92700	6.2	23.3	>10.0
	4.8	Mt.Sicker	442053	5412832	455	2.74	155	124	30	6.6	11.2	6	179500	0.61	1.67	0.224	0.2	132.5	9.9	<10	186.5	9.62	36.4	9.52	0.4	2830	0.04	20	>10.0
	5.8	Mt.Sicker	442064	5412835	462	1.385	94.4	114.5	20	28.9	>1000	14	3500	1.59	28.8	2.08	0.5	2.4	5.4	60	3870	24.8	48	20.7	0.27	260000	0.09	4.26	7.66
	6.8	Mt.Sicker	442064	5412835	462	1.25	79.5	185	20	13.6	>1000	22.5	6990	1.54	50.9	3.02	0.5	5.57	9.5	20	2300	23.9	45.1	10.15	1.6	300000	0.76	7.31	>10.0
	7.8	Mt.Sicker	442080	5412822	469	2.87	48.9	126.5	20	17.95	433	2	16000	3.71	13.15	0.318	0.2	163.5	7.4	10	7030	17.15	37.2	20.1	0.16	83800	0.41	5.07	>10.0
	8.8	Mt.Sicker	442080	5412822	469	1.235	6.92	75.8	20	0.35	22.8	8.7	8620	0.43	0.49	0.347	0.1	102.5	7.3	100	34.7	4.28	6.6	0.68	0.98	2760	0.54	2.71	2.89
	1.9	Mt.Sicker	442029	5412888	437	13.4	337	2260	40	67.5	220	1.2	137000	2.99	19.3	2.11	0.2	219	18.3	10	3170	68.2	41.2	88.7	5.05	54700	2.1	24.3	>10.0
	2.9	Mt.Sicker	442029	5412888	437	3.09	128	1735	110	1.6	44.1	17.8	179500	1.02	1.46	0.716	0.2	12.5	2.4	<10	182	97.3	21.2	6.12	1.94	6850	4.07	28.4	>10.0
	3.9	Mt.Sicker	442076	5412824	469	6.09	212	1065	40	74.4	455	2.3	95500	5.34	6.02	2.28	2	253	13	340	7070	64.3	60.5	46.4	2.51	92200	1.6	15.95	>10.0
	4.9	Mt.Sicker	442029	5412888	437	2.21	131	488	40	29.2	741	2.8	22900	16	7.99	1.675	1.1	158.5	7.8	430	20400	113.5	44.4	24.7	4.18	151500	3.52	6.36	>10.0

Appendix 2

2010 Rock Sample Data – Sognidoro Property

Rock Sample Locations

Rock Sample Descriptions

Rock Sample Geochemistry Details

Rock Sample Geochemistry Highlights

2010 Rock Sample Locations for Rock-Con Properties

Sample #	Sample #	Date	Sampler	Property	Location	Details	UTM Zone	Easting	Northing	Elevation
1	1.1	18-Sep-10	Brant & Harry	Sognidoro	Between B-24 and B-22 off Boulder main	chip from quartz vien 1/2 ft.thick with numerous cross cutting viens in green jasper	10N	422966	5421959	929
2	2.1	18-Sep-10	Brant &Harry	Sognidoro	B-22 off Boulder main Trek Res. drill hole 1-84	chip from drill hole pit in quartz sericite schist	10N	423323	5421954	931
3	3.1	18-Sep-10	Brant & Harry	Sognidoro	B-22 off Boulder main further East from sample 2	chip from quartz sericite schist in center of formation w.112m over L. 310m at surface	10N	423430	5421367	935
4	4.1	18-Sep-10	Brant & Harry	Sognidoro	Past B-24 turn off at culvert next to road	chip from red jasper at contact to purple jasper with numerous quartz viens	10N	422978	5421560	917
5	5.1	18-Sep-10	Brant & Harry	Sognidoro	Along strike of sample 1 formation	chip from sample 1 formation 50m west	10N	422986	5421890	934
6	6.1	18-Sep-10	Brant & Harry	Sognidoro	B-22 off Boulder main further East along strike from sample 2 and 3	chip from B-22 near schist contact	10N	423549	5421400	936
1B	1.2	10-Oct-10	Brant & Harry	Sognidoro	B-24 off Boulder main	Quartzs vien cross cut maroon purple Jasper	10N	422974	5421573	
2B	2.2	10-Oct-10	Brant & Harry	Sognidoro	1 Km south of Rheinheart Lake on by road at small creek	Red Jasper out crop with quartz viens near contact maroon Schist	10N	421447	5422704	
3B	3.2	10-Oct-10	Brant & Harry	Sognidoro	On road 5 meters from sample 2.2	Red Jasper along strike	10N	421453	5422693	
4B	4.2	10-Oct-10	Brant & Harry	Sognidoro	Float up small creek from sample 2.2 3.2	Quartz with Jasper fragments	10N	421424	5422742	

2010 Rock Sample Descriptions for Rock-Con Properties

Sample #	Sample #	Property	Descriptions
1	1.1	Sognidoro	15 cm quartz vein cross cuts in green felsic with jasper fragments. Cu and Fe oxidation 10% fine minerals 90% quartz
2	2.1	Sognidoro	Quartz sericite schist visible 10% cubic Fe 5% Al 3-5% brassy sulphides
3	3.1	Sognidoro	Quartz sericite schist visible10% cubic Fe 2-3% Al 3 - 5% brassy sulphides heavy sulfur smell on fresh break
4	4.1	Sognidoro	Red jasper with 1 - 2 inch cross cut quartz viens carrying native Cu and visible Fe Cu oxidation
5	5.1	Sognidoro	Green felsic with jasper fragment 25 - 30% fine sulphides. 2 - 3% honey colour
6	6.1	Sognidoro	Quartz sericite schist similar to sample 2.1 and 3.1 descriptions
1B	1.2	Sognidoro	purple marble with jasper fragments. 1/4" quartz cross cutting veins. 60% oxidized malachite
2B	2.2	Sognidoro	red jasper wuth 1/8" quartz cross cutting veins. 10% dark fine sulphides
3B	3.2	Sognidoro	red jasper with 3" quartz vein similar to sample 2.2
4B	4.2	Sognidoro	red jasper with 1/2" jasper fragments in quartz veins. Similar mineralization as samples 2.2 and 3.2

Rock Geochemistry		Method	Au-GRA22	Au-AA24	Au-AA23	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	SAMPLE	Analyte	Au	Au	Au	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga
Certificate #	DESCRIPTION	Unit	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
VA10137282	1				2.34	1.73	1.12	5	<0.2	<10	20	0.09	0.07	0.28	0.03	3.46	14.7	11	0.09	2600	2.11	2.32
VA10137282	2				0.006	0.07	5.12	8.1	<0.2	<10	40	0.13	0.33	0.55	0.1	10.2	34.5	5	0.4	53.4	9.56	10.8
VA10137282	3				0.014	0.07	2.32	8.6	<0.2	<10	60	0.09	0.45	0.21	0.1	10.55	43.1	3	0.64	71.4	9.44	4.4
VA10137282	4				0.04	1.15	0.16	14.4	<0.2	<10	50	0.21	0.05	2.76	0.13	2.85	16.9	16	<0.05	5930	11.85	1.34
VA10137282	5				0.008	2.5	3.39	7.3	<0.2	<10	340	0.26	0.01	2.61	0.18	10.35	66.6	11	0.1	>10000	6.8	6.68
VA10137282	6				<0.005	0.05	2.14	6.2	<0.2	<10	80	0.32	0.16	2.55	0.3	5.3	36.8	4	0.22	93.1	5.15	4.03
VA10150596	1B					2.74	1.87	6.8	<0.2	<10	100	0.35	0.04	2.93	0.19	11.15	32.1	12	0.08	>10000	5.35	3.47
VA10150596/VA10200240	2B			1.3		1.87	2.01	681	1.4	<10	10	0.49	0.53	0.22	0.11	9.65	58.2	28	<0.05	342	27.1	15.95
VA10150596	3B					0.56	0.38	29	<0.2	<10	10	0.06	0.37	0.61	0.1	4.83	17.6	16	<0.05	313	9.83	1.46
VA10150596	4B					0.23	0.07	3.6	<0.2	<10	10	0.17	0.19	1.35	0.09	1.46	13.6	18	<0.05	136	15.05	1.66

Rock Geochemistry		ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	SAMPLE	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
Certificate #	DESCRIPTION	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
VA10137282	1	0.06	0.04	1.62	<0.005	0.06	1.7	9.3	0.9	512	1.8	<0.01	0.17	6.8	430	0.9	1.4	<0.001	0.07	0.1	1.7	7.5	0.2	20.9	<0.01	0.89	0.3	0.067	<0.02
VA10137282	2	0.18	0.05	0.04	0.026	0.15	4.8	26.7	3.72	958	1.02	0.06	0.18	10.1	2260	5	2.8	0.001	4.96	0.25	4.8	23.6	0.3	21	<0.01	0.9	1.9	0.104	0.06
VA10137282	3	0.26	0.04	0.01	0.018	0.22	4.5	8.4	1.27	342	3.85	0.08	0.13	11.9	880	5.3	3.9	0.001	9.79	0.3	3.1	47.5	0.3	23.7	<0.01	0.94	2.1	0.053	0.09
VA10137282	4	0.17	<0.02	0.01	<0.005	0.01	2.9	1.6	0.09	8450	2.49	<0.01	0.34	45.8	550	6.3	0.2	<0.001	0.27	1.05	0.7	0.4	<0.2	50.7	<0.01	0.1	<0.2	0.005	<0.02
VA10137282	5	0.09	0.11	0.57	0.007	0.11	5.3	72.8	3.61	2020	0.88	0.02	0.2	45	1940	2.5	1.8	<0.001	0.49	0.27	3.3	0.3	0.2	136	<0.01	0.02	1	0.147	0.02
VA10137282	6	0.09	0.14	0.25	0.011	0.2	2.4	10	0.97	1250	0.49	0.03	0.45	17.1	1560	6.1	4.5	0.002	2.31	0.34	4.8	0.9	0.4	98.9	0.01	0.43	0.5	0.234	0.06
VA10150596	1B	0.21	0.16	0.84	0.006	0.07	5.6	36.6	1.71	1350	0.56	0.03	0.53	27	1880	2.9	1.5	0.001	0.38	0.3	4.1	0.7	0.2	177.5	0.01	0.02	1.3	0.172	0.02
VA10150596/VA10200240	2B	1.41	0.04	0.14	0.058	<0.01	2.6	15.1	0.78	2180	53.7	0.01	1.11	149	1250	86.6	0.1	0.019	>10.0	7.58	7.7	7.3	<0.2	6.7	<0.01	2.26	0.2	0.012	0.03
VA10150596	3B	0.28	0.02	0.12	0.008	<0.01	2.5	1.4	0.12	1430	11.2	0.01	0.4	51.1	360	24.6	0.1	0.003	7.51	2.75	2	8	<0.2	8.4	<0.01	0.53	<0.2	0.005	0.07
VA10150596	4B	0.75	<0.02	0.03	0.006	<0.01	0.8	0.2	0.26	3990	30.2	0.01	0.76	35.4	550	2.4	0.1	0.001	0.92	0.25	1.2	2.2	<0.2	15.5	<0.01	0.09	<0.2	<0.005	<0.02

Rock Geochemistry		ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	Ag-OG46	Cu-OG46	Pb-OG46	Zn-OG46
	SAMPLE	U	V	W	Y	Zn	Zr	Ag	Cu	Pb	Zn
Certificate #	DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
VA10137282	1	0.08	30	0.21	1.92	38	0.8				
VA10137282	2	0.11	97	<0.05	6.96	166	1.5				
VA10137282	3	0.13	47	0.07	6.02	58	1.2				
VA10137282	4	0.24	151	1.43	3.94	31	1.2				
VA10137282	5	0.27	92	0.29	6.44	145	3.2		1.845		
VA10137282	6	0.27	49	0.22	5.64	181	2.6				
VA10150596	1B	0.35	83	0.36	6.11	73	3.1		2		
VA10150596/VA10200240	2B	0.2	249	0.42	2.9	72	1.8				
VA10150596	3B	0.12	107	0.1	3.21	15	0.9				
VA10150596	4B	0.6	344	0.33	1.42	14	1				

2010 Rock Sample Geochemistry Highlights

Sample #	Sample #	Property	Easting	Northing	Elevation	Au ppm	Ag ppm	As ppm	Ba ppm	Bi ppm	Cd ppm	Co ppm	Cu ppm	Ga ppm	Hg ppm	In ppm	Li ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Te ppm	Y ppm	Zn ppm	Ca %	Fe %	S %
1	1.1	Sognidoro	422966	5421959	929	2.34	1.73	5	20	0.07	0.03	14.7	2600	2.32	1.62	<0.005	9.3	1.8	6.8	430	0.9	0.1	7.5	0.89	1.92	38	0.28	2.11	0.07
2	2.1	Sognidoro	423323	5421954	931	0.006	0.07	8.1	40	0.33	0.1	34.5	53.4	10.8	0.04	0.026	26.7	1.02	10.1	2260	5	0.25	23.6	0.9	6.96	166	0.55	9.56	4.96
3	3.1	Sognidoro	423430	5421367	935	0.014	0.07	8.6	60	0.45	0.1	43.1	71.4	4.4	0.01	0.018	8.4	3.85	11.9	880	5.3	0.3	47.5	0.94	6.02	58	0.21	9.44	9.79
4	4.1	Sognidoro	422978	5421560	917	0.04	1.15	14.4	50	0.05	0.13	16.9	5930	1.34	0.01	<0.005	1.6	2.49	45.8	550	6.3	1.05	0.4	0.1	3.94	31	2.76	11.85	0.27
5	5.1	Sognidoro	422986	5421890	934	0.008	2.5	7.3	340	0.01	0.18	66.6	18450	6.68	0.57	0.007	72.8	0.88	45	1940	2.5	0.27	0.3	0.02	6.44	145	2.61	6.8	0.49
6	6.1	Sognidoro	423549	5421400	936	<0.005	0.05	6.2	80	0.16	0.3	36.8	93.1	4.03	0.25	0.011	10	0.49	17.1	1560	6.1	0.34	0.9	0.43	5.64	181	2.55	5.15	2.31
1B	1.2	Sognidoro	422974	5421573		<0.2	2.74	6.8	100	0.04	0.19	32.1	20000	3.47	0.84	0.006	36.6	0.56	27	1880	2.9	0.3	0.7	0.02	6.11	73	2.93	5.35	0.38
2B	2.2	Sognidoro	421447	5422704		1.3	1.87	681	10	0.53	0.11	58.2	342	15.95	0.14	0.058	15.1	53.7	149	1250	86.6	7.58	7.3	2.26	2.9	72	0.22	27.1	>10.0
3B	3.2	Sognidoro	421453	5422693		<0.2	0.56	29	10	0.37	0.1	17.6	313	1.46	0.12	0.008	1.4	11.2	51.1	360	24.6	2.75	8	0.53	3.21	15	0.61	9.83	7.51
4B	4.2	Sognidoro	421424	5422742		<0.2	0.23	3.6	10	0.19	0.09	13.6	136	1.66	0.03	0.006	0.2	30.2	35.4	550	2.4	0.25	2.2	0.09	1.42	14	1.35	15.05	0.92

Appendix 3

2011 Rock Sample Data – Volcanics Property

Rock Sample Locations

Rock Sample Descriptions

Rock Sample Geochemistry Details

Rock Sample Geochemistry Highlights

2010&2011 Rock Sample Locations for Rock-Con Properties

Sample #	Sample #	Date	Sampler	Property	Location	Details	UTM Zone	Easting	Northing	Elevation
	1.7	17-Mar-11	Brant & Harry	Volcanics	end of Hidden Hills Rd- outcrop at end of road	chip sample rhyolite outcrop	10N	446456	5412950	327
	2.7	17-Mar-11	Brant & Harry	Volcanics	Hidden Hills Rd outcrop near roads end.	chip sample from ditch. approx. 100 m along ditch from sample 1.7 location	10N	446360	5413043	348
	3.7	17-Mar-11	Brant & Harry	Volcanics	west of Hidden Hills Rd. 50 m	chip sample- follow run-off creek to outcropping	10N	446151	5413361	309
	4.7	17-Mar-11	Brant & Harry	Volcanics	50 m off of Hidden Hills Rd- outcrop	chip sample from outcrop. Along strike	10N	446242	5413352	293
	5.7	17-Mar-11	Brant & Harry	Volcanics	50 m off of Hidden Hills Rd- outcrop	chip sample from outcrop. Along strike	10N	446244	5413356	277
	6.7	17-Mar-11	Brant & Harry	Volcanics	50 m off of Hidden Hills Rd- outcrop	chip sample from outcrop. Along strike	10N	446244	5413356	277
	7.7	17-Mar-11	Brant & Harry	Volcanics	Hidden Hills Rd- outcrop	chip sample from ditch	10N	446250	5413300	294

2010&2011 Rock Sample Descriptions for Rock-Con Properties

Sample #	Sample #	Property	Descriptions
	1.7	Volcanics	5 - 10 % fine to medium grained cubic sulphides .5 % chalcopyrite. quartz-eyes blue rhyolite with Fe oxidation
	2.7	Volcanics	similar to sample 1.7
	3.7	Volcanics	3 - 5 % fine dark sulphides with 3 - 5 % fine chalcopyrite in a pale schist. Fe oxidation
	4.7	Volcanics	5 % fine dark sulphides 5 % cubic pyrite in a pale schist. Fe oxidation
	5.7	Volcanics	5 - 10 % finely diminished metallic mineral with 2 % Fe medium grained Fe sulphides with visible fine bornite
	6.7	Volcanics	similar to sample 5.7
	7.7	Volcanics	1 - 3 % medium grained cubic chalcopyrite diminished throughout in a green schist

Rock Geochemistry		Method	Au-GRA22	Au-AA24	Au-AA23	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	SAMPLE	Analyte	Au	Au	Au	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Certificate #	DESCRIPTION	Unit	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
VA11053516	1.7					0.25	2.07	12.8	<0.2	<10	20	0.07	5.27	0.02	0.02	1.71	22.9	1	0.45
VA11053516	2.7					0.06	2.52	2.1	<0.2	<10	130	0.09	0.52	0.3	0.01	4	12.3	3	0.05
VA11053516	3.7					0.37	2.93	4.6	<0.2	<10	40	0.06	0.14	0.48	0.97	2.39	254	7	0.05
VA11053516	4.7					0.03	2.62	1.3	<0.2	<10	40	0.09	0.48	0.34	0.15	2.12	17.8	5	0.08
VA11053516	5.7					0.03	3	4.9	<0.2	<10	50	0.05	0.08	0.49	0.02	2.98	15.6	4	<0.05
VA11053516	6.7					0.07	2.64	1.2	<0.2	<10	30	0.05	0.54	0.72	0.03	2.85	25.9	4	<0.05
VA11053516	7.7					0.06	3.01	1.6	<0.2	<10	50	0.12	0.18	0.07	<0.01	2.48	15.7	28	<0.05

Rock Geochemistry	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
Certificate #	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
VA11053516	216	16.6	10.15	0.22	0.06	1.73	0.02	0.11	0.9	6.8	0.93	326	17.85	<0.01	0.08	0.9
VA11053516	61.3	6.23	5.73	0.1	0.07	0.31	0.006	0.17	1.9	10.9	1.75	435	1.99	0.06	0.22	3.9
VA11053516	1080	9.23	5.06	0.16	0.09	0.01	0.014	0.07	1.1	6.4	1.94	508	0.62	0.01	0.2	19
VA11053516	8.8	7.19	5.33	0.1	0.09	0.04	0.016	0.12	0.8	6.8	1.96	1180	0.4	0.04	0.26	4.6
VA11053516	20.8	6.38	4.3	0.1	0.05	<0.01	<0.005	0.1	1.2	5.7	1.95	624	0.17	0.03	0.12	7.8
VA11053516	6.3	7.27	4.64	0.13	0.15	0.01	0.009	0.07	1.2	6.1	2.38	538	0.16	0.04	0.31	5.5
VA11053516	67.5	5.56	9.07	0.09	0.02	0.04	0.007	0.08	1.1	12.2	3.26	431	0.45	0.05	0.06	10.8

Rock Geochemistry	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4	ME-MS4
	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Certificate #	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
VA11053516	220	8.4	2.9	0.005	7.79	0.21	1.4	20.7	0.3	8	<0.01	4.7	1.6	0.005	<0.02	0.36	25	0.06	0.8	40	2.2
VA11053516	820	1.2	2.7	<0.001	2.67	0.06	5.6	2.7	0.4	7.5	<0.01	0.6	0.5	0.211	<0.02	0.27	69	0.4	3.89	31	1.5
VA11053516	510	9.3	1.5	0.001	5.43	0.16	3.6	10.8	0.4	23.8	<0.01	0.24	0.2	0.127	<0.02	0.11	68	0.13	4.17	37	2.3
VA11053516	690	3.9	2.5	<0.001	2.1	0.1	6.2	1.8	0.3	17.9	<0.01	0.79	0.2	0.168	<0.02	0.07	94	0.13	4.24	37	2.2
VA11053516	1210	1.4	2	0.001	1.76	0.08	3.6	1.2	<0.2	13	<0.01	0.37	0.2	0.137	<0.02	0.06	75	0.14	4.82	78	1.3
VA11053516	880	4	1.3	0.001	4.14	0.07	3.5	1.9	0.3	14	<0.01	2.06	0.2	0.2	<0.02	0.09	89	0.11	4.11	60	3.3
VA11053516	490	1.6	1.6	<0.001	2.47	0.05	10	3.3	<0.2	3.2	<0.01	0.18	0.5	0.009	<0.02	<0.05	101	<0.05	1.64	61	0.7

2010&2011 Rock Sample Geochemistry Highlights

Sample #	Sample #	Property	Easting	Northing	Elevation	Au ppm	Ag ppm	As ppm	Ba ppm	Bi ppm	Cd ppm	Co ppm	Cu ppm	Ga ppm	Hg ppm	In ppm	Li ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Te ppm	Y ppm	Zn ppm	Ca %	Fe %	S %
	1.7	Volcanics	446456	5412950	327	<0.2	0.25	12.8	20	5.27	0.02	22.9	216	10.15	1.73	0.02	6.8	17.85	0.9	220	8.4	0.21	20.7	4.7	0.8	40	0.02	16.6	7.79
	2.7	Volcanics	446360	5413043	348	<0.2	0.06	2.1	130	0.52	0.01	12.3	61.3	5.73	0.31	0.006	10.9	1.99	3.9	820	1.2	0.06	2.7	0.6	3.89	31	0.3	6.23	2.67
	3.7	Volcanics	446151	5413361	309	<0.2	0.37	4.6	40	0.14	0.97	254	1080	5.06	0.01	0.014	6.4	0.62	19	510	9.3	0.16	10.8	0.24	4.17	37	0.48	9.23	5.43
	4.7	Volcanics	446242	5413352	293	<0.2	0.03	1.3	40	0.48	0.15	17.8	8.8	5.33	0.04	0.016	6.8	0.4	4.6	690	3.9	0.1	1.8	0.79	4.24	37	0.34	7.19	2.1
	5.7	Volcanics	446244	5413356	277	<0.2	0.03	4.9	50	0.08	0.02	15.6	20.8	4.3	<0.01	<0.005	5.7	0.17	7.8	1210	1.4	0.08	1.2	0.37	4.82	78	0.49	6.38	1.76
	6.7	Volcanics	446244	5413356	277	<0.2	0.07	1.2	30	0.54	0.03	25.9	6.3	4.64	0.01	0.009	6.1	0.16	5.5	880	4	0.07	1.9	2.06	4.11	60	0.72	7.27	4.14
	7.7	Volcanics	446250	5413300	294	<0.2	0.06	1.6	50	0.18	<0.01	15.7	67.5	9.07	0.04	0.007	12.2	0.45	10.8	490	1.6	0.05	3.3	0.18	1.64	61	0.07	5.56	2.47

Appendix 4

2010 & 2011 ALS Minerals Analytical Certificates

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12-JAN-2011
This copy reported on
13-JAN-2011
Account: KNAIND

CERTIFICATE VA11001995

Project:

P.O. No.:

This report is for 7 Rock samples submitted to our lab in Vancouver, BC, Canada on 5-JAN-2011.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
ME-MS41	51 anal. aqua regia ICPMS	

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12- JAN- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11001995

Sample Description	Method	WEI- 21	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
1 E		0.88	16.85	0.87	44.8	<0.2	<10	10	<0.05	63.5	2.87	22.2	0.96	21.8	<1	<0.05
2 E		1.00	10.85	0.76	52.9	<0.2	<10	20	<0.05	28.8	3.38	9.45	0.97	35.8	<1	<0.05
3 E		1.14	0.41	0.63	55.1	0.2	<10	20	<0.05	3.00	0.05	0.09	1.53	161.0	<1	0.13
4 E		1.12	1.05	1.13	21.9	<0.2	<10	10	<0.05	9.79	4.12	0.56	2.44	72.6	<1	<0.05
5 E		0.92	7.08	0.80	11.2	0.2	<10	40	<0.05	2.89	0.99	7.53	3.43	20.5	4	0.07
6 E		1.20	1.15	0.13	11.8	<0.2	<10	10	<0.05	2.86	0.32	0.20	0.52	41.1	7	<0.05
7 E		1.32	2.88	0.32	67.2	0.2	<10	10	<0.05	5.03	0.40	1.07	1.15	104.0	5	0.05

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12-JAN-2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11001995

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
1 E		>10000	25.5	1.75	0.38	<0.02	0.17	2.59	0.01	0.6	0.9	0.68	1400	5.62	0.01	0.28
2 E		>10000	26.9	1.50	0.39	<0.02	0.14	0.899	0.03	0.6	0.8	0.56	1380	18.70	0.01	0.29
3 E		977	23.7	1.21	0.44	0.02	2.75	0.012	0.20	0.6	0.4	0.28	81	18.45	0.01	0.41
4 E		1705	24.8	2.14	0.45	<0.02	0.05	0.071	0.01	1.5	2.0	0.85	1830	7.14	0.01	0.33
5 E		>10000	8.80	1.94	0.13	0.02	0.08	0.384	0.07	2.0	2.2	0.53	492	8.07	0.01	0.10
6 E		406	10.25	0.43	0.20	<0.02	0.03	0.010	0.01	0.3	0.3	0.10	137	6.11	<0.01	0.14
7 E		3980	17.80	1.04	0.37	<0.02	0.72	0.098	0.05	0.7	0.3	0.11	176	11.75	<0.01	0.29

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12-JAN-2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11001995

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
1 E		3.0	20	6.3	0.2	0.002	>10.0	1.22	1.1	38.4	0.6	32.3	<0.01	53.7	<0.2	<0.005
2 E		3.1	90	8.1	0.6	0.005	>10.0	1.32	1.1	42.7	0.2	42.5	<0.01	28.7	<0.2	<0.005
3 E		1.9	30	3.9	3.4	0.027	>10.0	0.13	0.4	60.5	<0.2	2.3	<0.01	6.63	0.2	<0.005
4 E		1.2	50	11.3	0.2	0.005	>10.0	0.27	0.9	45.1	<0.2	60.8	<0.01	13.20	0.4	<0.005
5 E		1.3	110	4.1	1.3	0.007	7.65	0.20	1.0	17.5	0.4	7.3	<0.01	3.77	0.5	<0.005
6 E		1.2	20	4.0	0.1	0.008	>10.0	0.15	0.4	24.8	<0.2	2.7	<0.01	4.33	<0.2	<0.005
7 E		2.8	20	6.5	0.9	0.016	>10.0	0.85	0.4	53.7	<0.2	4.4	<0.01	7.11	<0.2	<0.005

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12-JAN-2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11001995

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Cu-OG46
	Analyte	Tl	U	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.05	1	0.05	0.05	2	0.5	0.001
1 E		<0.02	<0.05	29	<0.05	1.53	310	<0.5	5.61
2 E		<0.02	<0.05	24	<0.05	2.07	125	<0.5	3.42
3 E		0.02	0.05	6	<0.05	0.75	14	0.6	
4 E		<0.02	<0.05	13	<0.05	4.12	46	<0.5	
5 E		<0.02	<0.05	5	0.17	2.22	134	0.7	1.550
6 E		<0.02	<0.05	1	0.08	0.50	8	<0.5	
7 E		0.03	<0.05	4	<0.05	1.28	14	<0.5	

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 12- JAN- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11001995

Method	CERTIFICATE COMMENTS
ME- MS41	Gold determinations by this method are semi- quantitative due to the small sample weight used (0.5g).

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE VA10137282

Project:

P.O. No.:

This report is for 6 Rock samples submitted to our lab in Vancouver, BC, Canada on 24-SEP-2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME-MS41	51 anal. aqua regia ICPMS	
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS

To: **KNAPPETT INDUSTRIES**
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10137282

Sample Description	Method	WEI-21	Au-AA23	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd Wt.	Au	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.02	0.005	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1
1		0.80	2.34	1.73	1.12	5.0	<0.2	<10	20	0.09	0.07	0.28	0.03	3.46	14.7	11
2		0.84	0.006	0.07	5.12	8.1	<0.2	<10	40	0.13	0.33	0.55	0.10	10.20	34.5	5
3		1.02	0.014	0.07	2.32	8.6	<0.2	<10	60	0.09	0.45	0.21	0.10	10.55	43.1	3
4		0.72	0.040	1.15	0.16	14.4	<0.2	<10	50	0.21	0.05	2.76	0.13	2.85	16.9	16
5		0.64	0.008	2.50	3.39	7.3	<0.2	<10	340	0.26	0.01	2.61	0.18	10.35	66.6	11
6		0.76	<0.005	0.05	2.14	6.2	<0.2	<10	80	0.32	0.16	2.55	0.30	5.30	36.8	4

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10137282

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na
	Units	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
	LOR	0.05	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01
1		0.09	2600	2.11	2.32	0.06	0.04	1.62	<0.005	0.06	1.7	9.3	0.90	512	1.80	<0.01
2		0.40	53.4	9.56	10.80	0.18	0.05	0.04	0.026	0.15	4.8	26.7	3.72	958	1.02	0.06
3		0.64	71.4	9.44	4.40	0.26	0.04	0.01	0.018	0.22	4.5	8.4	1.27	342	3.85	0.08
4		<0.05	5930	11.85	1.34	0.17	<0.02	0.01	<0.005	0.01	2.9	1.6	0.09	8450	2.49	<0.01
5		0.10	>10000	6.80	6.68	0.09	0.11	0.57	0.007	0.11	5.3	72.8	3.61	2020	0.88	0.02
6		0.22	93.1	5.15	4.03	0.09	0.14	0.25	0.011	0.20	2.4	10.0	0.97	1250	0.49	0.03

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10137282

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.05	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2
1		0.17	6.8	430	0.9	1.4	<0.001	0.07	0.10	1.7	7.5	0.2	20.9	<0.01	0.89	0.3
2		0.18	10.1	2260	5.0	2.8	0.001	4.96	0.25	4.8	23.6	0.3	21.0	<0.01	0.90	1.9
3		0.13	11.9	880	5.3	3.9	0.001	9.79	0.30	3.1	47.5	0.3	23.7	<0.01	0.94	2.1
4		0.34	45.8	550	6.3	0.2	<0.001	0.27	1.05	0.7	0.4	<0.2	50.7	<0.01	0.10	<0.2
5		0.20	45.0	1940	2.5	1.8	<0.001	0.49	0.27	3.3	0.3	0.2	136.0	<0.01	0.02	1.0
6		0.45	17.1	1560	6.1	4.5	0.002	2.31	0.34	4.8	0.9	0.4	98.9	0.01	0.43	0.5

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10137282

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Cu-OG46
	Analyte	Ti	Tl	U	V	W	Y	Zn	Zr	Cu
	Units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.001
1		0.067	<0.02	0.08	30	0.21	1.92	38	0.8	
2		0.104	0.06	0.11	97	<0.05	6.96	166	1.5	
3		0.053	0.09	0.13	47	0.07	6.02	58	1.2	
4		0.005	<0.02	0.24	151	1.43	3.94	31	1.2	
5		0.147	0.02	0.27	92	0.29	6.44	145	3.2	1.845
6		0.234	0.06	0.27	49	0.22	5.64	181	2.6	

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 7-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10137282

Method	CERTIFICATE COMMENTS
ME-MS41	Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE VA10150596

Project:

P.O. No.:

This report is for 6 Rock samples submitted to our lab in Vancouver, BC, Canada on 18-OCT-2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
ME-MS41	51 anal. aqua regia ICPMS	

To: **KNAPPETT INDUSTRIES**
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10150596

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.2	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1	ME-MS41 Cs ppm 0.05
B-1		0.78	2.74	1.87	6.8	<0.2	<10	100	0.35	0.04	2.93	0.19	11.15	32.1	12	0.08
B-2		0.64	1.87	2.01	681	1.4	<10	10	0.49	0.53	0.22	0.11	9.65	58.2	28	<0.05
B-3		0.64	0.56	0.38	29.0	<0.2	<10	10	0.06	0.37	0.61	0.10	4.83	17.6	16	<0.05
B-4		0.64	0.23	0.07	3.6	<0.2	<10	10	0.17	0.19	1.35	0.09	1.46	13.6	18	<0.05
B-5		0.72	10.25	0.22	31.7	<0.2	<10	<10	<0.05	26.2	0.46	3.00	0.92	127.0	11	<0.05
B-6		0.64	19.90	0.29	12.3	0.4	<10	30	<0.05	19.45	3.67	16.20	4.68	3.6	3	0.06

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10150596

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
B-1		>10000	5.35	3.47	0.21	0.16	0.84	0.006	0.07	5.6	36.6	1.71	1350	0.56	0.03	0.53
B-2		342	27.1	15.95	1.41	0.04	0.14	0.058	<0.01	2.6	15.1	0.78	2180	53.7	0.01	1.11
B-3		313	9.83	1.46	0.28	0.02	0.12	0.008	<0.01	2.5	1.4	0.12	1430	11.20	0.01	0.40
B-4		136.0	15.05	1.66	0.75	<0.02	0.03	0.006	<0.01	0.8	0.2	0.26	3990	30.2	0.01	0.76
B-5		>10000	24.8	0.73	0.98	<0.02	0.54	0.043	<0.01	0.5	0.7	0.15	228	9.63	0.01	1.08
B-6		>10000	11.25	0.87	0.24	0.02	0.32	0.812	0.04	2.5	0.6	0.16	1940	25.3	0.01	0.25

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10150596

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
B-1		27.0	1880	2.9	1.5	0.001	0.38	0.30	4.1	0.7	0.2	177.5	0.01	0.02	1.3	0.172
B-2		149.0	1250	86.6	0.1	0.019	>10.0	7.58	7.7	7.3	<0.2	6.7	<0.01	2.26	0.2	0.012
B-3		51.1	360	24.6	0.1	0.003	7.51	2.75	2.0	8.0	<0.2	8.4	<0.01	0.53	<0.2	0.005
B-4		35.4	550	2.4	0.1	0.001	0.92	0.25	1.2	2.2	<0.2	15.5	<0.01	0.09	<0.2	<0.005
B-5		1.7	<10	6.9	0.1	0.007	>10.0	0.69	0.7	97.2	<0.2	2.2	<0.01	41.6	<0.2	<0.005
B-6		0.6	40	8.4	0.9	0.001	9.29	1.01	0.7	19.2	1.4	17.7	<0.01	18.05	0.2	<0.005

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **KNAPPETT INDUSTRIES**
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10150596

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Cu-OG46
	Analyte	Tl	U	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.05	1	0.05	0.05	2	0.5	0.001
B-1		0.02	0.35	83	0.36	6.11	73	3.1	2.00
B-2		0.03	0.20	249	0.42	2.90	72	1.8	
B-3		0.07	0.12	107	0.10	3.21	15	0.9	
B-4		<0.02	0.60	344	0.33	1.42	14	1.0	
B-5		0.02	<0.05	10	<0.05	0.62	63	<0.5	1.900
B-6		0.02	<0.05	3	0.05	6.08	362	<0.5	7.63

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 28-OCT-2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10150596

Method	CERTIFICATE COMMENTS
ME-MS41	Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE VA10170845

Project:

P.O. No.:

This report is for 8 Rock samples submitted to our lab in Vancouver, BC, Canada on 17- NOV- 2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- OG46	Ore Grade Elements - AquaRegia	ICP- AES
Cu- OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Pb- OG46	Ore Grade Pb - Aqua Regia	VARIABLE
Zn- OG46	Ore Grade Zn - Aqua Regia	VARIABLE
ME- MS41	51 anal. aqua regia ICPMS	

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10170845

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg 0.02	ME- MS41 Ag ppm 0.01	ME- MS41 Al % 0.01	ME- MS41 As ppm 0.1	ME- MS41 Au ppm 0.2	ME- MS41 B ppm 10	ME- MS41 Ba ppm 10	ME- MS41 Be ppm 0.05	ME- MS41 Bi ppm 0.01	ME- MS41 Ca % 0.01	ME- MS41 Cd ppm 0.01	ME- MS41 Ce ppm 0.02	ME- MS41 Co ppm 0.1	ME- MS41 Cr ppm 1	ME- MS41 Cs ppm 0.05
1 C		1.02	34.1	0.03	37.6	2.0	<10	20	<0.05	25.7	0.46	310	0.09	0.8	<1	0.08
2 C		0.80	65.2	0.13	57	1.2	<10	120	<0.05	11.70	17.15	>1000	10.55	2.4	<1	0.05
3 C		0.74	30.5	0.05	253	0.2	<10	10	<0.05	7.79	1.91	8.37	2.23	3.3	<1	0.05
4 C		0.86	23.6	0.07	342	0.2	<10	10	<0.05	6.19	2.21	1.67	3.80	8.5	<1	0.08
5 C		1.06	57.9	0.12	80.7	3.3	<10	10	<0.05	4.29	0.02	114.5	4.38	10.1	<1	0.10
6 C		0.74	13.65	0.06	167.0	0.3	<10	10	<0.05	2.40	1.09	2.77	2.20	10.4	<1	0.08
7 C		0.74	0.23	0.76	6.3	<0.2	<10	2640	0.09	0.04	4.29	9.33	11.90	1.4	<1	0.20
8 C		0.60	32.5	2.42	38.5	0.6	<10	50	0.12	3.62	2.51	48.4	2.46	0.8	2	0.07

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10170845

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
1 C		2510	22.4	1.58	0.48	<0.02	7.82	1.845	0.02	<0.2	0.1	0.01	23	107.5	0.02	0.19
2 C		>10000	3.51	14.90	0.27	0.03	31.9	0.249	0.03	9.3	0.6	0.11	874	345	0.02	0.06
3 C		>10000	14.80	1.16	0.25	<0.02	0.45	0.215	0.02	1.1	0.4	0.07	123	54.2	0.02	0.14
4 C		>10000	17.15	0.64	0.31	0.02	0.27	0.252	0.02	1.6	0.4	0.05	144	59.6	0.03	0.16
5 C		>10000	13.90	1.28	0.29	0.06	5.97	0.342	0.05	2.3	1.3	0.01	14	161.0	0.01	0.13
6 C		>10000	14.15	0.51	0.26	0.02	0.23	0.124	0.03	1.2	0.1	0.02	75	89.9	0.03	0.14
7 C		809	1.17	1.63	<0.05	0.04	0.02	<0.005	0.09	7.0	2.9	0.64	687	1.46	0.01	<0.05
8 C		>10000	4.35	6.56	0.10	0.07	0.87	0.149	0.22	0.6	0.5	0.92	465	14.90	0.07	<0.05

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10170845

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
1 C		36.6	10	1795	0.4	0.003	>10.0	5.99	0.3	65.4	0.3	23.7	<0.01	20.8	<0.2	<0.005
2 C		19.2	20	>10000	0.7	0.015	>10.0	44.8	1.4	76.7	<0.2	177.0	<0.01	19.15	0.3	<0.005
3 C		1.5	30	280	0.3	0.001	>10.0	71.9	1.3	19.9	0.5	90.0	<0.01	4.04	0.3	<0.005
4 C		3.2	50	230	0.4	0.001	>10.0	36.2	0.9	26.2	0.5	43.2	<0.01	4.66	0.3	<0.005
5 C		21.7	10	88.4	0.8	0.013	>10.0	5.00	0.3	39.1	1.2	1.6	<0.01	8.05	0.2	<0.005
6 C		5.6	10	129.5	0.4	0.002	>10.0	9.96	0.4	25.2	0.4	29.7	<0.01	2.27	<0.2	<0.005
7 C		0.6	100	38.8	1.8	<0.001	0.13	0.13	0.5	0.5	<0.2	151.0	<0.01	0.02	1.3	<0.005
8 C		1.2	330	859	2.9	0.004	2.11	34.6	3.8	6.9	0.9	215	<0.01	3.40	0.5	<0.005

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10170845

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	Cu- OG46	Pb- OG46	Zn- OG46
	Analyte	Tl	U	V	W	Y	Zn	Zr	Cu	Pb	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
	LOR	0.02	0.05	1	0.05	0.05	2	0.5	0.001	0.001	0.001
1 C		0.03	0.39	<1	0.09	0.40	>10000	<0.5			6.08
2 C		0.03	1.14	9	0.46	5.05	>10000	0.9	1.260	1.720	20.6
3 C		0.02	0.10	2	<0.05	2.45	2020	0.5	10.90		
4 C		0.03	0.05	2	<0.05	4.26	380	0.7	2.96		
5 C		0.04	0.15	2	0.08	0.59	>10000	2.3	3.15		2.23
6 C		0.03	0.06	1	<0.05	1.45	522	0.7	2.20		
7 C		0.02	0.15	2	<0.05	12.85	1710	1.1			
8 C		0.28	0.44	10	<0.05	6.36	9560	2.8	3.45		

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N9

Finalized Date: 3- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10170845

Method	CERTIFICATE COMMENTS
ME- MS41	Interference: Ca> 10% on ICP- MS As,ICP- AES results shown.
ME- MS41	Gold determinations by this method are semi- quantitative due to the small sample weight used (0.5g).

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE VA10185687

Project:

P.O. No.:

This report is for 9 Rock samples submitted to our lab in Vancouver, BC, Canada on 13- DEC- 2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Ag- OG46	Ore Grade Ag - Aqua Regia	VARIABLE
ME- OG46	Ore Grade Elements - AquaRegia	ICP- AES
Cu- OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Pb- OG46	Ore Grade Pb - Aqua Regia	VARIABLE
Zn- OG46	Ore Grade Zn - Aqua Regia	VARIABLE
ME- MS41	51 anal. aqua regia ICPMS	

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10185687

Sample Description	Method	WEI- 21	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
Sample 1D		0.74	0.23	1.81	26	<0.2	<10	80	0.12	0.35	10.85	46.0	18.30	15.8	1	0.13
Sample 2D		0.74	16.70	0.42	20.1	0.3	<10	30	<0.05	3.10	0.04	0.50	1.26	6.6	<1	0.09
Sample 3D		0.86	34.6	0.27	90.9	1.8	<10	20	<0.05	2.36	1.38	6.60	3.87	2.9	3	0.12
Sample 4D		0.94	65.5	0.11	236	1.7	<10	20	<0.05	17.30	0.99	>1000	1.40	27.5	<1	<0.05
Sample 5D		0.88	>100	0.21	87.9	16.9	<10	80	<0.05	47.3	0.60	504	0.07	1.8	<1	0.13
Sample 6D		0.60	11.10	0.34	41.8	0.6	<10	30	0.06	1.14	0.08	11.65	2.81	56.2	3	0.11
Sample 7D		1.00	>100	0.05	208	4.8	<10	10	<0.05	3.78	0.27	658	0.12	0.7	<1	0.06
Sample 8D		0.60	9.12	0.17	27.8	0.2	<10	10	<0.05	13.60	0.38	10.65	0.44	99.9	<1	<0.05
Sample 9D		0.66	12.25	0.26	36.2	0.2	<10	30	<0.05	45.0	0.84	11.05	0.64	111.0	<1	<0.05

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10185687

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	S	0.05	0.01	0.05
Sample 1D		5150	6.23	3.20	0.10	0.08	0.07	0.070	0.22	10.3	7.3	4.69	2520	1.14	0.02	0.10
Sample 2D		398	23.7	1.18	0.29	0.02	0.06	0.017	0.20	0.4	0.4	0.05	37	478	0.02	0.19
Sample 3D		>10000	9.48	0.78	0.11	0.11	0.53	0.049	0.09	2.0	0.3	0.05	205	178.0	0.04	0.13
Sample 4D		7390	8.01	1.33	0.26	<0.02	59.0	3.19	0.02	0.7	0.5	0.11	337	2.52	0.01	0.12
Sample 5D		>10000	20.9	6.09	0.31	<0.02	16.00	2.14	0.07	<0.2	0.5	0.10	107	110.5	0.01	0.17
Sample 6D		1590	11.55	0.90	0.11	0.02	1.13	0.067	0.16	1.5	0.1	0.01	59	173.5	0.01	0.09
Sample 7D		>10000	2.02	7.91	0.08	<0.02	18.10	0.148	0.03	<0.2	0.1	0.01	53	95.1	<0.01	<0.05
Sample 8D		>10000	23.8	0.52	0.57	<0.02	1.32	0.033	0.05	0.2	0.2	0.05	149	14.85	0.01	0.18
Sample 9D		>10000	25.9	0.74	0.69	<0.02	0.99	0.102	0.01	0.2	0.5	0.21	328	9.80	0.01	0.16

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10185687

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
Sample 1D		4.3	270	21.2	3.1	<0.001	6.26	0.20	2.9	4.8	1.8	495	0.01	0.57	1.1	<0.005
Sample 2D		3.3	<10	271	3.0	0.011	>10.0	2.81	0.4	44.5	0.2	2.3	<0.01	4.15	<0.2	<0.005
Sample 3D		4.0	10	113.0	1.4	0.004	>10.0	16.70	0.7	16.2	1.6	42.7	<0.01	4.21	0.5	<0.005
Sample 4D		17.2	10	2320	0.3	<0.001	>10.0	20.1	0.3	37.0	0.2	15.1	<0.01	13.30	<0.2	<0.005
Sample 5D		28.2	10	2080	1.1	0.003	>10.0	11.80	0.3	46.8	0.7	16.1	<0.01	68.4	<0.2	<0.005
Sample 6D		30.4	10	20.5	2.9	0.017	>10.0	5.33	0.4	16.0	0.3	3.3	<0.01	1.25	<0.2	<0.005
Sample 7D		2.8	10	>10000	0.6	0.006	>10.0	740	0.2	21.8	<0.2	52.1	<0.01	22.3	0.3	<0.005
Sample 8D		20.4	<10	375	0.9	0.004	>10.0	13.95	0.3	95.2	<0.2	6.3	<0.01	21.8	0.3	<0.005
Sample 9D		0.7	10	409	0.1	0.006	>10.0	10.75	0.4	115.0	<0.2	10.3	<0.01	55.6	0.3	<0.005

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10185687

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	Ag- OG46	Cu- OG46	Pb- OG46	Zn- OG46
	Analyte	Tl	U	V	W	Y	Zn	Zr	Ag	Cu	Pb	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
	LOR	0.02	0.05	1	0.05	0.05	2	0.5	1	0.001	0.001	0.001
Sample 1D		0.06	0.36	7	0.05	25.6	3440	2.0				
Sample 2D		0.10	<0.05	6	0.09	0.37	76	0.8				
Sample 3D		0.06	0.34	2	0.07	2.45	1020	3.4		2.72		
Sample 4D		0.05	<0.05	1	<0.05	2.23	>10000	<0.5				>30.0
Sample 5D		0.06	0.43	8	0.14	0.64	>10000	<0.5	113	3.23		10.45
Sample 6D		0.11	0.05	2	0.48	0.31	1240	0.6				
Sample 7D		0.05	0.37	3	0.11	0.11	>10000	<0.5	176	1.190	2.78	13.85
Sample 8D		0.07	<0.05	4	0.06	0.41	2140	<0.5		1.005		
Sample 9D		0.02	<0.05	9	<0.05	0.89	1480	<0.5		3.11		

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 22- DEC- 2010
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10185687

Method	CERTIFICATE COMMENTS
ME- MS41	Interference: Ca> 10% on ICP- MS As,ICP- AES results shown.
ME- MS41	Gold determinations by this method are semi- quantitative due to the small sample weight used (0.5g).
ME- MS41	Interference: Mo> 400ppm on ICP- MS Cd,ICP- AES results shown.

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- JAN- 2011
Account: KNAIND

CERTIFICATE VA10200240

Project:

P.O. No.:

This report is for 1 Rock sample submitted to our lab in Vancouver, BC, Canada on 28- DEC- 2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA24	Au 50g FA AA finish	AAS

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- JAN- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10200240

Sample Description	Method Analyte Units LOR	Au- AA24 Au ppm 0.005
B- 2		1.300

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 7-JAN-2011
Account: KNAIND

CERTIFICATE VA10200241

Project:

P.O. No.:

This report is for 3 Rock samples submitted to our lab in Vancouver, BC, Canada on 28-DEC-2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA24	Au 50g FA AA finish	AAS

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 7-JAN-2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10200241

Sample Description	Method Analyte Units LOR	Au-AA24 Au ppm 0.005
1 C		1.740
2 C		1.175
5 C		2.74

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 7- JAN- 2011
Account: KNAIND

CERTIFICATE VA10200243

Project:

P.O. No.:

This report is for 4 Rock samples submitted to our lab in Vancouver, BC, Canada on 28- DEC- 2010.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- AA24	Au 50g FA AA finish	AAS
Au- GRA22	Au 50 g FA- GRAV finish	WST- SIM

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 7-JAN-2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA10200243

Sample Description	Method	Au-AA24	Au-GRA22
	Analyte	Au	Au
	Units	ppm	ppm
	LOR	0.005	0.05
Sample 3D		2.57	
Sample 4D		1.585	
Sample 5D		>10.0	21.1
Sample 7D		4.28	

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE VA11021571

Project:

P.O. No.:

This report is for 8 Rock samples submitted to our lab in Vancouver, BC, Canada on 11- FEB- 2011.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
ME- MS41	51 anal. aqua regia ICPMS

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11021571

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg 0.02	ME- MS41 Ag ppm 0.01	ME- MS41 Al % 0.01	ME- MS41 As ppm 0.1	ME- MS41 Au ppm 0.2	ME- MS41 B ppm 10	ME- MS41 Ba ppm 10	ME- MS41 Be ppm 0.05	ME- MS41 Bi ppm 0.01	ME- MS41 Ca % 0.01	ME- MS41 Cd ppm 0.01	ME- MS41 Ce ppm 0.02	ME- MS41 Co ppm 0.1	ME- MS41 Cr ppm 1	ME- MS41 Cs ppm 0.05
1.6		0.68	0.50	1.44	122.5	<0.2	<10	20	0.11	0.11	0.52	0.03	4.25	98.5	2	0.20
2.6		0.70	0.17	1.09	57.2	<0.2	<10	80	0.46	0.07	4.47	0.64	6.14	35.6	<1	0.40
3.6		0.58	0.18	1.37	97.3	<0.2	<10	40	0.11	0.04	0.72	0.02	6.55	33.9	2	0.19
4.6		0.74	0.24	3.53	16.3	<0.2	<10	30	0.13	0.92	0.62	0.03	1.59	49.4	1	0.10
5.6		0.72	0.18	5.06	56.1	<0.2	<10	20	0.39	0.04	3.77	0.08	7.21	24.2	<1	0.28
6.6		0.78	0.62	3.86	88.6	<0.2	<10	30	0.27	0.39	0.75	0.13	7.64	386	<1	0.32
7.6		0.70	0.62	4.18	78.3	<0.2	<10	30	0.25	0.54	0.53	0.10	9.41	543	<1	0.34
8.6		0.70	0.92	4.74	129.0	<0.2	<10	40	0.30	0.52	1.08	0.21	11.15	393	<1	0.26

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11021571

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
1.6		277	11.95	3.10	0.22	0.23	0.04	0.017	0.28	1.6	6.9	0.40	466	1.47	0.02	0.48
2.6		127.5	11.25	2.20	0.16	0.05	0.55	0.031	0.25	2.1	20.1	0.85	1360	2.07	0.01	0.24
3.6		126.5	6.18	2.62	0.07	0.33	0.03	0.014	0.33	2.4	4.2	0.43	346	0.76	0.03	0.37
4.6		10.6	15.25	6.32	0.23	0.09	0.41	<0.005	0.09	0.5	13.5	1.22	1030	3.82	0.02	0.44
5.6		11.3	23.0	10.95	0.52	0.05	0.17	0.011	0.03	2.6	30.3	1.54	1660	3.61	<0.01	0.54
6.6		1455	18.35	7.98	0.43	0.25	0.11	0.124	0.21	2.7	22.7	1.27	795	5.17	0.01	0.50
7.6		1380	22.6	10.60	0.59	0.16	0.18	0.473	0.11	3.4	31.8	1.18	783	5.98	0.01	0.59
8.6		2620	22.8	12.55	0.57	0.16	0.19	0.636	0.13	4.3	41.4	1.20	931	9.50	0.01	0.59

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11021571

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
1.6		32.1	1080	11.7	5.9	0.047	>10.0	1.98	4.9	14.2	<0.2	17.6	0.01	0.87	0.3	0.174
2.6		7.5	180	2.1	5.1	0.005	0.64	11.70	12.0	1.2	<0.2	79.7	0.01	0.07	0.3	<0.005
3.6		13.4	1720	4.6	6.9	0.013	4.99	1.00	7.7	6.6	0.2	12.1	0.01	0.60	0.6	0.286
4.6		20.8	150	5.8	1.8	0.003	>10.0	0.26	6.0	4.5	0.4	40.6	0.01	1.28	<0.2	0.204
5.6		17.2	500	2.6	0.9	0.004	1.85	0.46	19.3	0.7	<0.2	61.0	0.01	0.02	0.3	0.018
6.6		11.5	1480	6.7	3.8	0.001	>10.0	0.83	14.6	35.8	3.6	12.6	0.01	0.39	0.4	0.152
7.6		13.6	1560	8.1	2.1	0.002	>10.0	2.77	17.3	42.7	8.1	9.8	0.01	0.52	0.3	0.067
8.6		13.2	1180	8.4	2.6	0.002	>10.0	4.22	20.2	38.9	10.2	10.3	0.01	0.45	0.4	0.054

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11021571

Sample Description	Method Analyte Units LOR	ME- MS41 Tl ppm 0.02	ME- MS41 U ppm 0.05	ME- MS41 V ppm 1	ME- MS41 W ppm 0.05	ME- MS41 Y ppm 0.05	ME- MS41 Zn ppm 2	ME- MS41 Zr ppm 0.5
1.6		0.04	1.11	68	0.05	7.00	26	6.7
2.6		0.04	0.16	121	0.05	13.60	123	<0.5
3.6		0.05	1.74	85	0.08	10.95	28	9.6
4.6		0.02	0.38	94	0.14	3.97	54	2.3
5.6		<0.02	0.25	193	<0.05	11.30	78	0.6
6.6		0.07	1.39	115	0.07	12.05	69	6.4
7.6		0.09	1.31	128	0.06	11.40	59	3.9
8.6		0.08	1.52	156	0.05	14.75	77	3.6

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 19- FEB- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11021571

Method	CERTIFICATE COMMENTS
ME- MS41	Gold determinations by this method are semi- quantitative due to the small sample weight used (0.5g).

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE VA11053516

Project:

P.O. No.:

This report is for 19 Rock samples submitted to our lab in Vancouver, BC, Canada on 5- APR- 2011.

The following have access to data associated with this certificate:

KNAPPETT INDUSTRIES	CONNIE MCCOMBS	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
PUL- QC	Pulverizing QC Test
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- OG46	Ore Grade Elements - AquaRegia	ICP- AES
Pb- OG46	Ore Grade Pb - Aqua Regia	VARIABLE
Cu- OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Zn- OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Au- AA24	Au 50g FA AA finish	AAS
Au- GRA22	Au 50 g FA- GRAV finish	WST- SIM
ME- MS41	51 anal. aqua regia ICPMS	
Ag- OG46	Ore Grade Ag - Aqua Regia	VARIABLE

To: KNAPPETT INDUSTRIES
ATTN: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11053516

Sample Description	Method	WEI- 21	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.01	0.01	0.1	0.2	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
1.7		0.74	0.25	2.07	12.8	<0.2	<10	20	0.07	5.27	0.02	0.02	1.71	22.9	1	0.45
2.7		0.76	0.06	2.52	2.1	<0.2	<10	130	0.09	0.52	0.30	0.01	4.00	12.3	3	0.05
3.7		0.70	0.37	2.93	4.6	<0.2	<10	40	0.06	0.14	0.48	0.97	2.39	254	7	0.05
4.7		0.76	0.03	2.62	1.3	<0.2	<10	40	0.09	0.48	0.34	0.15	2.12	17.8	5	0.08
5.7		0.78	0.03	3.00	4.9	<0.2	<10	50	0.05	0.08	0.49	0.02	2.98	15.6	4	<0.05
6.7		0.76	0.07	2.64	1.2	<0.2	<10	30	0.05	0.54	0.72	0.03	2.85	25.9	4	<0.05
7.7		0.78	0.06	3.01	1.6	<0.2	<10	50	0.12	0.18	0.07	<0.01	2.48	15.7	28	<0.05
1.8		0.72	80.0	0.16	57.2	0.7	<10	30	<0.05	0.44	0.85	17.55	3.79	9.7	1	<0.05
2.8		0.68	>100	0.25	54.2	2.8	<10	60	<0.05	37.2	8.05	>1000	6.64	2.7	<1	0.10
3.8		0.88	48.2	0.33	253	1.6	<10	10	<0.05	20.9	6.20	562	5.64	32.3	1	0.05
4.8		0.82	>100	0.15	124.0	2.5	<10	30	<0.05	6.60	0.04	11.20	2.09	6.0	<1	0.08
5.8		0.82	94.4	0.14	114.5	1.2	<10	20	<0.05	28.9	0.09	>1000	0.70	14.0	3	0.06
6.8		0.80	79.5	0.12	185.0	1.2	<10	20	<0.05	13.60	0.76	>1000	1.14	22.5	1	<0.05
7.8		0.82	48.9	0.05	126.5	2.6	<10	20	<0.05	17.95	0.41	433	0.21	2.0	<1	0.06
8.8		0.88	6.92	0.11	75.8	1.1	<10	20	<0.05	0.35	0.54	22.8	1.27	8.7	7	0.09
1.9		0.70	>100	0.13	2260	12.4	<10	40	<0.05	67.5	2.10	220	3.06	1.2	<1	0.18
2.9		0.70	>100	0.04	1735	2.3	<10	110	<0.05	1.60	4.07	44.1	3.04	17.8	<1	<0.05
3.9		0.74	>100	0.38	1065	5.4	<10	40	<0.05	74.4	1.60	455	0.36	2.3	1	0.15
4.9		0.72	>100	0.54	488	1.9	<10	40	<0.05	29.2	3.52	741	1.40	2.8	2	0.12

***** See Appendix Page for comments regarding

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11053516

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOR	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
1.7		216	16.60	10.15	0.22	0.06	1.73	0.020	0.11	0.9	6.8	0.93	326	17.85	<0.01	0.08
2.7		61.3	6.23	5.73	0.10	0.07	0.31	0.006	0.17	1.9	10.9	1.75	435	1.99	0.06	0.22
3.7		1080	9.23	5.06	0.16	0.09	0.01	0.014	0.07	1.1	6.4	1.94	508	0.62	0.01	0.20
4.7		8.8	7.19	5.33	0.10	0.09	0.04	0.016	0.12	0.8	6.8	1.96	1180	0.40	0.04	0.26
5.7		20.8	6.38	4.30	0.10	0.05	<0.01	<0.005	0.10	1.2	5.7	1.95	624	0.17	0.03	0.12
6.7		6.3	7.27	4.64	0.13	0.15	0.01	0.009	0.07	1.2	6.1	2.38	538	0.16	0.04	0.31
7.7		67.5	5.56	9.07	0.09	0.02	0.04	0.007	0.08	1.1	12.2	3.26	431	0.45	0.05	0.06
1.8		>10000	9.93	0.35	0.14	0.11	1.39	0.363	0.02	2.0	0.3	0.14	113	85.5	0.07	0.10
2.8		>10000	6.41	9.81	0.33	0.03	38.9	0.895	0.03	5.5	1.3	0.14	490	399	0.02	0.08
3.8		>10000	23.3	7.36	0.67	<0.02	14.20	1.385	0.02	4.8	1.8	0.20	428	99.0	0.01	0.24
4.8		>10000	20.0	0.61	0.33	0.06	1.67	0.224	0.07	1.0	0.2	0.01	15	132.5	0.01	0.17
5.8		>10000	4.26	1.59	0.20	<0.02	28.8	2.08	0.03	0.4	0.5	0.06	72	2.40	0.01	0.07
6.8		6990	7.31	1.54	0.31	<0.02	50.9	3.02	0.02	0.6	0.5	0.09	222	5.57	0.01	0.09
7.8		>10000	5.07	3.71	0.17	<0.02	13.15	0.318	0.03	<0.2	0.2	0.01	26	163.5	0.01	0.05
8.8		8620	2.71	0.43	0.06	<0.02	0.49	0.347	0.07	0.7	0.1	0.02	118	102.5	0.01	0.07
1.9		>10000	24.3	2.99	0.80	<0.02	19.30	2.11	0.07	1.6	0.2	0.33	501	219	0.02	0.18
2.9		>10000	28.4	1.02	0.46	<0.02	1.46	0.716	<0.01	2.1	0.2	0.28	626	12.50	0.02	0.20
3.9		>10000	15.95	5.34	0.57	0.03	6.02	2.28	0.02	<0.2	2.0	0.41	253	253	0.02	0.15
4.9		>10000	6.36	16.00	0.33	0.03	7.99	1.675	0.03	0.4	1.1	0.23	361	158.5	0.03	0.07

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11053516

Sample Description	Method Analyte Units LOR	ME- MS41 Ni ppm 0.2	ME- MS41 P ppm 10	ME- MS41 Pb ppm 0.2	ME- MS41 Rb ppm 0.1	ME- MS41 Re ppm 0.001	ME- MS41 S % 0.01	ME- MS41 Sb ppm 0.05	ME- MS41 Sc ppm 0.1	ME- MS41 Se ppm 0.2	ME- MS41 Sn ppm 0.2	ME- MS41 Sr ppm 0.2	ME- MS41 Ta ppm 0.01	ME- MS41 Te ppm 0.01	ME- MS41 Th ppm 0.2	ME- MS41 Ti % 0.005
1.7		0.9	220	8.4	2.9	0.005	7.79	0.21	1.4	20.7	0.3	8.0	<0.01	4.70	1.6	0.005
2.7		3.9	820	1.2	2.7	<0.001	2.67	0.06	5.6	2.7	0.4	7.5	<0.01	0.60	0.5	0.211
3.7		19.0	510	9.3	1.5	0.001	5.43	0.16	3.6	10.8	0.4	23.8	<0.01	0.24	0.2	0.127
4.7		4.6	690	3.9	2.5	<0.001	2.10	0.10	6.2	1.8	0.3	17.9	<0.01	0.79	0.2	0.168
5.7		7.8	1210	1.4	2.0	0.001	1.76	0.08	3.6	1.2	<0.2	13.0	<0.01	0.37	0.2	0.137
6.7		5.5	880	4.0	1.3	0.001	4.14	0.07	3.5	1.9	0.3	14.0	<0.01	2.06	0.2	0.200
7.7		10.8	490	1.6	1.6	<0.001	2.47	0.05	10.0	3.3	<0.2	3.2	<0.01	0.18	0.5	0.009
1.8		2.6	50	16.5	0.4	0.004	7.19	3.99	1.1	9.5	1.4	26.7	<0.01	1.82	1.1	<0.005
2.8		12.0	40	>10000	0.5	0.020	>10.0	29.8	0.7	93.4	0.8	102.0	<0.01	42.3	<0.2	<0.005
3.8		6.6	20	8920	0.4	0.004	>10.0	29.0	0.3	79.6	0.5	79.0	<0.01	30.8	<0.2	<0.005
4.8		9.9	<10	186.5	1.0	0.006	>10.0	9.62	0.2	36.4	0.8	1.1	<0.01	9.52	<0.2	<0.005
5.8		5.4	60	3870	0.6	0.001	7.66	24.8	0.3	48.0	0.3	4.2	<0.01	20.7	0.3	<0.005
6.8		9.5	20	2300	0.3	<0.001	>10.0	23.9	0.3	45.1	0.3	7.7	<0.01	10.15	<0.2	<0.005
7.8		7.4	10	7030	0.6	0.013	>10.0	17.15	0.1	37.2	0.2	59.8	<0.01	20.1	<0.2	<0.005
8.8		7.3	100	34.7	1.3	0.007	2.89	4.28	0.3	6.6	0.2	14.8	<0.01	0.68	<0.2	<0.005
1.9		18.3	10	3170	1.2	0.007	>10.0	68.2	0.2	41.2	0.6	20.5	<0.01	88.7	<0.2	<0.005
2.9		2.4	<10	182.0	<0.1	0.002	>10.0	97.3	<0.1	21.2	0.9	50.7	<0.01	6.12	<0.2	<0.005
3.9		13.0	340	7070	0.4	0.009	>10.0	64.3	0.6	60.5	1.6	38.0	<0.01	46.4	<0.2	<0.005
4.9		7.8	430	>10000	0.5	0.005	>10.0	113.5	1.4	44.4	1.9	40.5	<0.01	24.7	<0.2	<0.005

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11053516

Sample Description	Method	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	ME- MS41	Ag- OG46	Pb- OG46	Cu- OG46	Zn- OG46	Au- AA24	Au- GRA22
	Analyte	Tl	U	V	W	Y	Zn	Zr	Ag	Pb	Cu	Zn	Au	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm
	LOR	0.02	0.05	1	0.05	0.05	2	0.5	1	0.001	0.001	0.001	0.005	0.05
1.7		<0.02	0.36	25	0.06	0.80	40	2.2						
2.7		<0.02	0.27	69	0.40	3.89	31	1.5						
3.7		<0.02	0.11	68	0.13	4.17	37	2.3						
4.7		<0.02	0.07	94	0.13	4.24	37	2.2						
5.7		<0.02	0.06	75	0.14	4.82	78	1.3						
6.7		<0.02	0.09	89	0.11	4.11	60	3.3						
7.7		<0.02	<0.05	101	<0.05	1.64	61	0.7						
1.8		0.03	0.41	2	0.10	2.08	1650	3.8			8.16			
2.8		0.03	1.37	7	0.45	4.72	>10000	1.0	126	1.870	1.615	28.2	2.87	
3.8		0.17	0.50	14	0.10	2.53	>10000	<0.5			0.943	9.27	1.590	
4.8		0.05	0.09	1	0.09	0.40	2830	2.1	155		10.40		2.74	
5.8		0.06	<0.05	1	<0.05	0.27	>10000	<0.5			1.400	26.0	1.385	
6.8		0.06	<0.05	1	<0.05	1.60	>10000	<0.5				>30.0	1.250	
7.8		0.15	0.68	2	0.05	0.16	>10000	<0.5			2.29	8.38	2.87	
8.8		0.07	<0.05	1	0.11	0.98	2760	<0.5					1.235	
1.9		0.22	0.07	4	0.44	5.05	>10000	<0.5	337		13.70	5.47	>10.0	13.40
2.9		0.06	0.12	6	<0.05	1.94	6850	<0.5	128		17.95		3.09	
3.9		0.05	1.82	9	0.13	2.51	>10000	0.9	212		9.55	9.22	6.09	
4.9		0.06	0.38	6	0.10	4.18	>10000	1.0	131	2.04	2.29	15.15	2.21	

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: KNAPPETT INDUSTRIES
#38 3200 ISLAND HWY
PO BOX 37090
NANAIMO BC V9T 6N4

Finalized Date: 6- MAY- 2011
Account: KNAIND

CERTIFICATE OF ANALYSIS VA11053516

Method	CERTIFICATE COMMENTS
ME- MS41	Gold determinations by this method are semi- quantitative due to the small sample weight used (0.5g).

Appendix 5

2010 & 2011 Cost Reports for Assessment Work

2010&2011 Assessment Cost Report - Mt. Sicker					
Exploration Work type	**Comment**	**Days**			**Totals**
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
Brant Protasiewich / Prospector	Oct.10, Nov.14, Dec.5,11, Feb.5, Mar.21,24	6.833	$316.00	$2,159.23	
Harry Young / Prospector	Oct.10, Nov.14, Dec.5,11, Feb.5, Mar.21,24	6.833	$316.00	$2,159.23	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
				$4,318.46	**$4,318.46**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Database compilation	Brant Protasiewich	1.25	$316.00	$395.00	
Database compilation	Harry Young	1.25	$316.00	$395.00	
Database compilation	Connie McCombs	1.25	$316.00	$395.00	
Report preparation	Jacques Houle, P.Eng.	8.60	$794.68	$6,834.24	
				$8,019.24	**$8,019.24**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Rock	*laboratory costs*	46	$51.59	$2,373.13	
				$2,373.13	**$2,373.13**
Transportation		**No.**	**Rate**	**Subtotal**	
truck rental		6.83	$148.00	$1,011.28	
truck rental - Houle		0.20	$403.20	$80.64	
fuel		166.67	$1.15	$190.93	
				$1,282.85	**$1,282.85**
Accommodation & Food	**Rates per day**				
Meals	day rate or actual costs-specify	12.67	$25.00	$316.68	
				$316.68	**$316.68**
Equipment Rentals					
Field Gear (Specify)			$0.00	$0.00	
Other (Specify)	office - Houle	7.65	$79.85	$610.85	
				$610.85	**$610.85**
Freight, rock samples					
		46	$2.95	$135.71	
			$0.00	$0.00	
				$135.71	**$135.71**
TOTAL Expenditures					**$17,056.92**

2010&2011 Assessment Cost Report - Sognidoro					
Exploration Work type	**Comment**	**Days**			**Totals**
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
Brant Protasiewich / Prospector	Sept.18 & Oct. 10, 2010	1.667	$316.00	$526.77	
Harry Young / Prospector	Sept.18 & Oct. 10, 2010	1.667	$316.00	$526.77	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
				$1,053.54	**$1,053.54**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Database compilation	Brant Protasiewich	0.250	$316.00	$79.00	
Database compilation	Harry Young	0.250	$316.00	$79.00	
Database compilation	Connie McCombs	0.250	$316.00	$79.00	
Report preparation	Jacques Houle, P.Eng.	2.600	$806.40	$2,096.64	
				$2,333.64	**$2,333.64**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Rock	*laboratory costs*	10	$53.93	$539.32	
				$539.32	**$539.32**
Transportation		**No.**	**Rate**	**Subtotal**	
truck rental - Knappett		1.67	$148.00	$246.72	
truck rental - Houle		0.10	$403.20	$40.32	
fuel		33.33	$1.07	$35.67	
				$322.71	**$322.71**
Accommodation & Food	**Rates per day**				
Meals	day rate or actual costs-specify	3.33	$25.00	$83.33	
				$83.33	**$83.33**
Equipment Rentals					
Field Gear (Specify)			$0.00	$0.00	
Other (Specify)	Houle - office	2.10	$80.64	$169.34	
				$169.34	**$169.34**
Freight, rock samples					
		10	$3.52	$35.23	
			$0.00	$0.00	
				$35.23	**$35.23**
TOTAL Expenditures					**$4,537.11**

2011 Assessment Cost Report - Volcanics					
Exploration Work type	**Comment**	**Days**			**Totals**
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
Brant Protasiewich / Prospector	17-Mar-11	1.25	$316.00	$395.00	
Harry Young / Prospector	17-Mar-11	1.25	$316.00	$395.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
				$790.00	**$790.00**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Database compilation	Brant Protasiewich	0.25	$316.00	$79.00	
Database compilation	Harry Young	0.25	$316.00	$79.00	
Database compilation	Connie McCombs	0.25	$316.00	$79.00	
Report preparation	Jacques Houle, P.Eng.	0.75	$806.40	$604.80	
				$841.80	**$841.80**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Rock	*laboratory costs*	7.0	$49.30	$345.12	
				$345.12	**$345.12**
Transportation		**No.**	**Rate**	**Subtotal**	
truck rental - Knappett		1.25	$148.00	$185.00	
truck rental - Houle				$0.00	
fuel		25.00	$1.25	$31.25	
				$216.25	**$216.25**
Accommodation & Food	**Rates per day**				
Meals	day rate or actual costs-specify	2.00	$25.00	$50.00	
				$50.00	**$50.00**
Equipment Rentals					
Field Gear (Specify)			$0.00	$0.00	
Other (Specify)	Office - Houle	0.65	$80.64	$52.42	
				$52.42	**$52.42**
Freight, rock samples					
		10.0	$1.36	$13.62	
			$0.00	$0.00	
				$13.62	**$13.62**
TOTAL Expenditures					**$2,309.21**

Appendix 8

BC Mineral Deposit Profiles

G06 – Noranda-Kuroko Massive Sulphide Cu-Pb-Zn

I05 – Polymetallic Veins – Ag-Pb-Zn+/-Au

NORANDA/KUROKO MASSIVE SULPHIDE Cu-Pb-Zn

G06

by Trygve Hõy
British Columbia Geological Survey

Hõy, Trygve (1995): Noranda/Kuroko Massive Sulphide Cu-Pb-Zn, in Selected British Columbia Mineral Deposit Profiles, Volume 1 - Metallics and Coal, Lefebure, D.V. and Hõy, T, Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1995-20, pages 53-54.

IDENTIFICATION

SYNONYM: Polymetallic volcanogenic massive sulphide.

COMMODITIES (*BYPRODUCTS*): Cu, Pb, Zn, Ag, Au (Cd, S, Se, Sn, barite, gypsum).

EXAMPLES (British Columbia - *Canada/International*): Homestake (082M 025), Lara (092B 001), Lynx (092B 129), Myra (092F 072), Price (092F 073), H-W (092F 330), Ecstall (103H 011), Tulsequah Chief (104K 011), Big Bull (104K 008), Kutcho Creek (104J 060), Britannia (092G 003); *Kidd Creek (Ontario, Canada), Buchans (Newfoundland, Canada), Bathurst-Newcastle district (New Brunswick, Canada), Horne-Quemont (Québec, Canada), Kuroko district (Japan), Mount Lyell (Australia), Rio Tinto (Spain), Shasta King (California, USA), Lockwood (Washington, USA).*

GEOLOGICAL CHARACTERISTICS

CAPSULE DESCRIPTION: One or more lenses of massive pyrite, sphalerite, galena and chalcopyrite commonly within felsic volcanic rocks in a calcalkaline bimodal arc succession. The lenses may be zoned, with a Cu-rich base and a Pb-Zn-rich top; low-grade stockwork zones commonly underlie lenses and barite or chert layers may overlie them.

TECTONIC SETTING: Island arc; typically in a local extensional setting or rift environment within, or perhaps behind, an oceanic or continental margin arc.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING: Marine volcanism; commonly during a period of more felsic volcanism in an andesite (or basalt) dominated succession; locally associated with fine-grained marine sediments; also associated with faults or prominent fractures.

AGE OF MINERALIZATION: Any age. In British Columbia typically Devonian; less commonly Permian-Mississippian, Late Triassic, Early (and Middle) Jurassic, and Cretaceous.

HOST/ASSOCIATED ROCK TYPES: Submarine volcanic arc rocks: rhyolite, dacite associated with andesite or basalt; less commonly, in mafic alkaline arc successions; associated epiclastic deposits and minor shale or sandstone; commonly in close proximity to felsic intrusive rocks. Ore horizon grades laterally and vertically into thin chert or sediment layers called informally “exhalites”.

DEPOSIT FORM: Concordant massive to banded sulphide lens which is typically metres to tens of metres thick and tens to hundreds of metres in horizontal dimension; sometimes there is a peripheral apron of "clastic" massive sulphides; underlying crosscutting “stringer” zone of intense alteration and stockwork veining.

TEXTURE/STRUCTURE: Massive to well layered sulphides, typically zoned vertically and laterally; sulphides with a quartz, chert or barite gangue (more common near top of deposit); disseminated, stockwork and vein sulphides (footwall).

ORE MINERALOGY (Principal and *subordinate*): Upper massive zone: pyrite, sphalerite, galena, chalcopyrite, pyrrhotite, tetrahedrite-tennantite, bornite, arsenopyrite. Lower massive zone: pyrite, chalcopyrite, sphalerite, pyrrhotite, magnetite.

GANGUE MINERALOGY: Barite, chert, gypsum, anhydrite and carbonate near top of lens, carbonate quartz, chlorite and sericite near the base.

ALTERATION MINERALOGY: Footwall alteration pipes are commonly zoned from the core with quartz, sericite or chlorite to an outer zone of clay minerals, albite and carbonate (siderite or ankerite).

ORE CONTROLS: More felsic component of mafic to intermediate volcanic arc succession; near centre of felsic volcanism (marked by coarse pyroclastic breccias or felsic dome); extensional faults.

ASSOCIATED DEPOSIT TYPES: Stockwork Cu deposits; vein Cu, Pb, Zn, Ag, Au.

EXPLORATION GUIDES

GEOCHEMICAL SIGNATURE: Zn, Hg and Mg halos, K addition and Na and Ca depletion of footwall rocks; closer proximity to deposit - Cu, Ag, As, Pb; within deposit - Cu, Zn, Pb, Ba, As, Ag, Au, Se, Sn, Bi, As.

GEOPHYSICAL SIGNATURE: Sulphide lenses usually show either an electromagnetic or induced polarization signature depending on the style of mineralization and presence of conductive sulphides. In recent years borehole electromagnetic methods have proven successful.

OTHER EXPLORATION GUIDES: Explosive felsic volcanics, volcanic centres, extensional faults, exhalite (chert) horizons, pyritic horizons.

ECONOMIC FACTORS

GRADE AND TONNAGE: Average deposit size is 1.5 Mt containing 1.3% Cu, 1.9 % Pb, 2.0 % Zn, 0.16 g/t Au and 13 g/T Ag (Cox and Singer, 1986). British Columbia deposits range from less than 1 to 2 Mt to more than 10 Mt. The largest are the H-W (10.1 Mt with 2.0 % Cu, 3.5 % Zn, 0.3 % Pb, 30.4 g/t Ag and 2.1 g/t Au) and Kutcho (combined tonnage of 17 Mt, 1.6 % Cu, 2.3 % Zn, 0.06 % Pb, 29 g/t Ag and 0.3 g/t Au).

IMPORTANCE: Noranda/Kuroko massive sulphide deposits are major producers of Cu, Zn, Ag, Au and Pb in Canada. Their high grade and commonly high precious metal content continue to make them attractive exploration targets.

REFERENCES

Cox, D.P. and Singer, D.A., Editors (1986): Mineral Deposit Models; U.S. Geological Survey, Bulletin 1693, 379 pages.
Höy, T. (1991): Volcanogenic Massive Sulphide Deposits in British Columbia: in Ore Deposits, Tectonics and Metallogeny in the Canadian Cordillera, W.J. McMillan, Coordinator, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1991-4, pages 89-123.
Franklin, J.M., Lydon, J.W. and Sangster, D.M. (1981): Volcanic-associated Massive Sulphide Deposits; Economic Geology, 75th Anniversary Volume, pages 485-627.
Hutchinson, R.W. (1980): Massive Base Metal Sulphide Deposits as Guides to Tectonic Evolution; in The Continental Crust and its Mineral Deposits, D.W. Strangway, Editor, Geological Association of Canada, Special Paper 20, pages 659-684.
Lydon, J.W. (1984): Volcanogenic Massive Sulphide Deposits, Part 1: A Descriptive Model, Geoscience Canada, Volume 11, No. 4, pages 195-202.
Ohmoto, H. and Skinner, B.J., Editors (1983): The Kuroko and Related Volcanogenic Massive Sulfide Deposits; Economic Geology, Monograph 5, 604 pages.
Scott, S.D. (1985): Seafloor Polymetallic Sulfide Deposits: Modern and Ancient; Marine Geology, Volume 5, pages 191-212.
Sangster, D.F. (1972): Precambrian Volcanogenic Massive Sulphide Deposits in Canada: a Review; Geological Survey of Canada; Paper 72-22, 44 pages.

POLYMETALLIC VEINS Ag-Pb-Zn+/-Au

I05

by David V. Lefebure and B. Neil Church
British Columbia Geological Survey

Lefebure, D.V. and Church, B.N. (1996): Polymetallic Veins Ag-Pb-Zn+/-Au, in Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits, Lefebure, D.V. and Höy, T., Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1996-13, pages 67-70.

IDENTIFICATION

SYNONYMS: Clastic metasediment-hosted silver-lead-zinc veins, silver/base metal epithermal deposits.

COMMODITIES (*BYPRODUCTS*): Ag, Pb, Zn (Cu, Au, Mn).

EXAMPLES (British Columbia (MINFILE # - *Canada/International*):

Metasediment host: Silvana (082FNW050) and Lucky Jim (082KSW023), Slocan-New Denver-Ainsworth district, St. Eugene (082GSW025), Silver Cup (082KNW027), Trout Lake camp; *Hector-Calumet and Elsa, Mayo district (Yukon, Canada), Coeur d'Alene district (Idaho, USA), Harz Mountains and Freiberg district (Germany), Pr¡bram district (Czechoslavakia).*
Igneous host: Wellington (082ESE072) and Highland Lass - Bell (082ESW030, 133), Beaverdell camp; Silver Queen (093L 002), Duthie (093L 088), Cronin (093L 127), Porter-Idaho (103P 089), Indian (104B 031); *Sunnyside and Idorado, Silverton district and Creede (Colorado, USA), Pachuca (Mexico).*

GEOLOGICAL CHARACTERISTICS

CAPSULE DESCRIPTION: Sulphide-rich veins containing sphalerite, galena, silver and sulphosalt minerals in a carbonate and quartz gangue. These veins can be subdivided into those hosted by metasediments and another group hosted by volcanic or intrusive rocks. The latter type of mineralization is typically contemporaneous with emplacement of a nearby intrusion.

TECTONIC SETTINGS: These veins occur in virtually all tectonic settings except oceanic, including continental margins, island arcs, continental volcanics and cratonic sequences.

Metasediment host: Veins are emplaced along faults and fractures in sedimentary basins dominated by clastic rocks that have been deformed, metamorphosed and intruded by igneous rocks. Veins postdate deformation and metamorphism.

Igneous host: Veins typically occur in country rock marginal to an intrusive stock. Typically veins crosscut volcanic sequences and follow volcano- tectonic structures, such as caldera ring-faults or radial faults. In some cases the veins cut older intrusions.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING:

AGE OF MINERALIZATION: Proterozic or younger; mainly Cretaceous to Tertiary in British Columbia.

HOST/ASSOCIATED ROCK TYPES: These veins can occur in virtually any host. Most commonly the veins are hosted by thick sequences of clastic metasediments or by intermediate to felsic volcanic rocks. In many districts there are felsic to intermediate intrusive bodies and mafic igneous rocks are less common. Many veins are associated with dikes following the same structures.

DEPOSIT FORM: Typically steeply dipping, narrow, tabular or splayed veins. Commonly occur as sets of parallel and offset veins. Individual veins vary from centimetres up to more than 3 m wide and can be followed from a few hundred to more than 1000 m in length and depth. Veins may widen to tens of metres in stockwork zones.

TEXTURE/STRUCTURE: Compound veins with a complex paragenetic sequence are common. A wide variety of textures, including cockade texture, colloform banding and crustifications and locally druzy. Veins may grade into broad zones of stockwork or breccia. Coarse-grained sulphides as patches and pods, and fine- grained disseminations are confined to veins.

ORE MINERALOGY (Principal and *subordinate*): Galena, sphalerite, tetrahedrite- tennantite, other sulphosalts including pyrargyrite, stephanite, bournonite and acanthite, native silver, chalcopyrite, pyrite, arsenopyrite, stibnite. Silver minerals often occur as inclusions in galena. Native gold and electrum in some deposits. Rhythmic compostional banding sometimes present in sphalerite. Some veins contain more chalcopyrite and gold at depth and Au grades are normally low for the amount of sulphides present.

Metasediment host: Carbonates (most commonly siderite with minor dolomite, ankerite and calcite), quartz, barite, fluorite, magnetite, bitumen.

Igneous host: Quartz, carbonate (rhodochrosite, siderite, calcite, dolomite), sometimes specular hematite, hematite, barite, fluorite. Carbonate species may correlate with distance from source of hydrothermal fluids with proximal calcium and magnesium-rich carbonates and distal iron and manganese-rich species.

GANGUE MINERALOGY (Principal and *subordinate*):

ALTERATION MINERALOGY: Macroscopic wall rock alteration is typically limited in extent (measured in metres or less). The metasediments typically display sericitization, silicification and pyritization. Thin veining of siderite or ankerite may be locally developed adjacent to veins. In the Coeur d'Alene camp a broader zone of bleached sediments is common. In volcanic and intrusive hostrocks the alteration is argillic, sericitic or chloritic and may be quite extensive.

WEATHERING: Black manganese oxide stains, sometimes with whitish melanterite, are common weathering products of some veins. The supergene weathering zone associated with these veins has produced major quantities of manganese. Galena and sphalerite weather to secondary Pb and Zn carbonates and Pb sulphate. In some deposits supergene enrichment has produced native and horn silver.

ORE CONTROLS: Regional faults, fault sets and fractures are an important ore control; however, veins are typically associated with second order structures. In igneous rocks the faults may relate to volcanic centers. Significant deposits restricted to competent lithologies. Dikes are often emplaced along the same faults and in some camps are believed to be roughly contemporaneous with mineralization. Some polymetallic veins are found surrounding intrusions with porphyry deposits or prospects.

GENETIC MODELS: Historically these veins have been considered to result from differentiation of magma with the development of a volatile fluid phase that escaped along faults to form the veins. More recently researchers have preferred to invoke mixing of cooler, upper crustal hydrothermal or meteoric waters with rising fluids that could be metamorphic, groundwater heated by an intrusion or expelled directly from a differentiating magma. Any development of genetic models is complicated by the presence of other types of veins in many districts. For example, the Freiberg district has veins carrying F-Ba, Ni-As- Co-Bi-Ag and U.

COMMENTS: Ag-tetrahedrite veins, such as the Sunshine and Galena mines in Idaho, contain very little sphalerite or galena. These may belong to this class of deposits or possibly the five-element veins. The styles of alteration, mineralogy, grades and different geometries can usually be used to distinguish the polymetallic veins from stringer zones found below syngenetic massive sulphide deposits.

ASSOCIATED DEPOSIT TYPES:

- Metasediment host: Polymetallic mantos (M01).
- Igneous host: May occur peripheral to virtually all types of porphyry mineralization (L01, L03, L04, L05, L06, L07, L08) and some skarns (K02, K03).

EXPLORATION GUIDES

GEOCHEMICAL SIGNATURE: Elevated values of Zn, Pb, Ag, Mn, Cu, Ba and As. Veins may be within arsenic, copper, silver, mercury aureoles caused by the primary dispersion of elements into wallrocks or broader alteration zones associated with porphyry deposit or prospects.

GEOPHYSICAL SIGNATURE: May have elongate zones of low magnetic response and/or electromagnetic, self potential or induced polarization anomalies related to ore zones.

OTHER EXPLORATION GUIDES: Strong structural control on veins and common occurrence of deposits in clusters can be used to locate new veins.

ECONOMIC FACTORS

TYPICAL GRADE AND TONNAGE : Individual vein systems range from several hundred to several million tonnes grading from 5 to 1500 g/t Ag, 0.5 to 20% Pb and 0.5 to 8% Zn. Average grades are strongly influenced by the minimum size of deposit included in the population. For B.C. deposits larger than 20 000 t the average size is 161 000 t with grades of 304 g/t Ag, 3.47 % Pb and 2.66 % Zn. Copper and gold are reported in less than half the occurrences, with average grades of 0.09 % Cu and 4 g/t Au.

ECONOMIC LIMITATIONS: These veins usually support small to medium-size underground mines. The mineralization may contain arsenic which typically reduces smelting credits.

IMPORTANCE: The most common deposit type in British Columbia with over 2 000 occurrences; these veins were a significant source of Ag, Pb and Zn until the 1960s. They have declined in importance as industry focused more on syngenetic massive sulphide deposits. Larger polymetallic vein deposits are still attractive because of their high grades and relatively easy benefication. They are potential sources of cadmium and germanium.

REFERENCES

ACKNOWLEDGEMENTS: Georges Beaudoin and Don Sangster are thanked for their suggestions to improve the profile.

Barton, P., Bethke, P., Wetlaufer, P.H., Foley, N., Hayba, D. and Goss, J. (1982): Silver/Base Metal Epithermal Deposits; in Characteristics of Mineral Deposit Occurrences, Erickson, R.L., Compiler, U.S. Geological Survey, pages 127-130.
Beaudoin, G. and Sangster, D.F. (1992): A Descriptive Model for Silver-Lead-Zinc Veins in Clastic Metasedimentary Terranes; Economic Geology, Volume 87, pages 1005-1021.
Beaudoin, G. and Sangster, D.F. (in press): Clastic Metasediment-hosted Vein Silver- Lead-Zinc; in Geology of Canadian Mineral Deposit Types, Eckstrand, O.R., Sinclair, W.D. and Thorpe, R.I., Editors, Geological Survey of Canada, Geology of Canada, No. 8, pages 393-398.
Boyle, R.W. (1965): Geology, Geochemistry and Origin of the Lead-Zinc-Silver Deposits of the Keno Hill - Galena Hill Area, Yukon Territory; Geological Survey of Canada, Bulletin 111, 302 pages.
Boyle, R.W. (1968): The Geochemistry of Silver and its Deposits; Geological Survey of Canada, Bulletin 160, 264 pages.
Corbett, G.J. and Leach, T.M. (1995): S.W. Pacific Rim Au/Cu Systems: Structure, Alteration and Mineralization; Mineral Deposit Research Unit, The University of British Columbia, Short Course No. 17 notes, 150 pages.
Cox, D.P. (1986): Descriptive Model of Polymetallic Veins; in Mineral Deposit Models, Cox, D.P. and Singer, D.A., Editors,U.S. Geological Survey, Bulletin 1693, pages 125-129.
Godwin, C.I., Watson, P.H. and Shen, K. (1986): Genesis of the Lass Vein System, Beaverdell Silver Camp, South-central British Columbia; Canadian Journal of Earth Sciences, Volume 23, pages 1615-1626.
Fyles, J.T. (1967): Geology of the Ainsworth-Kaslo Area, British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 53, 125 pages.
Little, H.W. (1960): Nelson Map Area, West Half, British Columbia; Geological Survey of Canada, Memoir 308, pages 305.
Steven, T.A. and Eaton, G.P. (1975): Environment of Ore Deposition in the Creede Mining District, San Juan Mountains, Colorado: I. Geologic, Hydrologic, and Geophysical Setting; Economic Geology, Volume 70, pages 1023-1037.