

**BC Geological Survey
Assessment Report
39122**



Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Technical Report - Geochemical TOTAL COST: **\$2050.00**

AUTHOR(S): Dean Michael Arbic SIGNATURE(S): _____

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): _____ YEAR OF WORK: **2020**

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): **5772964 Feb 03 2020**

PROPERTY NAME: Widow Creek Claims

CLAIM NAME(S) (on which the work was done): **PHEONIX 1049005**

COMMODITIES BOUGHT: Iron Copper Silver Gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: Minfile 92C 139

MINING DIVISION: Victoria NTS/BCGS: 092C16E

LATITUDE: 48 ° 54 ' 55.0 " LONGITUDE: 124 ° 11 ' 25.3 " (at centre of work)

OWNER(S):
1) Dean Arbic 2) _____

MAILING ADDRESS:
po box 415 Lake
Cowichan BC Vor 2Go

OPERATOR(S) (who paid for the work):
1) same as above 2) _____

MAILING ADDRESS:

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Mississippian to Pennsylvanian Fourth Lake
Formation, Buttle Lake Group **Quartz Chert, Sulphide Ores**

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: _____

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TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (per report)
Technical	.25 M3	1049005	\$2050.00
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			
SIL			
Rock	Hard Rock Sample concentrate for precious Metals		
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sample/assaying			
Petrographic			
Mineralogical			
Metallurgical			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres/feet)			
Trench (metres)			
Underground dev. (metres)			
Other			
TOTAL COST:			\$2050.00

Print Form

Event Number 5772964

Exploration and Development Work / Expiry Date Change Event Detail

Event Number ID	5772964
Recorded Date	2020/feb/03
Work Type	Technical Work (T)
Technical Items	Geochemical (C)
Work Start Date	2020/feb/01
Work Stop Date	2020/feb/03
Total Value of Work	\$ 2050.00
Mine Permit Number	

Summary of the work value:

Title Numbers	582325
Claim Name/Property	MAGNALIUM
Issue Date	2008/apr/22
Work Performed Index	N
Old Good To Date	2020/feb/05
New Good To Date	2021/feb/06
Numbers of Days Forward	367
Area in Ha	42.46
Applied Work Value	\$ 853.49
Submission Fee	\$ 0.00
Title Numbers	1017930
Claim Name/Property	MASTERPIECE
Issue Date	2013/mar/19
Work Performed Index	N
Old Good To Date	2020/feb/04
New Good To Date	2021/feb/06
Numbers of Days Forward	368
Area in Ha	21.23
Applied Work Value	\$ 415.18
Submission Fee	\$ 0.00

Title Numbers	1022870
Claim Name/Property	TRIBUTE
Issue Date	2013/oct/07
Work Performed Index	Y
Old Good To Date	2020/feb/05
New Good To Date	2021/feb/06
Numbers of Days Forward	367
Area in Ha	21.23
Applied Work Value	\$ 355.11
Submission Fee	\$ 0.00

Title Numbers	1049005
Claim Name/Property	PHOENIX
Issue Date	2017/jan/06
Work Performed Index	N
Old Good To Date	2020/feb/05
New Good To Date	2021/feb/06
Numbers of Days Forward	367
Area in Ha	42.46
Applied Work Value	\$ 425.90
Submission Fee	\$ 0.00

Financial Summary:

Total Applied Work Value:	\$ 2049.68
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PAC name	DEAN ARBIC
Debited PAC amount	\$ 0.00
Credited PAC amount	\$ 0.32

Total Submission Fees	\$ 0.00
Total Paid	\$ 0.00

Related Summary:

Existing Work Program
Event Numbers

Technical Report

Fire Assay of Metaliferous Chert
From Widow Creek

Victoria Mining District

92C

UTM Co-ordinates
5418346N 412686E

Event Number 5772964

Owner of Claims is Dean Arbic(133434)

Report Written by Dean Arbic

Work Performed and Supervised by Dean Arbic

Report Date

May 03 2020

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Introduction, Claim Location and History

This report details work done on the Mineral Claim PHEONIX(1049005). This claim is accessed by driving west past the town of Youbou near the Town of Lake Cowichan, for approximately 2.5 kilometers and turn right onto a logging road just before Cottonwood Creek. This is the Widow Creek Mainline, which is in good shape for about 3 kilometers then branches off into older de-activated roads and trails. A hard rock mineral sample of 30 grams of highly metallic Cherty Quartz was crushed and Roasted and mixed with Flux and melted. The sample is from the GPS Location 5418346N 412686E

In this area there are lots of roads and trails. Some of these trails were built by the department of Energy and Mines back in the twenties and thirties, to provide access to a miners cabin on the shore of Lomas Lake. From this cabin work was done on the El Capitan claim, which had many people at the time hoping a large Gold Mine was to be developed. Despite high assay values of Gold at El Capitan and high Silver values at another nearby site the Silver Leaf claim. Interest in this area has been rekindled only recently, with the hopes that a new El Capitan type deposit might be discovered.

Regional Geology

The area is very interesting and an abundant amount of metamorphism seems to have occurred here. Based on the appearance of Sherk Lake, being surrounded by mountains the way it is, I believe it is possible that Sherk Lake is the crater of a dormant volcano.

Portions of this area are underlain by the sedimentary rocks of the Mississippian to Pennsylvanian Fourth Lake Formation and the Buttle Lake Group. The manganese minerals found in this area are hosted in the Lower Mississippian Shaw Creek Member. The author believes the sample tested for this report. Comes from a hard rock vein associated with the Lower Mississippian Shaw Creek Member. Even though the sample is Chert with Quartz and a variety of Pyrite like crystals. The Chert veins are close to Rhodenite veins with Manganite and Jasper.

In other spots the area is underlain by the volcanic rocks of the Upper Triassic Karmutsen Formation, of the Vancouver Group.

Aswell as precious metals, many small deposits of gemstone quality Rhodenite and Jasper have been found and small amounts removed over the years.

Technical Work Description

A small outcropping of hard Chert with Quartz and Pyrite was discovered in a recent road cut just south of Widow Creek. The Pyrite is in a large body of Multi coloured Chert ranging in colour from milky grey and light grey green and glassy with black dendrites. Other areas are duller and Black with Quartz and less Pyrite scattered and mostly in cubic crystals. Above the Quartz veins are intercalated veins of what looks like Manganite and Rhodenite but may just be decomposed Rhodenite. Some Chert pods are quite glassy and may be Polyhydrolzed to Agate. Previously approximately 50 kg was removed from the Phoenix Claim and labelled and stored and dried for further analysis. The metallic material in this sample has a variety of coloured crystals, blebs and crack infillings. The crystal average 1 millimeter in size and are regular cubes in the Darker Chert. The area with the most metal is where a vein of white Quartz with White Crystals about 2 cm thick beside a Reddish Brown 2 cm thick Rhodenite vein, that is in a Apple Green Cherty Quartz vein thats 20 cm thick in a Host Vein of Black Dullish Chert with brassy Pyrite.

The objective of this work is to ascertain if this type of ore can be successfully melted and to calculate what percentage of noble metal can be captured into a button. When completed a precious metal percentage number for this unknown mettalic mineral can be formulated. That value can be used to answer the question, does this sample location warrant further exploration and certified assaying.

The ore sample was crushed by hand with a hammer, then screened to 20 mesh and re-crushed and screened again, then placed in a small electric flour mill and crushed to 150 – 200 mesh. Then the ore was roasted on a tray in an oven at 800 Degrees Celsius for 2 hours till the sulphur smell stops rising out of the ore. Then GPK Premium Gold Flux was added to the dried crushed ore and it all was placed into a hand mixer and thoroughly stirred. The contents of the mixer were placed in a small graphite crucible. The crucible was heated to 1100 degrees celcius for one and a half hours in a small electric furnace. The hot charge was then poured into a graphite prill mold to cool. The button that was produced was separated from the glass and was later weighed and photographed. Then button was pressed and was brittle and split and then subjected to wet digestion by placing it in 20 ml of a weak solution of 10% Hydrochloric Acid (Muriatic Acid) at room temperature for 6 Hours. Then the remaining metal button weighed 18 milligrams.

Step 1 Fire Assay Direct Smelt Sample #1 Widow Creek Cherty Quartz

Ore..... 30 grams

Melting Flux.....50 grams

Step 2 Apply pressure to button and digest in acid to remove any base metals.

The Button of 23 milligrams placed in 20 ml of Muriatic Acid and reduced to a weight of 18 milligrams.

Based on the appearance of the ore, I speculate that the sample is some type of iron sulphide with copper and manganese and other base metals and maybe precious metals. The Flux was purchased already mixed and it contains Sodium Carbonate, Manganese dioxide, Anhydrous Borax and Silica Sand.

Equipment and Tools Used

Hand tools; Hammer and anvil, screens, tongs, Graphite Prill Mold, Graphite Crucible.

Electric Mill Corona portable Hand Mill powered by a small 3 phase 2 Amp electric motor.

Amaco 15 amp small Enameling Electric Furnace

Report Written on a Lenovo Idea Pad laptop Computer with Apache Open Office 4.1.1 and photos labelled by Windows Paint Program and Acrobat Adobe Reader

Photography by Dean Arbic using a Sony Cyber-shot 16.1 mp digital camera.

10X to 30X Mag. Bifocular Gem Microscope with Webcam

Smart Weigh GEM20 Digital Jewelry Scale

References

Minfile 92C 139

Qualifications of Author

Grade 12 education at Erindale Secondary School and Many years of Field Experience.

Interpretation and Conclusions

The successful direct smelt of crushed ore produced a very small button of bright metal weighing 23 milligrams. Upon applying pressure to the button with a pair of pliers it compressed a bit then broke into pieces. This means that the button isn't Gold or any other malleable noble metal. After placing the button under the microscope I could see why it compressed at first then split into two pieces. The Button contains at least two metals. One malleable metal coats the outside and another has crystallized within. The inner metal is brittle and is why the button fractured into two pieces. This means the test wasn't successful in isolating only noble metals unless the crystallized center is a noble metal that is not familiar to the author and that is brittle. So to find out I placed the button in weak hydrochloric acid to see if it would weigh less afterwards, meaning that a base metal was present and had dissolved into the acid. The button weighed 23 milligrams then the acid ate away 5 milligrams leaving 18 milligrams of an unknown brassy coloured metal.

When the ore was crushed, great care was taken to select the pieces that had the shiniest appearance. This shifts the results of the work to show the potential value of a concentrate made from a local ore rather than an indication of the metal value of a type of ore deposit. 30 grams was melted and produced 18 milligrams of an unknown metal. That means that the ore contains 0.06% of an unknown metal. I am not certified to assay, so these results are speculative. Based on my understanding, how do I explain these results. Possibly the button is made of mostly iron and copper with some silver and gold mixed together, Many sulphide ores in this area contain these four metals. Why would iron and copper survive the flux and collect in the button? This could be because not enough flux was used or the sample wasn't fully roasted. Or a rare earth is present that I don't yet understand.

So why do this test? Based on this test I know that if I take a larger sample of the same material and hand select the pieces for crushing and place 1 kilogram in a crucible with the same flux. I should get roughly about 600 milligrams of the same unknown metal. And that is enough to properly study and test further, and it will help me understand how to be able to extract metal from ore from this area.

Statement of Work and Cost

Work for Event Number 5772964

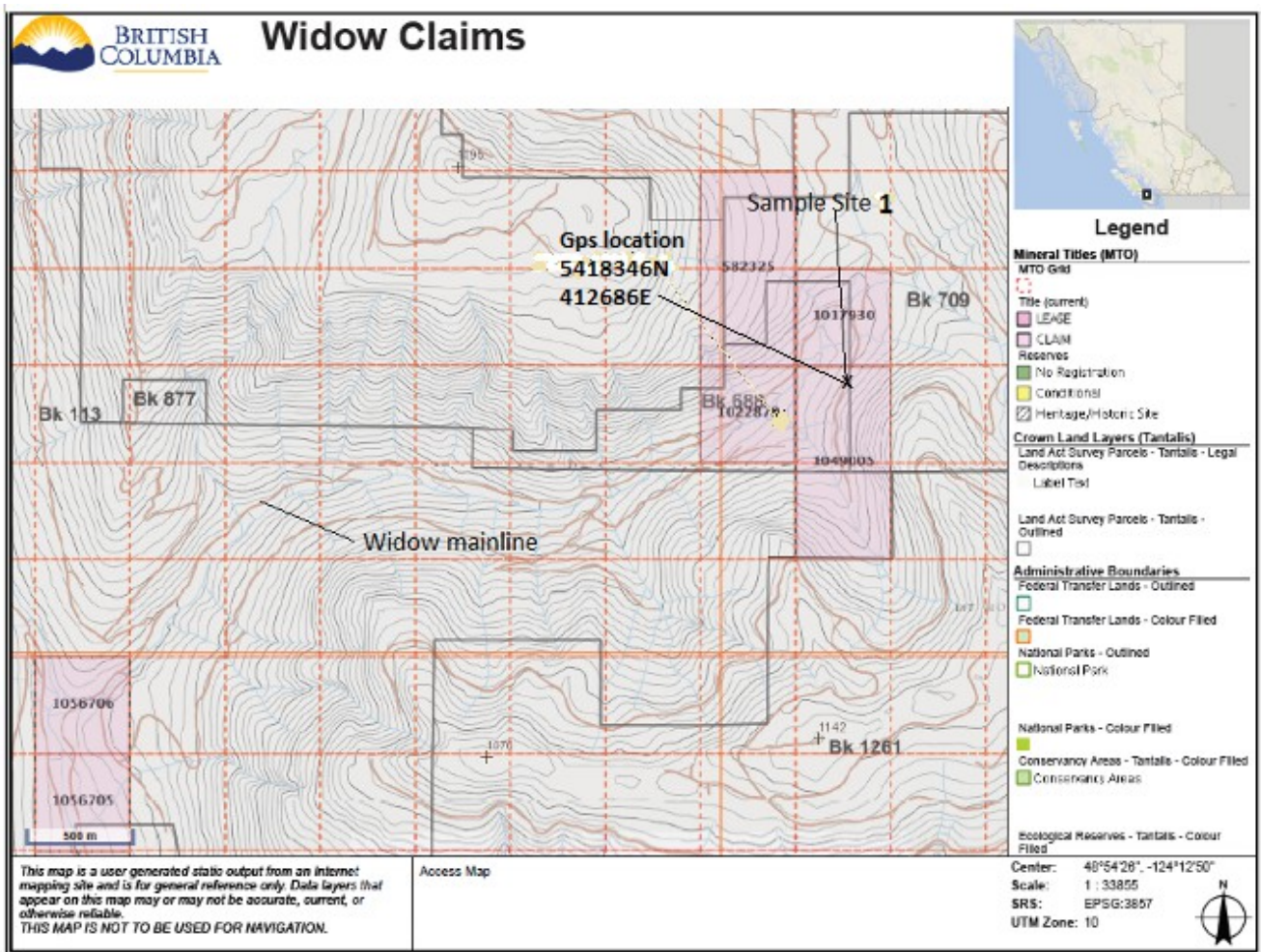
Work Start date Feb 01 2020 work stop date Feb 03 2020.

Work Description	Cost
Microscopic Analysis of sample – 4 Hours @ \$100 per hour.....	\$400
Sample Preparation: Drying, Screening, Crushing, Milling and Mixing ore and flux – 4 hours @ \$200.00 per hour equals.....	\$800
Furnace Operation; Monitoring and Pouring – 4 hours @ \$100.00 per hour equals.....	\$400
Sample Button Digestion in Acid – 6 hours @ \$50 per hour.....	\$300
Assaying Materials cost; Graphite Crucible, Flux, Electricity, Acid.....	\$150
Work Total Cost.....	\$2050.00

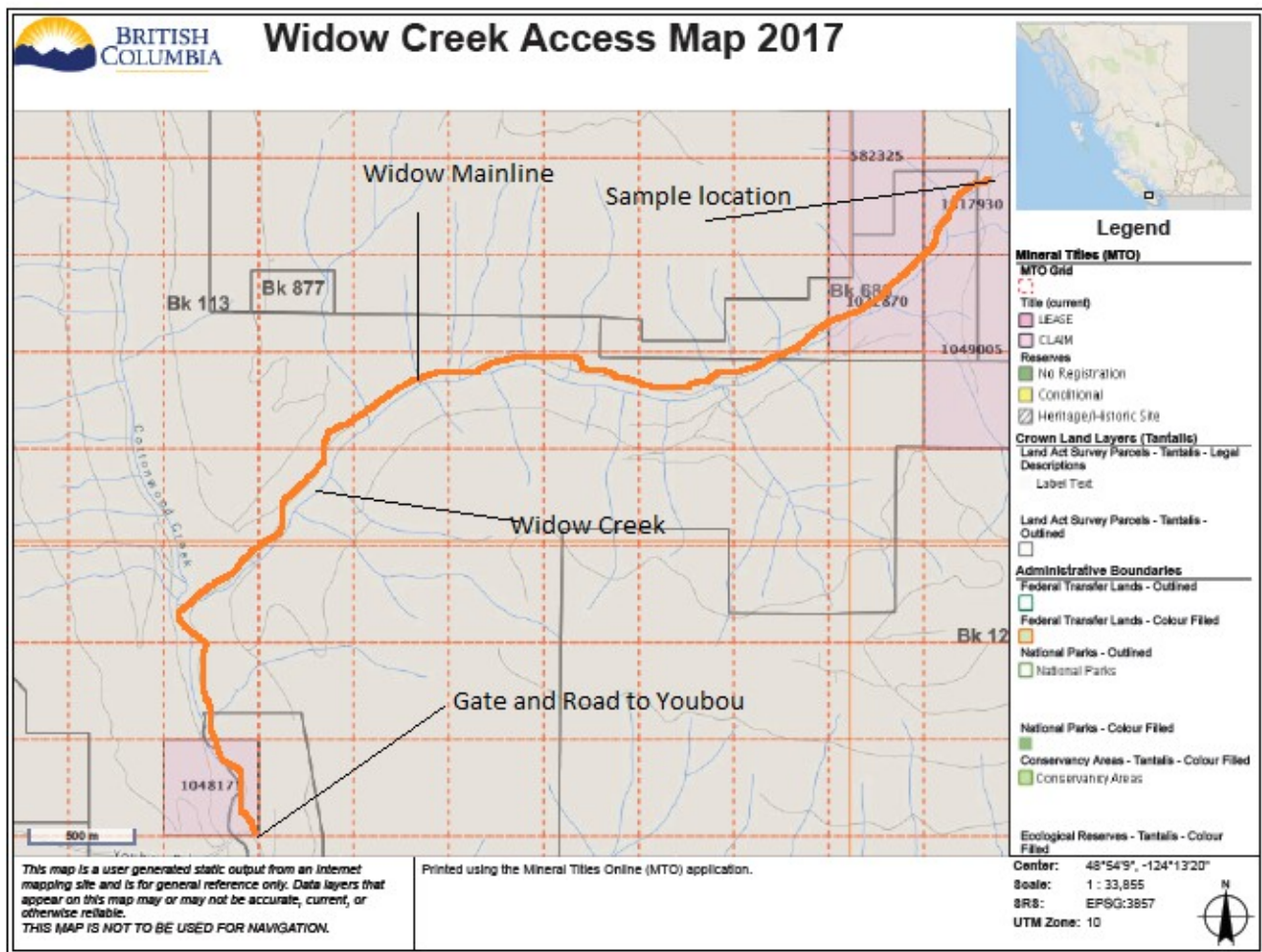
I Dean Arbic declare this to be true and correct. Dean Arbic

Date..... June 08 2020

Sample Location Map



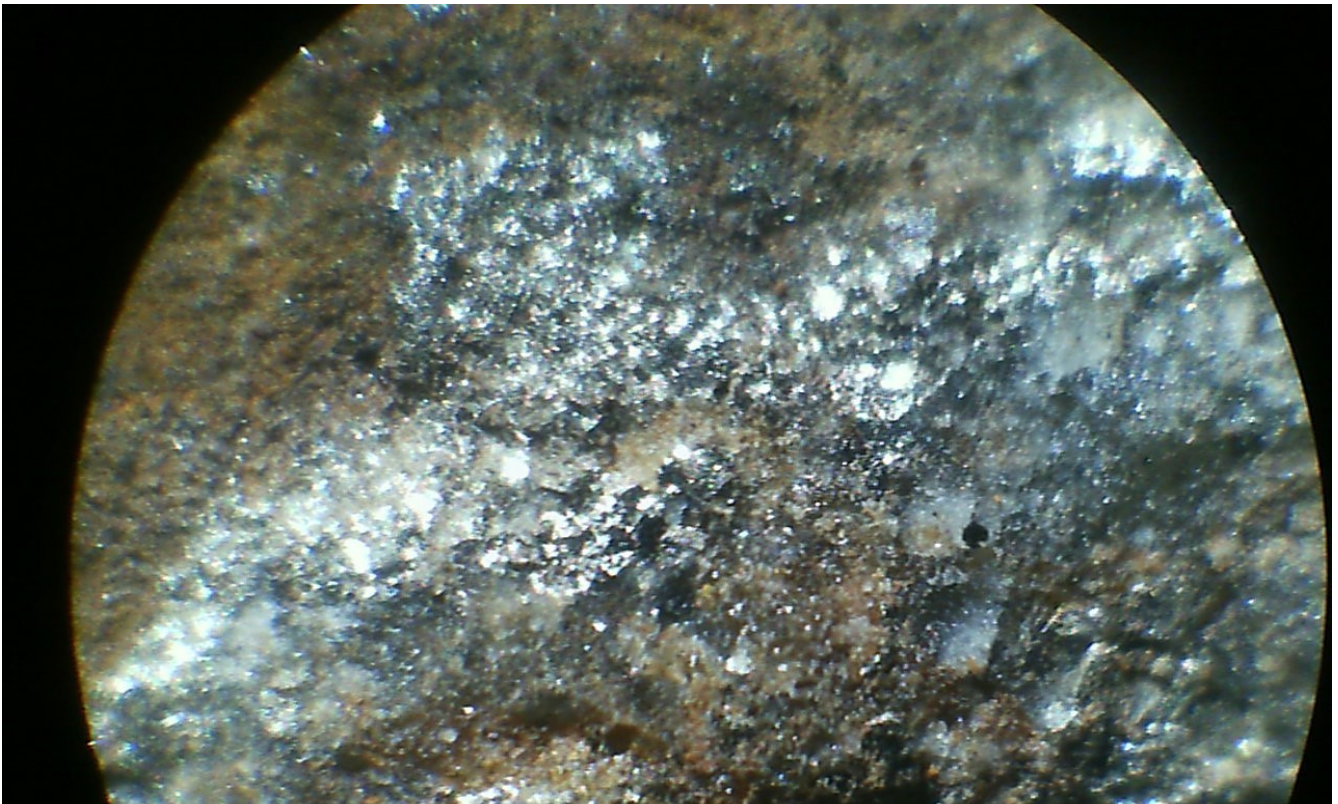
Claim Access Map



Microscopic Picture of Sample 10X Mag.
Metallic Streak in Cherty Quartz



Microscopic Photo of Sample 30X
Cross Section of Metallic Bleb in Quartz



Microscopic Photo of Quartz Sample with Metallic Bleb at 10X Mag.



Photo of Button 30X Mag.

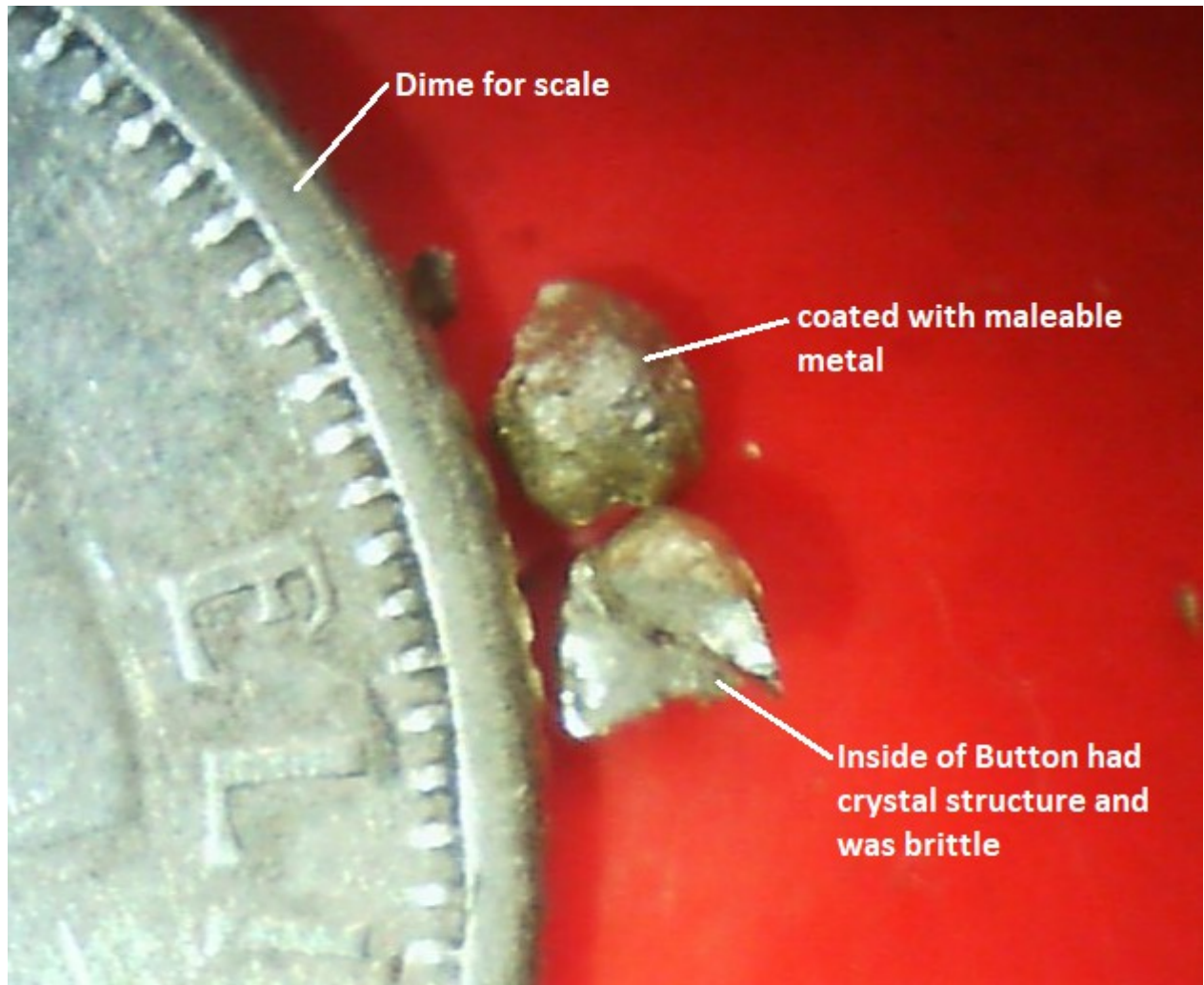


Photo of Sample Location



Detail of Sample Location

