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

ASSESSMENT REPORTTITLE PAGE AND SUMMARY

TYPE OF REPORT (type of survey(s)) Geochemical **TOTAL COST** **$1,242,306.00**
TITLE: Blackwater Region Indicator Mineral Report

AUTHOR(S) Fran Macpherson, Accurate Mining Services Ltd.; Mark A. Petersen New Gold Inc.

SIGNATURE(S) "SIGNED"

NOTICE OF WORK NUMBER(S) / DATE(S) N/A

YEAR OF WORK 2012, 2013

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBERS / DATE(S)
Event Number 5527171; 5527230; October 20, 2014

NOTE: Events were inadvertently filed as "geochemical and drilling", however all work is geochemical

PROPERTY NAME Blackwater Gold; Capoose

CLAIM NAME(S) (on which work was done) 509273; 512838; See Table 1 (p. 11) for full details - 123 titles included in work program

COMMODITIES SOUGHT Au

MINERAL INVENTORY MINFILE NUMBERS, IF KNOWN 093F037; 093F040; 093F043; 093F053; 093F030; 093F056

MINING DIVISION Omineca

NTS 093F/02

TRIM 093F.016; 093F.025; etc

LATITUDE 53° 4' 10''N

LONGITUDE 122° 10' 26''W (at centre of work)

NORTHING 5880315

EASTING 555351

UTM ZONE 10N

MAP DATUM NAD83

OWNER 1 New Gold Inc.

OWNER 2

MAILING ADDRESS
1800 - 555 BURRARD STREET
VANCOUVER BC, V7X 1M9

OPERATORS (who paid for work) As above

MAILING ADDRESS

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

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 06384, 09771, 12963, 14242, 15403, 16435, 16533, 16690, 16837, 17032, 17866, 19161, 22654, 22963, 23963, 25174, 27933, 28129, 29363, 32121, 32406, 32915, 33477

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground			N/A
Photo interpretation			N/A
GEOPHYSICAL (line-kilometres)			
Ground			N/A
Magnetic			N/A
Electromagnetic			N/A
Induced Polarization			N/A
Radiometric			N/A
Seismic			N/A
Other			N/A
Airborne			N/A
GEOCHEMICAL (number of samples analysed for …)			
Soil - 1,828 – As, Mn, Zn, Pb		See Table 1 for details	556,720.30
Silt - 79 - As, Mn, Zn, Pb		See Table 1 for details	24,694.61
Rock			N/A
Other			N/A
DRILLING (total metres, number of holes, size, storage location)			
Core			N/A
Non-core			N/A
RELATED TECHNICAL			
Sampling / Assaying			660,891.09
Petrographic			N/A
Mineralographic			N/A
Metallurgic			N/A
PROSPECTING (scale/area)			N/A
PREPATORY / PHYSICAL			
Line/grid (km)			N/A
Topo/Photogrammetric (scale, area)			N/A
Legal Surveys (scale, area)			N/A
Road, local access (km)/trail			N/A
Trench (number/metres)			N/A
Underground development (metres)			N/A
		TOTAL COST	**1,242,306.00**

BC Geological Survey
Assessment Report
35158

Blackwater Region Indicator Mineral Report

Omineca Mining Division
British Columbia, Canada

NTS: 93F/02
BCGS: 093F.006, 093F.007, 093F.008, 093F.015, 093F.016, 093F.017, 093F.018, 093F.025, 093F.026, 093F.027, 093F.035, 093F.036

NAD(83) Zone 10N Central Coordinates 371800E, 5900033N
Latitude 53^0 14' 3" Longitude -124^0 55 15

Mine Number 1300281
Event Numbers 5527171, 5527230

Property Owner:
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1800 – 555 Burrard Street
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February 23, 2015

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INTRODUCTION

This report documents an indicator mineral and till geochemistry survey conducted by Overburden Drilling Management Limited (ODM) on the Blackwater, Capoose and Auro properties that form part of the Blackwater Gold Project of New Gold Inc. Work was conducted on a continuous basis from June 10 2012, through October 20 2013. Dates used for filing were based on the last claims acquired.

The Blackwater property covers 27,175 hectares or ~272 km2. The eastern Blackwater sector of the property contains the large Blackwater Au-Ag deposit which is being readied for development and has an indicated mineral resource of 7.52 million ounces of gold and 36.93 million ounces of silver in 267,145 million tonnes grading 0.876 g/t Au and 4.3 g/t Ag and an inferred resource of 2.66 million ounces of gold and 28.28 million ounces of silver in 120,478 million tonnes grading 0.687 g/t Au and 7.3 g/t Ag. The Capoose sector to the west contains the smaller, lower grade Capoose Au-Ag deposit with a current indicated mineral resource of 0.38 million ounces of gold and 26.59 million ounces of silver in 31.22 million tonnes grading 0.38 g/t Au, 26.5 g/t Ag and 0.20% Zn and an inferred mineral resource of 0.44 million ounces of gold and 29.52 million ounces of silver in 37.23 million tonnes grading 0.37 g/t Au, 24.6 g/t Ag and 0.27% Zn.

The property is located in hilly terrain of the Nechako Plateau in the interior of British Columbia. The highest points are in the Fawnie Range that transects the property in a southeasterly direction. The Blackwater deposit is located on the north slope of Mount Davidson at the southeast end of this range and the Capoose deposit is on the summit of Fawnie Nose to the northwest. Bedrock crops out intermittently at the highest elevations but elsewhere is extensively mantled by till that was deposited by ~060º flowing ice in the Fraser Glaciation between ~25 and 14 Ka. The surface of the till is extensively drumlinized in the 060º direction. Its thickness is thought to be mostly <5 m but reaches as much as 100 m in exploration drill holes downslope from the Blackwater deposit.

The supracrustal rock formations on the Blackwater property vary widely in age from Jurassic to Miocene because the property lies on a structurally raised block or horst, the Nechako uplift, within which the younger cover rocks have largely been eroded, exposing the more prospective basement rocks. The oldest supracrustal rocks exposed in this erosional window are allochthonous, Jurassic-age, Hazelton Group basalts of the Stikine Terrane that were accreted from the basin of the ancestral Pacific Ocean onto the western margin of the North American continent in the Middle Jurassic epoch. Autochthonous continental arc volcanics and marine sediments of Jurassic and Cretaceous age unconformably overlie these accreted volcanics. The Cretaceous-age Kasalka Group, which appears to be restricted to isolated volcanic centers, is of particular importance as it is host to both the Blackwater and Capoose Au-Ag deposits. The presence of a volcanic center at the Blackwater deposit is indicated by abundant, chaotically distributed coarse breccia and by volcanogenic spessartine (Mn-garnet) alteration.

The main objective of the surveys was to test the heavy mineral fraction of the till that blankets most of the property for high concentrations of glacially dispersed gold grains and associated indicator minerals suggestive of proximity to significant undiscovered lode gold mineralization in the underlying bedrock. Some stream gravel samples were also collected; however a 12-sample test program conducted near the known Blackwater Au-Ag deposit in 2011 had shown that the gravel, while effective for detecting the garnet alteration associated with this deposit, was ineffective for gold (Averill 2011a).

The survey covered parts of both the eastern Blackwater and western Capoose sectors of the Blackwater property (Fig. 2). It was primarily of a reconnaissance nature, with more detailed orientation sampling conducted at the known Blackwater and Capoose Au-Ag deposits and also to follow up indicator mineral anomalies identified in the reconnaissance samples. The survey was designed and supervised by Overburden Drilling Management Limited (ODM) of Nepean (Ottawa), Ontario, and the sampling teams included both ODM and New Gold personnel. Most of the samples in the Blackwater sector were collected in 2012, and most of the Capoose samples were collected in 2013. The report summarizes features of the geology and exploration history of the area that are relevant to the survey, describes the sampling, sample processing, analytical, and data interpretation methods that were employed and details the results obtained from the survey and their implications for future exploration of the property.

At Capoose a prominent rhyolite dome indicates it with underlying, spessartine-altered, hypabyssal feeder dykes. The mineralization at both deposits appears to be volcanogenic rather than intrusion related or epithermal as previously theorized because it is roughly stratiform, closely associated with Mn (spessartine) alteration and, particularly at Capoose, accompanied by significant Cu, Zn and Pb sulphides.

The principal intrusions on the Blackwater property are the Capoose Batholith, which lies ~1 km west of the Capoose deposit, and the Laidman Batholith further to the south. The Capoose Batholith has been dated at approximately the same, 70 Ma Late Cretaceous age as the mineralized hypabyssal dykes and may be genetically related to them. However it appears to have been emplaced after the dykes because its top at the time of emplacement was at a higher crustal level and the supracrustal rocks between the pluton and dykes have been thermally metamorphosed. The Laidman Batholith, although of the same quartz monzonite composition as the Capoose Batholith, is of Jurassic rather than Cretaceous age.
Young, infertile, Eocene volcanics and alkaline continental flood basalts of the Miocene-age Chilcotin Group locally cover the Jurassic and Cretaceous basement rocks. The largest preserved area of Eocene cover rocks is located atop and west of Mount Davidson, possibly due to sustained subsidence along vertical caldera or other subvolcanic faults that originated in the Late Cretaceous around the volcanic center at the Blackwater deposit.

The Blackwater and Capoose till surveys were designed and executed by Overburden Drilling Management Limited (ODM) with assistance from New Gold. The main objective of the survey was to test the heavy mineral fraction of the till for high concentrations of glacially dispersed gold grains and associated indicator minerals suggestive of proximity to significant undiscovered lode gold mineralization in the underlying bedrock, but the geochemistry of the -0.063 mm fines from the till samples was also investigated. The alluvial gravel in some of the smaller streams on the property was also sampled for indicator minerals but was not analyzed geochemically.

The indicator mineral survey targeted grains of any minerals in the till or gravel that could be used effectively to identify, from afar, a particular variety of rock or a specific type of alteration or mineralized zone. In order to identify such targets from afar, the dispersed grains had to be detectable at very low levels of a few grains per billion. This required that: (a) large, ~10 kg samples be used; and (b) the indicator minerals be of a specific gravity >3.2 so that their concentration could be physically increased by gravity means to a level at which the grains could actually be identified and counted. A third requirement for most indicator minerals other than gold was that the grains be coarser than 0.25 mm in order to be readily visible in the heavy mineral concentrates, or HMCs.

Gold grains of any size are useable because the specific gravity of gold is so high that the grains can be physically separated from the other minerals in the HMCs for examination. This distinction is important because ~90 percent of the gold grains in till occur in the <0.063 mm silt + clay fraction. Gold is also soft and malleable such that the grains are deformed systematically during glacial transport, thereby recording their transport distance and the approximate location of their bedrock source mineralization. The approximate gold grade of the HMCs can be determined from the gold grain measurements and this grade foretells the grade of the source mineralization.

The till samples were collected at a depth of 0.5 to 1 m within the C-horizon of the superimposed soil profile. At this depth the till is only weakly oxidized and elements such as Cu, Zn and Pb have not been remobilized to a significant extent although all grains of pyrite and most other sulphide minerals other than molybdenite, cinnabar and a small proportion of the chalcopyrite have decomposed and cannot be used as indicator minerals. Gold grains, however, are chemically inert, even within the overlying, highly oxidized B-horizon of the soil profile, and retain all of their primary alloyed silver.

The main indicator of a specific rock formation in the Blackwater area was expected to be olivine that occurs as coarse phenocrysts in the alkaline flood basalts of the Chilcotin Group. The main indicator of mineralization was expected to be gold grains because molybdenite, cinnabar and chalcopyrite – the only sulphide minerals that are completely or partially stable in oxidized till – do not occur at significant concentrations in the principal mineral deposits in the area. The main potential indicator of hydrothermal alteration is spessartine garnet due to its abundance in the alteration zones of both the Blackwater and Capoose Au-Ag deposits.

Since the spessartine is restricted to the Cretaceous-age, Kasalka Group volcanics that, in turn, are restricted to volcanic centers, spessartine is potentially also a key mapping mineral. However, garnet of a probable andradite composition, i.e. enriched in Ca and Fe rather than Mn and Al like spessartine, is also known to occur in epidote veinlets within a broad, propylitic alteration zone along the east side of the Capoose Batholith.

In total, 504 till samples and 79 alluvial gravel samples were collected. Of these, 252 till and 33 gravel samples were obtained from the Blackwater sector of the property. Approximately 60 percent of the till samples collected from this sector were reconnaissance samples collected from a 7 x 10 km area around the Blackwater Au-Ag deposit. These samples were collected from hand-dug pits at ~300 m spacing along traverses 1 to 1.5 km apart, or a density of 2 to 3 samples per km2. The traverses were oriented NW-SE, roughly orthogonal to the 060º transport direction of the till. Limited regional sampling at 1 to 5 km centers was conducted further from the Blackwater deposit. An orientation program comprising 36 till samples at 300 x 500 m spacing, or a density of ~6 samples per km2, was conducted over the deposit to test the indicator mineral response both up-ice and down-ice as a guide to interpreting the results from the other samples. A significant anomaly identified 2 km to the northwest was followed up with 16 infill samples at 100 x 200 m spacing.

Of the 252 till samples in the Capoose sector, ~50 percent were reconnaissance samples from a 7 x 10 km area around the Capoose deposit. These samples were typically collected at ~300 m spacing along traverses 1 to 1.5 km apart, or a density of 2 to 3 samples per km^2. The traverses were oriented NW-SE, roughly orthogonal to the 060º transport direction of the till (Fig. 4). Two infill lines totaling 40 samples were added immediately up-ice and down-ice from the Capoose deposit to close the line spacing here to 500 m with the objective of obtaining benchmark data for interpreting possible anomalies in the other samples. Limited regional sampling at 1 to 4 km centers was conducted further from the Capoose deposit. A significant gold grain anomaly identified in Sample 108 approximately 2.5 km up-ice from the deposit was followed up with 16 infill samples at 200 x 500 m spacing. Based on the results obtained from these samples, eight additional infill samples were collected at 100 x 150 m spacing.

The 46-sample alluvial gravel survey comprised 34 widely-spaced regional samples and 12 orientation samples collected up to 4 km downslope along streams draining both northeast and southwest from the area of the Capoose deposit.

PROPERTY DESCRIPTION AND LOCATION

The properties are located in north central British Columbia, approximately 112 km southwest of Vanderhoof and 446 km northeast of Vancouver. The properties are centred at NAD(83) Zone 10N UTM 371800E, 5900033N and are located on NTS map sheet 093F/02 (see Fig. 1).

The property is accessible by two wheel drive vehicle from the Kluskus-Oostsa Forest Service Road originating approximately 10 km west of Vanderhoof. At kilometer 146.5 along this road, an 18 km "mine road" built in 1986 by Granges Inc. (Granges) and improved by Richfield Ventures Corp. (Richfield) provides direct easterly access to the property and camp location. Driving time from Vanderhoof to the property is approximately 2.5 hours and vehicles need to be equipped with off-road radios that provide availability to local logging channels.

The property is accessible by helicopter from bases in Vanderhoof, Prince George or Quesnel.

The area is sparsely inhabited with only three ranches located within a 20 km radius of the project's center. Local services are available in Vanderhoof.

Prince George is the area's regional hub with full service medical facilities, a variety of local service and supply companies, and a sizeable airport with multiple carriers and 10 daily direct flights to Vancouver. Additional direct flights are available to Victoria, Smithers, Terrace, Fort St. John, Kamloops and Kelowna in BC, and Calgary in Alberta.



Figure 1: Property Location

CLIMATE AND PHYSIOGRAPHY

The property is located within the Nechako Plateau, the northernmost region of the Interior Plateau physiographic province. The area is characterized by rolling north to northwest trending hills cut by small to medium sized drainages. Elevations on the property range from 1490 to 1820 meters; most current work is focused between 1520 and 1620 meters. An extensive veneer of glacial debris covers the property, and bedrock exposures are rare and generally restricted to higher elevations. On the ridge of Mount Davidson, outcrop is spotty although there is plenty of broken rock indicating shallow depth to bedrock.

Vegetation on the property is balsam fir and white spruce with lodge pole pine. At higher elevations vegetation is less dense and dominated by subalpine fir and white bark pine. Tree line is about 1600 meters. The climate is characterized by short warm summers and long cold winters. On average, the area receives 33 cm of precipitation yearly with temperatures ranging betweem a minimum of -40°C in winter to a maximum of 32°C in summer. Snowfall can exceed two (2) meters at higher elevations. The main exploration period is between mid-June and late October. Year round work is possible with a winterized camp.

MINERAL TITLES

The properties are composed of 226 mineral titles, with a contiguous area of 104,212.8 hectares. With the approval of this report, all the contiguous titles will share a common anniversary date of August 29, 2022.

Table 1 contains a list of the contiguous mineral titles in addition to an index showing where the work detailed in this report was performed.

Table 1: Status of Mineral Titles - Worked Performed Index

Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
238045	CAP	Mineral	Claim	093F025	1978/sep/18	2022/aug/29	100	
503050	WHITEWATER	Mineral	Claim	093F	2005/jan/13	2022/aug/29	348.759	Yes
509273	GOT	Mineral	Claim	093F	2005/mar/19	2022/aug/29	484.448	Yes
509274	got2	Mineral	Claim	093F	2005/mar/19	2022/aug/29	38.75	Yes
509275	got3	Mineral	Claim	093F	2005/mar/19	2022/aug/29	19.375	
512838		Mineral	Claim	093F	2005/may/17	2022/aug/29	811.88	Yes
515809		Mineral	Claim	093F	2005/jul/01	2022/aug/29	581.604	Yes
515810		Mineral	Claim	093F	2005/jul/01	2022/aug/29	348.962	Yes
534364	JAG-1	Mineral	Claim	093F	2006/may/24	2022/aug/29	482.75	Yes
534365	JAG-2	Mineral	Claim	093F	2006/may/24	2022/aug/29	482.919	
534366	JAG-3	Mineral	Claim	093F	2006/may/24	2022/aug/29	482.597	Yes
534367	JAG-4	Mineral	Claim	093F	2006/may/24	2022/aug/29	289.666	Yes
536650	NIGHT FLIGHT	Mineral	Claim	093F	2006/jul/06	2022/aug/29	271.424	Yes
552493	NE CAPOOSE	Mineral	Claim	093F	2007/feb/22	2022/aug/29	483.1181	Yes
552494	NE CAPOOSE 2	Mineral	Claim	093F	2007/feb/22	2022/aug/29	483.0008	Yes
552495	E CAPOOSE	Mineral	Claim	093F	2007/feb/22	2022/aug/29	483.3117	Yes
552497	NE CAPOOSE3	Mineral	Claim	093F	2007/feb/22	2022/aug/29	482.9662	Yes
553489	PAW	Mineral	Claim	093F	2007/mar/03	2022/aug/29	19.3912	
555053	CAP	Mineral	Claim	093F	2007/mar/26	2022/aug/29	251.3024	Yes
557495	JAG-5	Mineral	Claim	093F	2007/apr/23	2022/aug/29	482.7312	Yes
557496	JAG-6	Mineral	Claim	093F	2007/apr/23	2022/aug/29	482.4912	Yes
564372	CAPOOSE S	Mineral	Claim	093F	2007/aug/09	2022/aug/29	464.1767	Yes
564373	CAPOOSE SW	Mineral	Claim	093F	2007/aug/09	2022/aug/29	464.1784	Yes
564375	CAPOOSE SW2	Mineral	Claim	093F	2007/aug/09	2022/aug/29	483.4753	Yes
564376	CAPOOSE E2	Mineral	Claim	093F	2007/aug/09	2022/aug/29	483.4884	Yes
564377	CAPOOSE E3	Mineral	Claim	093F	2007/aug/09	2022/aug/29	483.2432	Yes
564994	KEY 1	Mineral	Claim	093F	2007/aug/24	2022/aug/29	485.2487	
564995	KEY 2	Mineral	Claim	093F	2007/aug/24	2022/aug/29	485.1576	
564996	KEY 3	Mineral	Claim	093F	2007/aug/24	2022/aug/29	485.1582	
564997	KEY 4	Mineral	Claim	093F	2007/aug/24	2022/aug/29	465.9964	
564998	KEY 5	Mineral	Claim	093F	2007/aug/24	2022/aug/29	388.2569	
564999	KEY 6	Mineral	Claim	093F	2007/aug/24	2022/aug/29	388.22	
565000	KEY 7	Mineral	Claim	093F	2007/aug/24	2022/aug/29	116.4995	
565001	KEY 8	Mineral	Claim	093F	2007/aug/24	2022/aug/29	97.0969	
580086	CAPOOSE NORTH	Mineral	Claim	093F	2008/apr/01	2022/aug/29	77.2921	Yes

Table 1: Status of Mineral Titles - Worked Performed Index

Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
589167	LOCK 1	Mineral	Claim	093F	2008/jul/30	2022/aug/29	485.5725	
589177	LOCK 2	Mineral	Claim	093F	2008/jul/30	2022/aug/29	485.8043	
589183	LOCK 3	Mineral	Claim	093F	2008/jul/30	2022/aug/29	484.9251	
589231	LOCK 4	Mineral	Claim	093F	2008/jul/30	2022/aug/29	485.1599	
589232	LOCK 5	Mineral	Claim	093F	2008/jul/30	2022/aug/29	485.3926	
589234	LOCK 6	Mineral	Claim	093F	2008/jul/30	2022/aug/29	388.4408	
589236	LOCK 7	Mineral	Claim	093F	2008/jul/30	2022/aug/29	466.1523	
589238	LOCK 8	Mineral	Claim	093F	2008/jul/30	2022/aug/29	233.0756	
589241	LOCK 9	Mineral	Claim	093F	2008/jul/30	2022/aug/29	407.6482	
589242	LOCK 10	Mineral	Claim	093F	2008/jul/30	2022/aug/29	465.66	
589243	LOCK 11	Mineral	Claim	093F	2008/jul/30	2022/aug/29	193.9704	
589244	LOCK 12	Mineral	Claim	093F	2008/jul/30	2022/aug/29	388.5506	
598000	BUCK	Mineral	Claim	093F	2009/jan/26	2022/aug/29	38.74	
601527	FAWN	Mineral	Claim	093F	2009/mar/23	2022/aug/29	19.3803	
602167	BWD	Mineral	Claim	093F	2009/apr/05	2022/aug/29	387.9406	Yes
602168	BWD2	Mineral	Claim	093F	2009/apr/05	2022/aug/29	310.3469	
606724	FAWN	Mineral	Claim	093F	2009/jun/27	2022/aug/29	174.2886	
606728	MALAPUT E-W	Mineral	Claim	093F	2009/jun/27	2022/aug/29	96.8958	
607194	BLACKWATER 2	Mineral	Claim	093F	2009/jul/08	2022/aug/29	464.8588	Yes
607195	BLACKWATER 1	Mineral	Claim	093F	2009/jul/08	2022/aug/29	348.7434	Yes
617183	BUCK 2	Mineral	Claim	093F	2009/aug/10	2022/aug/29	96.8601	
625583	M-1	Mineral	Claim	093F	2009/aug/29	2022/aug/29	484.0873	Yes
625603	M-2	Mineral	Claim	093F	2009/aug/29	2022/aug/29	484.1876	
625623	M-3	Mineral	Claim	093F	2009/aug/29	2022/aug/29	484.0325	Yes
625624	M-4	Mineral	Claim	093F	2009/aug/29	2022/aug/29	464.4796	Yes
625625		Mineral	Claim	093F	2009/aug/29	2022/aug/29	483.6828	Yes
630903	BW1	Mineral	Claim	093F	2009/sep/09	2022/aug/29	465.3307	Yes
630944	BW2	Mineral	Claim	093F	2009/sep/09	2022/aug/29	251.902	Yes
630963	BW3	Mineral	Claim	093F	2009/sep/09	2022/aug/29	465.1538	Yes
630983	BW4	Mineral	Claim	093F	2009/sep/09	2022/aug/29	387.2911	Yes
630984	BW5	Mineral	Claim	093F	2009/sep/09	2022/aug/29	464.9757	Yes
631003	BW6	Mineral	Claim	093F	2009/sep/09	2022/aug/29	484.1406	
631024	BW7	Mineral	Claim	093F	2009/sep/09	2022/aug/29	445.4864	Yes
631043	BW8	Mineral	Claim	093F	2009/sep/09	2022/aug/29	464.7268	Yes
636583	KASSY 1	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.5292	

Table 1: Status of Mineral Titles - Worked Performed Index

Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
636603	KASSY 2	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.2711	Yes
636604	KASSY 3	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.0079	Yes
636623	KASSY 4	Mineral	Claim	093F	2009/sep/18	2022/aug/29	463.8179	
636643	KASSY 5	Mineral	Claim	093F	2009/sep/18	2022/aug/29	483.3024	Yes
636644	KASSY 6	Mineral	Claim	093F	2009/sep/18	2022/aug/29	483.472	Yes
636663	KASSY 7	Mineral	Claim	093F	2009/sep/18	2022/aug/29	290.1782	Yes
636683	RIGHT STUFF 1	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.8647	Yes
636684	RIGHT STUFF 2	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.8675	Yes
636703	RIGHT STUFF 3	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.8687	Yes
636723	RIGHT STUFF 4	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.449	
636724	RIGHT STUFF	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.6267	Yes
636725	RIGHT STUFF 6	Mineral	Claim	093F	2009/sep/18	2022/aug/29	484.1815	Yes
636727	RIGHT STUFF 7	Mineral	Claim	093F	2009/sep/18	2022/aug/29	484.4075	Yes
636743	RIGHT STUFF 8	Mineral	Claim	093F	2009/sep/18	2022/aug/29	483.8407	
636763	RIGHT STUFF 9	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.849	
636764	RIGHT STUFF 10	Mineral	Claim	093F	2009/sep/18	2022/aug/29	484.5585	
636765	RIGHT STUFF 11	Mineral	Claim	093F	2009/sep/18	2022/aug/29	465.1158	
636766	RIGHT STUFF 12	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.7619	
636767	RIGHT STUFF 13	Mineral	Claim	093F	2009/sep/18	2022/aug/29	464.4173	
637203	OZZY	Mineral	Claim	093F	2009/sep/19	2022/aug/29	484.4198	Yes
637205	BABY JANE	Mineral	Claim	093F	2009/sep/19	2022/aug/29	464.574	Yes
637206	DAVID DALE	Mineral	Claim	093F	2009/sep/19	2022/aug/29	464.5708	
640804	PUREANDY	Mineral	Claim	093F	2009/sep/25	2022/aug/29	310.1586	Yes
641685	RICHFIELDADJACENTCC	Mineral	Claim	093F	2009/sep/26	2022/aug/29	445.5824	Yes
641983	FAWN	Mineral	Claim	093F	2009/sep/27	2022/aug/29	19.3636	
641984	FAWN 2	Mineral	Claim	093F	2009/sep/27	2022/aug/29	154.9086	Yes
642003	YELLOW & BLACK	Mineral	Claim	093F	2009/sep/27	2022/aug/29	174.857	
642004	BLACK & YELLOW	Mineral	Claim	093F	2009/sep/27	2022/aug/29	174.857	
642023	BLACK	Mineral	Claim	093F	2009/sep/27	2022/aug/29	388.6087	
642024	YELLOW	Mineral	Claim	093F	2009/sep/27	2022/aug/29	233.1985	
642043	BW	Mineral	Claim	093F	2009/sep/27	2022/aug/29	232.5739	Yes
642063	BW 2	Mineral	Claim	093F	2009/sep/27	2022/aug/29	232.6623	Yes
642064	BW3	Mineral	Claim	093F	2009/sep/27	2022/aug/29	310.3356	Yes
642544	FAWNIE DOME	Mineral	Claim	093F	2009/sep/28	2022/aug/29	116.0761	Yes
642564	FD 2	Mineral	Claim	093F	2009/sep/28	2022/aug/29	464.4016	Yes

Table 1: Status of Mineral Titles - Worked Performed Index

Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
642565	FD 3	Mineral	Claim	093F	2009/sep/28	2022/aug/29	348.3583	Yes
642583	FD 4	Mineral	Claim	093F	2009/sep/28	2022/aug/29	309.6229	
642603	TOP LAKE	Mineral	Claim	093F	2009/sep/28	2022/aug/29	174.0916	Yes
643103	BUCK 1	Mineral	Claim	093F	2009/sep/29	2022/aug/29	484.0859	Yes
643104	BUCK 2	Mineral	Claim	093F	2009/sep/29	2022/aug/29	445.5228	Yes
643106	BUCK 3	Mineral	Claim	093F	2009/sep/29	2022/aug/29	406.5938	Yes
643107	BUCK 4	Mineral	Claim	093F	2009/sep/29	2022/aug/29	483.8523	Yes
643108	BUCK 5	Mineral	Claim	093F	2009/sep/29	2022/aug/29	483.8534	Yes
643109	BUCK 6	Mineral	Claim	093F	2009/sep/29	2022/aug/29	483.7444	
643110	BUCK 7	Mineral	Claim	093F	2009/sep/29	2022/aug/29	483.69	Yes
643123	BUCK 8	Mineral	Claim	093F	2009/sep/29	2022/aug/29	484.0555	Yes
643323	TOP	Mineral	Claim	093F	2009/sep/29	2022/aug/29	309.4498	
644244	CAPOOSE M6	Mineral	Claim	093F	2009/sep/30	2022/aug/29	484.3461	Yes
644283	CAPOOSE M7	Mineral	Claim	093F	2009/sep/30	2022/aug/29	484.3319	Yes
644285	CAPOOSE M8	Mineral	Claim	093F	2009/sep/30	2022/aug/29	464.9522	Yes
644323	CAPOOSE M9	Mineral	Claim	093F	2009/sep/30	2022/aug/29	464.7372	Yes
644363	CAPOOSE M10	Mineral	Claim	093F	2009/sep/30	2022/aug/29	309.9812	Yes
645063	CAPOOSE M11	Mineral	Claim	093F	2009/sep/30	2022/aug/29	465.0383	Yes
645064	CAPOOSE M12	Mineral	Claim	093F	2009/sep/30	2022/aug/29	465.1488	Yes
645065	CAPOOSE M13	Mineral	Claim	093F	2009/sep/30	2022/aug/29	426.3967	Yes
645066	CAPOOSE M14	Mineral	Claim	093F	2009/sep/30	2022/aug/29	232.5738	
646683	PRINCESS	Mineral	Claim	093F	2009/oct/03	2022/aug/29	407.1842	Yes
649243	JAG-8	Mineral	Claim	093F	2009/oct/08	2022/aug/29	483.0504	
704807	PAWING	Mineral	Claim	093F	2010/jan/26	2022/aug/29	213.3039	Yes
704817	PAWS	Mineral	Claim	093F	2010/jan/26	2022/aug/29	213.3112	Yes
704825	FAWN WEST	Mineral	Claim	093F	2010/jan/26	2022/aug/29	387.1781	Yes
704826	FW 2	Mineral	Claim	093F	2010/jan/26	2022/aug/29	464.6142	Yes
704827	FW 3	Mineral	Claim	093F	2010/jan/26	2022/aug/29	406.6463	Yes
704828	FW 4	Mineral	Claim	093F	2010/jan/26	2022/aug/29	387.3834	Yes
704829	FW 5	Mineral	Claim	093F	2010/jan/26	2022/aug/29	387.0294	Yes
704830	FW 6	Mineral	Claim	093F	2010/jan/26	2022/aug/29	193.6449	
704854	FW 7	Mineral	Claim	093F	2010/jan/27	2022/aug/29	464.5695	Yes
704855	FW 8	Mineral	Claim	093F	2010/jan/27	2022/aug/29	309.603	Yes
704863	FW 9	Mineral	Claim	093F	2010/jan/27	2022/aug/29	445.0697	Yes
706011	FW 10	Mineral	Claim	093F	2010/feb/11	2022/aug/29	193.742	

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Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
706593	CPN1	Mineral	Claim	093F	2010/feb/19	2022/aug/29	482.8872	Yes
706594	CPN2	Mineral	Claim	093F	2010/feb/19	2022/aug/29	482.6129	Yes
706595	CPN3	Mineral	Claim	093F	2010/feb/19	2022/aug/29	444.0303	
706596	CPN4	Mineral	Claim	093F	2010/feb/19	2022/aug/29	328.0669	Yes
706597	CPW1	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.3782	Yes
706598	CPW2	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.2758	Yes
706599	CPW3	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.275	Yes
706600	CPW4	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.2739	Yes
706602	CPW5	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.0417	Yes
706603	CPW6	Mineral	Claim	093F	2010/feb/19	2022/aug/29	483.8128	Yes
706605	CPW7	Mineral	Claim	093F	2010/feb/19	2022/aug/29	483.8824	Yes
706606	CPW8	Mineral	Claim	093F	2010/feb/19	2022/aug/29	483.9973	Yes
706607	CPW9	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.1818	Yes
706608	CPW9	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.398	Yes
706609	CPW10	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.506	Yes
706610	CPW11	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.6866	Yes
706612	CPW12	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.5068	Yes
706613	CPW13	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.549	Yes
706614	CPW14	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.6976	Yes
706615	CPW15	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.7667	Yes
706616	CPW16	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.9679	Yes
706617	CPW17	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.2009	
706618	CPW18	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.4331	
706619	CPW19	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.4329	
706620	CPW20	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.2006	
706621	CPW21	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.9677	Yes
706622	CPW22	Mineral	Claim	093F	2010/feb/19	2022/aug/29	484.921	Yes
706623	CPW23	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.1541	
706625	CPW24	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.0144	
706626	CPW25	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.2473	
706627	CPW26	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.3868	
706628	CPW27	Mineral	Claim	093F	2010/feb/19	2022/aug/29	485.4707	
706629	CPNW1	Mineral	Claim	093F	2010/feb/19	2022/aug/29	290.1488	Yes
706630	CPNW2	Mineral	Claim	093F	2010/feb/19	2022/aug/29	154.646	Yes
706638	PAWS 2	Mineral	Claim	093F	2010/feb/19	2022/aug/29	407.2836	

Table 1: Status of Mineral Titles - Worked Performed Index

Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
745822	NG1	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.4955	
745842	NG2	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.4951	
745862	NG3	Mineral	Claim	093F	2010/apr/12	2022/aug/29	465.898	
745882	NG4	Mineral	Claim	093F	2010/apr/12	2022/aug/29	465.8655	
745902	NG5	Mineral	Claim	093F	2010/apr/12	2022/aug/29	465.8438	
745922	NG6	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.6811	
745942	NG7	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.2242	
745962	NG8	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.6817	
745982	NG9	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.4239	
746002	NG10	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.7264	
746022	NG11	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.7257	
746042	NG12	Mineral	Claim	093F	2010/apr/12	2022/aug/29	466.501	
746062	NG13	Mineral	Claim	093F	2010/apr/12	2022/aug/29	485.9596	
746082	NG14	Mineral	Claim	093F	2010/apr/12	2022/aug/29	466.5018	
746102	NG15	Mineral	Claim	093F	2010/apr/12	2022/aug/29	465.9922	
746182	NG15	Mineral	Claim	093F	2010/apr/12	2022/aug/29	388.7671	
746202	NG16	Mineral	Claim	093F	2010/apr/12	2022/aug/29	330.4406	
831124	AURO PROPERTY	Mineral	Claim	093F	2010/aug/05	2022/aug/29	14025.9769	Yes
834367	RICH 1	Mineral	Claim	093F	2010/sep/27	2022/aug/29	484.0613	Yes
834371	DAVIDSON	Mineral	Claim	093F	2010/sep/27	2022/aug/29	425.8729	Yes
834533	DAVIDSON 1	Mineral	Claim	093F	2010/sep/29	2022/aug/29	77.3917	
834534	DAVIDSON 2	Mineral	Claim	093F	2010/sep/29	2022/aug/29	406.3329	
834923	DAVIDSON 3	Mineral	Claim	093F	2010/oct/02	2022/aug/29	483.5867	
834924	DAVIDSON 4	Mineral	Claim	093F	2010/oct/02	2022/aug/29	483.454	
834926	DAVIDSON 5	Mineral	Claim	093F	2010/oct/02	2022/aug/29	483.4529	
834948		Mineral	Claim	093F	2010/oct/03	2022/aug/29	484.6897	Yes
834998	RICH 2	Mineral	Claim	093F	2010/oct/04	2022/aug/29	426.276	Yes
835005		Mineral	Claim	093F	2010/oct/04	2022/aug/29	465.5035	
835009		Mineral	Claim	093F	2010/oct/04	2022/aug/29	271.2713	Yes
835011		Mineral	Claim	093F	2010/oct/04	2022/aug/29	484.6897	
835012		Mineral	Claim	093F	2010/oct/04	2022/aug/29	484.4599	Yes
835013		Mineral	Claim	093F	2010/oct/04	2022/aug/29	174.4104	Yes
835014	DAVE	Mineral	Claim	093F	2010/oct/04	2022/aug/29	116.2312	Yes
835016		Mineral	Claim	093F	2010/oct/04	2022/aug/29	232.7703	
835019		Mineral	Claim	093F	2010/oct/04	2022/aug/29	387.7691	

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Title No.	Claim Name	Title Type	Sub Type	Map No.	Issue Date	Good To Date	Area (ha)	Work Performed
835020		Mineral	Claim	093F	2010/oct/04	2022/aug/29	329.4685	Yes
835021	BW WEST	Mineral	Claim	093F	2010/oct/04	2022/aug/29	387.9372	
835022	BW WEST2	Mineral	Claim	093F	2010/oct/04	2022/aug/29	368.555	
835023		Mineral	Claim	093F	2010/oct/04	2022/aug/29	465.1906	Yes
835025	BW WEST2	Mineral	Claim	093F	2010/oct/04	2022/aug/29	38.7862	
843656	JOHNNY NORTH	Mineral	Claim	093F	2011/jan/20	2022/aug/29	213.193	Yes
843657	JOHNNY NW	Mineral	Claim	093F	2011/jan/20	2022/aug/29	407.0355	
843658	JOHNNY W	Mineral	Claim	093F	2011/jan/20	2022/aug/29	310.0402	
920729	JONBLK	Mineral	Claim	093F	2011/oct/21	2022/aug/29	251.2018	
940115	NOREADD	Mineral	Claim	093F	2012/jan/06	2022/aug/29	77.2525	
982702	BW BRIDGE	Mineral	Claim	093F	2012/apr/26	2022/aug/29	194.1415	
1018105		Mineral	Claim	093F	2013/mar/27	2022/aug/29	77.5193	Yes
1024945	BW NE	Mineral	Claim	093F	2014/jan/09	2022/aug/29	1817.2099	
1024947	BW-N 1	Mineral	Claim	093F	2014/jan/09	2022/aug/29	96.7059	
1024948	BW-N 2	Mineral	Claim	093F	2014/jan/09	2022/aug/29	599.6007	
1024956	BW-N 3	Mineral	Claim	093F	2014/jan/09	2022/aug/29	561.131	
Total hectares							**104212.807**	

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 2: Mineral Claims Map
For the survey, the property
was divided into two sections

335000 m
345000 m
355000 m
365000 m
375000 m
385000 m
395000 m
405000 m
415000 m

5920000 m
5910000 m
5900000 m
5890000 m
5880000 m
5870000 m

Capoose Deposit

Blackwater Deposit

0
10 km

HISTORY

Mineralization on the property was discovered in 1973 during a regional silt geochemical survey by Granges, which located anomalous zinc and other metals in stream sediment east and north of the property. Between 1973 and 1985 a range of ground and airborne geophysical and geochemical surveys were conducted to locate and define mineralization. The nature of the historical work is detailed in Table 2.

Drilling began in 1985 and was concentrated between 1986 and 1994 with a total of 6,300 meters of diamond drilling completed during this period. A further 1,332.6 meters of diamond drilling was completed in the winter of 2005-06. The focus of the work during this period was on high-grade vein targets that, at the time, were the only known gold targets in the Nechako Plateau.

Richfield's work on the property began in 2009 when the company recognized the bulk gold potential on the property. In 2009, Richfield optioned the Davidson property from Silver Quest Resources Ltd. (Silver Quest) and the Dave and Jarrit claims from private individuals. Richfield subsequently completed all of the earn-in requirements for these agreements resulting in it holding a 75% interest in the Davidson property and 100% interests in each of the Dave and Jarrit properties.

In June 2011, New Gold acquired all of the issued and outstanding common shares of Richfield pursuant to a court approved plan of arrangement. In December 2011, New Gold acquired all of the issued and outstanding common shares of Geo Minerals Ltd. (Geo) and Silver Quest. New Gold subsequently amalgamated with Richfield, Geo and Silver Quest effective January 1, 2012 and became the direct operator of the Project. In March 2012, New Gold purchased the Auro Property from Gold Reach Resources Ltd. (Gold Reach). Several other private property purchases were also completed between 2012 and 2015.

In 2012, New Gold conducted a 182 hole, 71,857 meter diamond drilling program that was detailed in ARIS 334774 (Ledwon and Bligh, November 2012). To date a total of 493 diamond drill holes have been completed since 1985 (Table 3).

Table 2: Work History (Ledwon, November 2012)

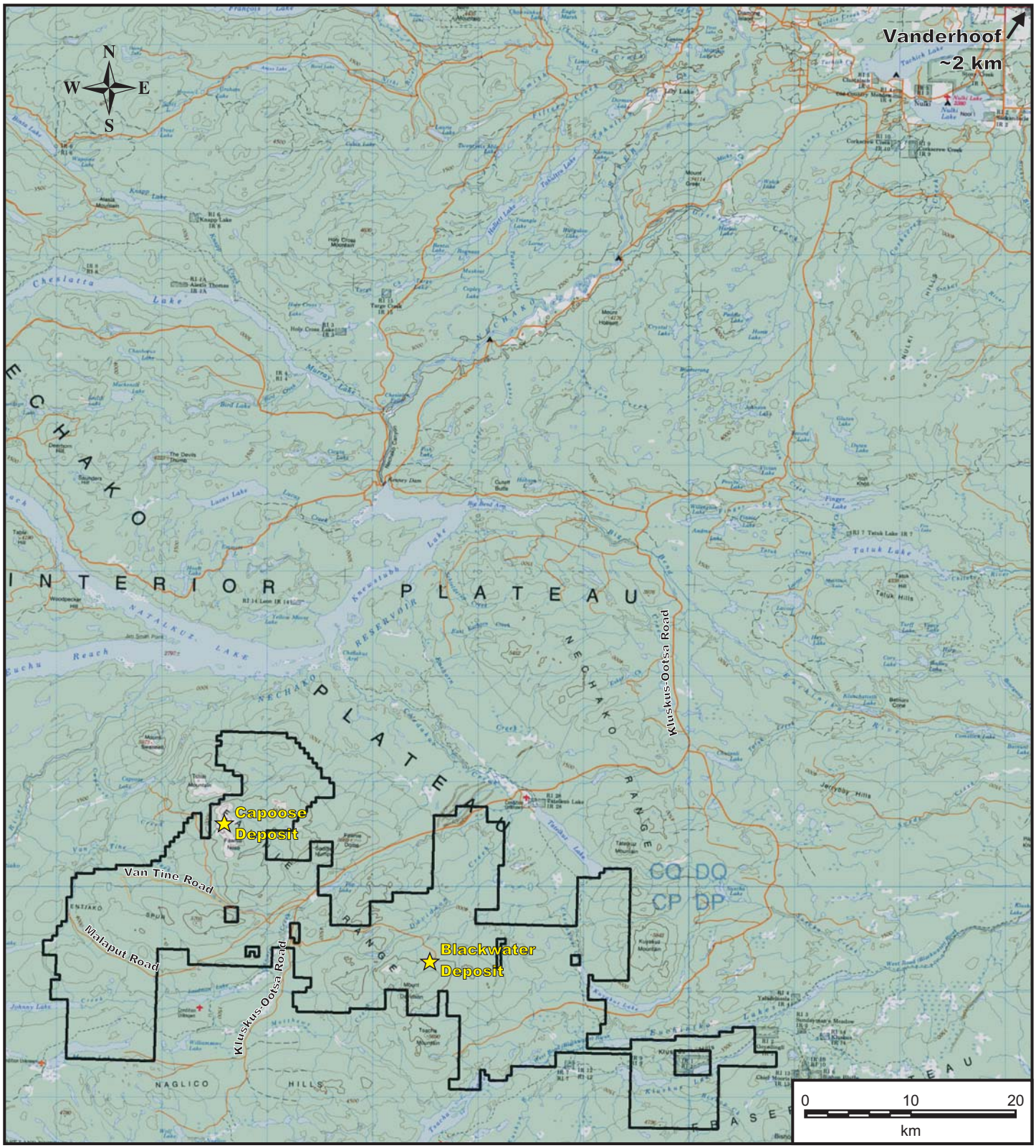
Year	Operator	Work
1973	Granges	Regional silt survey located anomalous silver, zinc, and lead in the Mt. Davidson area. This was followed by a wide-spaced soil survey northeast of Mt. Davidson.
1976	Granges	Soil sample and ground magnetometer surveys to follow up 1973 soil results.
1977	Granges	Pem claim staked covering most of the presently defined mineral deposit. Pulse EM survey on the Pem claim (12.5 km)
1979	Granges	Vector Pulse EM survey on the Pem claim (7 km).
1981	Granges	Helicopter EM and magnetometer survey.
1981	Granges	Horizontal Loop EM survey on the Deb #1 claim.
1981	Granges	Reconnaissance mapping of the Mt. Davidson area.
1982	Granges	Soil geochemistry (220 samples) and ground magnetometer survey (20.8 line km) on the Pem claim.
1983	Granges	Hammer seismic survey.
1984	Granges	Hand-trenching (30 trenches for total of 66 m) and VLF survey (4.8 line km) on the Pem claim. Only 1 trench intersected bedrock.
1985	Granges	Winkie drilling (8 holes for total of 507 m) on the Pem claim. Holes DAV 1-8.
1986	Granges	Construction of access road from km 146.5 on the Kluskus Haulage road, east 18 km to the Pem grid.
1986	Granges	Percussion drilling (34 holes for total of 1,524 m) on the Pem claim. RC 1-34.
1987	Granges	Diamond drilling (22 holes for total of 2,725 m) on the Pem claim. Holes DAV 9-31.
1992	Granges	Line Cutting (58.8km); collection of 955 soil samples and 35, stream silt samples; geological mapping over 6000 hectares at a scale of 1:10,000; 50 km of geophysical surveys (IP, mag, VLF); , and diamond drilling of 5 holes BD92-32 to BD92-36, for total of 785 m.
1994	Granges	Linecutting (48.2 km); 29 rock, samples, 1598 soils samples, 23 silt samples and 4 lake sediments were collected; Dighem airborne geophysical survey (881 line km of EM, Mag and radiometrics); 20km IP survey over the Dave claim; Diamond drilling (6 holes for total of 759 m). Holes DAV 94-37 to DAV 94-41.
1997	Kennecott Canada	4 km of Linecutting and an Induced Polarization survey on the Dave claim.
2005	Silver Quest	Diamond drilling (5 holes for total of 939 m). Holes DAV05-01 to DAV05-05.
2006	Silver Quest	Diamond drilling (2 holes for total of 394 m). Holes DAV06-06 and DAV06-07.
2007	Silver Quest	Soil sampling program, 335 samples.
2009	Richfield	Diamond drilling (18 holes for total of 3,665 m) BW0042 to BW0059
2010	Richfield	Diamond drilling (57 holes for total of 21,337 m). Holes BW0060 to BW0116.
2011	Richfield	Diamond drilling (59 holes for total of 19,734 m). Holes BW0117 to BW0175.
2011	Newgold	Diamond drilling (125 holes for total of 49,153 m). Holes BW0176 to BW0299. Additional 7 metallurgical test holes for a total of 2,282 m .
2012	Newgold	Diamond drilling (177 holes for total of 70,057 m). Holes BW0300 to BW0476. Additional 5 geotechnical holes for a total of 1,800 m.

Table 3: Diamond Drill Summary 2009-2012 (AMEC, 2012)

Series	Year	Company	Holes Drilled	Total metres	Intervals Assayed	Metres Assayed
BW0042 TO BW0059	2009	RVC	18	3,621.26	3,408	3,413.62
BW0060 TO BW0116	2010	RVC	57	21,337.03	20,034	20,219.03
BW0117 TO BW0175 (+50R)	2011	RVC	59	19,733.74	18,517	19,114.96
	Subtotal	RVC	134	44,692.03	41,959	42,747.61
BW0176 TO BW0299	2011	New Gold	125	49,153.18	46,210	46,872.92
BWMET01 TO BWMET07	2011	New Gold	7	2,281.91	1,347	1,364.73
BW0300 to BW0443.448,449	2012	New Gold	146	58,444.25	53,152	54,025.28
BW0444 to BW0478	2012	New Gold	32	11,904.42	0	0
GM12-01 to 05	2012	New Gold	5	1,800.00	1,633	1,682.04
	Subtotal	New Gold	315	123,583.76	102,342	103,944.97
	Total	**All**	**449**	**168,275.79**	**144,301**	**146,692.58**

Note: No analytical data were available for 34 RC holes completed in 1986 by Granges, and their precise locations are uncertain.

Figure 3: Topography and Road Infrastructure



REGIONAL GEOLOGY

The Project is underlain by rocks of the Stikine Terrane within an uplifted block termed the Nechako uplift. The Nechako Plateau is an area of moderate relief between the Skeena Arch and the Stikine and Cache Creek Terrane contact.

Late Triassic to Middle Jurassic island and continental arc assemblages and epicontinental sedimentary strata underlies the southern Nechako Plateau near the Blackwater property (Diakow et al. 1997). Near the Project, the volcaniclastic Hazelton Group represents the Stikine Terrane (Diakow and Levson 1997). The Hazelton Group has a lower unit of felsic tuffs and sediments, named the Entiako Formation and an upper unit of felsic to mafic volcanic flows and volcaniclastic and sedimentary rocks, termed the Naglico Formation (Diakow and Levson 1997). Rocks of the Stikine Terrane in the southern Nechako Plateau are overlain by post-accretion Upper Jurassic volcaniclastic, sedimentary and mafic to felsic volcanic rocks of the Bowser Lake Group (Diakow and Levson 1997). The Hazelton and Bowser Lake groups in the area are collectively intruded by Late Cretaceous granitic to granodioritic plutons (e.g., Capoose batholith) exposed within the Nechako uplift.

Rocks of the Hazelton and Bowser Lake groups are overlain by Upper Cretaceous and Paleocene continental volcanic arc intermediate volcanic rocks and related sedimentary rocks of the Kasalka Group (Diakow et al. 1997). The Kasalka Group is a rock unit that occurs locally south of Natalkuz fault. Widespread Eocene volcanic arc related extensional felsic volcanic rocks and minor sedimentary rocks of the Ootsa Lake Group overlie the older rocks and are themselves overlain on higher ridges by basalt and andesite of the Eocene Endako Group (Diakow et al. 1997).

The Bowser Lake Group is poorly exposed in the southern Nechako Plateau, except within Nechako uplift. Nechako uplift is a structurally raised block bounded by the Natalkuz fault to the north and the Blackwater fault to the south (Diakow and Webster, 1994). Both faults juxtapose older rocks of the Stikine Terrane (e.g., Hazelton and Bowser Lake groups) with younger Cretaceous and Eocene rocks of the Ootsa Lake and Endako groups. This uplift provides a direct window through younger cover into older rocks (Diakow et al. 1997). The regional geologic setting is illustrated in Figure 11.

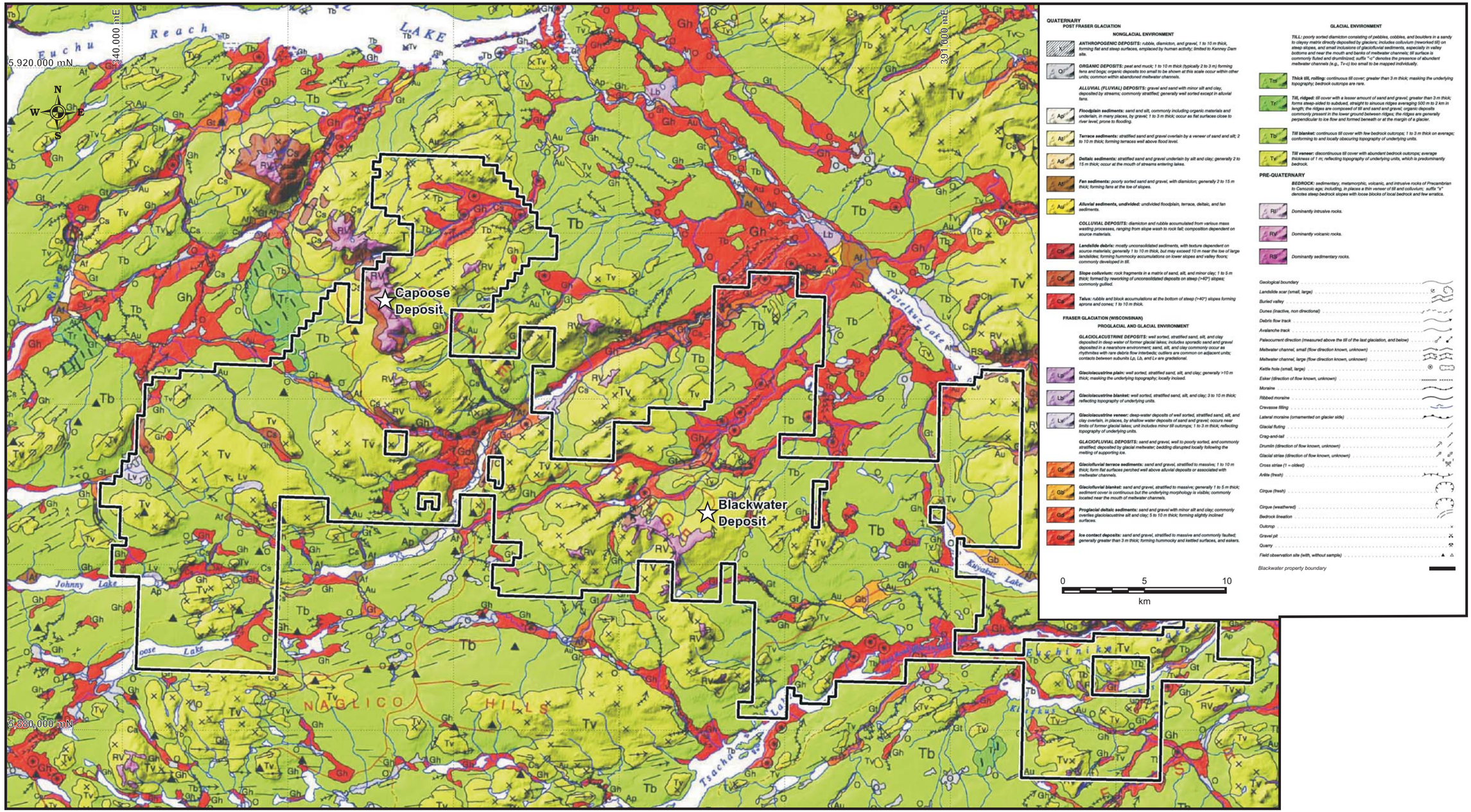


Figure 4: Quarternary Geology of the Blackwater Property
Source: Plouffe et al (2004)

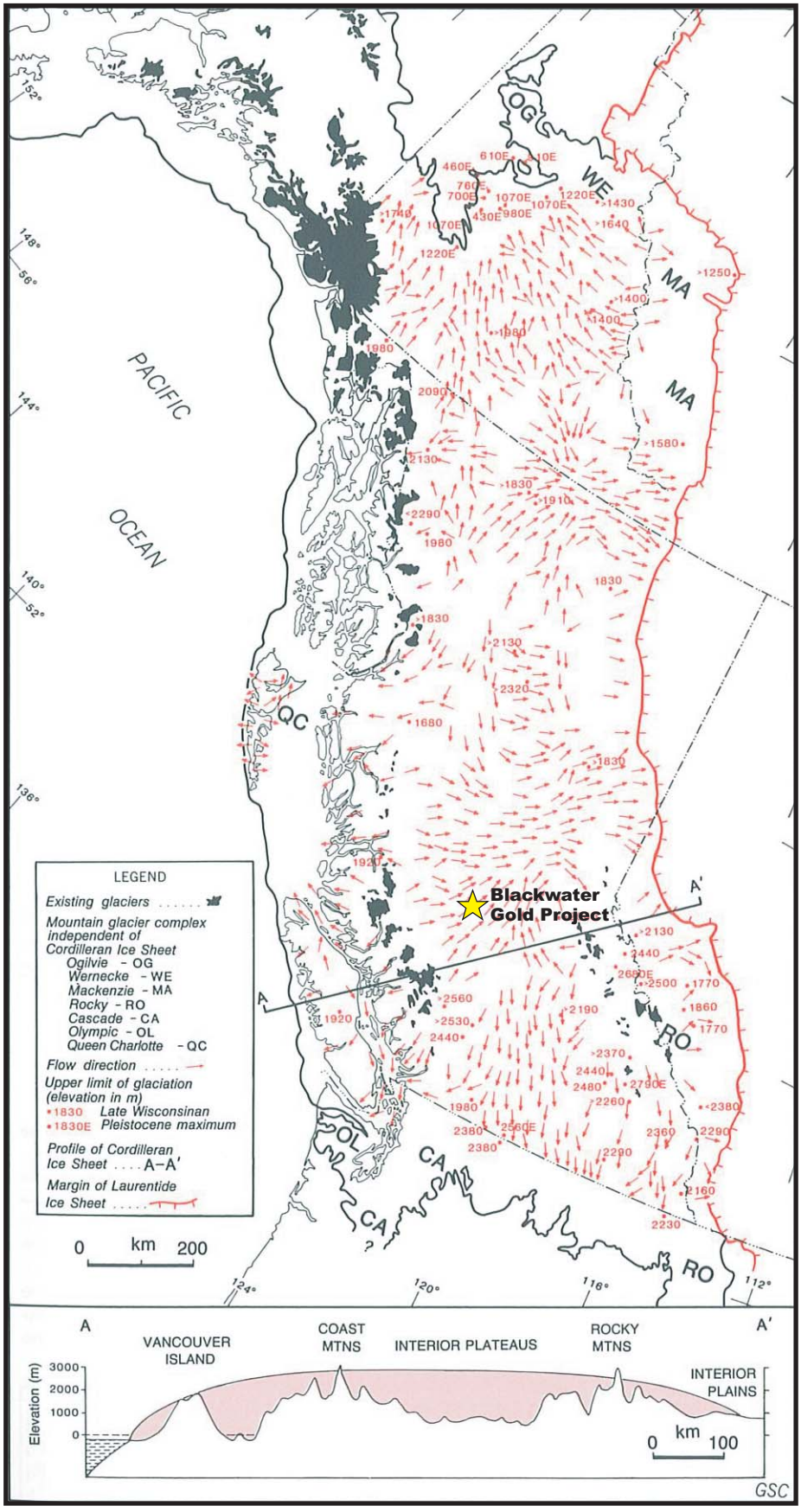


Figure 5: Maximum Extent of Pleistocene Glaciation in the Canadian Cordillera

Source: Clague (1989)

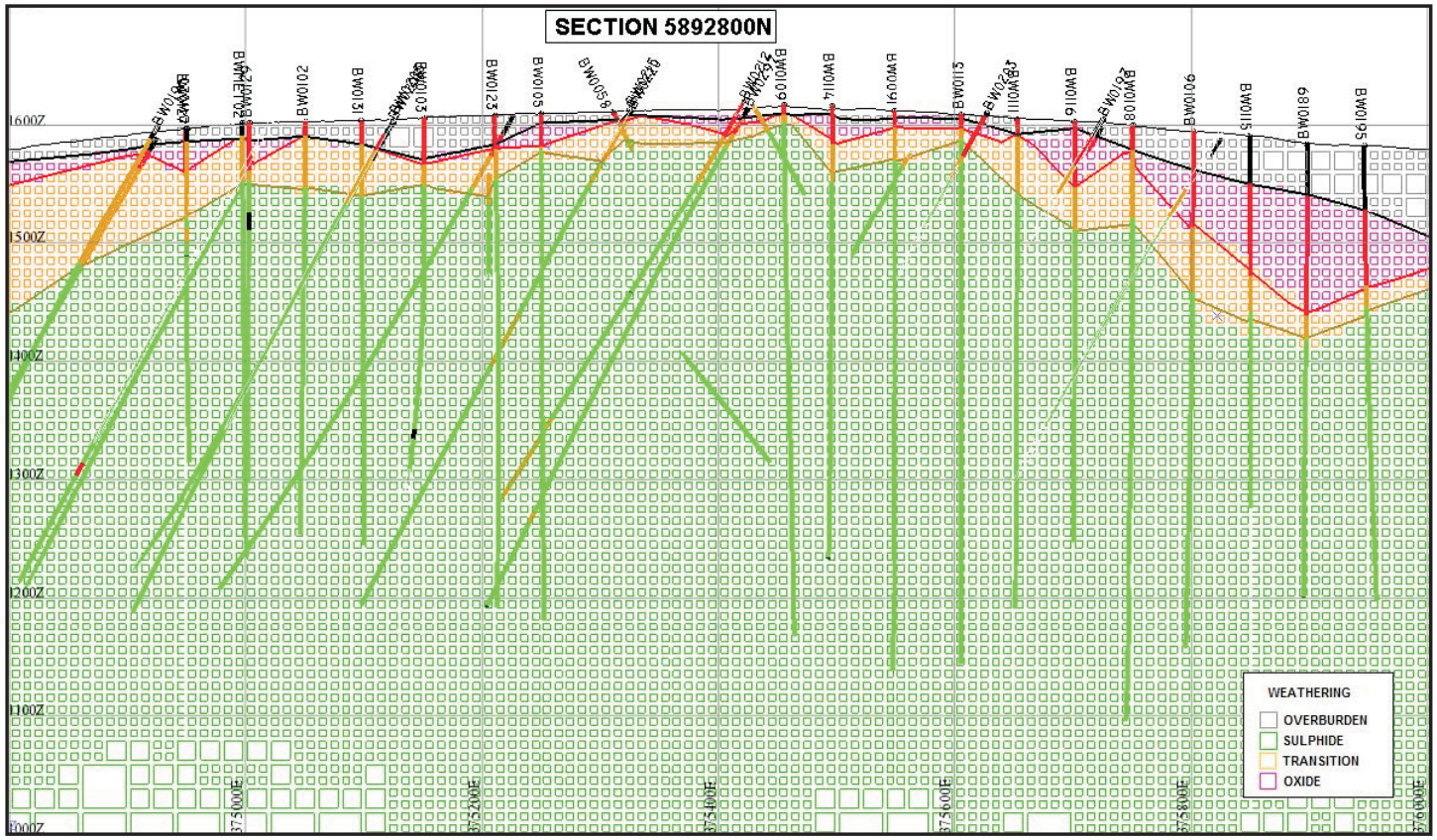


Figure 6: Blackwater Deposit Longitudinal Section (E-W) Showing Glacial Till Thickness

Source: Simpson et al. (2012)

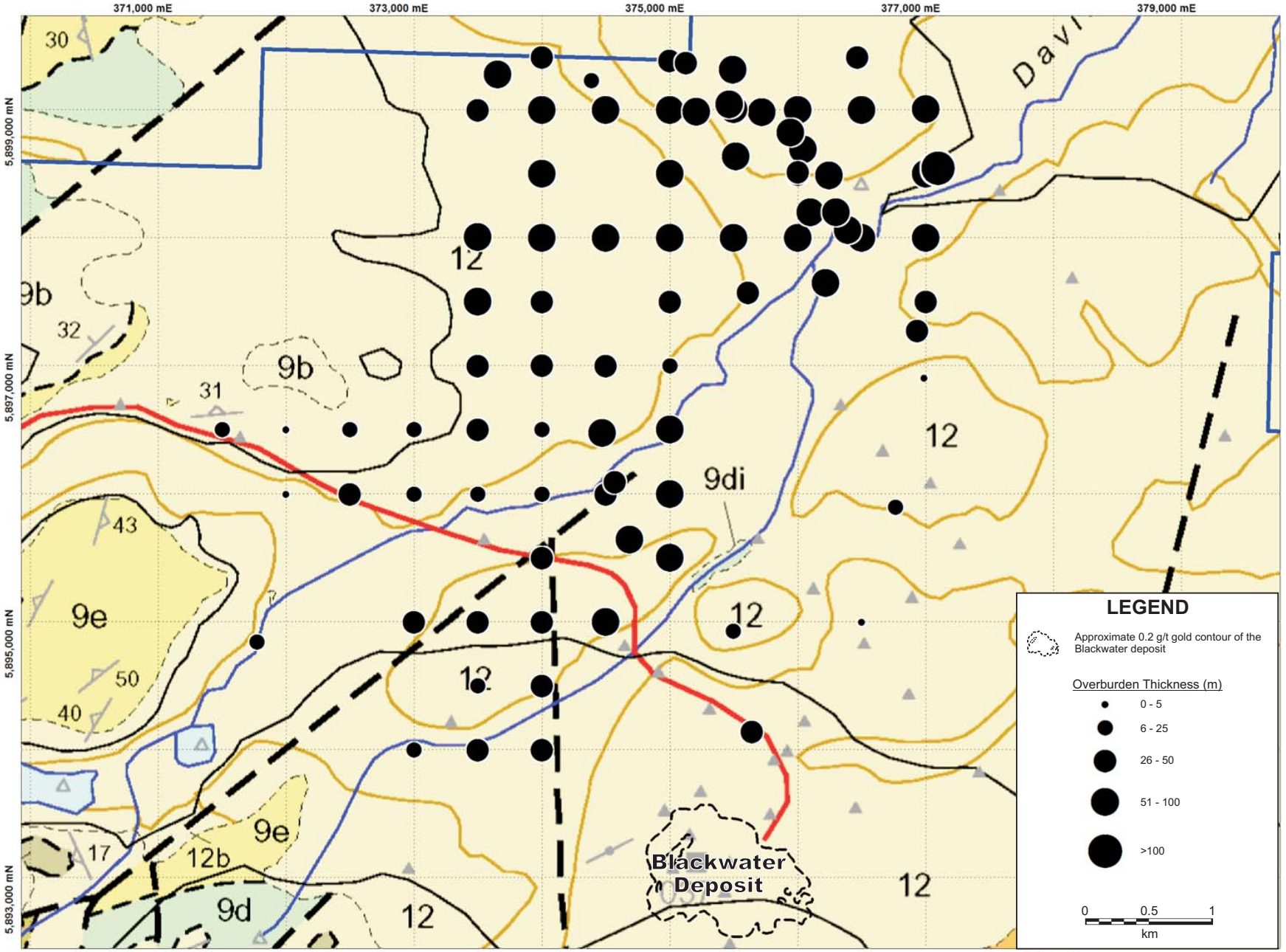


Figure 7: Overburden Thickness in Vertical Condemnation Drill Holes

LOCAL GEOLOGY

Quaternary glacial overburden, colluvial and glaciofluvial deposits mask the majority of bedrock within the Project area. Outcrop on the Blackwater property is sparse and limited to the peak and ridges of Mt. Davidson. Property geology is based on historic and 2009/2010 drill core interpretations. Figures 4, 8 and 9 to 11 depict the Project geology.

The Project is underlain by intercalated volcanic and volcaniclastic felsic to intermediate lapilli and ash tuff, volcanic breccia and andesitic flows. These strata form a local wedge of laterally discontinuous strata. The Blackwater wedge is thought to dip generally northwest and is of limited aerial extent. On the west the Blackwater wedge is faulted against younger massive felsic volcanic rocks of the Ootsa Lake Group. The fault is a north trending, presumed steep dipping structure. A similar relationship exists on the north side where Blackwater host rocks are also juxtaposed next to Ootsa Lake Group strata across an east-northeast trending fault. Although displacement across the faults is not known, the relative age of rocks across the two faults implies that the Blackwater block is a horst or high standing remnant west and north of which the Ootsa Lake Group dropped to the west and north.

East and south of the Blackwater block, the relationship to the country rocks is unknown but is presumed to be stratigraphic. The Blackwater strata is likely underlain by Bowser Lake Group beds as has been interpreted at Capoose Lake.

The Blackwater wedge consists of a sequence of felsic to intermediate composition volcanic rocks. Individual lithologies include felsic tuffs and lapilli tuffs, volcaniclastic and epiclastic heterolithic breccias, and massive to layered andesites. Dark reddish-brown uniform anhedral garnet crystal fragments up to a cm in diameter are common as an accessory in the heterolithic breccia and locally make up 1-2% of the rock. XRF data on the garnets indicates they are Mn-rich spessartine.

Blackwater wedge rocks are pervasively hydro fractured and silicified. The amount of silica introduced through hydro fracturing and silicification may amount to 25% or more of the total volume of volcanic rocks. Although intensely hydro fractured, the Blackwater wedge lacks clearly recognizable large scale faults or shear zones. Instead, extensive zones of broken rocks are seen in the mineralized zone. The zones grade laterally into unbroken rock and are generally not bounded by planar surfaces.

Outcrops of massive felsic lapilli tuff, assigned to the Ootsa Lake Group, appear on the peak and ridges of Mt. Davidson. This rock is generally darker grey than rocks drilled on the Property, clasts are larger and plagioclase porphyry dominates. This unit is also characterized by fresh, black stubby euhedral doubly terminated quartz crystals up to 1 mm across that commonly make up a few percent of the rock.

At lower elevations near the Kluskus Road, bedded tuffs and sediments of the Jurassic Naglico Formation have been observed.

What is known of the Blackwater deposit has previously been determined exclusively from drilling. Host rocks are not exposed but were thought to occupy a roughly 5 square kilometer area east of a north trending fault, which juxtaposes younger Ootsa Lake Group strata and south of a similar fault north of which the same relationship is hypothesized.

Blackwater has the characteristics of, and is considered to be, an intermediate sulphidation epithermal gold-silver deposit according to the classification system of Sillitoe and Hedenquist (2003). Mineralization is hosted within felsic to intermediate composition volcanic rocks of Late Cretaceous age emplaced through and on Hazelton Group strata. The rocks are extensively hydro-fractured and silicified and are in association with pervasive stock work and disseminated fine grained pyrite and other sulphide minerals distributed throughout. Gold is mainly associated with the sulphide minerals as gold grains between 5 and 50 microns across.

In general, all rocks at Blackwater are mineralized, whether as trace pyrite-pyrrhotite-sphalerite in outboard andesite flows and volcaniclastics, or as gold-bearing polymetallic sulphide mineralization within the fragmental unit of the deposit. The only exceptions are Eocene (?) dacite porphyry dykes intersected along the southern portion of the drilling grid, and amygdaloid mafic intermediate flows in the northern part of the grid, possibly related with the Eocene Ootsa Group.

Mineralized rocks within the main Blackwater resource area can be broadly divided into a thick succession of felsic to intermediate pyroclastic and volcaniclastic rocks, volcanic flows and breccias, and related volcanic and lithic-derived sedimentary units (fine to coarse epiclastic rocks). Whole-rock analysis indicates that these units range from rhyolite to dacite to andesite in composition. The age relationship between all of the intermediate and felsic volcanic units at Blackwater has not been entirely understood, but the locally observed progressive inter-bedding of these units within the deposit implies there is likely a temporal relationship.

Disseminated Au-Ag mineralization is defined by an east-west-trending tabular-conical shaped deposit with a lateral extent of up to 1,250 m east-west by 1,000 m north-south. Mineralization remains open at depth in the southwestern portion of the deposit as well as to the north and northwest. The center of the Blackwater deposit has an average thickness of 350 m with a vertical extension of up to 600 m where open. The overall volume plunges shallowly to the north and northwest with inferred steep, north-plunging higher-grade mineralized shoots measuring tens of meters thick, likely influenced by near-vertical structural intersections.

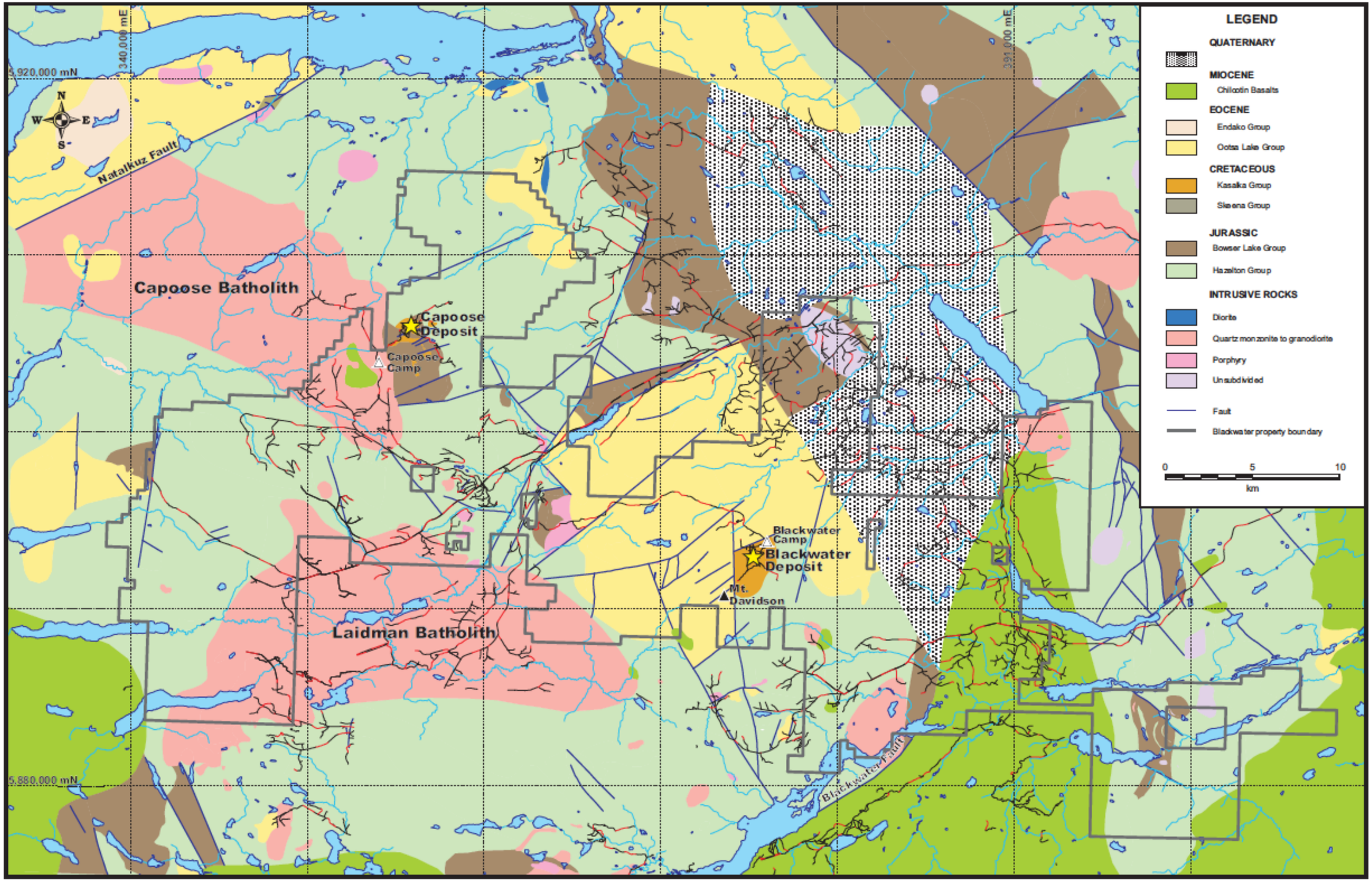


Figure 8: Geology of the Blackwater Area
Modified from Massey et al. (2004)

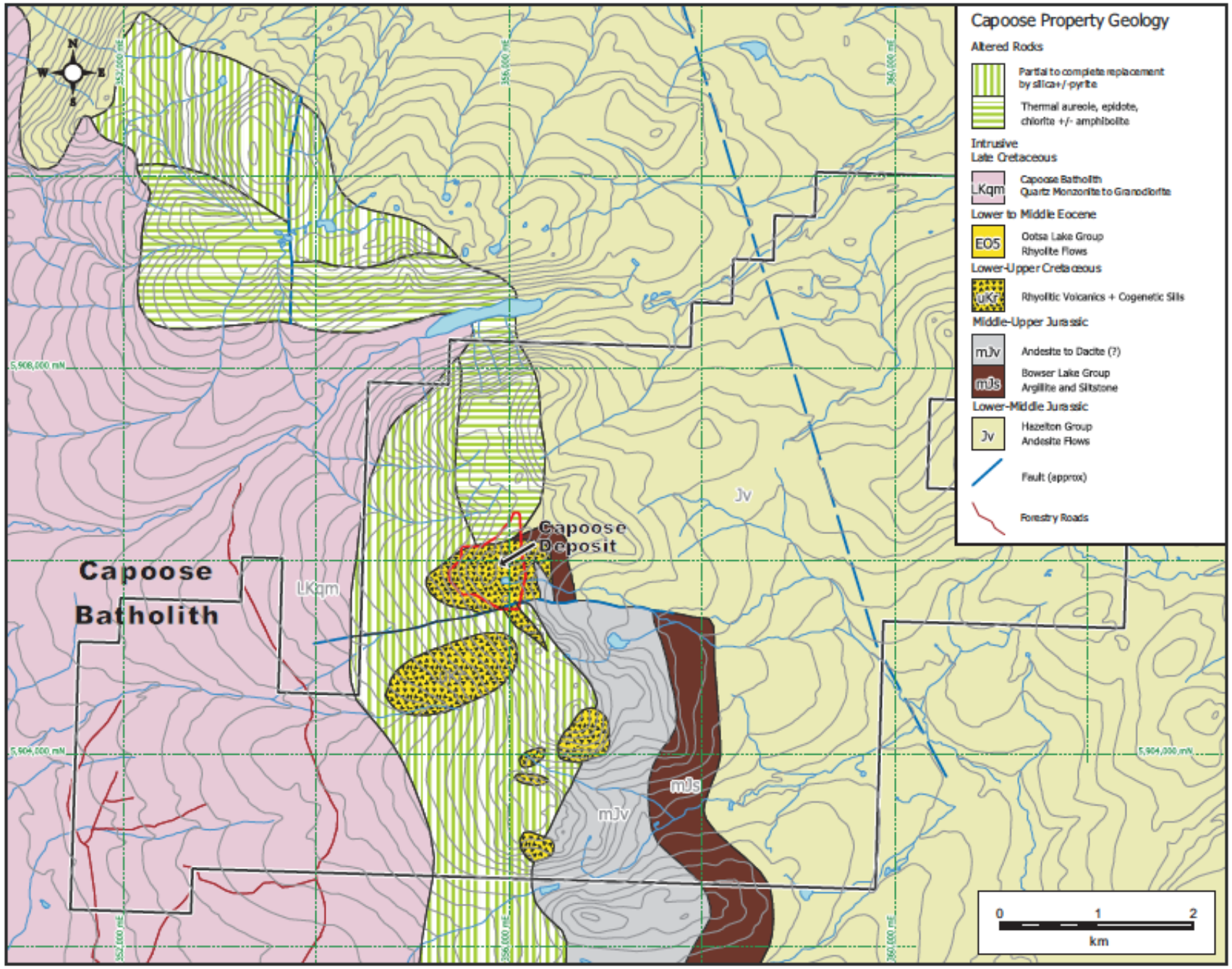


Figure 9: Geology of the Capoose Area

Modified from Awmack et al. (2010)

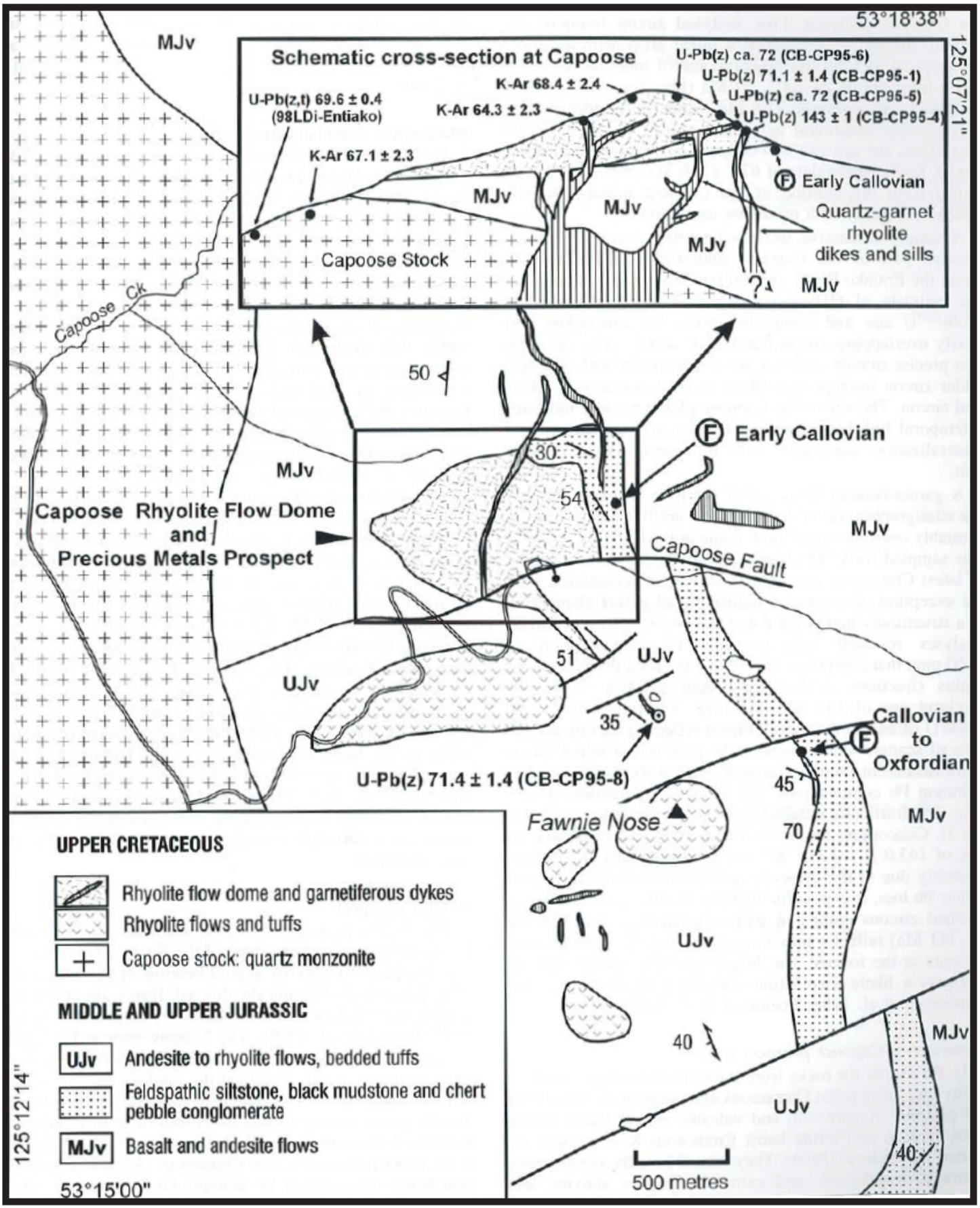


Figure 10: Detailed Geology of the Capoose Deposit

Source: Friedman et al. (2001)

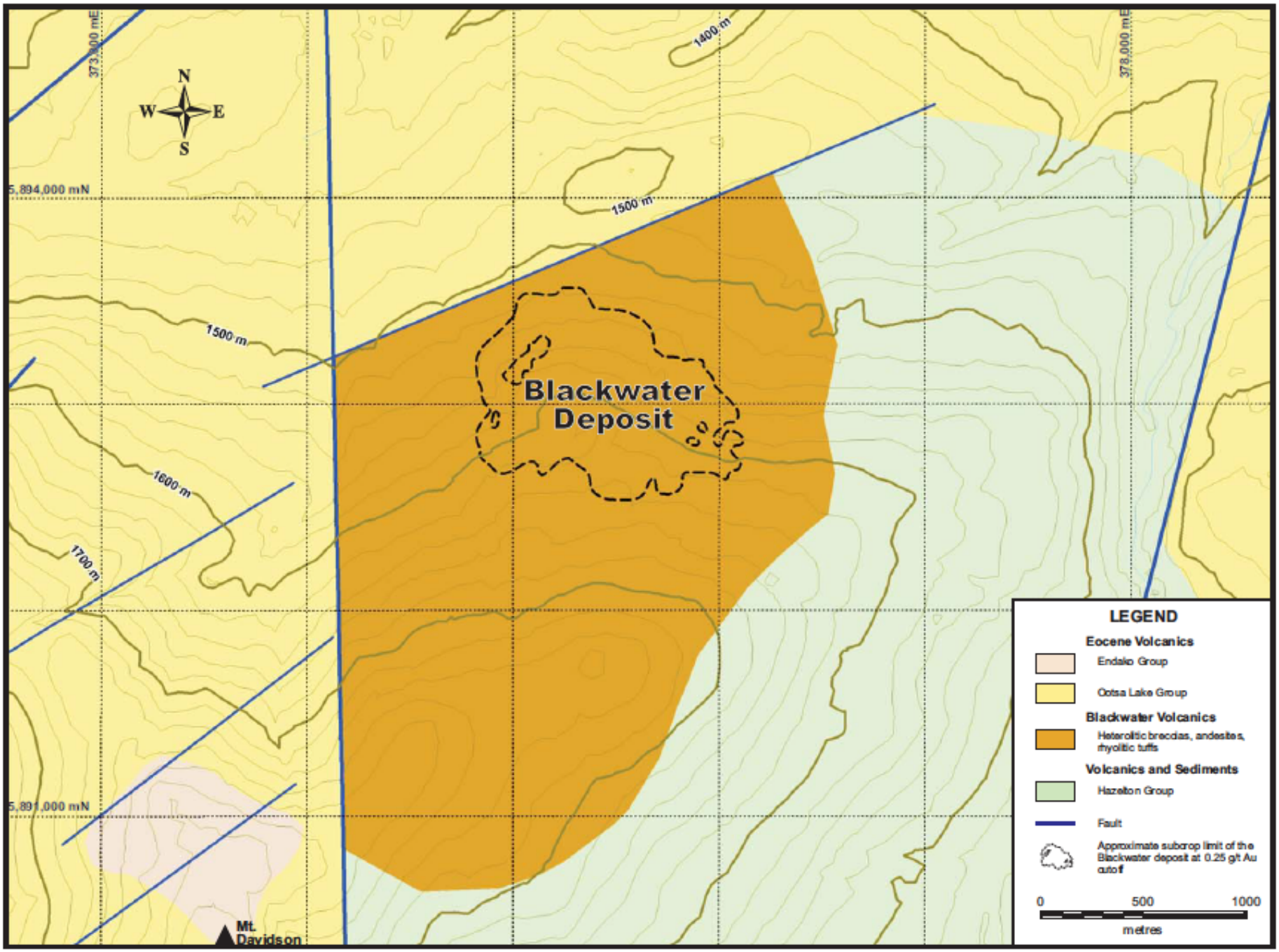


Figure 11: Geologic Setting of the Blackwater Deposit
Modified from Massey et al. (2004) by Simpson et al. (2012)

Gold-silver mineralization is associated with a variable assemblage of pyrite-sphalerite-marcasite-pyrrhotite ± chalcopyrite ± galena ± arsenopyrite (± stibnite ± tetrahedrite ± bismuthite). Sulphide and gangue mineralogy along with sericite alteration is reasonably characteristic of an intermediate sulphidation regime as defined by Sillitoe and Hedenquist (2003). However, pervasive silicification is more typical of high-sulphidation deposits and minor carbonate gangue of a low-sulphidation environment.

Sulphide mineralization at Blackwater can be divided into the following types:

(i) Disseminated **-** as pinhead to coarse blebby sulphide grains and aggregates typically ranging from 1% to 5% total volume of the rock, but locally exceeding this volume. Disseminations may be uniform or irregular, with sulphides displaying an anhedral to euhedral crystal form.

Disseminations of a dark-grey, very fine-grained sulphide material called "dendritic-black-sulphide" (DBS) is common at Blackwater and may form as fine disseminations to coarse clusters, as thicker coatings to fractures, or as an irregular network of ―dendritic‖ micro-cracks within the rock mass.

(ii) Porosity infill - sulphides fill, rim, or replace devitrified pyroclasts, tephra, and juvenile pumiceous material. Sulphides also commonly form parallel to compositional layering and laminations within felsic pyroclastic flows and laminated tuff units. Mineralized amygdules and altered feldspars are also observed in the andesite flow units.

(iii) Vein - polymetallic, anhedral to euhedral sulphide assemblages in sub-millimetre to centimetre-scale polymetallic veinlets-veins of quartz-sericite-chlorite-clay (illite) ± (iron) carbonate ± tourmaline ± vivianite.

(iv) Hydrothermal brecciation and related silicification - centimetre to metre-scale zones of hydrothermal brecciation, alteration, and elevated sulphide content. These breccia zones are typically healed with silica-sericite-sulphide cement and cut by a micro-stockwork of vitric quartz ± sulphide veinlets.

(v) Structure-related (late?) - sulphides crushed to comminuted in brittle fault breccia and gouge. Hydrothermal alteration (and possibly contact metamorphism) has produced several superimposed alteration assemblages, including pervasive silica-sericite-clay (illite) ± biotite alteration and veinlet/fracture-controlled silica-sericite-chlorite-clay ± iron carbonate ± tourmaline. An early (?) biotite silica-albite±chlorite/actinolite hornfelsing event may have been significant, although mineralization in these rocks appears to be lower than in units without evident hornfelsing. Visible native gold has been noted in some drill holes.

Secondary quartz occurs in several modes:

- Pervasive, amorphous to translucent silicification with associated illite ± sericite. Commonly holes display intense silicification of felsic units, epiclastics, and more intermediate volcaniclastic rocks with biotitic alteration of the matrix (hornfels).

- Cryptocrystalline silica replacements in felsic ash-tuff layering

- Silica cement/matrix to local hydrothermal brecciation

- Sub-millimeter vitric quartz veinlets in zones of intense silicification; commonly as a micro stock work.

Due to a general lack of outcrop, all previous geological interpretations have been previously based on drill information.

EXPLORATION PROGRAM

New Gold contracted Overburden Drilling Management Limited (ODM) to plan and execute the survey, including training New Gold personnel in sample collection procedures, and to process the collected samples for indicator minerals. The initial program for the Blackwater property proposed the collection of ~400 samples, including both till samples from hand-dug shovel pits in areas of thin cover and gravel samples from natural sediment traps in first and second-order stream drainages at high elevations. The program was designed primarily to give reconnaissance-level exploration coverage of prospective areas surrounding the Blackwater deposit but also included closer-spaced orientation sampling over the deposit and some regional sampling beyond the deposit area. The program was later expanded to include similar sampling around the Capoose deposit in 2013.

The sampling was conducted between June 10 2012 and October 20, 2013. In total, 504 till samples and 79 alluvial gravel samples were collected. Of these, 252 till and 33 gravel samples were obtained from the Blackwater sector and 252 till and 46 alluvial gravel samples were obtained from the Capoose sector of the property. The geographic coordinates of the till sample sites are listed in Tables 4 & 6, the locations of these samples in relation to the underlying bedrock geology as mapped by Green & Diakow (1993) are shown in Figures 12 & 14, respectively. Corresponding data for the gravel samples are presented in Tables 5 & 7, Figures 13 & 15, respectively. Of the 226 contiguous claim titles owned by New Gold, the investigation area included 123 of the claim titles.

Of the 252 till samples in the Blackwater sector, ~60 percent were reconnaissance samples from a 7 x 10 km area around the Blackwater deposit. These samples were typically collected at ~300 m spacing along traverses 1 to 1.5 km apart (Fig. 12), or a density of 2 to 3 samples per km2. The traverses were oriented NW-SE, roughly orthogonal to the 060º transport direction of the till (Fig. 4). Limited regional sampling at 1 to 5 km centers was conducted further from the Blackwater deposit. An orientation program comprising 36 till samples at 300 x 500 m spacing, or a density of ~6 samples per km2, was conducted over the deposit to test the indicator mineral response both up-ice and down-ice as a guide to interpreting the results from the other samples. A significant anomaly identified 1.5 km to the northwest was followed up with 16 infill samples at 100 x 200 m spacing.

Of the 252 till samples in the Capoose sector, ~50 percent were reconnaissance samples from a 7 x 10 km area around the Capoose deposit. These samples were typically collected at ~300 m spacing along traverses 1 to 1.5 km apart (Fig. 13), or a density of 2 to 3 samples per km2. The traverses were oriented NW-SE, roughly orthogonal to the 060º transport direction of the till (Fig. 4). Two infill lines totaling 40 samples were added immediately up-ice and down-ice from the Capoose deposit to close the line spacing here to 500 m with the objective of obtaining benchmark data for interpreting possible anomalies in the other samples. Limited regional sampling at 1 to 4 km centers was conducted further from the Capoose deposit. A significant gold grain anomaly identified in Sample 108 approximately 2.5 km up-ice from the deposit was followed up with 16 infill samples at 200 x 500 m spacing. Based on the results obtained from these samples, eight additional infill samples were collected at 100 x 150 m spacing.

The 46-sample alluvial gravel survey comprised 34 widely-spaced regional samples and 12 orientation samples collected up to 4 km downslope along streams draining both northeast and southwest from the area of the Capoose deposit (Fig. 15).

ODM, with input and assistance from New Gold, chose the sample sites, dug and sampled the till pits and collected the alluvial gravel samples. ODM's field personnel at various times during the program were Donald Holmes, P.Geo., Peter Collins, P.Geo., Stephen Keays, P.Geo. and geotechnician Bohdan Rudnicki. New Gold's personnel included geologists Robin Whiteaker, Todd Wikjord and Scott Caldwell, geotechnicians Tom Mikaluk and Hayley McIntosh and various assistants.

At its Ottawa laboratory, ODM (a) processed both the till and gravel samples to extract the heavy mineral fraction where the indicator minerals reside; (b) searched the heavy mineral concentrates by binocular microscope for grains of these minerals; (c) sieved the fine, -0.063 mm silt + clay fraction from a subsample of each till sample, but not from the fines-depleted gravel samples, and forwarded it to Actlabs Limited ("Actlabs") in Ancaster, Ontario, for geochemical analysis to check for possible chemically scavenged elements commonly associated with sulphide mineralization but not represented by indicator minerals due to the oxidized condition of the till and the high susceptibility of most sulphides to oxidation; and (d) interpreted the indicator mineral and geochemical data. Remy Huneault, P.Geo., supervised the sample processing, A team of six geologists and one assistant performed the indicator mineral logging. Donald Holmes, P.Geo., Stuart Averill,

P.Geo. and Kenzie MacNeil, P.Geo. interpreted the data and wrote the final report. David Hozjan, P.Geo. and Michael Michaud, P.Geo. drafted the illustrations and coordinated production of the ODM reports prepared for New Gold.

Till Sampling

The sites for the till sample pits were preselected using topographic and geology maps and satellite imagery, and the UTM coordinates of the sites were loaded into GPS receivers. However, the actual locations of most of the pits were adjusted in the field in order to obtain till of the desired quality, and new UTM coordinates were recorded for every site (Table 1). In particular, sites were shifted to avoid patches of melt water-sorted glaciofluvial sand and gravel and to sample the till blanket between drumlins rather than the thicker till on the drumlin crests. The sample pits were dug with a hand shovel, grub-hoe and auger to a depth of approximately 1 m, typically passing through a surface veneer of bouldery supraglacial till overprinted by highly oxidized B-horizon soil to reach sub glacially deposited till at the less oxidized C-horizon level.

All sample pits were logged, describing the sediment and soil type and character, sample interval, topography and the geology of the nearest rock outcrop (Appendix A). The till excavated from the lower part of the pit was roughly hand screened on site at 8 mm to remove most of the large clasts. Approximately 12 kg of -8 mm material, along with a representative handful of the larger clasts, was packed in a heavy-duty, 30 x 50 cm plastic bag. The 12 kg sample size was based on ~10 kg of -2 mm sand matrix being required for indicator mineral processing and ~15 percent or 2 kg of the collected material being granules and small pebbles between 2 and 8 mm. The sample bag was labeled on both sides with the sample number and sealed with a cable tie. At the Blackwater and Capoose camps, two such samples were packed in a protective 20-litre plastic shipping pail with a secure lid. A local contractor delivered the pails to Prince George from where they were trucked by Manitoulin Transport to ODM's Ottawa processing laboratory.

The till samples were prefixed BWT-12 (for Blackwater Till, 2012) and were numbered consecutively from 001 to 504 in the sequence collected, irrespective of whether they were obtained from the Blackwater or Capoose sectors of the property.

Gravel Sampling

The alluvial gravel sample sites were preselected in the same manner as the till sites, focusing on small, first and second order drainages at high elevations where the probability of active stream erosion of till and bedrock is greatest. As in the till survey, the UTM coordinates of the proposed sample sites were loaded into GPS receivers but most sites were adjusted in the field (Table 2) both to simplify access and locate clean gravel deposited in a high-energy environment. The gravel samples were collected by shovel from sediment traps, variably behind and between boulders, under bedrock ledges and from braid bars, focusing on the centre of the stream (Figure 18) and avoiding any entrained bank material and silt or very fine sand.

The sample sites were sketched and logged (Appendix B), describing the material sampled, the local topography and exposed surficial sediments and the stream order, width, velocity and gradient. The gravel was screened on site at 2.4 mm, considerably finer than the 8 mm used for the till samples, both because gravel is easier to screen and sufficient water to aid the screening process was available in most of the streams. The 2.4 mm sieve size was very close to the 2 mm size used in the laboratory; therefore the sample size was reduced from ~12 kg to ~10 kg. The samples were prefixed BWS-12 (for Blackwater Stream, 2012) and were numbered consecutively from 001 to 081 in the sequence collected irrespective of whether they were obtained from the Blackwater or Capoose sectors of the property except that, inadvertently, no gravel samples numbered 064 or 065 were collected. All samples were packaged and shipped in the same manner as the till samples.

Laboratory Procedures

The till and gravel samples were processed by ODM to concentrate the heavy mineral fraction where the indicator minerals reside, and a subsample of the till samples but not of the gravel samples was sieved to extract, for geochemical analysis at Actlabs, the fine, -0.063 mm silt + clay fraction which contains secondary minerals that tend to adsorb metals leached from the primary sulphide minerals, most of which are readily oxidized and thus unusable as physical indicators. The processing and analytical procedures are detailed below.

Extracting the Heavy Mineral Fraction of the Till and Gravel Samples

Prior to extracting the heavy minerals from the till and gravel samples, two 500 g character splits were taken, one of which was archived and the other, from the till samples only, was used for fine fraction geochemical analysis. The remaining material, typically 8 to 10 kg, was wet screened at 2.0 mm to separate the clasts from the matrix. The major clast lithologies were recorded (Appendix B) and the clasts were archived. The -2.0 mm matrix was then processed using the procedures shown in Figure 16.

The procedures were designed to: (a) progressively reduce the size of the sample by rejecting quartz, feldspar and other low-density minerals; (b) expose any gold grains that are present; and (c) obtain a pure, 0.25 to 2 mm heavy mineral fraction that contains any grains of this size of the other desired indicator minerals and is of a sufficiently small size to allow visual identification of these grains. The processing was performed in 20-sample batches with separate batches for till and gravel samples. For all samples, the lower S.G. cut-off for the final heavy mineral concentrates was 3.2 but a mid-density fraction between S.G. 2.8 and 3.2 was also prepared for the first batch of till samples to test for possible grains of the supergene minerals jarosite and alunite which are of a variable but mostly moderate density.

The first step in extracting the heavy minerals from the sample matrix was the preparation of a primary concentrate using an ODM-customized Deister shaking table. The granulometry and colour of the matrix were recorded as the sample was tabled (Appendices C, D, K, L). The table concentrate was purposely large (typically 300-400 g) and of low grade (5-10% heavy minerals) in order to achieve a high, 80 to 90 percent recovery rate for all desired heavy minerals irrespective of their grain size or differences in specific gravity. The next step was the extraction of a pure, S.G. >3.2 concentrate (Appendices E, F) from the 0.25 to 2 mm fraction of the primary table concentrate. The primary concentrate was sieved at 0.25 mm, its -0.25 mm fraction was archived and the +0.25 mm fraction was separated in methylene iodide of S.G. 3.3 diluted by acetone to 3.2. Undesirable magnetite was then removed from the S.G. >3.2 heavy liquid concentrate using a plunger magnet, leaving a pure, 0.25 to 2 mm, non-ferromagnetic heavy mineral concentrate (HMC) potentially containing the indicator minerals of interest other than the fine gold grains.

The S.G. 2.8 to 3.2 mid-density concentrates of the 20-sample test batch (Appendix G) were obtained by re-separating the 0.25 to 2 mm fraction of the primary table concentrates in methylene iodide further diluted to S.G. 2.8.

Most of the mineral grains in oxidized till and gravel are significantly stained with limonite which tends to mask their identity. Therefore the HMCs were deoxidized with a mild oxalic solution. To further sort the heavy minerals and ease the identification of any grains of indicator minerals, the HMCs were sieved into three size fractions – 0.25 to 0.5, 0.5 to 1 and 1 to 2 mm (Appendices E, F). As well, the 0.25 to 0.5 mm fraction, which contained the most mineral grains, was separated electromagnetically at three different amperage settings into four fractions of differing paramagnetic susceptibility – non-paramagnetic (>1.0 amp) and weakly (0.8-1.0 amp), moderately (0.6-0.8 amp) and strongly (<0.6 amp) paramagnetic – resulting in a total of six fractions requiring indicator mineral identification. The S.G. 2.8 to 3.2 mid-density concentrates of the 20-sample test batch were cleansed with oxalic acid and sieved into the same three size fractions (Appendix F) but an electromagnetic separation was not performed on the 0.25 to 0.5 mm fraction.

Identifying and Recording Indicator Minerals

Each of the six-particle size and paramagnetic susceptibility fractions of the HMCs was thoroughly searched by an experienced exploration geologist for indicator mineral grains using a binocular microscope with simulated daylight illumination to maintain the natural colours of the minerals. The number of grains of each identified indicator mineral in the 0.25 to 0.5 mm particle size range, or its percentage if abundant, was recorded, as shown in the Table 4 example for the first four till samples from the Blackwater sector and detailed in Appendix J for all of the till samples and Appendix K for the gravel samples. For the key mineral species, either all of the grains or a representative number were “picked” – i.e. removed from the concentrate and vialed – from each of the 0.25 to 0.5, 0.5 to 1 and 1 to 2 mm fractions. The number of grains picked from each fraction was carefully recorded, and separate vials were used for each particle size of each indicator mineral.

The contents of each vial were clearly labeled and the vials were organized systematically by grain size and mineral species in custom designed vial boxes, forming a complete indicator mineral library for the project. Grains of uncertain mineralogy were resolved by semi-quantitative x-ray analysis using a scanning electron microscope (SEM), then vialed. The results of these analyses were also recorded. Similar procedures were used to determine the indicator mineralogy (Appendices G, H) of the 20-sample test batch of S.G. 2.8 to 3.2 mid-density concentrates.

In order to gauge the overall provenance of the till or gravel and hence of the probable provenance of the indicator minerals, the major background mineral suite or "assemblage" of each HMC was systematically recorded. The assemblage was established by listing, in order of prominence, minerals comprising >15 percent of the paramagnetic (<0.8 amp) component of the 0.25 to 0.5 mm fraction of the HMC followed by minerals comprising >15 percent of the corresponding non-paramagnetic (>1.0 amp) component which was generally only one-fifth as large as the paramagnetic component. For example, the assemblage for the first till sample from the Blackwater sector was reported as hematite-goethite-spessartine/epidote, indicating that the paramagnetic part of the HMC was dominated by hematite but also contained considerable goethite and spessartine garnet whereas the only major non-paramagnetic mineral present was epidote. Moreover, this epidote must have been very pale green, white or pale orange as only these Fe-poor varieties are non-paramagnetic; common pistachio-green epidote collects in the neutral 0.8 to1.0 amp fraction and thus is not recorded in the mineral assemblage.

Extracting and Analyzing the -0.063 mm Till Fines

The second 500 gram split that had been reserved from each till sample for fine-fraction geochemical analysis, or a 25 or 50 percent sub-split in the case of the finest-grained till samples, was dry-sieved to remove its -0.063 mm silt + clay fraction (Appendices I, Q). The sieving was done to completion, i.e. until no more material passed through the sieve, not just until the minimum 10 grams of fines needed for geochemical analysis were obtained. The till samples, having a relatively high silty rock flour content, typically yielded 25 to 50 percent fines. The alluvial gravel samples were not sieved but probably contained <10 percent fines.

Sieving the samples to completion is necessary on gold exploration programs in order to obtain a representative product. The shaking motion used in sieving resembles the motion of gravity concentrators, and tests conducted by ODM have demonstrated that the heavy gold particles preferentially filter downward through the bed load to the sieve and pass through it. If the sieving time is short, therefore, most of the gold grains but only a small portion of the low-density quartz and feldspar will have passed through the sieve, and analyzing the recovered fines will give a high, biased gold value, potentially generating an anomaly even if only background levels of gold grains are present in the sample.

The sieved fines from the till samples were placed in two vials, one large and the other small, and submitted to Actlabs for geochemical analysis. The large vial, containing up to 40 grams of fines depending on their density, was analyzed for a package of 34 elements by the instrumental neutron activation (INA) method with no milling or acid digestion. Of these 34 elements, Au and As are quantitative with suitable detection limits of 2 ppb and 0.5 ppm, respectively, but most of the others are either too qualitative to be useful or of limited exploration interest. The smaller vial, containing ~5 grams of fines, was analyzed quantitatively for a suite of elements other than Au and As that are commonly associated with gold and base metal deposits – namely Ag, Cu, Pb, Zn, Ni, Cd, Mo, Mn and S – by inductively coupled plasma/optical emission spectrometry following aqua regia acid digestion (AR-ICP/OES). No milling was required prior to acid digestion due to the very fine particle size. Complete analyses for the till samples are presented in Appendices J and R.

Quality Control and Assurance

No duplicate samples were taken to assess the quality and reproducibility of the indicator mineral data, mainly because ODM both collected and processed the samples, precluding an independent test. However, ODM's indicator mineral recovery rates are known from frequent blind tests to be consistently in the 80 to 90 percent range. The quality of the heavy mineral separation and the overall mineralogy of the concentrate is visible at every stage of the concentration process, minimizing the potential for sample mix-ups and indicator mineral carryover between samples or other sample contamination issues. For example, gold grains which are the most important indicator mineral on many surveys including Blackwater, are more susceptible to inter-sample carryover than any other indicator mineral due to their very small size, but these grains are physically observed during the first stage of mineral concentration – tabling – and, if anomalous concentrations are present, blank samples are tabled and carefully inspected for gold grains before the next project sample is processed.

While no field duplicates were collected, a twin till sample, No. 199, was taken from a pit a few meters from the pit where Sample 15 was collected because the first sample had yielded only 26 gold grains and several neighboring samples had yielded >100 grains. The twin sample gave a similarly low, 36-grain response, confirming the original result.

To check Actlabs' analytical precision on the -0.063 mm till fines, duplicate aliquots from eight samples from the Blackwater sector of the property – Nos. 002, 042, 044, 049, 130, 200, 247 and 280 – were submitted for analysis as Samples 006B, 022B, 064B, 098B, 133B, 209B, 247B and 286B, respectively (Appendices J, R). In addition, 17 aliquots of a natural ODM till standard known to be weakly anomalous in gold and most of the other metals of interest were submitted for analysis as Samples 001B, 019B, 038B, 076B, 114B, 152B, 190B, 228B, 277B, 297B, 305B, 342B, 375B, 417B, 450B, 479B and 504B.

Actlabs' geochemical analyses for both the duplicate and standard samples generally show very good reproducibility and little deviation in the elements of interest, giving a high degree of confidence in the analyses for the project samples. Often only one aliquot of the duplicate samples showed detectable Au suggesting that a small gold grain was present in this aliquot but not in the other aliquot. In the standard sample, most of the analyses for the first ten aliquots were, as expected, weakly anomalous, averaging 11.8 ppb whereas those for the final seven aliquots were all sub-anomalous at <2 ppb. Further investigation revealed that ODM had sieved the two sets of aliquots from two separate batches of the standard sample. The sample is known to contain fine gold grains and the significant gold variance between batches indicates that the sample was not blended sufficiently to homogenize the gold before removing these batches.

Program Costs

The sampling program originally planned for the property envisioned the collection of 400 till and gravel samples, mainly in the Blackwater sector. ODM and other contractor costs for this program were budgeted at $297,300, or $743.25 per sample, including planning, travel, field work, training of New Gold field personnel, sample processing and analysis, data interpretation, interim reports and a comprehensive final report but excluding on-site camp costs, occasional helicopter use, prepaid sample shipping and any services provided by New Gold personnel. A separate budget of $100,300 was subsequently prepared for a second phase of sampling centred on the Capoose deposit and based on collecting 143 samples and providing the same services. Later, a further 40 samples were added without revising the budget, raising the project total to 583 samples.

The costs of preparing the Blackwater and Capoose reports were tracked separately but field, sample processing and analytical costs were prorated according to the number of samples collected in each area because sampling was conducted simultaneously in both areas, resulting in an intermixed sample series. Prorated final contract costs for the 285 samples collected in the Blackwater sector were $252,722, or $886.74 per sample, 19 percent more than the budgeted $743.25.

TILL INDICATOR MINERAL SURVEY RESULTS

Major Heavy Minerals

The minimum practical size for visually identifying most indicator minerals other than gold grains is 0.25 mm. Heavy minerals coarser than the 0.25 mm are not abundant in the till on the Blackwater property, typically aggregating only 2 to 10 grams (Appendices E, F, M, N) and representing <0.1 percent of the 8 to 10 kg of processed -2 mm sample matrix (Appendices B, C, K, L). This reflects the unmetamorphosed condition and consequent fine grain size of the underlying volcano-sedimentary rocks. In metamorphic terrains, coarse heavy minerals are typically ten times as abundant because metamorphism increases grain size through high-temperature recrystallization and, due to the associated high pressure, also raises rock density that is accommodated by the crystallization of higher-density mineral species. For example, fine-grained, low-density chlorite is transformed into coarser-grained, higher-density hornblende, pyroxene and garnet.

The ferromagnetic portion of the 0.25 to 2 mm Blackwater HMCs, which consists entirely of magnetite since the till is oxidized and thus devoid of pyrrhotite, typically weighed <1 gram and represented <20 percent of the total HMC. Within the other, non-ferromagnetic portion of the HMCs, the major non-indicator minerals occurring at a concentration >15 percent, i.e. those defining the background mineral assemblage (Tables 8 and 11), are generally limited to epidote, ilmenite, goethite and hematite.

Epidote is ubiquitous because it is a universal constituent of the volcanic rocks due to significant saussuritization of plagioclase. The ilmenite and hematite are probably derived mainly from the basaltic volcanics, as is the magnetite. The paucity of these Fe-rich minerals probably reflects the Fe-poor composition of both the early, arc-related, calc-alkaline and later, alkaline, Chilcotin Group basalts.

The goethite in the till probably reflects both local preglacial oxidation of hypogene pyrite mineralization in the bedrock, such as that in the supergene cap at the Blackwater deposit (Fig. 6), and major post-glacial oxidation of the dispersed pyrite grains in the till as most samples yielded either no pyrite or just one or two grains (Tables 8 and 11). As previously noted, only two sulphide minerals – molybdenite and cinnabar – wholly survive in weathered till and the only other sulphide mineral that survives to a significant extent is chalcopyrite. Only one molybdenite grain was found in the 252 till samples from the Blackwater sector of the property, probably because no samples were collected down ice from the Capoose Batholith (Fig. 14) which hosts the known molybdenum occurrences (Awmack et al. 2010). Cinnabar, which like gold is of a high specific gravity and occurs mainly as silt-sized grains, was found in ten samples, typically at a concentration of just one to two grains per sample (Tables 8 and 11) but reaching six grains in one of the widely-spaced regional samples on the northeastern edge of the survey area. Chalcopyrite grains are rare, occurring in only three scattered samples at very low levels of just one to three grains per sample (Tables 8 and 11). No grains of the less resistant sulphide minerals sphalerite and galena were found.

Background Levels of Indicator Minerals

As previously explained, the main indicator minerals expected in the till on the Blackwater property were: (a) gold, spessartine garnet and possibly chalcopyrite and supergene jarosite from the Blackwater and Capoose Au-Ag deposits; (b) possible gahnite from the Capoose deposit if it lies within the hornfels zone bordering the Capoose Batholith (Fig. 10) or from other, similarly situated Zn-bearing mineralized zones; (c) andradite garnet from the propylitic alteration zone that roughly coincides with the above hornfels zone and from possible skarns in the neighboring minor carbonate horizons of the Naglico Formation; and (d) olivine from phenocrysts in outliers of the Chilcotin Group flood basalts. All of these minerals were encountered, mainly in predictable locations.

As previously noted, negligible chalcopyrite was found. Two of the other potential indicator minerals, gahnite and jarosite, also occur only in low concentrations. Gahnite was found in only two till samples, with four grains in one and two in the other. Its paucity appears to be due to the samples being collected southeast of and thus glacially across-ice from the Capoose Batholith as till samples collected down-ice from the batholith in the Capoose survey area yielded up to 10,000 gahnite grains (Holmes et al. 2013).

Jarosite, as noted, is a mid-density mineral and was not found at sufficient levels in the initial 20 test samples, which were collected close to the supergene-capped Blackwater deposit (Fig. 6), to justify preparation of mid-density concentrates from the other 232 till samples. The maximum jarosite concentration attained in the test samples was just 100 grains (Appendix F) in Sample 001 which was collected directly over the Blackwater deposit. This suggests that most of the pyrite in the supergene cap of the deposit was oxidized to goethite instead of jarosite, possibly due to an insufficiently arid preglacial climate.

The other four expected indicator minerals – gold, spessartine, andradite and olivine – all reach highly anomalous levels in the Blackwater sector, as does another unexpected mineral, chromite. The background level for each of these minerals is near zero, resulting in unusually sharp definition of their dispersal trains. However, the two garnets – spessartine and andradite – are so similar visually that if one is abundant the other can be difficult to recognize. Andradite, for example, was not recognized visually in the first 173 samples that were processed, most of which were collected near the Blackwater deposit with some yielding >10,000 spessartine grains, but a few andradite grains were identified by x-ray analysis in SEM checks of garnet populations that seemed visually to consist entirely of spessartine.

Abundant and visibly obvious andradite grains were first noted in Sample 184 from the Capoose sector which contained ~8000 grains (Holmes et al. 2013). Both garnets tend to occur as irregular grains rather than euhedral crystals, reflecting the relatively low temperature and pressure conditions at which they crystallized, but the spessartine grains are orange-brown (Fig. 17a) and the andradite grains are paler yellow-brown (Fig. 17b). After these color differences were recognized, the two garnets were routinely differentiated and low concentrations of andradite – up to a few tens of grains – were found in some of the infill samples collected in the Blackwater sector where only spessartine had been recognized in the early reconnaissance samples.

Indicator Mineral Anomalies

The gold, spessartine, andradite, olivine and chromite anomalies identified in the Blackwater sector of the property are discussed in the following sections. In cases where two or more of these minerals define a single anomaly, they are discussed together.

Table 4: Geographic Co-ordinates of the Blackwater Till Samples

Sample Number	Easting	Northing	Sample Number	Easting	Northing	Sample Number	Easting	Northing
BWT-12-001	375380	5893011	BWT-12-051	372290	5897681	BWT-12-101	376004	5892420
BWT-12-002	375608	5892824	BWT-12-052	372080	5897806	BWT-12-103	376150	5892148
BWT-12-003	375837	5892607	BWT-12-053	371481	5898460	BWT-12-109	380643	5891322
BWT-12-004	374857	5892797	BWT-12-054	371965	5897923	BWT-12-116	376044	5890239
BWT-12-005	374628	5893010	BWT-12-055	374379	5895463	BWT-12-117	375819	5890453
BWT-12-006	375169	5893186	BWT-12-056	373395	5898577	BWT-12-118	375615	5890688
BWT-12-007	374950	5893435	BWT-12-057	373125	5898807	BWT-12-119	375393	5890886
BWT-12-008	374193	5893390	BWT-12-058	372915	5898990	BWT-12-120	375267	5892356
BWT-12-009	374415	5893193	BWT-12-059	372769	5899190	BWT-12-121	375494	5892164
BWT-12-010	374771	5893631	BWT-12-060	373674	5898298	BWT-12-122	375064	5892590
BWT-12-011	376130	5892919	BWT-12-061	374525	5893766	BWT-12-123	379516	5890368
BWT-12-012	376371	5892734	BWT-12-062	374384	5894013	BWT-12-124	379308	5890566
BWT-12-013	376569	5892510	BWT-12-063	374117	5894223	BWT-12-125	379080	5890843
BWT-12-014	375939	5893188	BWT-12-064	372667	5895906	BWT-12-126	374589	5891731
BWT-12-015	375741	5893353	BWT-12-065	373259	5896300	BWT-12-127	374778	5891483
BWT-12-016	375532	5893568	BWT-12-066	373937	5894475	BWT-12-128	374986	5891296
BWT-12-017	375914	5893884	BWT-12-067	373715	5894705	BWT-12-129	375186	5891130
BWT-12-018	376505	5893223	BWT-12-068	373494	5894915	BWT-12-130	374120	5892119
BWT-12-019	376758	5893026	BWT-12-069	373263	5895143	BWT-12-131	374331	5891938
BWT-12-020	376928	5892827	BWT-12-070	373049	5895345	BWT-12-132	375685	5891900
BWT-12-021	376272	5893451	BWT-12-071	373928	5898140	BWT-12-133	377164	5892685
BWT-12-022	376111	5893658	BWT-12-072	373980	5897876	BWT-12-134	377366	5892503
BWT-12-023	375202	5894542	BWT-12-073	374213	5897533	BWT-12-135	377577	5892308
BWT-12-024	375407	5894361	BWT-12-074	374388	5897371	BWT-12-136	377813	5892015
BWT-12-025	375635	5894137	BWT-12-075	374577	5897230	BWT-12-137	377980	5891861
BWT-12-026	375313	5893806	BWT-12-076	375189	5896550	BWT-12-138	380358	5891588
BWT-12-027	375095	5894071	BWT-12-077	374946	5896748	BWT-12-139	380213	5891732
BWT-12-028	374887	5894237	BWT-12-078	374717	5896945	BWT-12-140	380018	5891952
BWT-12-029	372309	5896016	BWT-12-079	375732	5896169	BWT-12-141	378848	5891008
BWT-12-030	372048	5896151	BWT-12-080	375616	5896471	BWT-12-142	378644	5891225
BWT-12-031	372004	5896434	BWT-12-081	372865	5895541	BWT-12-143	378434	5891440
BWT-12-032	371799	5896637	BWT-12-082	378294	5890070	BWT-12-144	378240	5891616
BWT-12-033	371557	5896876	BWT-12-083	378106	5890278	BWT-12-145	379166	5892792
BWT-12-034	371324	5897071	BWT-12-084	377918	5890432	BWT-12-146	378966	5893023
BWT-12-035	371172	5897290	BWT-12-085	377713	5890655	BWT-12-147	378748	5893219
BWT-12-036	370969	5897492	BWT-12-086	376832	5891517	BWT-12-148	378525	5893443
BWT-12-037	370732	5897699	BWT-12-087	376996	5891333	BWT-12-149	378307	5893606
BWT-12-038	370516	5897925	BWT-12-088	377331	5890975	BWT-12-150	378117	5893848
BWT-12-039	370330	5898163	BWT-12-089	377510	5890831	BWT-12-151	377902	5894052
BWT-12-040	373637	5896516	BWT-12-090	376602	5891800	BWT-12-152	373925	5892358
BWT-12-041	375099	5894808	BWT-12-091	376027	5896009	BWT-12-153	373697	5892565
BWT-12-042	374824	5895074	BWT-12-092	376227	5895735	BWT-12-154	373467	5892807
BWT-12-043	374656	5895265	BWT-12-093	376418	5895530	BWT-12-161	379363	5892597
BWT-12-044	373992	5895867	BWT-12-094	376637	5895313	BWT-12-162	379588	5892328
BWT-12-045	374233	5895668	BWT-12-095	376859	5895088	BWT-12-163	379786	5892132
BWT-12-046	373178	5896733	BWT-12-096	377045	5894872	BWT-12-164	373232	5892961
BWT-12-047	373329	5896548	BWT-12-097	377284	5894669	BWT-12-165	373035	5893249
BWT-12-048	372923	5896986	BWT-12-098	377458	5894430	BWT-12-166	372971	5893548
BWT-12-049	372738	5897164	BWT-12-099	377638	5894260	BWT-12-167	372589	5893633
BWT-12-050	372537	5897384	BWT-12-100	376395	5892027	BWT-12-168	371413	5894922

Sample Number	Easting	Northing
BWT-12-169	371560	5894669
BWT-12-170	372431	5893828
BWT-12-171	372239	5894043
BWT-12-172	372008	5894290
BWT-12-173	371743	5894492
BWT-12-199	375742	5893345
BWT-12-200	368038	5895898
BWT-12-201	364678	5894830
BWT-12-203	363270	5896170
BWT-12-223	380296	5904237
BWT-12-224	377991	5904460
BWT-12-225	379157	5902231
BWT-12-226	382531	5895997
BWT-12-227	389214	5890700
BWT-12-228	384669	5895089
BWT-12-229	384168	5893960
BWT-12-230	385792	5892090
BWT-12-231	381759	5905487
BWT-12-232	382032	5902792
BWT-12-233	379491	5898649
BWT-12-234	387360	5895687
BWT-12-235	388863	5892032
BWT-12-236	362798	5892032
BWT-12-237	380572	5894781
BWT-12-238	387176	5890246
BWT-12-239	389930	5898106
BWT-12-240	391666	5897595
BWT-12-241	390352	5895156
BWT-12-242	391543	5892546
BWT-12-244	381024	5899265
BWT-12-245	391324	5888674
BWT-12-246	389648	5889082
BWT-12-247	378835	5884398
BWT-12-250	369957	5896402
BWT-12-253	378984	5900682
BWT-12-254	379109	5903228
BWT-12-255	377372	5897564
BWT-12-256	370139	5896190
BWT-12-257	370353	5895991
BWT-12-258	370547	5895770
BWT-12-259	370758	5895536
BWT-12-260	373218	5894986
BWT-12-261	365721	5893829
BWT-12-262	365201	5893569
BWT-12-263	374274	5890217
BWT-12-267	382248	5890453
BWT-12-268	383623	5890279
BWT-12-269	382749	5889738
BWT-12-270	371480	5891046
BWT-12-271	370002	5889557

Sample Number	Easting	Northing
BWT-12-276	370859	5892319
BWT-12-277	369809	5892615
BWT-12-278	369535	5893109
BWT-12-279	373277	5894882
BWT-12-280	379408	5889269
BWT-12-281	380296	5889626
BWT-12-282	380733	5887635
BWT-12-283	381111	5886891
BWT-12-284	373342	5894804
BWT-12-285	373389	5894723
BWT-12-286	373473	5894627
BWT-12-287	373082	5894435
BWT-12-288	373034	5894531
BWT-12-289	373052	5894885
BWT-12-290	373157	5894793
BWT-12-291	373157	5894706
BWT-12-292	373209	5894626
BWT-12-293	373247	5894539
BWT-12-294	372917	5894590
BWT-12-295	372918	5894681
BWT-12-296	372881	5894780
BWT-12-297	373384	5894866
BWT-12-467	367264	5894601
BWT-12-468	367495	5894422
BWT-12-469	367700	5894222
BWT-12-470	366420	5895473
BWT-12-471	366621	5895263
BWT-12-472	366848	5895038
BWT-12-473	367044	5894836
BWT-12-474	368112	5895968
BWT-12-475	367921	5896164
BWT-12-476	368321	5895754
BWT-12-477	368531	5895545
BWT-12-478	368757	5895331
BWT-12-479	368954	5895093
BWT-12-480	369148	5894915
BWT-12-481	369362	5894696
BWT-12-482	369581	5894498
BWT-12-483	367905	5893986
BWT-12-484	368108	5893775
BWT-12-485	368333	5893563
BWT-12-486	368543	5893353
BWT-12-487	368748	5893141
BWT-12-488	368968	5892933
BWT-12-489	369198	5892713
BWT-12-490	369782	5894285
BWT-12-491	369998	5894074
BWT-12-492	370051	5891886
BWT-12-493	370912	5893146
BWT-12-494	369411	5892492
BWT-12-495	369605	5892301
BWT-12-496	369798	5892088

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 12: Till Sample Location Map
For the survey, the property
was divided into two sections

345000 m
355000 m
365000 m
375000 m
385000 m
395000 m

5910000 m
5900000 m
5890000 m
5880000 m

Scale: 1:50000
0
10 km

Table 5: Geographic Co-ordinates of the BW Alluvial Gravel Samples

Sample Number	Easting	Northing
BWS-12-001	374009	5894119
BWS-12-002	374461	5894252
BWS-12-003	375911	5895991
BWS-12-004	376401	5895872
BWS-12-005	378042	5896041
BWS-12-006	378608	5896144
BWS-12-007	378642	5896813
BWS-12-008	379566	5897148
BWS-12-012	378307	5893695
BWS-12-013	377882	5895177
BWS-12-014	377461	5894051
BWS-12-015	373926	5892366
BWS-12-016	372565	5893699
BWS-12-031	366583	5894754
BWS-12-034	366558	5894663
BWS-12-042	362476	5893095
BWS-12-044	378596	5904970
BWS-12-045	379528	5901818
BWS-12-047	382814	5895387
BWS-12-048	388673	5891732
BWS-12-049	388252	5888004
BWS-12-050	380070	5884758
BWS-12-051	362985	5892838
BWS-12-052	390204	5896866
BWS-12-053	390789	5893157
BWS-12-056	376470	5897987
BWS-12-057	382117	5904380
BWS-12-058	388892	5895574
BWS-12-059	387377	5894005
BWS-12-066	384104	5887256
BWS-12-068	377175	5898453
BWS-12-069	365131	5893715
BWS-12-071	370339	5889634

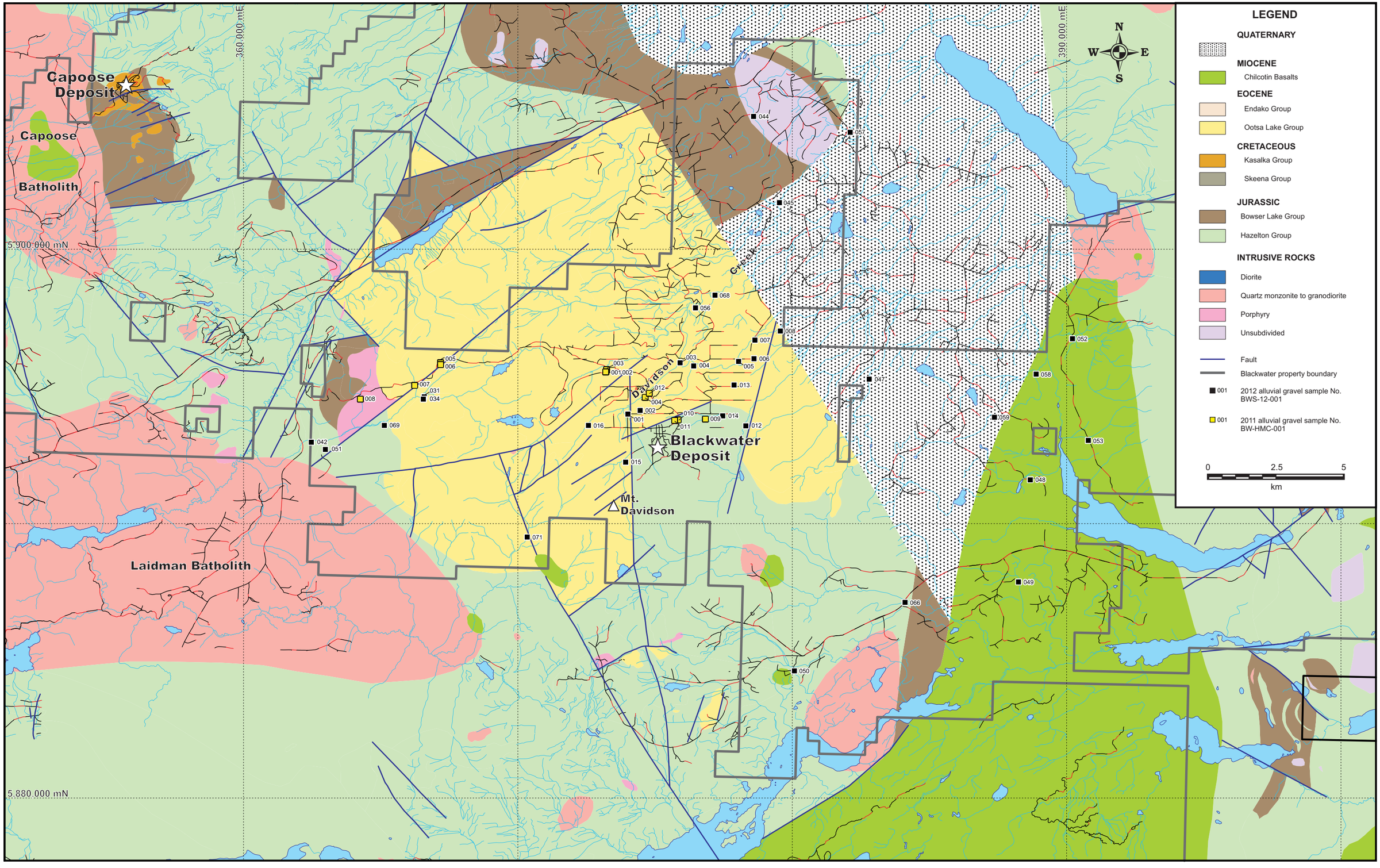


Figure 13: Blackwater Alluvial Gravel Sample Sites

Table 6: Geographic Co-ordinates of the Capoose Till Samples

Sample Number	Easting	Northing	Sample Number	Easting	Northing	Sample Number	Easting	Northing
BWT-12-102	353949	5904549	BWT-12-210	347804	5893575	BWT-12-323	355539	5906259
BWT-12-104	353159	5906921	BWT-12-211	348935	5894357	BWT-12-324	355598	5905981
BWT-12-105	353131	5906513	BWT-12-212	346287	5896063	BWT-12-325	352913	5905246
BWT-12-106	353086	5906117	BWT-12-213	348454	5896252	BWT-12-326	352491	5904988
BWT-12-107	353255	5905735	BWT-12-214	359825	5911242	BWT-12-327	352377	5905202
BWT-12-108	353428	5905377	BWT-12-215	356886	5912169	BWT-12-328	352801	5905458
BWT-12-110	353605	5905030	BWT-12-216	350911	5895118	BWT-12-329	355677	5906901
BWT-12-111	353886	5904162	BWT-12-217	344435	5893048	BWT-12-330	357168	5905056
BWT-12-112	354004	5903834	BWT-12-218	354574	5893553	BWT-12-331	355285	5907394
BWT-12-113	354179	5903469	BWT-12-219	343450	5900213	BWT-12-332	352630	5904772
BWT-12-114	354161	5903034	BWT-12-220	342885	5899048	BWT-12-333	353065	5905023
BWT-12-115	353991	5902672	BWT-12-221	359469	5913781	BWT-12-334	353180	5904812
BWT-12-155	354098	5902252	BWT-12-222	356634	5914252	BWT-12-335	352749	5904556
BWT-12-156	354152	5901837	BWT-12-243	365051	5897642	BWT-12-336	355492	5907123
BWT-12-157	354487	5901592	BWT-12-248	358545	5894634	BWT-12-337	356114	5906419
BWT-12-158	354663	5901224	BWT-12-249	360432	5898517	BWT-12-338	356508	5906693
BWT-12-159	354618	5900838	BWT-12-251	345967	5898643	BWT-12-339	355755	5907579
BWT-12-160	354594	5900434	BWT-12-252	345322	5901066	BWT-12-340	355919	5907367
BWT-12-174	351488	5903727	BWT-12-264	365139	5902985	BWT-12-341	356098	5907124
BWT-12-175	351485	5903287	BWT-12-265	363556	5900901	BWT-12-342	355883	5906667
BWT-12-176	351606	5902948	BWT-12-266	366092	5909467	BWT-12-343	355351	5906483
BWT-12-177	351658	5902498	BWT-12-272	363020	5912595	BWT-12-344	354769	5906436
BWT-12-178	351708	5902103	BWT-12-273	362992	5910855	BWT-12-345	355167	5906724
BWT-12-179	351895	5901754	BWT-12-274	354432	5895399	BWT-12-346	354974	5906937
BWT-12-180	352064	5901612	BWT-12-275	352262	5896548	BWT-12-347	354807	5907203
BWT-12-181	354729	5900062	BWT-12-298	351599	5904540	BWT-12-348	355056	5907564
BWT-12-182	352582	5900407	BWT-12-299	351495	5904688	BWT-12-349	357120	5906038
BWT-12-183	352817	5900077	BWT-12-300	351765	5904271	BWT-12-350	357274	5905747
BWT-12-184	354331	5899163	BWT-12-301	351887	5904058	BWT-12-351	357465	5905531
BWT-12-185	355197	5898564	BWT-12-302	351988	5903829	BWT-12-352	357658	5905300
BWT-12-186	358654	5897781	BWT-12-303	355747	5905259	BWT-12-353	357851	5905072
BWT-12-187	354729	5898874	BWT-12-304	355940	5905023	BWT-12-354	356888	5907785
BWT-12-188	355768	5898301	BWT-12-305	356135	5904799	BWT-12-355	356698	5908010
BWT-12-189	349501	5902245	BWT-12-306	356129	5905585	BWT-12-356	356268	5906805
BWT-12-190	349788	5901963	BWT-12-307	355896	5905811	BWT-12-357	356701	5906453
BWT-12-191	352469	5901250	BWT-12-308	356452	5905978	BWT-12-358	356885	5906239
BWT-12-192	352678	5900936	BWT-12-309	356264	5905373	BWT-12-359	352196	5904530
BWT-12-193	350257	5902023	BWT-12-310	356500	5905127	BWT-12-360	352332	5904252
BWT-12-194	348549	5901129	BWT-12-311	356742	5904933	BWT-12-361	351943	5904958
BWT-12-195	348872	5899035	BWT-12-312	356912	5904671	BWT-12-362	352064	5904724
BWT-12-196	348550	5899181	BWT-12-313	355925	5906088	BWT-12-363	357088	5907559
BWT-12-197	361316	5900676	BWT-12-314	356272	5906183	BWT-12-364	357293	5907333
BWT-12-198	362970	5899639	BWT-12-315	356639	5905751	BWT-12-365	356496	5908233
BWT-12-202	351034	5900135	BWT-12-316	356815	5905527	BWT-12-366	356320	5908479
BWT-12-204	348542	5897914	BWT-12-317	356990	5905285	BWT-12-367	358626	5908063
BWT-12-205	348115	5899767	BWT-12-318	355173	5905945	BWT-12-368	358799	5907822
BWT-12-206	345027	5899553	BWT-12-319	354987	5906163	BWT-12-369	358431	5908270
BWT-12-207	347790	5898812	BWT-12-320	355336	5905709	BWT-12-370	358228	5908522
BWT-12-208	344375	5896888	BWT-12-321	355554	5905501	BWT-12-371	358041	5908754
BWT-12-209	347353	5891553	BWT-12-322	355743	5906035	BWT-12-372	355555	5903921

Sample Number	Easting	Northing	Sample Number	Easting	Northing
BWT-12-373	357921	5906656	BWT-12-423	359967	5906437
BWT-12-374	357669	5906855	BWT-12-424	360178	5906214
BWT-12-375	358047	5906405	BWT-12-425	357874	5903504
BWT-12-376	357462	5907090	BWT-12-426	358118	5903292
BWT-12-377	359008	5907581	BWT-12-427	357864	5902723
BWT-12-378	359210	5907356	BWT-12-428	358064	5902515
BWT-12-379	359372	5907128	BWT-12-429	359968	5907226
BWT-12-380	359580	5906920	BWT-12-430	360165	5906990
BWT-12-381	355007	5904623	BWT-12-431	360355	5906761
BWT-12-382	355751	5903691	BWT-12-432	360546	5906529
BWT-12-383	355947	5903459	BWT-12-433	360744	5906316
BWT-12-384	356133	5903228	BWT-12-434	360922	5906092
BWT-12-385	356337	5903009	BWT-12-435	361162	5905914
BWT-12-386	358064	5904833	BWT-12-436	356516	5902757
BWT-12-387	358237	5904597	BWT-12-437	356544	5902435
BWT-12-388	358424	5904402	BWT-12-438	360345	5905981
BWT-12-389	358634	5904152	BWT-12-439	360604	5905765
BWT-12-390	358242	5906168	BWT-12-440	359380	5904789
BWT-12-391	355364	5904163	BWT-12-441	359209	5905023
BWT-12-392	355223	5904370	BWT-12-442	359594	5904550
BWT-12-393	354774	5904863	BWT-12-443	359781	5904318
BWT-12-394	358200	5903926	BWT-12-444	355441	5902491
BWT-12-395	358351	5903654	BWT-12-445	355233	5902713
BWT-12-396	358576	5903436	BWT-12-446	356725	5902188
BWT-12-397	358766	5903214	BWT-12-447	356934	5901973
BWT-12-398	358978	5902989	BWT-12-448	357149	5901707
BWT-12-399	359170	5902760	BWT-12-449	357328	5901538
BWT-12-400	358991	5903738	BWT-12-450	357530	5901367
BWT-12-401	358816	5903913	BWT-12-451	355640	5902238
BWT-12-402	357801	5904363	BWT-12-452	355834	5902021
BWT-12-403	358048	5904143	BWT-12-453	356034	5901795
BWT-12-404	358430	5905949	BWT-12-454	356207	5901568
BWT-12-405	358542	5905714	BWT-12-455	356420	5901336
BWT-12-406	358820	5905474	BWT-12-456	356605	5901090
BWT-12-407	359000	5905272	BWT-12-457	353119	5903892
BWT-12-408	356343	5904589	BWT-12-458	352980	5904116
BWT-12-409	356509	5904345	BWT-12-459	352878	5904337
BWT-12-410	356728	5904151	BWT-12-460	355062	5902965
BWT-12-411	357089	5904429	BWT-12-461	354884	5903129
BWT-12-412	357287	5904185	BWT-12-462	352536	5902962
BWT-12-413	356881	5903890	BWT-12-463	352375	5903177
BWT-12-414	357088	5903705	BWT-12-464	352240	5903417
BWT-12-415	357511	5904042	BWT-12-465	352121	5903622
BWT-12-416	357572	5904577	BWT-12-466	353237	5903691
BWT-12-417	357410	5904833	BWT-12-497	353357	5905471
BWT-12-418	357290	5903408	BWT-12-498	353477	5905297
BWT-12-419	357542	5903122	BWT-12-499	353250	5905381
BWT-12-420	357696	5902923	BWT-12-500	353295	5905300
BWT-12-421	357665	5903757	BWT-12-501	353339	5905222
BWT-12-422	359786	5906677	BWT-12-502	353123	5905313
			BWT-12-503	353168	5905227
			BWT-12-504	353212	5905145

Table 7: Geographic Co-ordinates of the Capoose Alluvial Gravel Samples

Sample Number	Easting	Northing
BWS-12-009	353965	5904440
BWS-12-010	354157	5903523
BWS-12-011	354222	5903402
BWS-12-017	354649	5901245
BWS-12-018	354665	5899977
BWS-12-019	352745	5900619
BWS-12-020	351609	5902899
BWS-12-021	349658	5901749
BWS-12-022	350654	5901719
BWS-12-023	350699	5900273
BWS-12-024	351711	5900272
BWS-12-025	354286	5899157
BWS-12-026	360273	5897536
BWS-12-027	362086	5900606
BWS-12-028	352324	5900233
BWS-12-029	363846	5899335
BWS-12-030	362999	5898175
BWS-12-032	346400	5900957
BWS-12-033	349233	5891511
BWS-12-035	360692	5895806
BWS-12-036	350208	5896135
BWS-12-037	343757	5893439
BWS-12-038	342324	5900055
BWS-12-039	343199	5899044
BWS-12-040	347021	5898998
BWS-12-041	356838	5894900
BWS-12-043	357956	5914450
BWS-12-046	359882	5910277
BWS-12-054	358449	5895453
BWS-12-055	354040	5892636
BWS-12-060	346601	5892089
BWS-12-061	363248	5897968
BWS-12-062	362882	5911736
BWS-12-063	361942	5900989
BWS-12-067	345996	5901324
BWS-12-070	352581	5904700
BWS-12-072	354813	5906460
BWS-12-073	354753	5906986
BWS-12-074	357441	5905471
BWS-12-075	357599	5908029
BWS-12-076	355128	5904471
BWS-12-077	358420	5905111
BWS-12-078	358588	5904047
BWS-12-079	358511	5906367
BWS-12-080	357814	5903390
BWS-12-081	359557	5905193

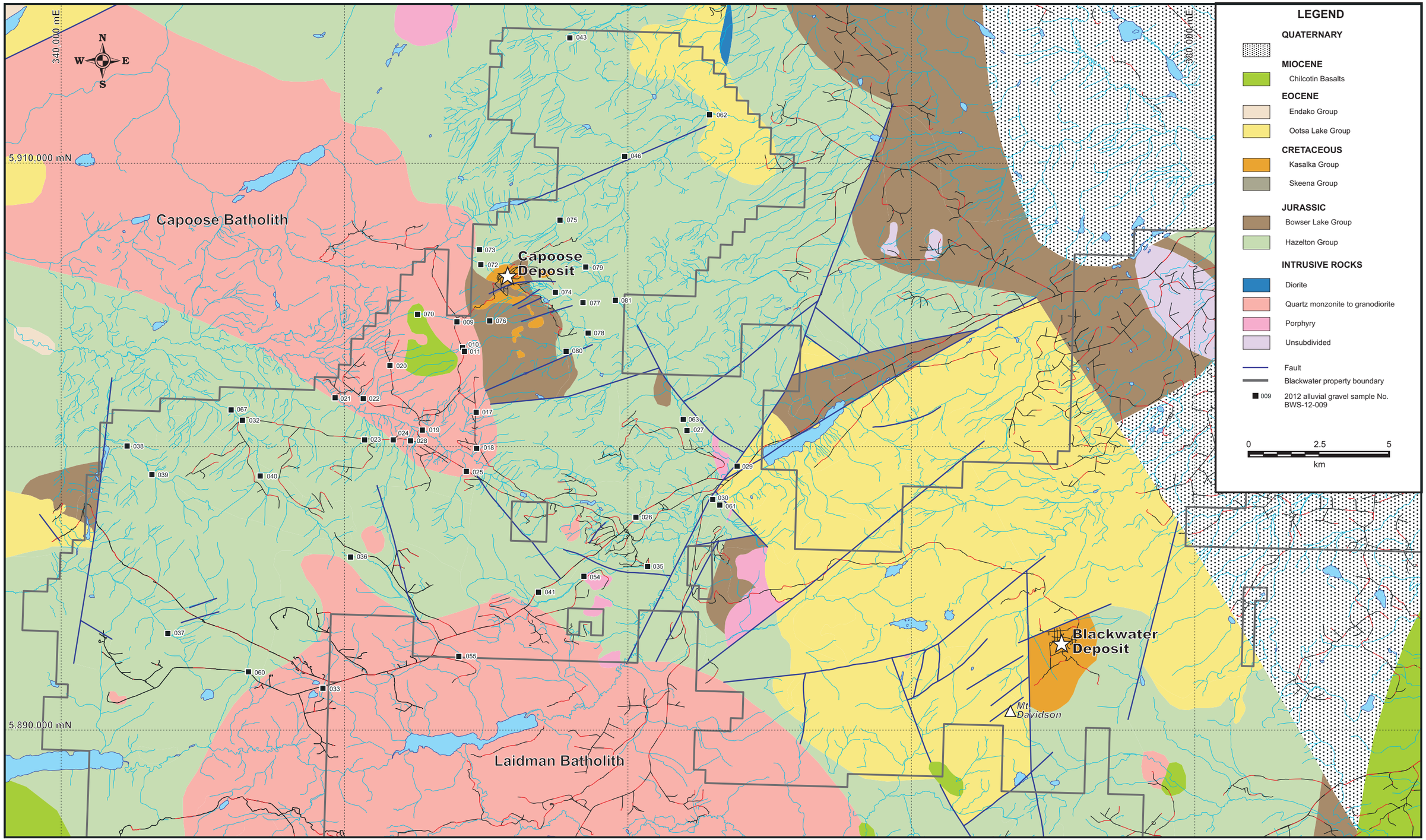


Figure 14: Capoose Till Sample Sites

Andradite Anomalies

Andradite was not recognized visually until Sample 184 which was collected in the Capoose sector of the property but is inferred to have been present at low concentrations in a few of the earlier samples collected around the Blackwater deposit because andradite grains were observed in some of the later infill samples collected in the same area. However, these minor andradite occurrences, ranging up to just a few tens of grains per sample, represent only background noise in comparison to the response in the Capoose sector where many till samples yielded >10,000 andradite grains (Holmes et al. 2013). The Capoose anomaly straddles the area between the Capoose and Laidman Batholiths and its northern part is inferred to reflect the known epidote-garnet veining in the propylitic alteration zone bordering the Capoose Batholith (Diakow et al. 1997). Its extension southward to the Laidman Batholith would readily be explained if the two batholiths were cogenetic and connected at a sufficiently shallow depth for the propylitic alteration to have pervaded all of the intervening volcanic roof rocks (Fig. 12), however the Capoose Batholith is of Late Cretaceous age and the Laidman Batholith is Late Jurassic. The propylitic alteration zone therefore appears to be genetically related to just the Laidman Batholith and intruded by the younger Capoose Batholith, i.e. the alteration is of Jurassic rather than Cretaceous age.

Holmes et al. (2013) note that all of the volcanic rocks underlying or occurring directly up-ice from the andradite anomaly belong to the Hazelton Group and andradite is not present in the spessartine-rich till over the Cretaceous volcanics near the Capoose deposit. This suggests that only the Hazelton Group was affected by the propylitic alteration and supports a Jurassic age for this alteration whereas the spessartine alteration is clearly associated with the younger Cretaceous volcanics of the Kasalka Group. Interestingly, Friedman et al. (2001) obtained a Jurassic age of 143 Ma from an unmineralized garnetiferous dyke near the Capoose deposit, suggesting that the garnet in this dyke was andradite, not spessartine as in the mineralized dykes.

The highest andradite count obtained from the till samples in the Blackwater sector of the property was just 300 grains in Samples 282 and 283 (Table 10). All samples with >100 grains were collected near known intrusions (Fig. 25), suggesting that these intrusions are bordered by weak propylitic alteration zones. The significantly anomalous samples include: (a) five contiguous, widely-spaced regional samples collected between two small stocks near the southeastern corner of the survey area; and (b) two contiguous regional samples collected on or near a small stock at the northern tip of the survey area. As at the much stronger Capoose anomaly, the volcanic rocks underlying or occurring directly up-ice from the anomalous till are of Jurassic age, suggesting that the propylitic alteration is also of this age.

Olivine-Chromite Anomalies

As previously noted, olivine grains in the till should be useful for mapping areas covered by the olivinephyric Chilcotin flood basalts. This was found to be the case in Blackwater survey area. The eastern end of the area is the only part having continuous basalt cover and the HMCs of all till samples collected over the basalt contained >1 percent olivine with three exceeding 50 percent. The northwestern limit of the basalt is unknown due to a lack of outcrop but appears to be ~5 km west of the inferred limit because the olivine levels in the till remain high in this corridor. With the bedrock olivine being reflected in the till, the till here must be relatively thin unlike that in New Gold's condemnation drill holes 5 km further to the west. Only a few small, scattered outliers of Chilcotin basalt are known elsewhere in the survey area. This is reflected in the till mineralogy, with the HMCs of most samples containing only a trace of olivine but occasional samples containing more than 10 percent.

Anomalous levels of chromite were encountered unexpectedly in the Blackwater survey area. The distribution of chromite in the till (Fig. 26) is similar to that for olivine, indicating that the chromite too is derived from the Chilcotin basalt. However, chromite is much less abundant, reaching a maximum of ~80 grains or <1 percent of the 0.2 to 0.5 mm HMC versus up to 70 percent for olivine (Tables 8 and 11). Both the chromite and olivine grains are coarse-biased, with grains commonly exceeding 0.5 mm as in kimberlite rather than being uniformly <0.5 mm as in known dispersal trains from volcanic rocks in which the chromite and olivine reside in the matrix (Averill 2009). This indicates that the basalt is not only olivine phyric but also chromite phyric or that chromite is present in the coarse-grained mantle xenoliths that occur in the basalt (Diakow et al. 1997). The presence of chromite in the basalt does not appear to have been recognized previously, probably because it is much less plentiful than the olivine.

Representative olivine grains were analyzed by SEM and found to consist of Mg-rich forsterite. The composition of the chromite grains, in contrast, is highly variable with more being of hercynite ($FeAl_2O_4$) or Cr-spinel ($Mg(Al,Cr)_2O_4$) rather than of true chromite ($(Fe,Mg)(CrAl)_2O_4$).

ALLUVIAL GRAVEL INDICATOR MINERAL SURVEY RESULTS

Major Heavy Minerals

The 0.25 to 2 mm HMCs extracted from the gravel samples in the Blackwater sector of the property are of a generally larger and more variable size than those from the till samples, with the non-ferromagnetic fraction typically weighing 5 to 50 g (Appendix F) versus 2 to 10 g (Appendix E). Their larger size is due to the gravel being a coarse, sorted sediment with a much higher proportion of 0.25 to 2 mm particles than the unsorted till. The variability in the weights of the HMCs is due to natural variations in the energy of the streams from which the samples were collected, resulting in variable hydraulic (placer) concentration of the heaviest minerals. However, the background minerals defining the heavy mineral assemblage in the alluvial gravel samples (Table 7) are the same as those in the till samples (Table 6), with hematite and epidote being the only minerals exceeding the 15 percent major mineral threshold in the non-ferromagnetic fraction of many HMCs. Also as in the till samples, the ferromagnetic fraction constitutes <20 percent of the HMCs and consists entirely of magnetite because the till is oxidized and devoid of pyrrhotite.

Background Levels of Indicator Minerals

As previously explained and further illustrated by the negative gold grain results obtained from the 12 test samples collected by New Gold in 2011 (Averill 2011a), alluvial gravel is unsuitable for gold grain sampling because >90 percent of gold grains are silt sized and these small grains remain in suspension during high-energy gravel sedimentation. Predictably, therefore, the gold grain counts for the 33 new gravel samples collected in the Blackwater sector of the property are uniformly low, ranging from 0 to just 6 grains per sample (Table 7). No anomalies ≥10 grains were obtained even though 11 of the samples were orientation samples collected from streams that lie directly downslope from the Blackwater deposit (Fig. 16) and in some cases flow along or across the strong gold grain dispersal train in the till (Plan 1).

The degree of oxidation of the gravel appears to be similar to that of the till as pyrite is again either absent or occurs at very low concentrations (maximum 7 grains of 0.25 to 0.5 mm size; Table 7). Cinnabar grains which, like gold, are of a high specific gravity, mostly silt sized and chemically stable in oxidized sediments, are completely absent, as are 0.25 to 0.5 mm grains of similarly stable molybdenite and parastable chalcopyrite. Gahnite is also absent whereas the gravel samples collected in the Capoose sector of the property contained up to 80 gahnite grains (Holmes et al. 2013)

Indicator Mineral Anomalies

The only indicator minerals that reach anomalous concentrations in the gravel samples in the Blackwater sector of the property are spessartine, andradite, olivine and chromite. The distribution of these minerals is shown in Figures 24 to 26, respectively, and the anomalies are discussed in the following sections. Anomaly thresholds are the same as those for the till samples, i.e. 25 grains for spessartine, 10 grains for andradite, 10 percent for olivine and 10 grains for chromite.

Spessartine Anomalies

The distribution of spessartine in the alluvial gravel (Fig. 26) is similar to that in the till (Plan 2) but the gravel anomalies are more subdued. Only four samples yielded ≥1000 spessartine grains, with the maximum count being just 1200 grains (Table 7) compared to 30,000 grains in the till samples (Table 6). Three of the four high values are from the orientation samples collected from streams downslope from the Blackwater deposit (Fig. 26) in the area containing the much stronger, till-hosted Blackwater Train (Plan 2). The relative weakness of the gravel anomaly is surprising, given the much higher proportion of 0.25 to 0.5 mm sand grains in the gravel samples, and indicates that the spessartine dilution that occurred when both anomalous and barren till were eroded and recycled to produce the gravel greatly exceeded hydraulic reconcentration of the heavy spessartine grains during deposition of the gravel. The fourth high spessartine value is from gravel sample No. 068 (Fig. 16) which was collected 6 km downstream on Davidson Creek (Fig. 26) beyond the down-ice limit of till sampling (Fig. 15). This spessartine anomaly is supported by a weaker, 300-grain response in neighboring sample No. 056 (Table 7; Figs. 16, 26) and may indicate the presence of a second area of hydrothermally altered, spessartine-bearing Cretaceous rocks along the creek.

Andradite Anomalies

Andradite levels in the alluvial gravel in the Blackwater sector of the property (Fig. 27), as in the till in this sector (Fig. 23), are generally low, reaching a maximum of just 500 grains of 0.25 to 2 mm size per 10 kg sample (Table 7) compared to 50,000 grains near the propylitic alteration zone associated with the Laidman Batholith in the Capoose sector (Holmes et al. 2013). Andradite values >100 grains per sample in the gravel (Fig. 27) occur either in the same areas as or downstream from the till anomalies (Fig. 23), i.e. over Hazelton or Bowser Lake Group basement rocks in the vicinity of small felsic intrusions at the eastern end, northern tip and southwestern corner of the survey area. This systematic distribution provides further evidence that the andradite is derived from intrusion-related propylitic alteration zones of probable Jurassic age.

Table 8: Indicator mineral counts for the Blackwater gravel samples

	Number of Grains										%	
	Unsized		0.25-0.5 mm									
Sample Number	Au	Cinnabar	Cpy	Mo	Anglesite/ Plumbo-gummite	Py	Gah	Adr	Sps	Cr	Olivine	Assemblage
BWS-12-001	1	0	0	0	0	0	0	0	~250	12	Tr	Hematite/epidote
BWS-12-002	0	0	0	0	0	0	0	0	26	2	0	Hematite/epidote
BWS-12-003	0	0	0	0	0	0	0	0	14	0	Tr	Hematite/epidote
BWS-12-004	1	0	0	0	0	0	0	0	1	1	0	Hematite/epidote
BWS-12-005	0	0	0	0	0	1	0	0	2	2	0	Hematite-augite/epidote
BWS-12-006	6	0	0	0	0	0	0	0	~1000	0	0	Hematite/epidote
BWS-12-007	3	0	0	0	0	0	0	~100	15	5	Tr	Hematite/epidote
BWS-12-008	0	0	0	0	0	0	0	0	~100	4	1	Hematite/epidote
BWS-12-012	0	0	0	0	0	0	0	0	~60	3	Tr	Hematite/epidote
BWS-12-013	3	0	0	0	1	0	0	0	~1200	~120	1	Hematite/epidote
BWS-12-014	0	0	0	0	0	0	0	0	~1000	10	Tr	Hematite/epidote
BWS-12-015	0	0	0	0	0	0	0	0	~60	1	Tr	Hematite/epidote
BWS-12-016	1	0	0	0	0	0	0	0	~500	0	Tr	Hematite/epidote
BWS-12-031	1	0	0	0	0	0	0	0	~100	9	Tr	Hematite-ilmenite/epidote-titanite
BWS-12-034	1	0	0	0	0	0	0	0	~80	8	Tr	Hematite-ilmenite/epidote
BWS-12-042	0	0	0	0	0	0	0	14	~50	1	Tr	Hematite/epidote
BWS-12-044	0	0	0	0	0	7	0	~50	~100	17	Tr	Hematite/epidote
BWS-12-045	3	0	0	0	0	0	0	~200	~300	18	Tr	Hematite/epidote
BWS-12-047	0	0	0	0	0	0	0	~120	0	0	Tr	Hematite/epidote
BWS-12-048	5	0	0	0	0	7	0	17	~50	~40	25	Hematite-forsterite/epidote
BWS-12-049	2	0	0	0	0	2	0	~100	~200	9	Tr	Hematite-ilmenite/epidote
BWS-12-050	0	0	0	0	0	0	0	~60	0	0	Tr	Hematite/epidote
BWS-12-051	2	0	0	0	0	1	0	~40	0	2	Tr	Hematite/epidote
BWS-12-052	2	0	0	0	0	1	0	~200	~40	16	70	Forsterite-hematite/epidote
BWS-12-053	2	0	0	0	0	3	0	~60	~60	~60	60	Forsterite-hematite/epidote
BWS-12-056	1	0	0	0	0	1	0	~500	~300	17	Tr	Hematite/epidote
BWS-12-057	2	0	0	0	0	1	0	2	~80	19	Tr	Hematite/epidote
BWS-12-058	3	0	0	0	0	0	0	~200	14	~100	Tr	Hematite/epidote
BWS-12-059	3	0	0	0	0	0	0	~40	~80	15	10	Hematite/epidote
BWS-12-066	6	0	0	0	0	0	0	0	~120	~30	Tr	Hematite/epidote
BWS-12-068	5	0	0	0	0	0	0	0	~1200	~200	Tr	Hematite/epidote
BWS-12-069	3	0	0	0	0	0	1	7	~100	22	Tr	Hematite-ilmenite/epidote
BWS-12-071	2	0	0	0	0	0	0	0	9	9	Tr	Hematite-ilmenite/epidote

Olivine Anomalies

Gravel HMCs containing >10 percent olivine occur only in streams over the main outlier of olivinephyric Chilcotin flood basalt at the eastern end of the survey area (Fig. 28) where the till is similarly anomalous in olivine (Fig. 24). The HMC from the most anomalous sample, No. 052, contains 70 percent olivine (Table 7), the same level attained in the till HMCs (Table 6).

Chromite Anomalies

Chromite levels in the gravel samples, unlike spessartine, andradite and olivine levels, tend to be higher than in the till samples, ranging up to 200 grains of 0.25 to 0.5 mm size per 10 kg sample (Table 7) versus just 80 grains per sample (Table 6). The variance would probably have been even greater if as many gravel samples had been collected as till samples. The greater chromite abundance in the gravel probably reflects the fact that chromite is of a significantly higher specific gravity (4.8) than spessartine (4.2), andradite (3.9) and olivine (3.3) and thus was more amenable to hydraulic concentration during gravel sedimentation.

The degree of hydraulic concentration of a readily-concentrated mineral such as chromite in a stream varies with the energy of the stream. Therefore the locations of the chromite anomalies are governed not only by the geographic distribution of chromite-bearing source rocks but also by the energy of the host stream and are less predictable than the locations of the spessartine, andradite and olivine anomalies. Most notably, four of the 33 gravel samples yielded >50 chromite grains but only two of these highly anomalous samples were collected over the eastern Chilcotin basalts (Fig. 29) which appear to be the main source of the chromite in the till samples (Fig. 25). The other two anomalies are from streams downslope from the Blackwater deposit where no chromite source rocks are known to occur and the till contains negligible chromite.

TILL GEOCHEMISTRY RESULTS

Elements of Interest

The -0.063 mm till fines were analyzed by INA for 34 elements and by AR-ICP/OES for 9 elements, including some of the original 34 at higher resolution, but only a limited number of these elements are relevant to the Blackwater survey. The analyses for all analyzed elements are included in Appendix N and those for 11 elements of potential interest – Au, Ag, S, Mn, As, Cu, Zn, Pb, Cd, Mo and Ni – are summarized in Table 8. Significant trends identified for specific elements within this group are discussed in the following sections.

Table 9: Selected geochemical analyses for – 0.063 mm fraction of the till samples from the Blackwater sector

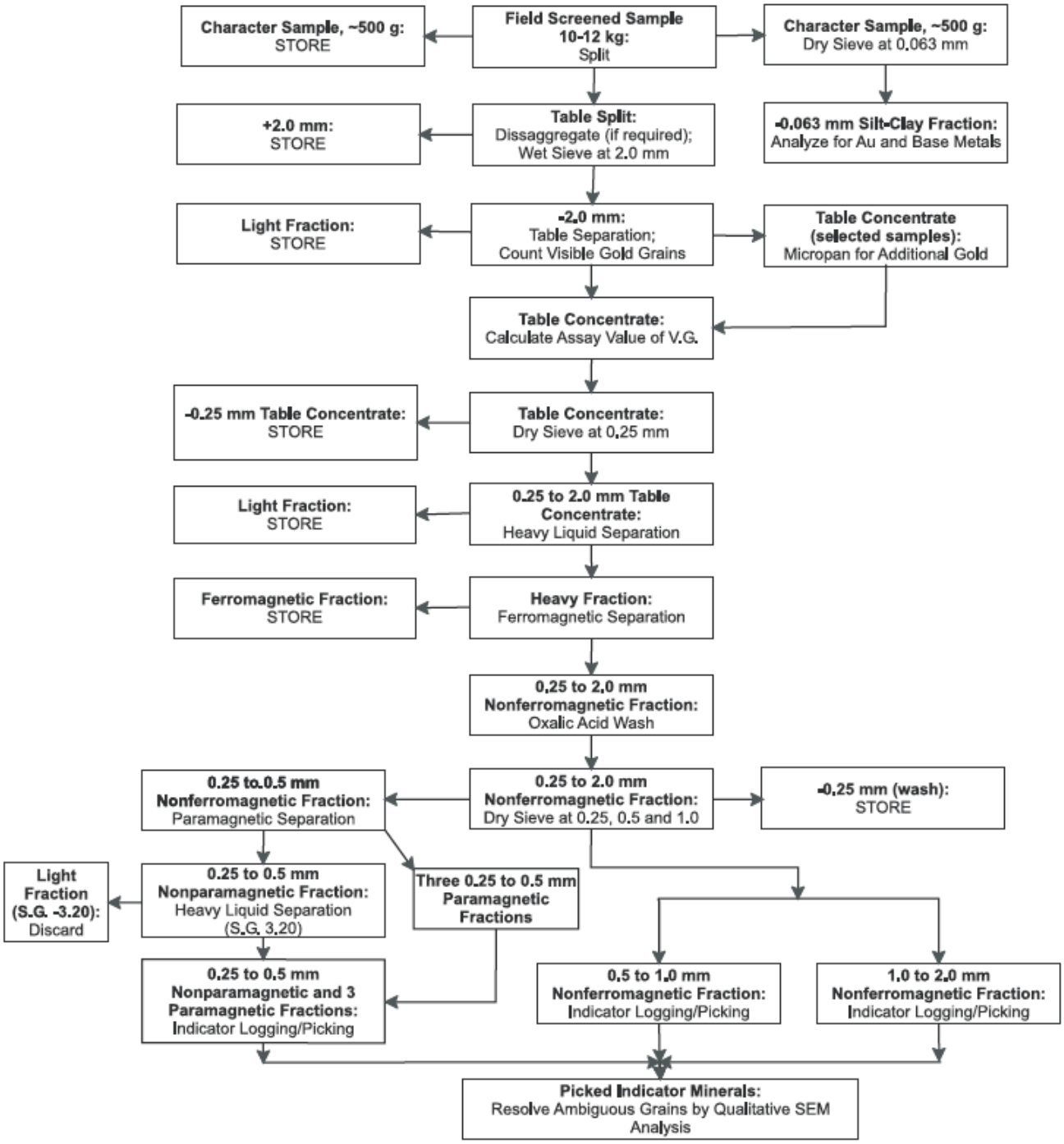
Sample No.	Au ppb	Ag ppm	S %	Mn ppm	As ppm	Cu ppm	Zn ppm	Pb ppm	Cd ppm	Mo ppm	Ni ppm
BTW-12-001	74	< 0.2	0.007	676	26.1	25	266	71	1.4	< 2	10
BTW-12-002	42	< 0.2	0.005	506	31.4	18	118	47	1.0	< 2	9
BTW-12-003	11	< 0.2	0.008	547	21.6	11	95	10	0.6	< 2	8
BTW-12-004	< 2	< 0.2	0.005	768	18.0	20	91	18	0.6	< 2	16
BTW-12-005	< 2	< 0.2	0.005	234	7.7	6	52	13	< 0.5	< 2	6
BTW-12-006	37	< 0.2	0.005	1210	32.0	39	1620	49	8.5	< 2	12
BTW-12-007	< 2	3.9	0.005	299	132.0	7	284	28	< 0.5	< 2	6
BTW-12-008	11	< 0.2	0.004	497	11.8	7	42	6	< 0.5	< 2	6
BTW-12-009	< 2	< 0.2	0.008	319	7.9	5	54	15	< 0.5	< 2	6
BWT-12-010	< 2	< 0.2	0.008	247	12.1	3	125	20	< 0.5	< 2	7
BWT-12-011	14	< 0.2	0.003	1020	24.9	18	208	66	2.7	< 2	12
BWT-12-012	20	< 0.2	0.006	390	8.6	9	95	15	< 0.5	< 2	10
BWT-12-013	< 2	< 0.2	0.012	315	9.3	13	71	8	0.5	< 2	11
BWT-12-014	19	< 0.2	0.006	475	11.7	10	120	26	0.6	< 2	10
BWT-12-015	< 2	< 0.2	0.003	1140	12.8	24	125	17	0.6	< 2	19
BWT-12-016	34	1.5	0.011	612	57.8	7	761	70	0.9	< 2	9
BWT-12-017	< 2	0.6	0.013	195	9.5	5	158	79	0.5	2	4
BWT-12-018	36	0.3	0.010	325	7.5	8	101	45	0.6	< 2	8
BWT-12-019	< 2	0.2	0.022	272	19.8	11	94	11	0.6	< 2	10
BWT-12-020	< 2	< 0.2	0.007	240	8.1	7	54	11	< 0.5	< 2	6
BWT-12-021	13	0.2	0.012	326	8.8	9	133	20	0.6	< 2	9
BWT-12-022	15	0.7	0.018	395	14.3	8	123	32	< 0.5	< 2	7
BWT-12-023	< 2	< 0.2	0.006	309	16.7	8	77	12	< 0.5	< 2	9
BWT-12-024	9	< 0.2	0.018	568	9.4	43	82	13	0.6	< 2	13
BWT-12-025	< 2	< 0.2	0.003	615	15.7	16	88	18	0.5	< 2	12
BWT-12-026	19	1.7	0.018	986	28.3	10	772	48	0.8	< 2	13
BWT-12-027	< 2	< 0.2	0.003	550	13.3	10	69	12	< 0.5	< 2	9
BWT-12-028	< 2	< 0.2	0.006	316	12.2	5	49	10	< 0.5	< 2	6
BWT-12-029	< 2	< 0.2	0.003	944	16.5	14	74	19	0.5	< 2	12
BWT-12-030	< 2	< 0.2	0.003	636	12.8	14	69	15	0.5	< 2	13
BWT-12-031	12	< 0.2	0.002	682	12.4	16	81	15	< 0.5	< 2	12
BWT-12-032	< 2	< 0.2	0.004	488	18.5	15	89	13	< 0.5	3	12
BWT-12-033	< 2	0.4	0.011	681	10.5	16	169	28	1.6	4	12
BWT-12-034	< 2	1.2	0.016	490	15.3	5	447	92	0.9	< 2	4
BWT-12-035	< 2	< 0.2	0.007	538	9.3	15	130	32	0.6	< 2	13
BWT-12-036	< 2	< 0.2	0.004	402	9.7	8	68	14	< 0.5	< 2	8
BWT-12-037	< 2	< 0.2	0.016	475	15.1	15	64	13	< 0.5	< 2	11
BWT-12-038	< 2	< 0.2	0.009	620	7.4	39	60	4	< 0.5	< 2	17
BWT-12-039	< 2	< 0.2	0.010	203	8.9	12	49	4	< 0.5	< 2	11
BWT-12-040	10	< 0.2	0.002	365	10.0	10	45	10	< 0.5	< 2	8
BWT-12-041	< 2	< 0.2	0.010	233	16.1	8	102	15	< 0.5	< 2	10
BWT-12-042	10	< 0.2	0.003	243	10.6	8	49	13	< 0.5	< 2	12
BWT-12-043	< 2	< 0.2	0.002	531	20.3	15	66	16	< 0.5	< 2	13
BWT-12-044	< 2	< 0.2	0.002	307	14.2	14	69	13	< 0.5	< 2	14
BWT-12-045	17	< 0.2	0.008	278	12.8	7	82	16	0.5	< 2	9
BWT-12-046	< 2	< 0.2	0.006	218	10.3	7	104	18	< 0.5	< 2	6
BWT-12-047	< 2	< 0.2	0.007	296	12.9	12	143	21	< 0.5	< 2	8
BWT-12-048	< 2	< 0.2	0.007	184	9.7	7	76	16	< 0.5	< 2	7
BWT-12-049	< 2	< 0.2	0.004	397	11.2	8	51	18	< 0.5	< 2	8
BWT-12-050	< 2	< 0.2	0.004	280	17.3	10	90	26	< 0.5	< 2	8
BWT-12-051	< 2	0.2	0.005	577	15.1	11	82	31	< 0.5	< 2	6
BWT-12-052	< 2	0.3	0.010	276	12.9	7	147	24	< 0.5	< 2	8
BWT-12-053	< 2	< 0.2	0.012	350	5.7	10	106	8	< 0.5	< 2	10
BWT-12-054	< 2	< 0.2	0.006	882	12.4	16	88	23	0.6	< 2	10
BWT-12-055	24	< 0.2	0.005	772	14.7	12	79	47	0.5	< 2	14
BWT-12-056	< 2	< 0.2	0.005	265	9.8	11	75	18	< 0.5	< 2	8
BWT-12-057	< 2	< 0.2	0.005	225	6.9	5	40	12	< 0.5	< 2	6
BWT-12-058	< 2	< 0.2	0.008	188	5.7	7	43	11	< 0.5	< 2	7
BWT-12-059	< 2	< 0.2	0.015	647	13.0	20	61	13	< 0.5	< 2	14
BWT-12-060	< 2	< 0.2	0.009	230	9.2	10	121	17	< 0.5	< 2	11
BWT-12-061	10	< 0.2	0.007	257	9.8	7	46	10	< 0.5	< 2	10
BWT-12-062	6	< 0.2	0.004	522	17.5	10	56	13	0.5	< 2	11
BWT-12-063	< 2	< 0.2	0.004	352	12.6	16	83	16	< 0.5	< 2	14
BWT-12-064	< 2	< 0.2	0.002	456	17.5	14	63	12	< 0.5	< 2	8

Sample No.	Au ppb	Ag ppm	S %	Mn ppm	As ppm	Cu ppm	Zn ppm	Pb ppm	Cd ppm	Mo ppm	Ni ppm
BWT-12-065	< 2	< 0.2	0.005	396	12.4	9	60	12	< 0.5	< 2	12
BWT-12-066	43	< 0.2	0.004	446	70.1	13	188	62	1.3	< 2	14
BWT-12-067	< 2	0.5	0.006	214	23.3	12	101	43	< 0.5	< 2	11
BWT-12-068	44	1.2	0.010	526	34.7	19	396	340	2.1	< 2	9
BWT-12-069	< 2	< 0.2	0.004	299	14.3	7	66	25	0.5	< 2	9
BWT-12-070	< 2	< 0.2	0.012	311	7.7	6	88	19	< 0.5	< 2	6
BWT-12-071	9	< 0.2	0.003	484	13.6	12	75	21	< 0.5	< 2	7
BWT-12-072	< 2	< 0.2	0.002	449	11.0	11	50	11	< 0.5	< 2	10
BWT-12-073	3	< 0.2	0.003	253	9.1	7	37	12	< 0.5	< 2	6
BWT-12-074	< 2	< 0.2	0.005	224	10.4	6	42	11	< 0.5	< 2	6
BWT-12-075	10	< 0.2	0.005	358	8.4	6	60	9	< 0.5	< 2	9
BWT-12-076	< 2	< 0.2	0.004	351	8.4	16	58	14	< 0.5	< 2	17
BWT-12-077	< 2	< 0.2	0.005	315	12.4	13	64	14	< 0.5	< 2	11
BWT-12-078	3	< 0.2	0.003	308	10.4	8	46	8	< 0.5	< 2	11
BWT-12-079	< 2	< 0.2	0.002	338	14.6	10	45	17	< 0.5	< 2	9
BWT-12-080	12	< 0.2	0.004	588	11.1	23	94	9	0.6	< 2	13
BWT-12-081	15	< 0.2	0.011	741	74.5	26	176	23	0.6	12	17
BWT-12-082	< 2	< 0.2	0.006	233	10.5	11	43	8	< 0.5	< 2	8
BWT-12-083	< 2	< 0.2	0.005	272	10.8	18	50	11	< 0.5	< 2	10
BWT-12-084	< 2	< 0.2	0.007	226	8.2	15	43	7	< 0.5	< 2	11
BWT-12-085	< 2	< 0.2	0.007	586	12.6	13	59	10	< 0.5	< 2	11
BWT-12-086	3	< 0.2	0.016	287	17.9	14	98	12	< 0.5	< 2	27
BWT-12-087	< 2	0.3	0.016	426	38.2	15	86	9	0.6	< 2	13
BWT-12-088	< 2	0.2	0.010	808	13.6	5	55	18	< 0.5	3	5
BTW-12-089	< 2	< 0.2	0.016	346	25.8	19	75	14	< 0.5	6	11
BTW-12-090	< 2	< 0.2	0.017	377	13.8	17	87	14	< 0.5	4	12
BTW-12-091	6	< 0.2	0.004	378	10.2	14	48	16	< 0.5	2	9
BTW-12-092	< 2	< 0.2	0.007	289	8.5	15	54	14	< 0.5	3	8
BTW-12-093	< 2	< 0.2	0.006	275	10.5	14	58	11	< 0.5	< 2	12
BTW-12-094	< 2	0.2	0.011	333	7.5	14	85	13	< 0.5	3	11
BTW-12-095	< 2	0.3	0.008	194	6.6	11	51	20	< 0.5	< 2	10
BTW-12-096	< 2	0.3	0.008	266	9.4	12	70	21	< 0.5	< 2	8
BTW-12-097	7	0.3	0.008	270	9.0	12	115	25	< 0.5	3	10
BTW-12-098	9	0.3	0.007	300	6.8	12	100	45	< 0.5	2	8
BTW-12-099	7	0.4	0.009	373	5.6	18	72	8	0.5	3	14
BTW-12-100	< 2	< 0.2	0.005	482	9.6	19	61	9	< 0.5	< 2	10
BTW-12-101	6	0.4	0.024	275	10.8	12	65	11	< 0.5	3	7
BTW-12-103	< 2	< 0.2	0.031	306	18.2	17	73	11	0.5	4	12
BTW-12-109	< 2	< 0.2	0.009	312	13.1	21	74	11	< 0.5	< 2	13
BTW-12-116	7	0.7	0.027	423	27.9	18	148	25	< 0.5	5	18
BTW-12-117	18	< 0.2	0.009	558	99.8	45	81	20	< 0.5	4	18
BTW-12-118	< 2	0.4	0.020	521	42.4	22	95	14	< 0.5	4	15
BTW-12-119	< 2	1.1	0.043	315	14.8	45	64	14	< 0.5	6	8
BTW-12-120	< 2	< 0.2	0.014	474	10.5	13	56	7	< 0.5	3	7
BTW-12-121	< 2	0.2	0.013	584	14.7	17	81	9	< 0.5	3	9
BTW-12-122	8	0.8	0.022	393	12.0	18	207	31	1.0	4	13
BTW-12-123	< 2	0.3	0.011	223	9.6	19	44	8	< 0.5	3	11
BTW-12-124	11	< 0.2	0.009	277	10.7	22	77	8	< 0.5	3	15
BTW-12-125	5	< 0.2	0.009	266	10.0	14	51	9	< 0.5	< 2	11
BTW-12-126	< 2	< 0.2	0.027	676	19.6	24	78	9	< 0.5	2	11
BTW-12-127	< 2	< 0.2	0.036	383	12.9	13	66	9	< 0.5	< 2	8
BTW-12-128	8	< 0.2	0.046	185	10.5	11	51	6	< 0.5	< 2	6
BTW-12-129	< 2	0.2	0.045	447	7.5	11	82	12	< 0.5	< 2	9
BTW-12-130	< 2	< 0.2	0.010	427	15.5	13	62	14	< 0.5	4	9
BTW-12-131	< 2	< 0.2	0.048	372	47.1	13	61	9	< 0.5	3	12
BTW-12-132	6	< 0.2	0.027	368	9.0	15	86	9	< 0.5	3	10
BTW-12-133	9	0.2	0.010	253	9.0	10	71	10	< 0.5	< 2	7
BTW-12-134	< 2	< 0.2	0.015	283	10.1	10	103	13	< 0.5	2	9
BTW-12-135	< 2	0.5	0.010	278	10.8	10	73	12	< 0.5	< 2	9
BTW-12-136	< 2	< 0.2	0.008	498	14.0	23	71	12	< 0.5	3	13
BTW-12-137	< 2	< 0.2	0.010	385	12.9	12	91	10	< 0.5	2	11
BTW-12-138	< 2	< 0.2	0.007	365	13.9	28	67	9	< 0.5	3	15
BTW-12-139	13	< 0.2	0.006	701	27.6	64	128	14	< 0.5	< 2	24
BTW-12-140	< 2	0.4	0.025	417	17.4	25	143	12	0.5	4	15

Sample No.	Au ppb	Ag ppm	S %	Mn ppm	As ppm	Cu ppm	Zn ppm	Pb ppm	Cd ppm	Mo ppm	Ni ppm
BTW-12-141	12	< 0.2	0.008	297	12.3	17	54	9	< 0.5	2	11
BTW-12-142	< 2	< 0.2	0.006	272	13.7	12	45	9	< 0.5	< 2	8
BTW-12-143	12	< 0.2	0.005	360	14.8	21	55	13	< 0.5	< 2	13
BTW-12-144	< 2	< 0.2	0.006	444	11.1	24	70	9	< 0.5	< 2	17
BTW-12-145	10	< 0.2	0.004	415	14.2	15	63	12	< 0.5	3	11
BTW-12-146	< 2	< 0.2	0.012	248	11.9	11	59	14	< 0.5	3	8
BTW-12-147	15	< 0.2	0.007	292	12.6	11	59	16	< 0.5	< 2	10
BTW-12-148	9	< 0.2	0.005	327	10.2	13	61	14	< 0.5	< 2	10
BTW-12-149	< 2	< 0.2	0.015	336	9.5	12	67	11	< 0.5	5	10
BTW-12-150	< 2	0.3	0.009	386	9.6	21	70	13	< 0.5	3	14
BTW-12-151	< 2	< 0.2	0.007	437	18.8	23	116	10	< 0.5	3	18
BTW-12-152	< 2	< 0.2	0.016	317	7.0	8	50	11	< 0.5	3	7
BTW-12-153	< 2	< 0.2	0.007	507	10.9	12	54	7	< 0.5	3	12
BTW-12-154	39	0.4	0.022	288	12.3	6	53	10	< 0.5	< 2	5
BTW-12-161	< 2	0.2	0.007	309	15.2	15	76	19	< 0.5	2	12
BTW-12-162	< 2	< 0.2	0.008	208	6.9	9	40	10	< 0.5	< 2	9
BTW-12-163	< 2	< 0.2	0.015	272	15.1	15	92	12	< 0.5	3	12
BTW-12-164	< 2	< 0.2	0.019	200	11.3	6	53	10	< 0.5	< 2	5
BTW-12-165	< 2	< 0.2	0.009	250	24.1	11	65	13	< 0.5	3	10
BTW-12-166	< 2	0.5	0.022	449	31.5	19	110	14	< 0.5	2	28
BTW-12-167	< 2	< 0.2	0.005	359	18.9	19	66	26	< 0.5	2	20
BTW-12-168	23	< 0.2	0.004	366	8.6	7	83	33	0.6	< 2	7
BTW-12-169	13	0.2	0.015	334	19.1	13	128	27	< 0.5	4	11
BTW-12-170	< 2	< 0.2	0.008	277	16.7	9	89	25	< 0.5	2	9
BTW-12-171	7	< 0.2	0.008	219	15.8	6	76	19	< 0.5	< 2	6
BTW-12-172	< 2	< 0.2	0.004	302	8.3	10	55	13	< 0.5	3	11
BTW-12-173	< 2	0.2	0.015	306	24.5	9	117	17	< 0.5	4	10
BTW-12-199	27	< 0.2	0.004	1150	15.0	15	370	26	0.6	< 2	11
BTW-12-200	< 2	< 0.2	0.001	416	6.4	9	35	6	< 0.5	< 2	6
BTW-12-201	< 2	< 0.2	0.002	365	9.6	13	46	7	< 0.5	< 2	8
BTW-12-203	< 2	< 0.2	0.004	473	23.8	16	145	23	0.7	< 2	18
BTW-12-223	4	< 0.2	0.003	482	10.1	21	49	5	< 0.5	< 2	19
BTW-12-224	< 2	< 0.2	0.003	378	7.4	16	45	6	< 0.5	< 2	16
BTW-12-225	< 2	< 0.2	0.004	280	13.1	23	72	5	< 0.5	< 2	36
BTW-12-226	< 2	< 0.2	0.003	351	9.6	15	46	9	< 0.5	< 2	11
BTW-12-227	7	< 0.2	0.005	518	11.4	20	73	6	< 0.5	< 2	24
BTW-12-228	< 2	< 0.2	0.005	380	8.0	15	62	9	< 0.5	< 2	13
BTW-12-229	23	< 0.2	0.005	274	6.2	13	48	9	< 0.5	< 2	11
BTW-12-230	< 2	< 0.2	0.004	277	8.8	13	45	10	< 0.5	< 2	9
BTW-12-231	< 2	< 0.2	0.003	317	4.5	10	42	5	< 0.5	< 2	12
BTW-12-232	34	< 0.2	0.006	466	10.1	21	54	6	< 0.5	< 2	20
BTW-12-233	< 2	< 0.2	0.004	316	8.0	16	71	9	< 0.5	< 2	15
BTW-12-234	< 2	< 0.2	0.004	260	4.1	17	43	7	< 0.5	< 2	19
BTW-12-235	< 2	< 0.2	0.003	291	7.2	13	45	9	< 0.5	< 2	12
BTW-12-236	< 2	< 0.2	0.003	323	4.9	16	40	6	< 0.5	< 2	10
BTW-12-237	< 2	< 0.2	0.002	283	6.8	12	41	10	< 0.5	< 2	12
BTW-12-238	< 2	< 0.2	0.003	328	6.1	12	52	6	< 0.5	< 2	13
BTW-12-239	9	< 0.2	0.003	336	5.4	16	41	5	< 0.5	< 2	17
BTW-12-240	< 2	< 0.2	0.004	737	8.5	31	71	7	< 0.5	< 2	27
BTW-12-241	< 2	< 0.2	0.005	321	8.2	18	61	9	< 0.5	< 2	19
BTW-12-242	< 2	< 0.2	0.004	614	8.5	32	74	6	< 0.5	< 2	32
BTW-12-244	< 2	< 0.2	0.004	299	6.6	13	69	11	< 0.5	< 2	13
BTW-12-245	< 2	< 0.2	0.003	238	6.2	9	36	7	< 0.5	< 2	9
BTW-12-246	7	< 0.2	0.003	328	7.2	16	51	9	< 0.5	< 2	13
BTW-12-247	< 2	< 0.2	0.004	406	9.1	22	58	9	< 0.5	< 2	11
BTW-12-250	< 2	0.4	0.005	234	15.0	5	31	15	< 0.5	< 2	6
BTW-12-253	< 2	< 0.2	0.016	209	3.9	10	59	17	< 0.5	< 2	19
BTW-12-254	< 2	< 0.2	0.005	392	5.8	13	43	9	< 0.5	< 2	10
BTW-12-255	3	< 0.2	0.004	208	5.1	8	41	8	< 0.5	< 2	10
BTW-12-256	< 2	< 0.2	0.003	557	6.1	6	38	8	< 0.5	< 2	6
BTW-12-257	< 2	< 0.2	0.005	488	20.0	5	52	19	< 0.5	< 2	6
BTW-12-258	< 2	< 0.2	0.006	214	15.4	4	66	19	0.6	< 2	4
BTW-12-259	< 2	< 0.2	0.004	261	5.6	6	37	15	< 0.5	2	6
BWT-12-260	17	< 0.2	0.003	563	23.3	19	225	89	1.0	< 2	13

Sample No.	Au ppb	Ag ppm	S %	Mn ppm	As ppm	Cu ppm	Zn ppm	Pb ppm	Cd ppm	Mo ppm	Ni ppm
BTW-12-261	< 2	< 0.2	0.003	315	8.4	15	47	6	< 0.5	< 2	10
BTW-12-262	< 2	< 0.2	0.002	349	7.6	13	43	6	< 0.5	< 2	8
BTW-12-263	< 2	< 0.2	0.023	381	12.4	14	68	9	< 0.5	< 2	8
BWT-12-267	< 2	< 0.2	0.004	302	8.5	20	53	10	< 0.5	< 2	11
BWT-12-268	< 2	< 0.2	0.007	294	8.2	17	58	10	< 0.5	< 2	11
BWT-12-269	< 2	< 0.2	0.005	275	8.4	23	44	8	< 0.5	< 2	11
BTW-12-270	17	< 0.2	0.009	223	12.1	8	34	12	< 0.5	< 2	7
BTW-12-271	< 2	< 0.2	0.003	599	8.4	19	57	7	< 0.5	< 2	10
BWT-12-276	< 2	< 0.2	0.011	746	36.0	21	82	23	< 0.5	< 2	12
BWT-12-277	< 2	0.3	0.011	254	7.6	8	101	11	< 0.5	< 2	8
BWT-12-278	< 2	< 0.2	0.008	493	7.7	8	39	8	< 0.5	< 2	7
BWT-12-279	< 2	0.6	0.004	1620	41.3	20	686	115	4.1	< 2	19
BWT-12-280	< 2	< 0.2	0.019	274	18.7	32	83	10	< 0.5	< 2	16
BWT-12-281	< 2	< 0.2	0.006	331	16.1	24	57	8	< 0.5	< 2	16
BWT-12-282	< 2	< 0.2	0.007	643	50.7	89	80	9	0.6	2	22
BWT-12-283	< 2	< 0.2	0.006	328	8.8	19	44	7	< 0.5	< 2	8
BWT-12-284	< 2	< 0.2	0.003	681	35.4	26	98	33	0.6	< 2	17
BWT-12-285	< 2	0.7	0.008	584	62.8	22	270	60	0.9	< 2	20
BWT-12-286	18	0.5	0.004	870	66.2	31	141	30	0.7	2	25
BWT-12-287	9	< 0.2	0.004	435	10.3	25	78	13	0.5	< 2	30
BWT-12-288	< 2	< 0.2	0.005	378	15.2	23	77	14	0.6	< 2	24
BWT-12-289	3	< 0.2	0.006	317	6.7	7	63	21	< 0.5	< 2	8
BWT-12-290	< 2	< 0.2	0.006	323	8.3	7	56	17	< 0.5	< 2	10
BWT-12-291	9	< 0.2	0.006	408	10.1	12	60	21	< 0.5	< 2	16
BWT-12-292	< 2	< 0.2	0.005	306	13.0	18	104	14	< 0.5	< 2	31
BWT-12-293	12	< 0.2	0.004	385	17.1	23	92	14	0.5	< 2	30
BWT-12-294	< 2	< 0.2	0.009	893	19.6	30	97	16	0.8	< 2	46
BWT-12-295	< 2	< 0.2	0.005	239	8.2	8	71	20	< 0.5	< 2	13
BWT-12-296	< 2	< 0.2	0.004	250	7.8	6	41	19	< 0.5	< 2	8
BWT-12-297	95	2.3	0.006	958	104.0	64	603	502	3.7	2	21
BWT-12-467	< 2	< 0.2	0.003	391	7.6	16	50	6	< 0.5	< 2	12
BWT-12-468	< 2	< 0.2	0.005	754	9.4	17	50	10	< 0.5	< 2	12
BWT-12-469	< 2	< 0.2	0.004	461	5.1	15	42	9	< 0.5	< 2	9
BWT-12-470	< 2	< 0.2	0.003	295	9.2	10	39	4	< 0.5	< 2	7
BWT-12-471	< 2	< 0.2	0.003	263	4.8	8	28	6	< 0.5	< 2	6
BWT-12-472	< 2	< 0.2	0.007	324	5.1	9	46	7	< 0.5	< 2	8
BWT-12-473	< 2	< 0.2	0.006	540	9.3	12	43	8	< 0.5	< 2	8
BWT-12-474	< 2	< 0.2	0.009	354	6.9	10	45	9	< 0.5	< 2	8
BWT-12-475	4	< 0.2	0.008	333	5.5	11	33	6	< 0.5	< 2	6
BWT-12-476	< 2	< 0.2	0.005	245	5.4	4	28	9	< 0.5	< 2	4
BWT-12-477	< 2	< 0.2	0.005	251	6.0	8	28	8	< 0.5	< 2	5
BWT-12-478	< 2	< 0.2	0.003	320	6.5	9	35	6	< 0.5	< 2	6
BWT-12-479	< 2	< 0.2	0.006	365	5.1	9	47	11	< 0.5	< 2	9
BWT-12-480	< 2	< 0.2	0.004	301	6.2	11	46	8	< 0.5	< 2	8
BWT-12-481	< 2	< 0.2	0.007	230	6.1	7	40	11	< 0.5	< 2	6
BWT-12-482	< 2	< 0.2	0.004	348	6.0	10	41	9	< 0.5	< 2	9
BWT-12-483	< 2	< 0.2	0.012	460	7.1	24	47	8	< 0.5	< 2	9
BWT-12-484	< 2	< 0.2	0.005	370	5.7	10	41	9	< 0.5	< 2	8
BWT-12-485	< 2	< 0.2	0.009	376	8.3	14	61	11	< 0.5	< 2	13
BWT-12-486	< 2	< 0.2	0.006	443	7.3	8	55	9	< 0.5	< 2	8
BWT-12-487	< 2	< 0.2	0.004	543	8.4	11	60	9	< 0.5	< 2	8
BWT-12-488	< 2	< 0.2	0.004	560	6.5	11	50	9	< 0.5	< 2	10
BWT-12-489	< 2	< 0.2	0.004	383	5.3	9	55	9	< 0.5	< 2	8
BWT-12-490	< 2	< 0.2	0.003	465	6.1	12	57	19	< 0.5	< 2	8
BWT-12-491	< 2	< 0.2	0.003	336	3.7	9	39	7	< 0.5	< 2	8
BWT-12-492	< 2	< 0.2	0.002	307	4.6	8	44	9	< 0.5	< 2	7
BWT-12-493	< 2	< 0.2	0.007	513	9.5	8	47	11	< 0.5	< 2	8
BWT-12-494	< 2	< 0.2	0.005	337	14.2	11	61	14	< 0.5	< 2	7
BWT-12-495	< 2	< 0.2	0.010	309	3.7	7	44	9	< 0.5	< 2	7
BWT-12-496	< 2	< 0.2	0.010	332	19.6	12	58	9	< 0.5	< 2	10

Figure 15: Indicator Mineral Processing Flow Sheet



Sulphur and Manganese

The sulphur analyses are of interest because they record the extent to which the glacially dispersed sulphide mineral grains in the till at the sampled C-horizon soil level have been leached by post-glacial oxidation. Conversely, manganese analyses normally record the degree of development of secondary Mn-oxides that could potentially scavenge metals leached from the degraded sulphide grains. Where the till contains abundant spessartine as in the Blackwater Train, however, anomalously high Mn analyses could simply reflect this spessartine and/or glacially dispersed grains of other Mn-bearing hydrothermal alteration minerals that are of lower density and not recovered in the till HMCs.

The sulphur analyses are all <0.1 and mostly <0.01 percent or 100 ppm (Table 8), reflecting the minimal preservation of pyrite seen in the heavy mineral fraction of the till. Manganese levels are higher, ranging from 188 to 1620 ppm. Basaltic volcanics such as those from which much of the till on the Blackwater property is derived typically contain 0.1 to 0.3 percent MnO, or ~800 to 2400 ppm Mn. Therefore the sampled till appears to be slightly depleted rather than enriched in Mn. The lack of enrichment is probably due to the samples being collected at the deep, C-horizon soil level as any remobilized Mn would tend to precipitate in the shallower B horizon. No leaching of Mn would have occurred in the spessartine garnet grains in the till because garnet is insoluble. Therefore the high Mn values should highlight the spessartine anomalies and this is indeed the case – of five Mn values >1000 ppm (Table 8), four are from samples at the head of the spessartine-rich Blackwater gold grain dispersal train (Fig. 31) and the other is at the head of the 068 Train. Similarly high Mn values were encountered in the spessartine-rich till near the Capoose deposit (Holmes et al. 2013).

Arsenic

Arsenic levels in the till in the Blackwater sector of the property are relatively low, ranging from 3.7 to just 132 ppm (Table 8). Values between 25 and 132 ppm appear to be anomalous as they occur mainly at the heads of the Blackwater and 068 gold grain dispersal trains (Fig. 32). The limited As response is consistent with the very minor arsenopyrite content of the known Blackwater mineralization (Simpson 2011, Simpson et al. 2012). Arsenic levels in the till near the Capoose deposit are two to three times higher (Holmes et al. 2013), reflecting the significantly higher As content of this deposit (Awmack et al. 2010).

A weaker but similarly persistent As anomaly is present on the eastern side of Mount Davidson (Fig. 32) where consecutive samples No. 116 to 118 at the southeast end of the most southerly grid line and Samples 087 and 089 on the line 1.5 km down-ice returned As analyses between 25.8 and 99.8 ppm (Table 8) . As previously noted, this area is also anomalous in spessartine (Plan 2) but not in gold (Plan 1). A weak, 50.7 ppm As anomaly was encountered further southeast (Fig. 32) in Sample 282 in the area covered at broad reconnaissance scale (Fig. 32) but is not considered significant because neither the gold grain count (Plan 1) nor gold analysis (Plan 3) for this sample is anomalous.

Copper, Zinc, Lead and Cadmium

Copper, zinc, lead and cadmium are assessed together because they are characteristic of volcanogenic mineralization and, as noted, the Blackwater and Capoose Au-Ag deposits appear to be of the volcanogenic type.

Only Zn and Pb reach anomalous concentrations in the till in the Blackwater survey area; Cu and Cd occur at low levels of 3 to 89 ppm and <0.5 to only 8.5 ppm, respectively (Table 8), although the highest Cd values are significantly sympathetic to Zn which varies considerably from 31 to 686 ppm. A similar range of Zn values occurs in the till at Capoose but a higher proportion of the samples there are near the upper end of the range (Holmes et al. 2013), reflecting the significant Zn content (~0.2%; Armitage et al. 2011) of the Capoose deposit.

Zinc values >150 ppm in the survey area are considered anomalous because most such values (Fig. 33), like the Ag (Fig. 30) and As (Fig. 32) anomalies, occur near the heads of the Blackwater and 068 gold grain dispersal trains. Interestingly, a persistent although weak Zn anomaly was also obtained 3 km northwest of the 068 Train (Fig. 33) coincident with the apparent weak Ag dispersal train that occurs in this area (Fig. 30), reinforcing the probability that fertile basement rocks are exposed in an erosional window within the extensive Eocene cover volcanics. Lead levels in the Blackwater till samples range widely from 4 to 502 ppm (Table 8) but are more subdued than those in the Capoose sector of the property which range up to 1270 ppm (Holmes et al. 2013), reflecting the presence of significant Pb in the Capoose Au-Ag deposit (Armitage et al. 2011). In the Blackwater sector, Pb values >25 ppm are considered anomalous because most such values occur within the Blackwater gold grain dispersal train (Fig. 34). The three highest values of 115 to 502 ppm, however, all occur at the head of the 068 Train which, as previously explained may emanate from vein type mineralization since the till in the train is of an unusually high gold grade, the gold grains are larger than normal and only minor spessartine is present. Interestingly, a weak but persistent Pb anomaly is also present 3 km to the northwest coincident with the previously described Ag (Fig. 30) and Zn (Fig. 34) anomalies, providing further evidence that prospective basement rocks are exposed in an erosional window within the extensive, unprospective Eocene cover rocks in this area. While the till that hosts the Ag-Zn-Pb anomaly is not anomalous in gold, either geochemically (Plan 3) or as physical gold grains (Plan 1), or in spessartine grains (Plan 2), most of the mineralization may still be covered by the Eocene volcanics and thus not reflected in the till.

Molybdenum

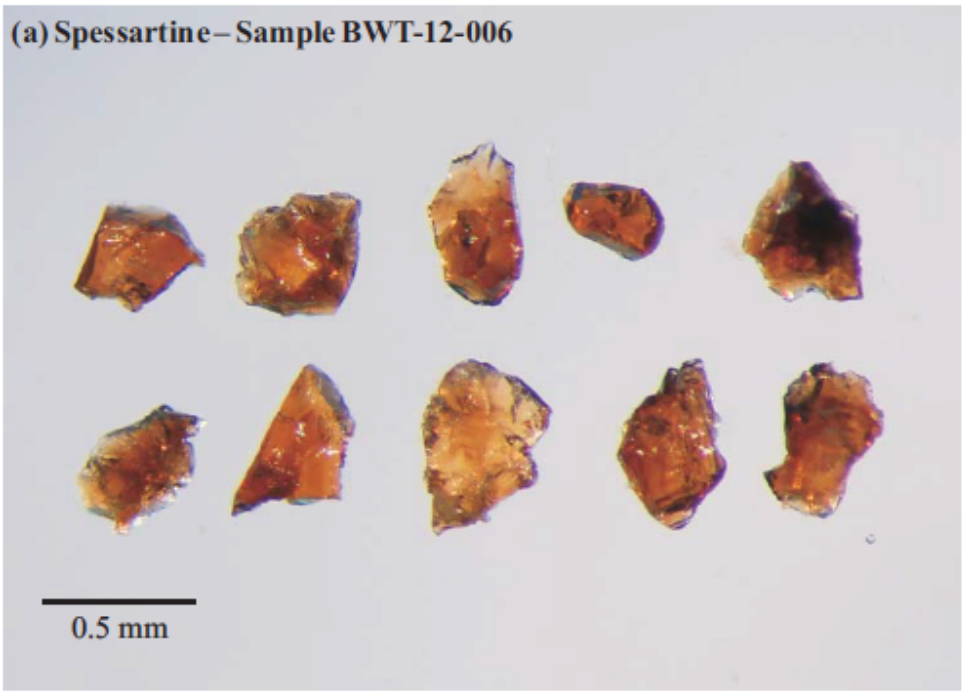
Molybdenum values in the till in the Blackwater sector of the property are very low, ranging from <2 to just 16 ppm (Table 8) because, as previously noted: (a) molybdenite grains in till are not susceptible to oxidation and, in consequence, none of their contained Mo is leached out and scavenged by secondary, soil-forming minerals; and (b) very few molybdenite grains are present because the survey area is not down-ice from the Capoose Batholith which hosts the known Mo occurrences (Awmack et el. 2010). These occurrences are so minor that even in the Capoose area Mo values in the till are consistently low (Holmes et al. 2013).

In most of Actlabs' analytical batches (Appendix N), ~90 percent of the reported Mo analyses were below the 2 ppm detection limit. However, ~70 percent of the analyses in two batches that also included samples from the Capoose area – Nos. A12-08357 and 09774 – were noticably higher, mostly 2 to 7 ppm, indicating an analytical precision issue in these batches. This problem does not appear to extend to any of the other ten elements of interest.

Nickel

Nickel levels in the till in the Blackwater area are uniformly low, ranging from 4 ppm to just 46 ppm (Table 8), probably because no komatiitic volcanics or other ultramafic rocks are present in the area.

Figure 16: Binocular microscope photographs of representative spessartine and andradite garnet grains from selected till samples



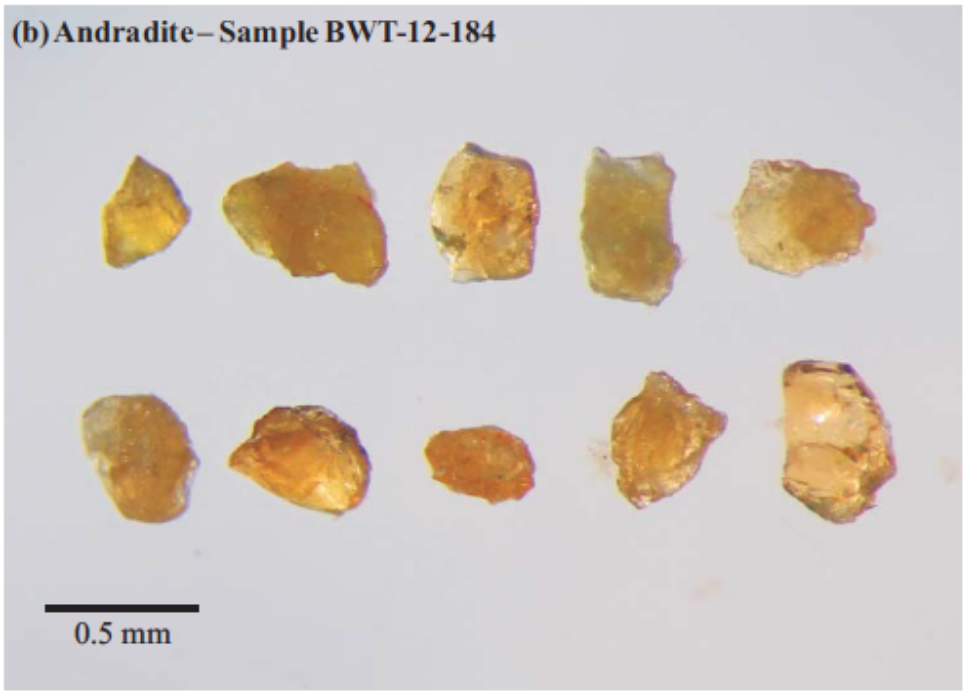
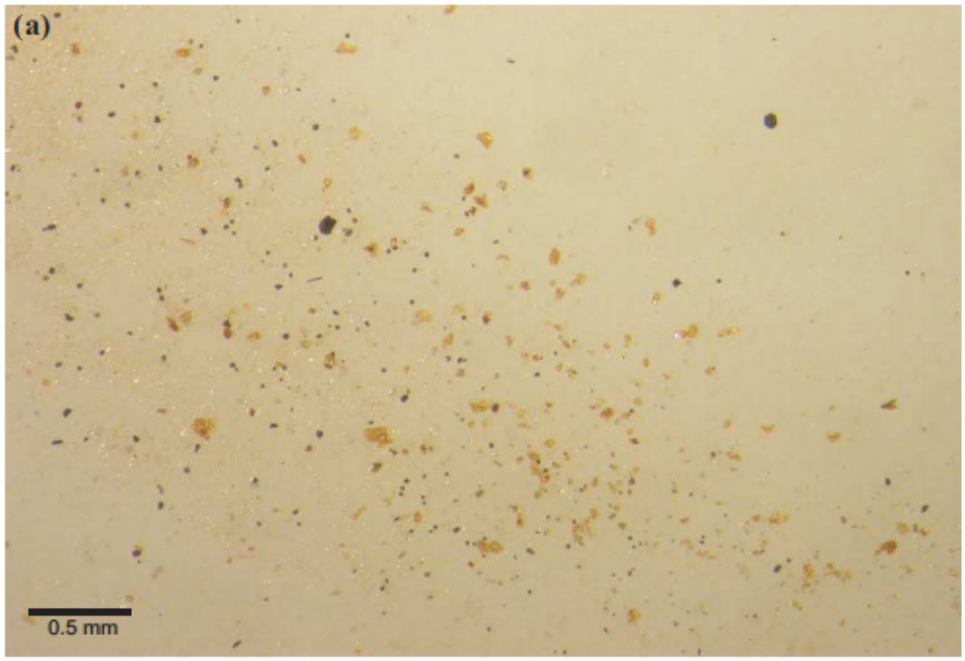
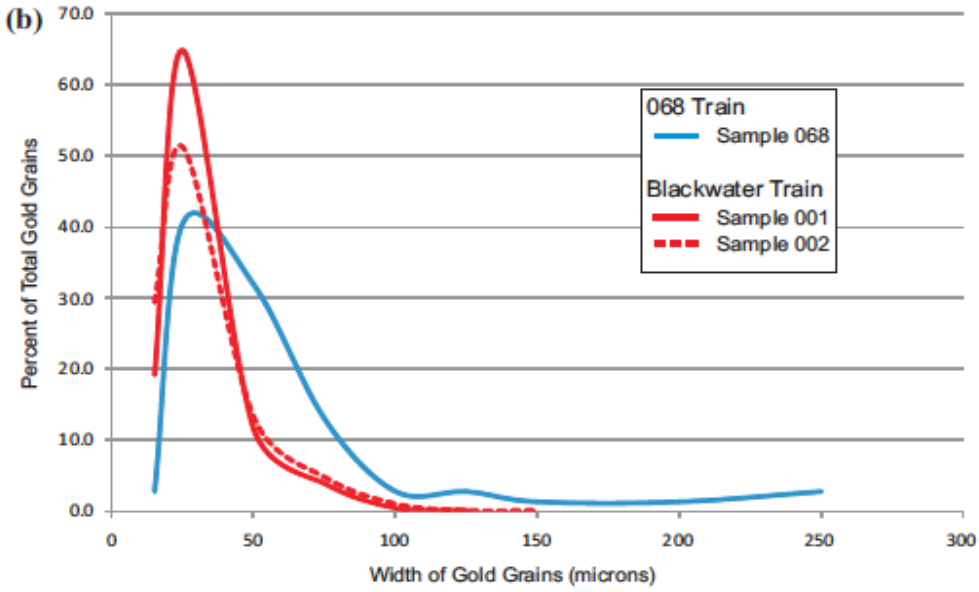


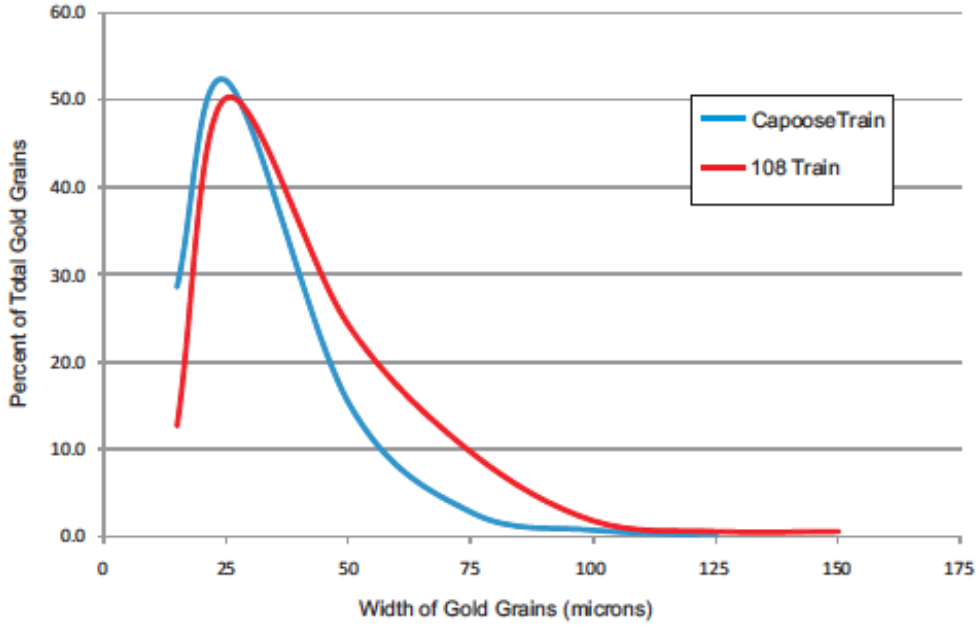
Figure 17: Blackwater and 068 Dispersal Train Gold Grain Particle Size Distribution





(a) silt-sized (<0.063mm) grain from the pan tail of Sample 001; (b) size comparison of grains from the most gold-rich samples of the 068 and Blackwater trains

Figure 18: Capoose and 108 Dispersal Train Particle Size Gold Grain Distribution



The graph includes all gold grains from the three most anomalous samples in the proximal part of each dispersal train

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 19: Till Sample Mn Results (ppm)
For the survey, the property
was divided into two sections

345000 m
355000 m
365000 m
375000 m
385000 m
395000 m

5910000 m
5900000 m
5890000 m
5880000 m

0
Scale: 1:50000
10 km

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 20: Till Sample As Results (ppm)
For the survey, the property
was divided into two sections

345000 m
355000 m
365000 m
375000 m
385000 m
395000 m

5910000 m
5900000 m
5890000 m
5880000 m

0
Scale: 1:50000
10 km

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 21: Till Sample Zn Results (ppm)
For the survey, the property
was divided into two sections

345000 m
355000 m
365000 m
375000 m
385000 m
395000 m

5910000 m
5900000 m
5890000 m
5880000 m

0
Scale: 1:50000
10 km

New Gold Titles
Capoose Sector
Blackwater Sector

N

Figure 22: Till Sample Pb Results (ppm)
For the survey, the property
was divided into two sections

345000 m
355000 m
365000 m
375000 m
385000 m
395000 m

5910000 m
5900000 m
5890000 m
5880000 m

0
Scale: 1:50000
10 km

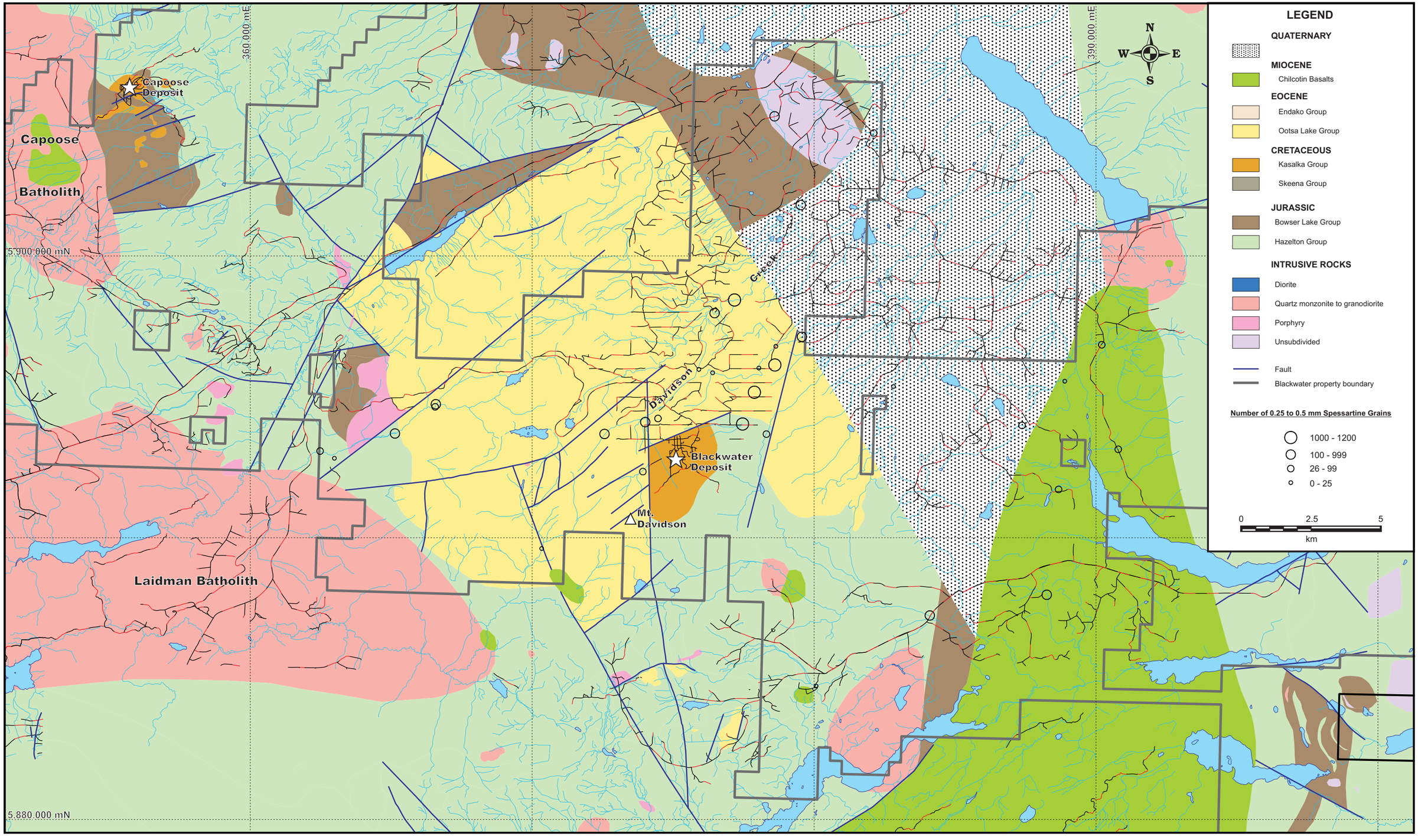


Figure 23: **Number of 0.25 to 0.5 mm spessartine grains in nonferromagnetic HMCs from alluvial gravel samples in the Blackwater sector of the property.**

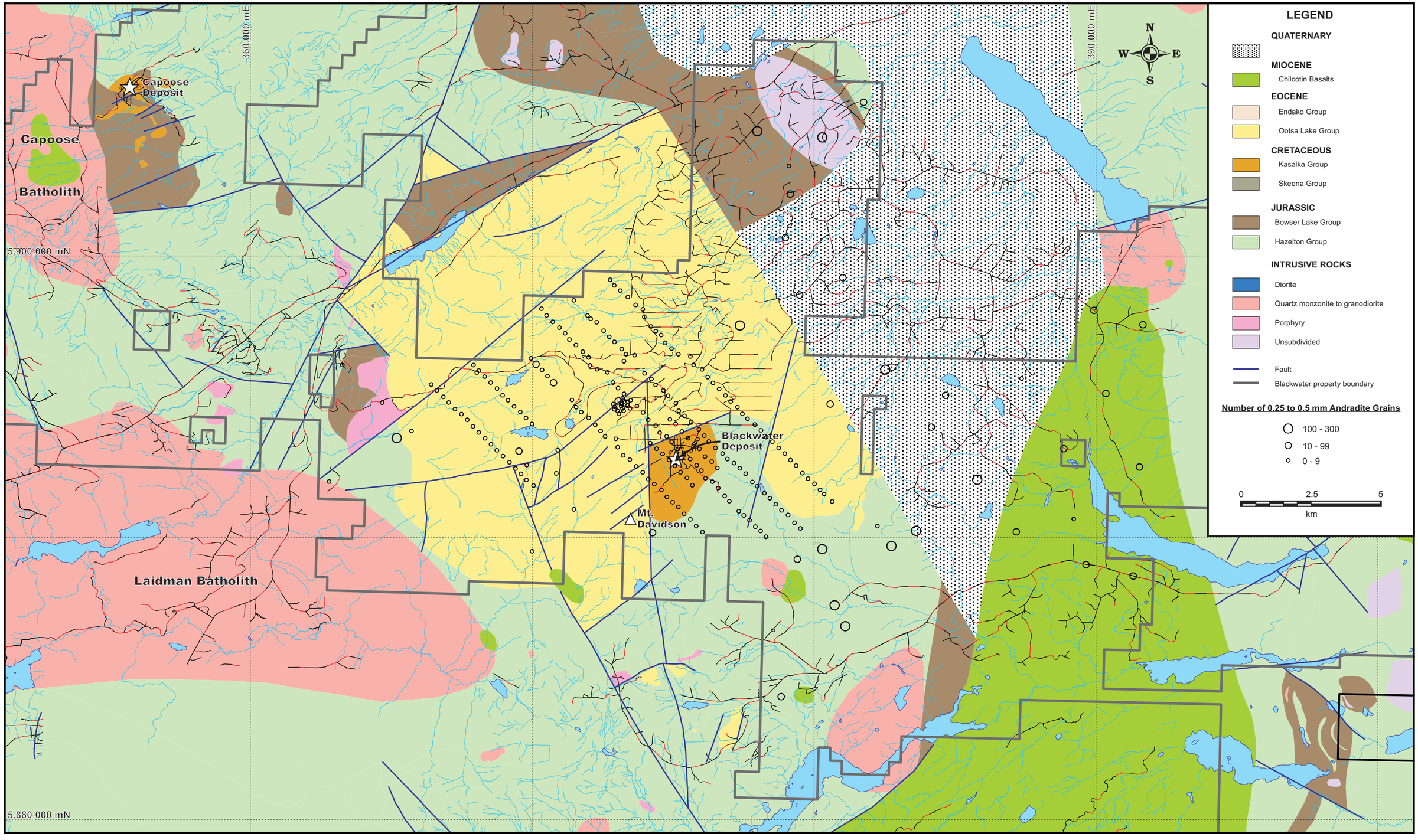


Figure 24: **Number of 0.25 to 0.5 mm andradite grains in nonferromagnetic HMCs from till samples in the Blackwater sector of the property.**

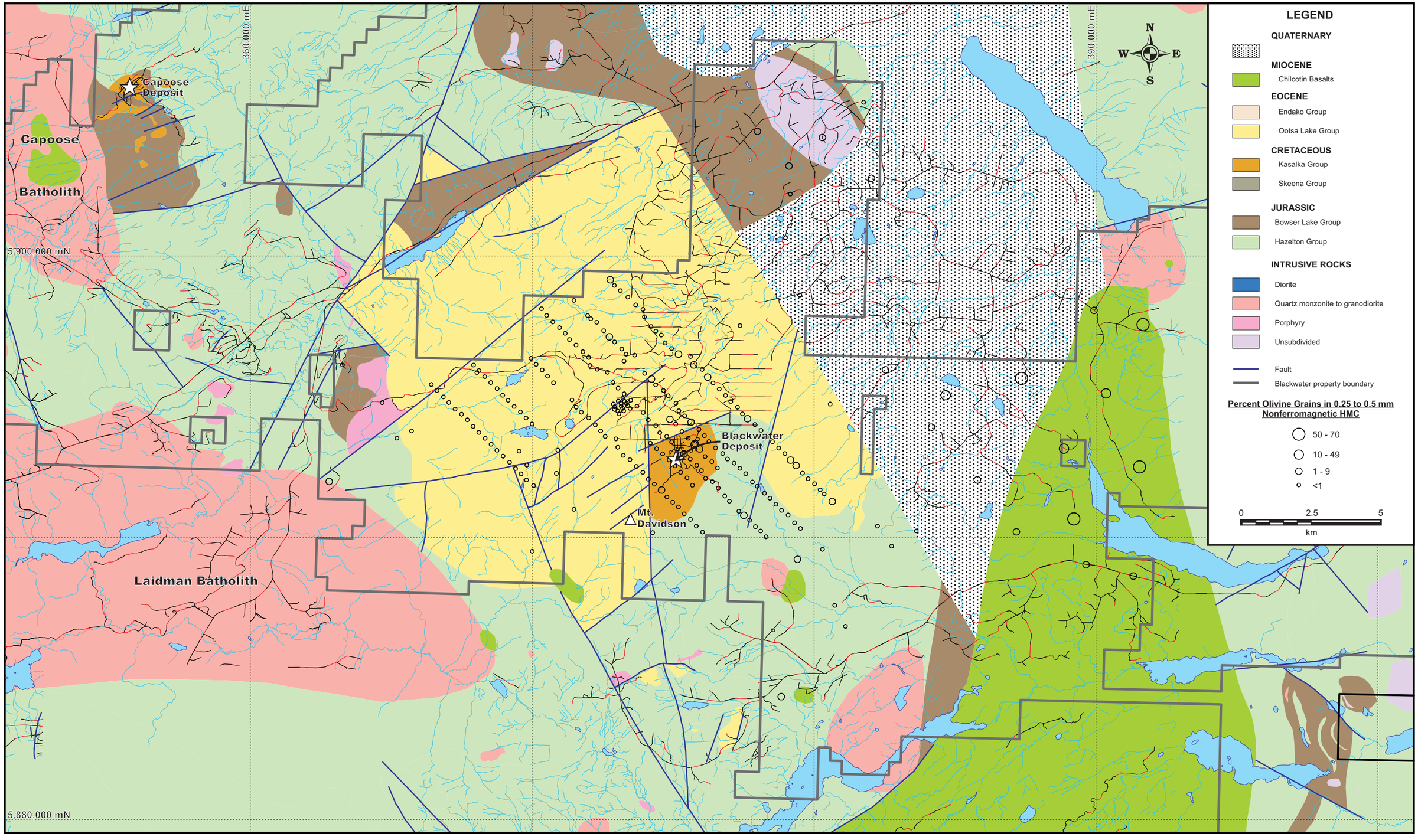


Figure 25: **Percent olivine in nonferromagnetic 0.25 to 0.5 mm HMCs from till samples in the Blackwater sector of the property.**

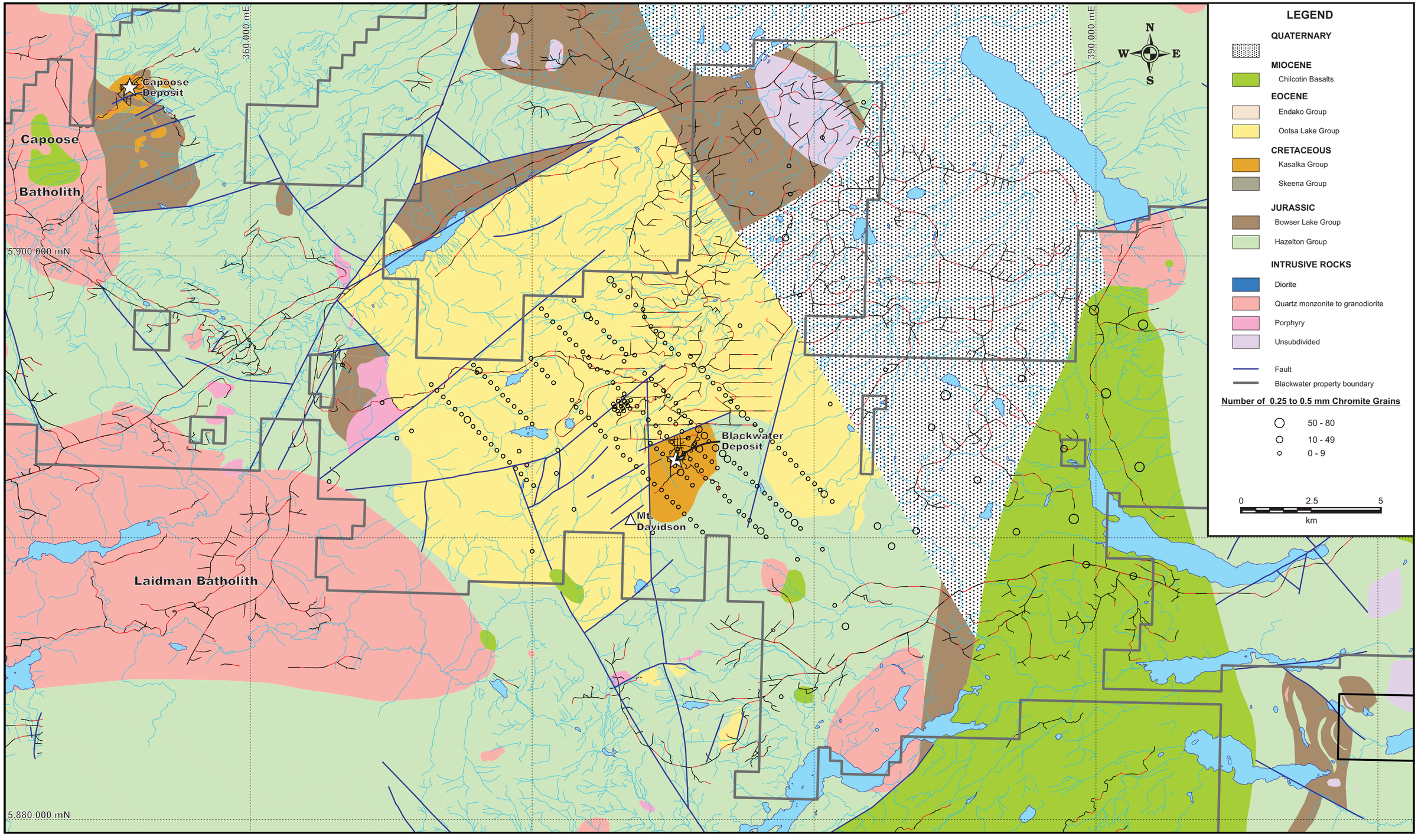


Figure 26: Number of 0.25 to 0.5 mm chromite grains in nonferromagnetic HMCs from till samples in the Blackwater sector of the property.

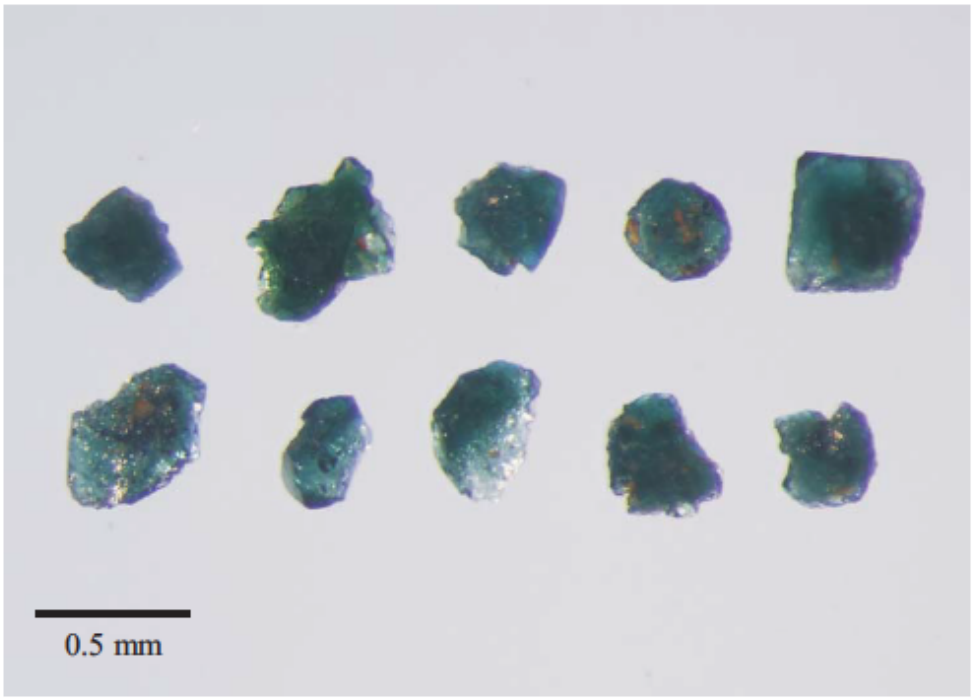
Table 10: Blackwater Indicator Mineral Counts for Till Samples

	Number of Grains										%	
	Unsized		0.25-0.5 mm									
Sample Number	Au	Cinnabar	Cpy	Mo	Anglesite/ Plumbo-gummite	Py	Gah	Adr	Sps	Cr	Olivine	Major Mineral Assemblage
BWT-12-001	641	0	0	0	0	0	0	0	~2000	3	1	Hematite-goethite-spessartine/epidote
BWT-12-002	561	0	0	0	0	3	0	0	~1000	2	0.5	Hematite/epidote
BWT-12-003	23	0	0	0	0	2	0	0	3	5	Tr	Hematite-goethite/epidote
BWT-12-004	5	0	0	0	1	2	0	0	5	2	Tr	Hematite/epidote
BWT-12-005	10	0	0	0	0	1	0	0	16	5	Tr	Hematite-ilmenite/epidote
BWT-12-006	62	0	1	0	1	0	0	0	~25,000	3	Tr	Spessartine/epidote
BWT-12-007	1	0	0	0	0	0	0	0	3	0	Tr	Hematite/epidote
BWT-12-008	5	0	0	0	0	3	0	0	4	0	Tr	Hematite-goethite/epidote
BWT-12-009	3	0	0	0	0	0	0	0	~1500	2	0	Hematite-spessartine/epidote
BWT-12-010	3	0	0	0	0	0	0	0	~800	2	Tr	Hematite-ilmenite/epidote
BWT-12-011	214	0	0	0	0	1	0	0	~2500	9	Tr	Hematite-spessartine/epidote
BWT-12-012	1	0	0	0	0	1	0	0	~2500	7	Tr	Hematite-ilmenite-spessartine/epidote
BWT-12-013	1	0	0	0	0	0	0	0	~200	1	2	Hematite/epidote
BWT-12-014	151	0	0	0	0	0	0	0	~500	21	0	Hematite/epidote
BWT-12-015	26	0	0	0	3	1	0	0	~800	6	0	Hematite-ilmenite/epidote
BWT-12-016	119	0	0	0	0	2	0	0	~12,000	3	Tr	Spessartine/epidote
BWT-12-017	11	0	0	0	0	1	0	0	~1500	12	Tr	Hematite-spessartine/epidote
BWT-12-018	58	0	0	0	0	0	0	0	~1200	15	Tr	Hematite-ilmenite-spessartine/epidote
BWT-12-019	2	0	0	0	0	0	0	0	~200	10	Tr	Hematite/epidote
BWT-12-020	2	0	0	0	0	2	0	0	~200	12	Tr	Hematite-ilmenite/epidote
BWT-12-021	44	0	0	0	3	0	0	0	~400	7	Tr	Hematite-ilmenite/epidote
BWT-12-022	23	0	0	0	0	0	0	0	~250	18	Tr	Hematite-ilmenite/epidote
BWT-12-023	0	0	0	0	0	1	0	0	2	2	Tr	Hematite-ilmenite/epidote
BWT-12-024	5	0	0	0	0	0	0	0	26	0	Tr	Hematite-ilmenite/epidote
BWT-12-025	6	0	0	0	0	0	0	0	~800	0	4	Hematite-ilmenite-spessartine/epidote
BWT-12-026	9	0	0	0	0	0	0	0	~800	4	Tr	Hematite-ilmenite/epidote
BWT-12-027	2	0	0	0	0	0	0	0	~40	0	Tr	Hematite-ilmenite/epidote
BWT-12-028	6	0	0	0	0	1	0	0	~40	4	10	Hematite-ilmenite/epidote
BWT-12-029	3	0	0	0	0	0	0	0	~80	5	Tr	Hematite-ilmenite/epidote
BWT-12-030	0	0	0	0	0	1	0	0	8	1	Tr	Hematite/epidote
BWT-12-031	2	0	0	0	0	0	0	0	~40	5	Tr	Hematite-ilmenite/epidote
BWT-12-032	2	0	0	0	0	0	0	0	14	0	Tr	Hematite/epidote
BWT-12-033	0	0	0	0	0	2	0	0	10	2	Tr	Hematite/epidote
BWT-12-034	5	0	0	0	0	0	0	0	3	2	Tr	Hematite-ilmenite/epidote
BWT-12-035	1	0	0	0	0	~40	0	0	2	0	Tr	Hematite/epidote
BWT-12-036	0	0	0	0	0	0	0	0	13	1	Tr	Hematite/epidote
BWT-12-037	0	0	0	0	0	0	0	0	5	0	Tr	Hematite/epidote
BWT-12-038	0	0	0	0	0	0	0	0	0	0	0.5	Hematite/epidote
BWT-12-039	0	0	0	0	0	0	0	0	7	0	Tr	Hematite/epidote
BWT-12-040	4	0	0	0	0	0	0	0	8	0	Tr	Hematite/epidote
BWT-12-041	1	0	0	0	0	0	0	0	18	2	0.5	Hematite-ilmenite/epidote
BWT-12-042	5	0	0	0	0	0	0	0	8	1	Tr	Hematite/epidote
BWT-12-043	9	0	0	0	0	0	0	0	11	4	0.5	Hematite/epidote
BWT-12-044	2	0	0	0	0	0	0	0	~50	8	Tr	Hematite-ilmenite/epidote
BWT-12-045	8	0	0	0	1	0	0	0	~150	8	10	Hematite/epidote
BWT-12-046	1	0	0	0	0	0	0	0	3	0	Tr	Hematite-ilmenite/epidote
BWT-12-047	0	0	0	0	0	0	0	0	10	0	Tr	Hematite/epidote
BWT-12-048	1	0	0	0	0	0	0	0	3	0	Tr	Hematite/epidote
BWT-12-049	1	0	0	0	0	1	0	0	10	0	10	Hematite/epidote
BWT-12-050	2	0	0	0	0	0	0	0	12	0	Tr	Hematite/epidote
BWT-12-051	8	0	0	0	0	0	0	0	16	2	Tr	Hematite/epidote
BWT-12-052	0	0	0	0	0	5	0	0	14	5	Tr	Hematite-ilmenite/epidote
BWT-12-053	3	0	0	0	0	8	0	0	27	1	Tr	Hematite/epidote
BWT-12-054	0	0	0	0	0	0	0	0	15	12	Tr	Hematite-ilmenite/epidote
BWT-12-055	28	0	0	0	0	0	0	0	11	6	Tr	Hematite/epidote
BWT-12-056	5	0	0	0	0	0	0	2	16	5	Tr	Hematite/epidote
BWT-12-057	1	0	0	0	0	0	0	0	19	5	Tr	Hematite-ilmenite/epidote
BWT-12-058	0	0	0	0	0	0	0	0	~40	6	Tr	Hematite/epidote
BWT-12-059	1	0	0	0	0	0	0	0	~150	11	2	Hematite/epidote
BWT-12-060	4	0	0	0	0	0	0	0	19	4	Tr	Hematite/epidote
BWT-12-061	1	0	0	0	0	0	0	0	8	1	Tr	Hematite-ilmenite/epidote
BWT-12-062	2	0	0	0	0	0	0	0	5	2	Tr	Hematite/epidote
BWT-12-063	1	0	0	0	0	0	0	0	13	1	Tr	Hematite/epidote
BWT-12-064	1	0	0	0	0	0	0	0	8	0	Tr	Hematite/epidote
BWT-12-065	0	0	0	0	0	0	0	1	14	9	Tr	Hematite/epidote
BWT-12-066	31	0	0	0	0	0	0	1	3	0	Tr	Hematite-goethite/epidote
BWT-12-067	4	0	0	0	0	0	0	0	11	1	Tr	Hematite/epidote
BWT-12-068	69	0	0	0	0	1	0	0	3	4	Tr	Hematite/epidote
BWT-12-069	5	0	0	0	0	0	0	0	17	4	Tr	Hematite/epidote
BWT-12-070	8	0	0	0	0	1	0	0	10	4	Tr	Hematite/epidote
BWT-12-071	16	0	0	0	0	0	0	0	16	7	0.5	Hematite/epidote
BWT-12-072	4	0	0	0	0	0	0	3	21	4	0.5	Hematite/epidote
BWT-12-073	5	0	0	0	0	0	0	0	22	2	Tr	Hematite/epidote
BWT-12-074	0	0	0	0	0	0	0	0	11	7	Tr	Hematite/epidote
BWT-12-075	1	0	0	0	0	0	0	2	8	11	Tr	Hematite/epidote
BWT-12-076	1	0	0	0	0	1	0	0	~50	8	10	Hematite/epidote
BWT-12-077	1	0	0	0	0	0	0	0	~40	4	Tr	Hematite/epidote
BWT-12-078	2	0	0	0	0	1	0	1	14	3	Tr	Hematite/epidote
BWT-12-079	16	1	0	0	0	0	0	0	~40	7	10	Hematite/epidote
BWT-12-080	2	0	0	0	0	0	0	1	26	7	Tr	Hematite/epidote
BWT-12-081	2	0	0	0	0	0	0	0	4	3	Tr	Hematite/epidote-titanite
BWT-12-082	4	0	0	0	0	1	0	0	8	7	Tr	Hematite/epidote
BWT-12-083	3	0	0	0	0	0	0	0	~50	10	0.5	Hematite/epidote
BWT-12-084	6	0	0	0	0	0	0	0	40	7	Tr	Hematite/epidote-titanite

	Number of Grains										%	
	Unsized		0.25-0.5 mm									
Sample Number	Au	Cinnabar	Cpy	Mo	Anglesite/ Plumbo-gummite	Py	Gah	Adr	Sps	Cr	Olivine	Major Mineral Assemblage
BWT-12-085	1	0	0	0	0	0	0	0	~60	5	Tr	Hematite/epidote
BWT-12-086	1	0	0	0	0	0	0	0	3	1	Tr	Hematite/epidote
BWT-12-087	0	0	0	0	0	0	0	0	6	7	0.5	Hematite/epidote
BWT-12-088	3	0	0	0	0	0	0	0	12	5	Tr	Hematite/epidote
BWT-12-089	2	0	0	0	0	0	0	0	80	9	2	Hematite/epidote
BWT-12-090	0	0	0	0	0	0	0	0	10	6	Tr	Hematite/epidote
BWT-12-091	8	0	0	0	0	0	0	0	7	11	0.5	Hematite/epidote
BWT-12-092	4	0	0	0	0	0	0	0	7	4	1	Hematite/epidote
BWT-12-093	9	0	0	0	0	0	0	0	11	3	Tr	Hematite-ilmenite/epidote
BWT-12-094	2	0	0	0	0	0	0	0	27	9	Tr	Hematite/epidote
BWT-12-095	2	0	0	0	0	0	0	0	17	4	Tr	Hematite/epidote
BWT-12-096	32	0	0	0	0	0	0	0	~2500	7	Tr	Hematite-spessartine/epidote
BWT-12-097	28	0	0	0	0	0	0	0	~800	8	Tr	Hematite/epidote
BWT-12-098	162	0	0	0	0	0	0	0	~2000	11	Tr	Hematite-spessartine/epidote
BWT-12-099	14	0	0	0	0	0	0	0	18	5	10	Ilmenite-hematite/epidote
BWT-12-100	0	0	0	0	0	0	0	0	~100	0	Tr	Hematite/epidote
BWT-12-101	0	0	0	0	0	1	0	0	~800	5	Tr	Hematite-spessartine/epidote
BWT-12-103	1	0	0	0	0	0	0	0	~300	4	Tr	Hematite/epidote
BWT-12-109	3	0	0	0	0	2	0	0	13	2	10	Hematite/epidote
BWT-12-116	0	0	0	0	0	0	0	0	~150	0	Tr	Almandine-hematite/epidote
BWT-12-117	4	0	0	0	0	0	0	0	~50	1	Tr	Hematite/epidote
BWT-12-118	0	0	0	0	0	0	0	0	~4000	4	0.5	Hematite-spessartine/epidote
BWT-12-119	2	0	0	0	0	0	0	0	~100	0	Tr	Hematite/epidote
BWT-12-120	3	0	0	0	0	1	0	0	13	10	Tr	Hematite/epidote
BWT-12-121	5	0	0	0	0	0	4	0	16	4	0.5	Hematite-ilmenite/epidote
BWT-12-122	1	0	0	0	0	0	0	0	0	8	Tr	Hematite-ilmenite/epidote
BWT-12-123	2	0	0	0	0	0	0	0	~100	5	Tr	Hematite/epidote
BWT-12-124	5	0	0	0	0	0	0	0	2	11	Tr	Hematite/epidote
BWT-12-125	7	0	0	0	0	0	0	3	25	14	0	Hematite/epidote
BWT-12-126	1	0	0	0	0	0	0	0	6	5	2	Hematite-ilmenite/epidote
BWT-12-127	1	0	0	0	0	0	0	0	~1200	9	Tr	Hematite-ilmenite/epidote
BWT-12-128	1	0	0	0	0	0	0	0	1	2	Tr	Hematite/epidote
BWT-12-129	1	0	0	0	0	0	0	0	~250	4	0	Hematite/epidote
BWT-12-130	4	0	0	0	0	0	0	0	9	8	Tr	Hematite-ilmenite/epidote
BWT-12-131	1	0	0	0	0	0	0	0	8	1	Tr	Hematite/epidote
BWT-12-132	0	0	0	0	0	2	0	0	~100	6	Tr	Hematite/epidote
BWT-12-133	0	0	0	0	0	0	0	0	~80	8	Tr	Hematite/epidote
BWT-12-134	0	0	0	0	0	0	0	0	~60	2	Tr	Hematite/epidote
BWT-12-135	0	0	0	0	0	0	0	2	~100	7	Tr	Hematite/epidote
BWT-12-136	5	0	0	0	0	0	0	0	~30,000	4	Tr	Hematite/epidote
BWT-12-137	6	0	0	0	0	1	0	0	~80	8	Tr	Hematite/epidote
BWT-12-138	3	0	0	0	0	0	0	3	~40	13	Tr	Hematite/epidote
BWT-12-139	0	0	0	0	0	0	0	0	0	1	Tr	Hematite/epidote
BWT-12-140	2	0	0	0	0	3	0	0	1	3	Tr	Hematite-almandine/epidote
BWT-12-141	3	0	0	0	0	0	0	0	18	4	Tr	Hematite/epidote
BWT-12-142	1	0	0	0	0	0	0	0	30	1	Tr	Hematite/epidote
BWT-12-143	6	0	0	0	0	5	0	1	~60	4	Tr	Hematite/epidote
BWT-12-144	1	0	0	0	0	0	0	0	~50	2	Tr	Hematite/epidote
BWT-12-145	21	0	0	0	0	0	0	1	~100	9	1	Hematite/epidote
BWT-12-146	3	0	0	0	0	3	0	1	~1500	2	Tr	Hematite/epidote
BWT-12-147	25	0	0	0	0	1	0	1	~150	0	Tr	Hematite/epidote
BWT-12-148	3	0	0	0	0	0	0	0	~150	1	Tr	Hematite/epidote
BWT-12-149	5	0	0	0	0	0	0	0	~800	4	Tr	Hematite/epidote
BWT-12-150	2	0	0	0	0	0	0	0	~40	6	Tr	Hematite/epidote
BWT-12-151	0	0	0	0	0	0	0	1	~300	2	Tr	Hematite-ilmenite/epidote
BWT-12-152	1	0	0	0	0	0	0	0	15	5	Tr	Hematite-ilmenite/epidote
BWT-12-153	1	0	0	0	0	0	0	0	~50	5	Tr	Hematite/epidote
BWT-12-154	0	0	0	0	0	0	0	0	6	5	Tr	Hematite/epidote
BWT-12-161	27	1	0	0	0	0	0	0	~50	2	1	Hematite/epidote
BWT-12-162	6	0	0	0	0	0	0	0	~40	4	Tr	Hematite/epidote
BWT-12-163	6	0	0	0	0	0	0	0	~40	5	Tr	Hematite/epidote
BWT-12-164	3	0	0	0	0	0	0	0	10	1	Tr	Hematite/epidote
BWT-12-165	2	0	0	0	0	0	0	5	5	0	Tr	Hematite/epidote
BWT-12-166	2	0	0	0	0	0	0	0	8	3	Tr	Hematite/epidote
BWT-12-167	4	0	0	0	0	1	0	0	12	0	Tr	Hematite/epidote
BWT-12-168	1	0	1	0	0	0	0	0	11	0	Tr	Hematite/epidote
BWT-12-169	7	0	0	1	0	0	0	1	16	0	Tr	Hematite/epidote
BWT-12-170	3	0	0	0	0	0	0	0	80	4	Tr	Hematite/epidote
BWT-12-171	3	0	0	0	0	0	0	0	10	0	Tr	Hematite/epidote
BWT-12-172	4	0	0	0	0	0	0	0	6	4	Tr	Hematite/epidote
BWT-12-173	3	0	0	0	0	0	0	1	~40	1	Tr	Hematite/epidote-titanite
BWT-12-199	36	0	0	0	0	3	0	0	~80	3	10	Hematite/epidote
BWT-12-200	19	0	0	0	0	0	0	0	14	1	Tr	Hematite/epidote
BWT-12-201	14	0	0	0	0	0	0	0	~60	4	Tr	Hematite-ilmenite/epidote
BWT-12-203	19	0	0	0	0	5	0	0	~30	1	Tr	Hematite/epidote
BWT-12-223	3	0	0	0	0	0	0	~100	4	5	1	Hematite/epidote
BWT-12-224	2	0	0	0	0	0	0	~250	5	15	2	Hematite/epidote
BWT-12-225	1	0	0	0	0	3	0	~40	12	1	Tr	Augite/epidote
BWT-12-226	4	0	0	0	0	0	0	~200	0	7	1	Hematite/epidote
BWT-12-227	2	0	0	0	0	0	0	0	~40	~80	70	Forsterite-hematite/epidote
BWT-12-228	2	0	0	0	0	0	0	~60	2	~50	20	Hematite-forsterite/epidote
BWT-12-229	0	0	0	0	0	0	0	~80	7	14	1	Hematite-augite/epidote
BWT-12-230	4	0	0	0	0	0	0	~100	3	13	1	Hematite/epidote
BWT-12-231	2	0	0	0	0	0	0	16	9	4	Tr	Hematite/epidote

	Number of Grains										%	
	Unsized		0.25-0.5 mm									
Sample Number	Au	Cinnabar	Cpy	Mo	Anglesite/ Plumbo-gummite	Py	Gah	Adr	Sps	Cr	Olivine	Major Mineral Assemblage
BWT-12-232	15	6	0	0	0	1	0	7	18	6	2	Hematite/epidote
BWT-12-233	3	0	0	0	0	~15	0	~40	~30	4	Tr	Hematite/epidote
BWT-12-234	7	0	0	0	0	0	0	1	~150	17	60	Forsterite-augite/epidote
BWT-12-235	6	1	0	0	0	0	0	~80	4	~40	40	Hematite-forsterite/epidote
BWT-12-236	5	0	0	0	0	0	0	4	17	6	5	Hematite/epidote
BWT-12-237	1	0	0	0	0	0	0	~40	15	9	Tr	Hematite-augite/epidote
BWT-12-238	18	2	0	0	0	0	0	~40	6	15	1	Hematite/epidote
BWT-12-239	5	0	0	0	0	0	0	11	18	~60	3	Hematite/epidote
BWT-12-240	8	0	0	0	0	0	0	~40	3	~50	70	Forsterite-hematite/epidote
BWT-12-241	5	1	0	0	0	0	0	13	~100	~60	40	Hematite-forsterite/epidote
BWT-12-242	6	0	0	0	0	0	0	~80	2	~50	70	Forsterite-hematite/epidote
BWT-12-244	24	0	0	0	0	0	0	~50	~40	9	Tr	Hematite/epidote
BWT-12-245	1	1	0	0	0	0	0	~50	6	~30	3	Hematite/epidote
BWT-12-246	8	0	0	0	0	0	0	24	23	~30	6	Hematite/epidote
BWT-12-247	4	0	0	0	0	0	0	~40	5	5	2	Hematite/epidote
BWT-12-250	2	0	0	0	0	2	0	7	3	0	Tr	Hematite/epidote
BWT-12-253	2	0	0	0	0	0	0	11	~60	14	Tr	Hematite-ilmenite/epidote
BWT-12-254	5	1	0	0	0	0	0	1	18	7	1	Hematite/epidote
BWT-12-255	7	0	0	0	0	0	0	~100	16	6	Tr	Hematite/epidote
BWT-12-256	6	0	0	0	0	0	0	~60	3	0	Tr	Hematite/epidote
BWT-12-257	4	0	0	0	0	0	0	2	14	0	Tr	Hematite/epidote
BWT-12-258	1	0	0	0	0	0	0	2	0	0	Tr	Hematite/epidote
BWT-12-259	3	0	0	0	0	0	0	~50	2	2	Tr	Hematite/epidote
BWT-12-260	81	0	0	0	0	0	0	0	~40	5	Tr	Hematite/epidote
BWT-12-261	6	0	0	0	0	0	0	0	8	1	Tr	Hematite/epidote
BWT-12-262	3	0	0	0	0	0	0	~100	11	0	Tr	Hematite/epidote
BWT-12-263	0	0	0	0	0	0	0	12	0	0	Tr	Hematite-goethite/epidote-titanite
BWT-12-267	6	0	0	0	0	0	0	7	15	15	Tr	Hematite/epidote
BWT-12-268	9	0	0	0	0	1	0	~200	18	17	Tr	Hematite/epidote
BWT-12-269	8	0	0	0	0	0	0	~150	17	10	Tr	Hematite/epidote
BWT-12-270	9	0	0	0	0	0	0	8	5	8	Tr	Hematite/epidote
BWT-12-271	5	0	0	0	0	0	0	8	6	3	Tr	Hematite/epidote
BWT-12-276	1	0	0	0	0	0	0	0	3	2	Tr	Hematite/epidote
BWT-12-277	2	0	0	0	0	0	0	2	9	2	Tr	Hematite/epidote
BWT-12-278	3	0	0	0	0	0	0	18	4	0	Tr	Hematite/epidote-titanite
BWT-12-279	109	0	0	0	0	0	0	1	~30	8	Tr	Hematite/epidote
BWT-12-280	3	0	0	0	0	0	0	~40	7	4	1	Hematite/epidote
BWT-12-281	4	0	0	0	0	0	0	~100	8	7	Tr	Hematite/epidote
BWT-12-282	0	0	3	0	0	6	0	~300	~300	6	Tr	Hematite/epidote
BWT-12-283	7	0	0	0	0	0	0	~300	~50	15	Tr	Hematite/epidote
BWT-12-284	28	0	0	0	0	0	0	10	6	0	Tr	Hematite/epidote
BWT-12-285	30	0	0	0	0	0	0	1	0	1	Tr	Hematite/epidote
BWT-12-286	91	0	0	0	0	0	0	1	5	1	Tr	Hematite/epidote
BWT-12-287	6	0	0	0	0	0	0	7	10	2	Tr	Hematite/epidote
BWT-12-288	5	0	0	0	0	0	0	2	8	0	Tr	Hematite/epidote
BWT-12-289	9	0	0	0	0	0	0	22	11	9	Tr	Hematite/epidote
BWT-12-290	2	0	0	0	0	0	0	7	6	3	Tr	Hematite/epidote
BWT-12-291	8	0	0	0	0	0	0	0	9	2	0.5	Hematite-ilmenite/epidote
BWT-12-292	5	0	0	0	0	0	0	0	9	1	Tr	Hematite/epidote
BWT-12-293	4	0	0	0	0	0	0	6	2	0	Tr	Hematite/epidote
BWT-12-294	5	0	0	0	0	0	0	6	3	1	Tr	Hematite-goethite/epidote
BWT-12-295	7	0	0	0	0	0	0	4	6	2	Tr	Hematite/epidote
BWT-12-296	16	2	0	0	0	0	0	9	14	7	Tr	Hematite/epidote
BWT-12-297	266	0	0	0	5	1	0	5	3	3	Tr	Hematite/epidote
BWT-12-467	2	0	0	0	0	0	0	0	9	0	Tr	Hematite/epidote
BWT-12-468	6	0	0	0	0	0	0	3	7	9	Tr	Hematite/epidote
BWT-12-469	2	0	0	0	0	0	0	0	9	17	Tr	Hematite/epidote
BWT-12-470	3	0	0	0	0	0	0	6	~50	7	Tr	Hematite/epidote
BWT-12-471	7	0	0	0	0	0	0	0	~40	0	Tr	Hematite-ilmenite/epidote
BWT-12-472	1	0	0	0	0	0	0	0	18	5	Tr	Hematite-ilmenite/epidote
BWT-12-473	1	0	0	0	0	0	0	0	11	5	Tr	Hematite/epidote
BWT-12-474	4	0	0	0	0	0	2	0	~30	16	Tr	Hematite/epidote
BWT-12-475	1	0	0	0	0	0	0	2	15	6	Tr	Hematite/epidote
BWT-12-476	1	0	0	0	0	0	0	0	~40	5	Tr	Ilmenite-hematite/epidote
BWT-12-477	5	0	0	0	0	0	0	2	13	4	Tr	Hematite/epidote
BWT-12-478	2	0	0	0	0	0	0	0	19	0	Tr	Hematite/epidote
BWT-12-479	1	0	0	0	0	0	0	0	5	3	Tr	Hematite/epidote
BWT-12-480	1	0	0	0	0	0	0	0	1	1	Tr	Hematite/epidote
BWT-12-481	0	0	0	0	0	0	0	0	1	3	Tr	Hematite/epidote
BWT-12-482	0	0	0	0	0	0	0	0	0	1	Tr	Hematite/epidote
BWT-12-483	3	0	0	0	0	0	0	0	18	4	Tr	Hematite/epidote
BWT-12-484	0	0	0	0	0	0	0	0	12	0	Tr	Hematite/epidote
BWT-12-485	5	0	0	0	0	0	0	0	2	3	Tr	Hematite/epidote
BWT-12-486	2	0	0	0	0	0	0	0	2	0	Tr	Hematite/epidote
BWT-12-487	2	0	0	0	0	0	0	0	0	1	Tr	Hematite/epidote
BWT-12-488	0	0	0	0	0	0	0	0	8	2	Tr	Hematite/epidote
BWT-12-489	0	0	0	0	0	0	0	0	0	1	Tr	Hematite/epidote
BWT-12-490	3	1	0	0	0	0	0	0	7	0	Tr	Hematite/epidote
BWT-12-491	1	0	0	0	0	1	0	0	9	0	Tr	Hematite/epidote
BWT-12-492	1	0	0	0	0	0	0	0	0	6	Tr	Hematite/epidote
BWT-12-493	1	0	0	0	0	0	0	0	3	0	Tr	Hematite/epidote
BWT-12-494	2	0	0	0	0	0	0	0	0	1	Tr	Hematite/epidote
BWT-12-495	1	0	0	0	0	0	0	0	0	4	Tr	Hematite-ilmenite/epidote
BWT-12-496	0	0	0	0	0	0	0	0	0	2	Tr	Hematite/epidote

Figure 27: Binocular Microscope Photograph – Gahnite Grains



Grains taken from till sample BWT-12-108. Most of the grains contain significant quartz seen in the colorless areas.

Table 11: Indicator Mineral Counts for the Capoose Alluvial Gravel Samples

	Number of Grains										%		
	Unsized		0.25-0.5 mm										
Sample Number	Au	Cinnabar	Cpy	Mo	Anglesite/ Plumbo-gummite	Py	Gah	Adr	Sps	Cr	Goethite	Olivine	Assemblage
BWS-12-009	2	0	0	0	0	0	17	0	~500	~50	0	5	Hematite/titanite-epidote
BWS-12-010	3	0	0	0	0	0	1	0	~40	0	Tr	1	Hematite/titanite
BWS-12-011	1	0	0	0	0	0	3	0	4	40	0	Tr	Hematite/titanite
BWS-12-017	1	0	0	0	0	0	0	0	~80	~30	Tr	2	Hematite/epidote-titanite
BWS-12-018	0	0	3	0	0	~100	2	0	~2000	4	Tr	3	Hematite/epidote-titanite
BWS-12-019	4	0	0	0	0	0	0	~3000	0	~200	Tr	Tr	Hematite-andradite/epidote-titanite
BWS-12-020	3	0	1	0	0	0	0	6	~80	0	Tr	Tr	Hematite/epidote
BWS-12-021	1	0	0	0	0	0	0	~12,000	~2500	~150	Tr	Tr	Hematite-andradite/epidote
BWS-12-022	5	0	0	0	0	0	0	~5000	~60	~40	Tr	Tr	Hematite-andradite/epidote-titanite
BWS-12-023	23	0	0	1	0	~80	0	~30,000	~500	~50	Tr	Tr	Andradite-hematite/epidote
BWS-12-024	1	0	0	0	0	0	0	~20,000	15	~50	Tr	Tr	Andradite-hematite/epidote
BWS-12-025	3	0	2	0	0	~250	0	~50,000	~40	~50	Tr	Tr	Andradite-hematite/epidote
BWS-12-026	1	0	0	0	0	5	0	~2000	0	7	Tr	Tr	Hematite/epidote
BWS-12-027	0	0	2	0	0	0	0	~2000	1	12	Tr	2	Hematite/epidote
BWS-12-028	3	0	0	0	0	~15	0	~3000	~50	~40	Tr	1	Hematite-andradite/epidote
BWS-12-029	8	0	3	0	0	5	1	~1500	~50	~50	Tr	3	Hematite-andradite/epidote
BWS-12-030	6	0	1	0	0	~80	3	~15,000	~8000	~100	Tr	2	Hematite/epidote
BWS-12-032	30	0	0	0	0	0	0	~200	~40	~60	Tr	Tr	Hematite/epidote
BWS-12-033	6	0	0	0	0	3	0	~5000	~40	13	Tr	Tr	Ilmenite-hematite/epidote
BWS-12-035	0	0	0	0	0	8	0	7	15	0	Tr	Tr	Augite-hematite/epidote
BWS-12-036	1	0	0	1	0	~30	0	~1000	0	~40	Tr	Tr	Hornblende/epidote
BWS-12-037	1	0	0	0	0	0	0	0	~120	10	Tr	Tr	Hematite-augite/epidote
BWS-12-038	0	0	0	0	0	3	0	0	~100	5	Tr	Tr	Hematite/epidote
BWS-12-039	0	0	0	0	0	7	0	~100	0	~40	Tr	Tr	Hematite/epidote
BWS-12-040	1	0	0	0	0	0	0	~3000	~300	17	Tr	Tr	Hematite/epidote
BWS-12-041	1	0	2	0	0	5	0	~400	8	4	Tr	Tr	Hematite/epidote
BWS-12-043	0	0	2	0	0	4	0	~300	5	18	Tr	Tr	Hematite/epidote
BWS-12-046	1	0	0	0	0	4	1	0	~2400	8	2	1	Hematite/epidote
BWS-12-054	2	0	0	0	0	0	0	~1500	13	1	Tr	Tr	Hematite-andradite/epidote
BWS-12-055	5	0	0	0	0	3	0	~12000	~50	9	Tr	Tr	Hematite-ilmenite-andradite/epidote
BWS-12-060	8	0	2	0	0	0	0	~1000	~80	13	Tr	Tr	Hematite/epidote
BWS-12-061	2	0	3	0	0	3	0	3	20	7	2	Tr	Hematite/epidote
BWS-12-062	1	0	3	0	0	~20	1	0	~8000	22	Tr	Tr	Hematite/epidote
BWS-12-063	1	0	1	0	0	6	0	0	11	6	Tr	Tr	Hematite-almandine/epidote
BWS-12-067	8	0	0	0	0	0	0	~4000	~40	~50	Tr	Tr	Hematite-andradite/epidote
BWS-12-070	1	0	0	0	0	0	28	0	~150	0	0	Tr	Hematite/titanite
BWS-12-072	10	0	0	0	0	~50	~80	0	~50,000	6	0	4	Spessartine-hematite-goethite/epidote
BWS-12-073	1	0	0	0	0	~600	~60	0	~20,000	19	60	5	Goethite-spessartine/epidote
BWS-12-074	3	0	0	0	0	0	~40	0	~80,000	0	5	1	Spessartine/epidote
BWS-12-075	2	0	1	0	0	8	27	0	~15,000	21	5	5	Spessartine-hematite/epidote
BWS-12-076	0	0	0	0	0	0	12	0	~400	~80	5	2	Hematite-almandine/epidote-titanite
BWS-12-077	1	0	0	0	0	0	31	0	~50,000	17	Tr	2	Spessartine-hematite/epidote
BWS-12-078	0	0	1	0	0	0	4	0	~10,000	3	Tr	5	Hornblende-hematite-spessartine/epidote
BWS-12-079	4	0	1	0	0	0	3	0	~80,000	3	3	1	Spessartine-hematite/epidote
BWS-12-080	1	0	1	0	0	1	0	15	~3000	24	0	2	Hematite-hornblende-spessartine/epidote
BWS-12-081	1	0	1	0	0	0	13	0	~20,000	12	Tr	2	Spessartine-hematite/epidote

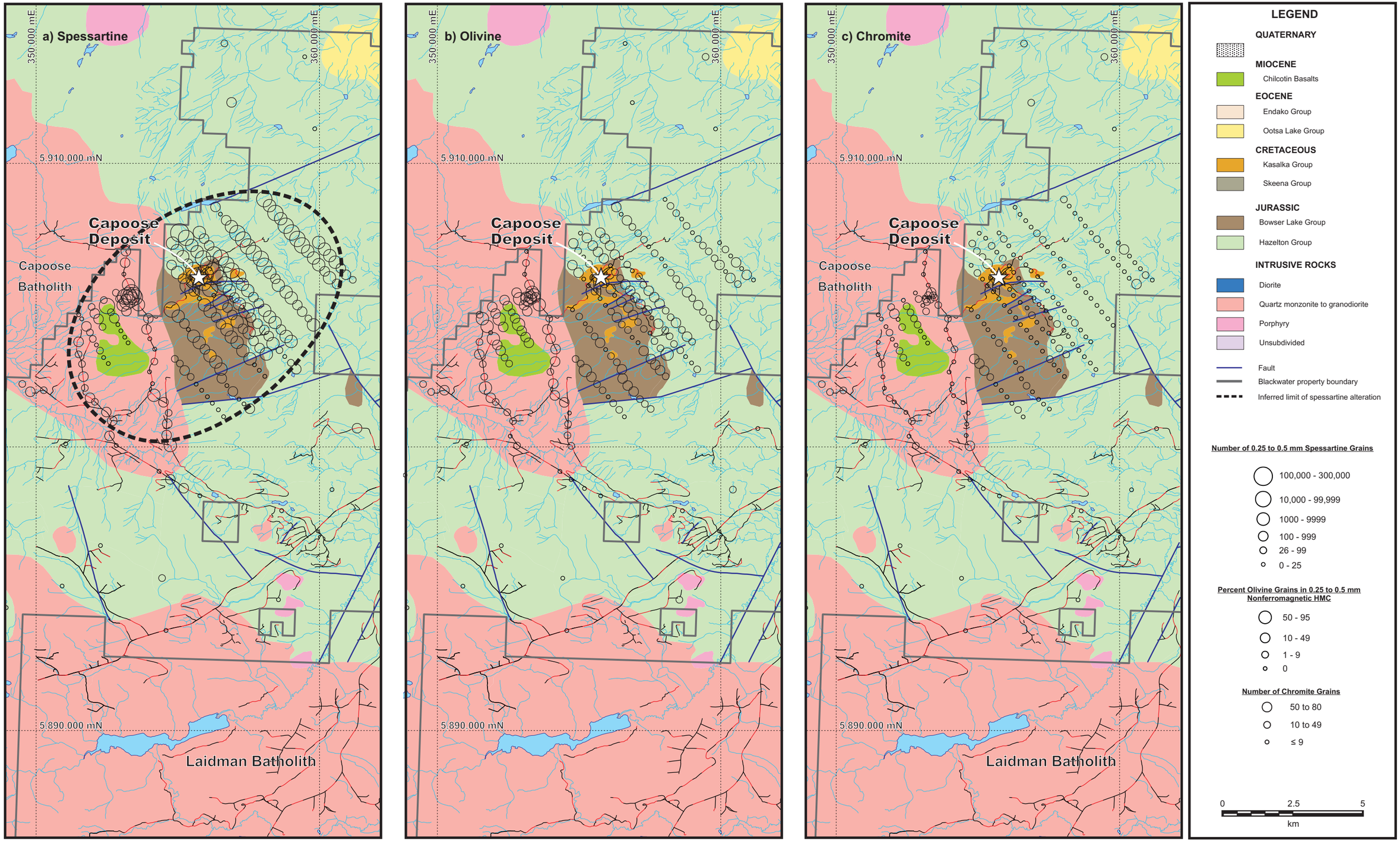


Figure 28: Map of the central part of the Capoose survey area comparing the abundance of spessartine (a), olivine (b) and chromite (c) in the 0.25 to 0.5 mm heavy mineral fraction of the till. Note that the olivine content was measured as a percentage of the 0.25 to 0.5 mm heavy mineral concentrate rather than by the number of grains present because olivine is more abundant than spessartine or chromite,

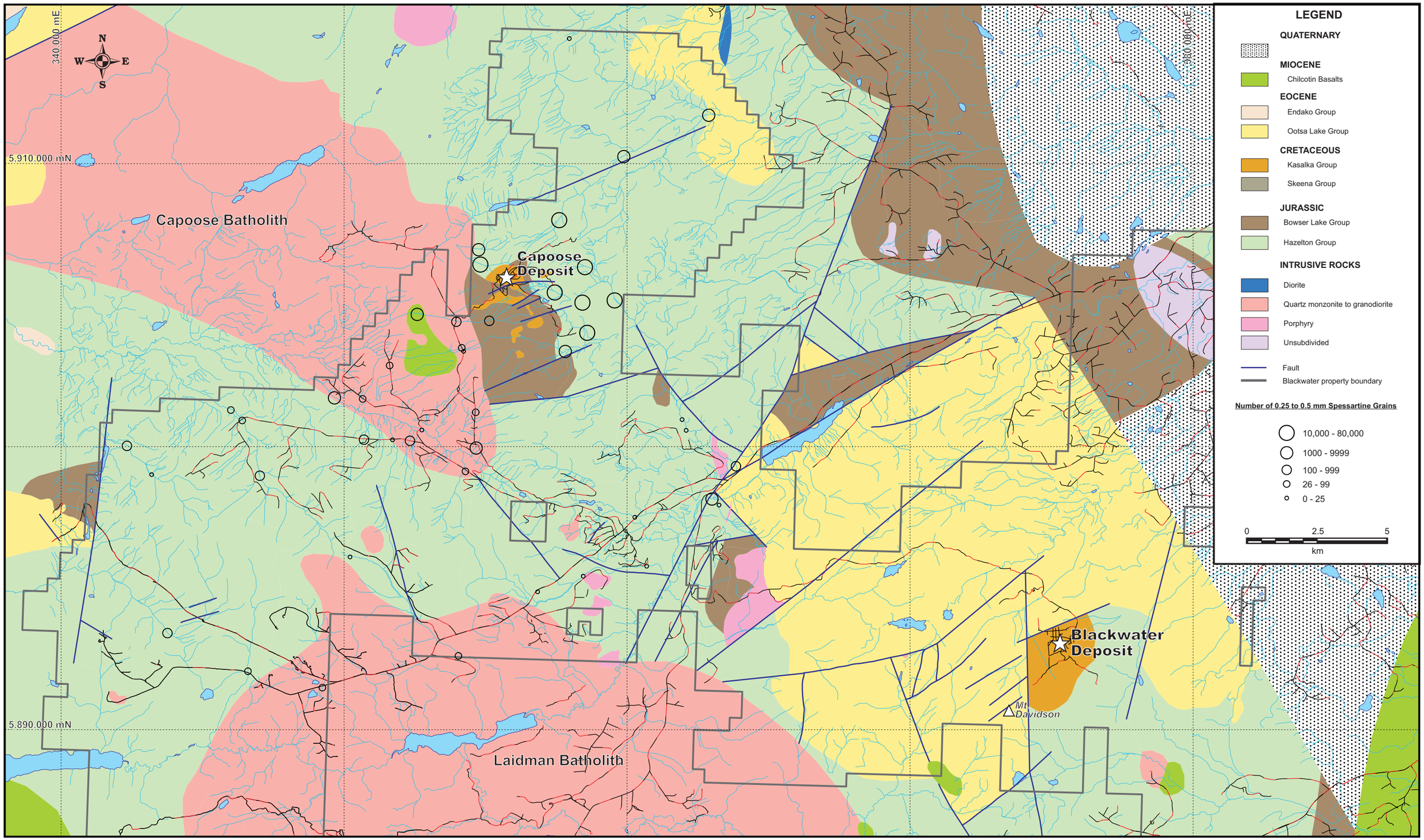


Figure 29: Number of 0.25 to 0.5 mm spessartine grains in nonferromagnetic HMCs from alluvial gravel samples in the Capoose sector of the property.

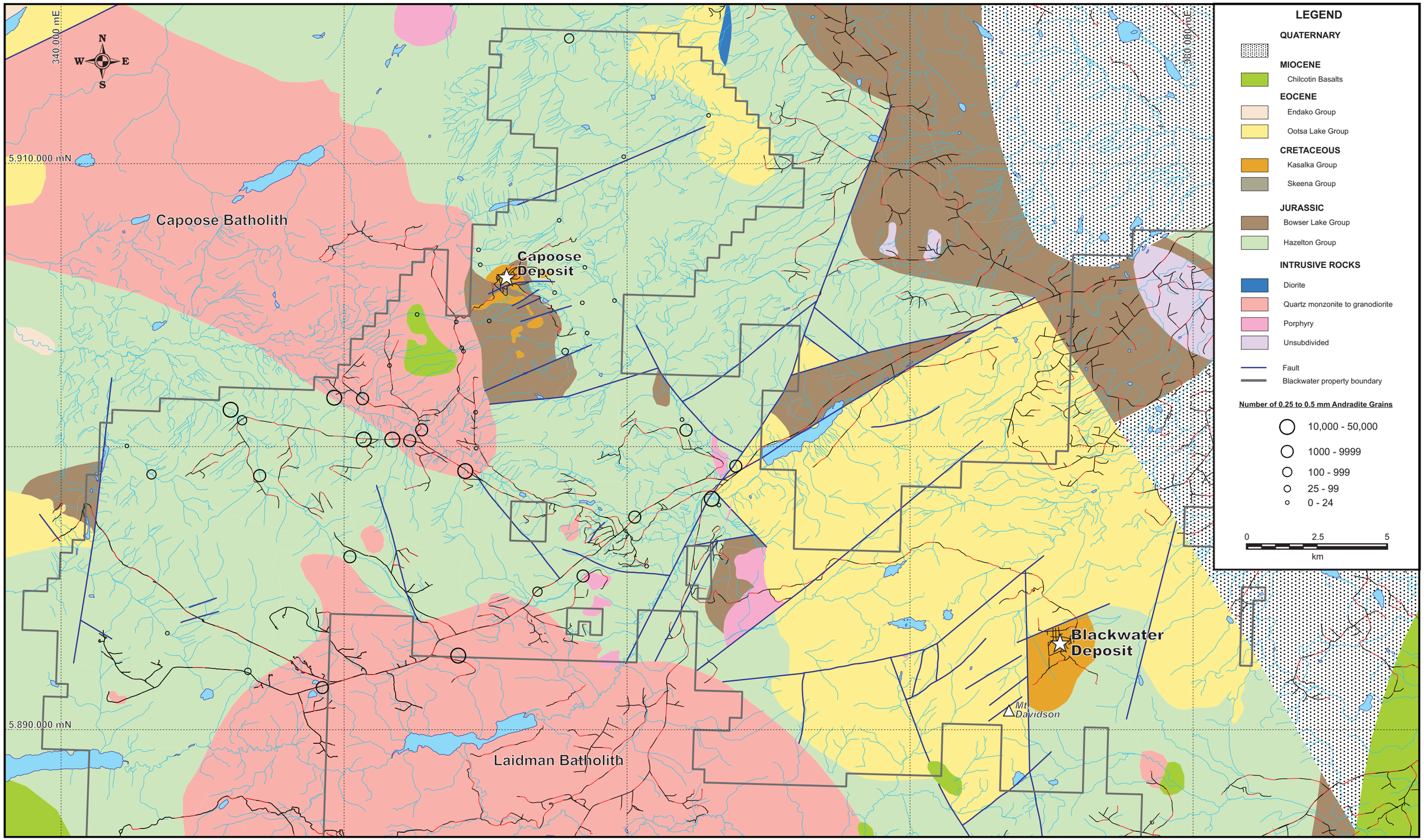


Figure 30: Number of 0.25 to 0.5 mm andradite grains in nonferromagnetic HMCs from alluvial gravel samples in the Capoose sector of the property.

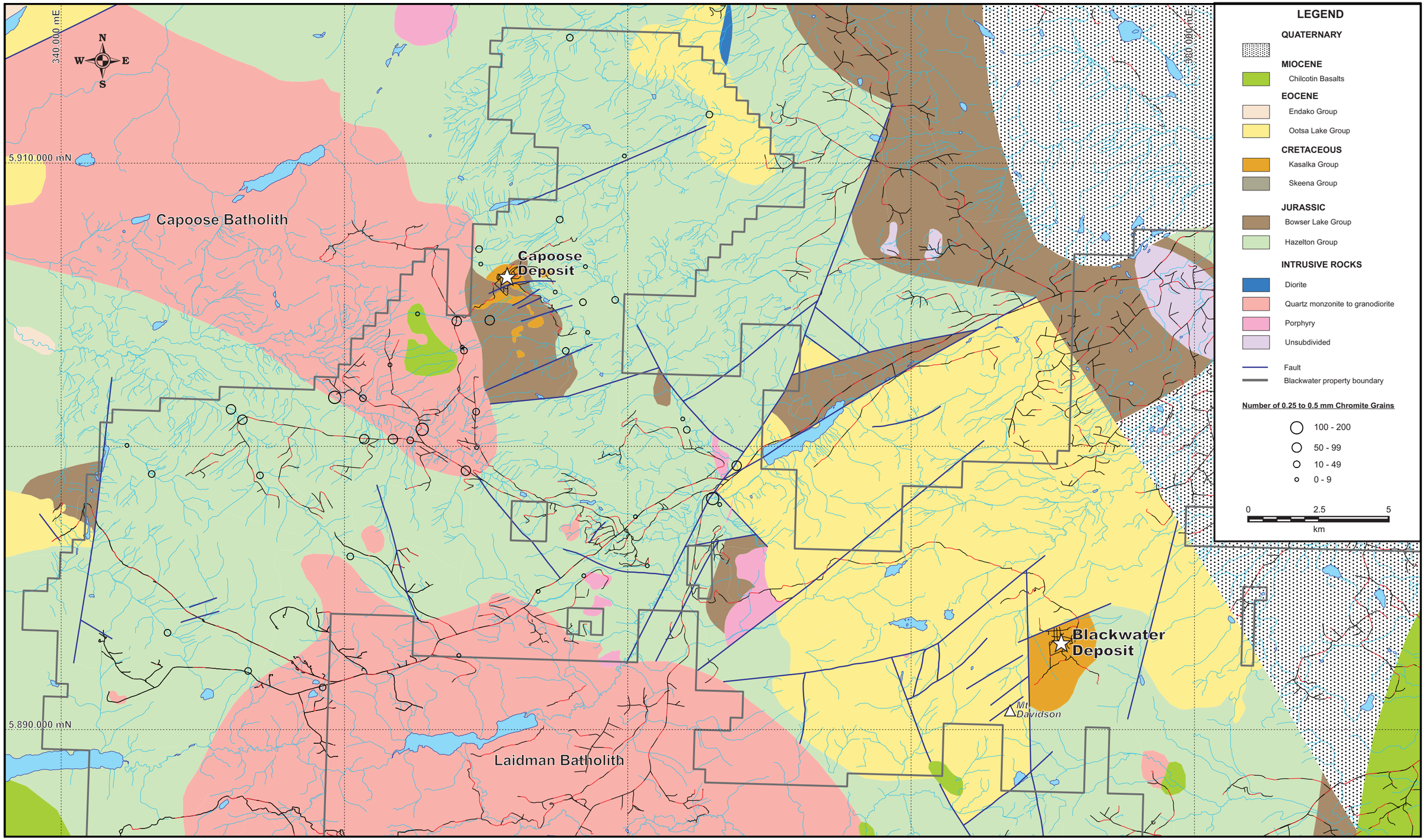


Figure 31: **Number of 0.25 to 0.5 mm chromite grains in nonferromagnetic HMCs from alluvial gravel samples in the Capoose sector of the property.**

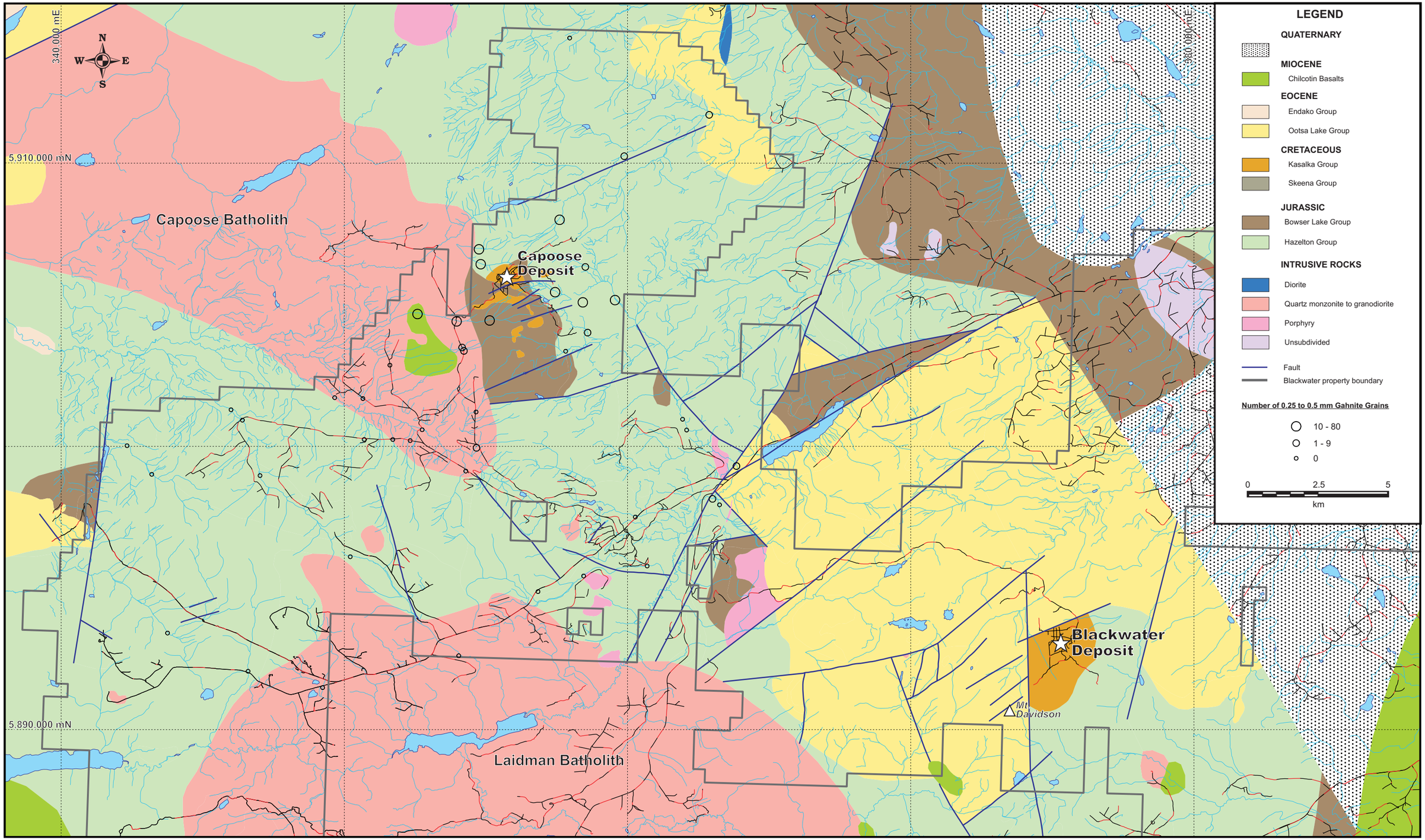


Figure 32: Number of 0.25 to 0.5 mm gahnite grains in nonferromagnetic HMCs from alluvial gravel samples in the Capoose sector of the property.

The 33-sample alluvial gravel survey included 22 widely-spaced regional samples and 11 orientation samples collected up to 6 km downslope along streams draining northeastward from the area of the Blackwater deposit. The samples were collected by shovel from natural sediment traps, and the sampling focused on small, steep, first and second-order streams at high elevations. Such high-energy streams are actively eroding till and in some cases also bedrock such that most of the indicator minerals in the gravel should be the same as those in the till. However, alluvial gravel is normally depleted in gold grains relative to the parent till because most of the grains are so small that they remain in suspension in the streams rather than being deposited with the gravel.

The till and gravel samples were processed by Overburden Drilling Management Limited (ODM) in Ottawa to extract their heavy mineral fraction and further concentrate any fine gold grains. Each gold grain was classified as pristine, modified or reshaped to determine its probable distance of transport from source. The grain dimensions were also recorded to allow calculation of the expected gold grade of the HMCs and thus the potential grade of the bedrock source mineralization of any significant dispersal trains. The 0.25 to 2 mm fraction of the heavy mineral concentrates was searched by binocular microscope for any grains of the other, coarser indicator mineral species.

The fine, -0.063 mm silt + clay fraction was sieved from a split of each till sample, but not of the silt-poor gravel samples, and analyzed geochemically for a broad suite of elements of which only Au, Ag, As, S, Mn, Cu, Zn, Pb, Cd, Mo and Ni were evaluated. A large, 40 g aliquot was used for the gold analyses to limit the influence of any background gold grains on the analyses.

The indicator mineral grain counts for minerals other than gold and cinnabar, which is as fine-grained as gold, were based on the 0.25 to 0.5 mm heavy mineral fraction of the till and gravel samples; however, the number of coarser, 0.5 to 1 and 1 to 2 mm grains was also recorded. In the till samples, the 0.25 to 2 mm heavy mineral fraction was very small, representing <0.1 percent of the -2 mm till matrix, because the underlying volcanic and sedimentary rocks from which the till is derived are unmetamorphosed and thus deficient in both coarse-grained and high-density minerals. In the gravel samples, coarse heavy minerals are approximately twice as abundant because the gravel is sorted and coarse biased. Although basalt is the dominant lithology in the area, negligible magnetite is present in the till and gravel because the basalts are calc-alkalic or alkaline (Chilcotin Group) rather than Fe-rich tholeiites. The main nonmagnetic heavy minerals are epidote, ilmenite, hematite and goethite.

The main indicator minerals present in the till are gold, spessartine, andradite and olivine. The distribution of these minerals in areas of presumed thin to moderate till cover is very predictable, indicating that the till composition closely reflects the bedrock composition. Indeed, the dispersal trains outlined by the indicator minerals are some of the best-defined trains ever encountered in glaciated terrain in Canada. Spessartine is particularly effective because it specifically indicates prospective areas of hydrothermally altered, vent-facies Cretaceous volcanics and the till is devoid of metamorphic almandine garnet grains which, in most other parts of Canada, impede the identification of spessartine grains.

Olivine is a useful mapping mineral on the property because it reliably indicates the positions of outliers of the alkaline, Miocene-age, Chilcotin Group flood basalts that occur near the eastern end of the survey area and could hide significant mineralization in the fertile basement rocks. The olivine in the till is accompanied by subordinate chromite, which may be derived from mantle xenoliths that are known to occur in the basalt. Near the Capoose deposit, west of the Blackwater survey area, a large olivine-chromite dispersal train correlates closely with a spessartine-gahnite train emanating from the broad hydrothermal alteration zone that surrounds the deposit. The odd coincidence of these genetically unrelated indicator minerals in the till indirectly indicates that the western, up-ice part of the hydrothermal alteration zone is patchily covered by Chilcotin basalt, possibly as a result of continued, post-mineralization subsidence on vertical faults that originally developed in association with the Cretaceous volcanic centre at Capoose. The presence in the till of gahnite, a Zn-spinel ($ZnAl_2O_4$) that is not known to occur in the Capoose deposit, reflects metamorphism of the western part of the Zn-bearing, aluminous alteration zone by the slightly younger Capoose Batholith. The till near the Blackwater deposit and elsewhere in the Blackwater sector of the property contains negligible gahnite because no similar batholiths are present in this area.

The highest spessartine counts in the till in the Blackwater sector, ranging up to 25,000 grains of 0.25 to 0.5 mm size per 10 kg sample compared to background levels of 0 to 20 grains per sample, occur in a well-defined, 1.2 km wide dispersal train that originates at the hydrothermal alteration zone associated with the thinly till-covered Blackwater Au-Ag deposit and follows the 060º ice flow path down-ice, without interruption, for more than 2.5 km over the thick till on the lower north slope of Mount Davidson. This “Blackwater Train” is equally well defined by the gold grain counts which range up to 641 grains per sample, contrasting with the property background which is very low at 0 to 5 grains per sample. As expected, more than 90 percent of the gold grains in the train are silt sized, the grains become progressively more pristine toward the head of the train and the calculated gold grade of the till HMCs accurately reflects the known grade of the Blackwater deposit. The till on the eastern flank of Mount Davidson remains broadly anomalous in spessartine, indicating that Cretaceous volcanics were also vented on this side of the mountain, but the spessartine grains are only locally accompanied by gold grains, mainly in three neighboring samples, No. 145, 147 and 161, where the till is weakly anomalous in physically reshaped gold grains typical of the distal portion of a gold dispersal train.

A second gold grain dispersal train with little associated spessartine is present 2 km northwest of and parallel to the Blackwater Train within the limits of the main outlier of Eocene volcanics. This train, centered on till sample No. 068 and designated the "068 Train", is <300 m wide but the gold grains are larger than those in the Blackwater Train, resulting in higher calculated HMC gold values which suggest that the bedrock gold source mineralization is of a significantly higher grade than the Blackwater deposit. The narrowness of the train could be due to the gold source being partly covered by the younger Eocene volcanics. Alternatively, in combination with the coarseness of the gold grains, the high gold grade of the till and the paucity of spessartine grains, it could indicate that the source mineralization is concentrated in veins within a limited area rather than being of the broadly disseminated, strati form Blackwater type.

Andradite grains are locally present in the till in the Blackwater sector of the property but the maximum andradite concentration is just 300 grains per sample compared to >10,000 grains in some of the Capoose till samples. The andradite grains closely resemble and are difficult to distinguish from the spessartine grains but tend to be pale yellow brown while the spessartine grains are darker orange brown. Andradite is a common constituent of propylitic alteration zones associated with felsic plutons, and the strong andradite anomaly in the Capoose sector of the property is restricted to till that overlies Hazelton Group volcanics in the saddle between the Laidman and Capoose Batholiths. Significant propylitic alteration is presently known only on the eastern side of the Capoose Batholith, which is of Cretaceous age but the extension of the andradite anomaly southward over Hazelton Group volcanics to the Laidman Batholith suggests that most and probably all of the propylitic alteration is actually Jurassic because both the volcanics and Laidman Batholith are of this age. The weak andradite anomalies encountered in the till in the Blackwater sector of the property also consistently overlie Hazelton Group volcanics, mainly near known small felsic stocks. The till samples that define the main andradite anomaly in the Capoose sector were collected at a very regional, 1 to 5 km spacing but an unusually high proportion of these samples, along with a few in the adjoining western part of the Blackwater survey area, yielded weak gold grain anomalies. This suggests that the propylitic alteration zone that is inferred to underlie the andradite anomaly is significantly fertile in gold.

The alluvial gravel samples are, as expected, depleted in gold grains because most gold grains are so fine that they were carried in suspension in the streams rather than deposited with the gravel. No gold grain anomalies were obtained, even in the streams that lie directly downslope from the Blackwater Au-Ag deposit and cut across the strong gold-spessartine dispersal train in the till. The distribution of the coarser-grained indicator minerals that were carried in the bed load of the streams – spessartine, andradite, olivine and chromite – is similar to that in the till. However, the spessartine content of the gravel in the streams that cut cross the Blackwater Train is less than that in the till within the train, indicating that even though spessartine is a heavy mineral and its coarse particle size more closely matches the grain size of the gravel than that of the till, the natural hydraulic concentration that occurred in the streams was insufficient to offset the dilution caused by the gravel being derived from barren as well as anomalous till. However chromite, the indicator mineral with the highest specific gravity and thus the one most susceptible to hydraulic concentration, is generally more plentiful in the gravel than in

the till. A spessartine anomaly similar in strength to the ones in the streams near the Blackwater deposit was obtained from gravel samples in Davidson Creek ~6 km downstream from the deposit, beyond the area covered by the till indicator mineral survey, and may be of interest in view of the significant spessartine dilution that occurred during gravel sedimentation.

The geochemical anomalies obtained by analyzing the -0.063 mm till fines tend to be weak because the samples were collected at a depth where metal remobilization has been minimal. This is most clearly shown in the Capoose sector where the till is significantly less anomalous than the overlying, metal-scavenging B-horizon that was sampled in a historical soil survey. In the Blackwater sector, most of the till geochemical anomalies occur within the Blackwater and 068 gold grain dispersal trains, principally at the heads of the trains where the gold grain ± spessartine counts are highest. The strength of the gold geochemical anomalies is further limited by the small size of the gold grains, with most grains being much finer than 0.063 mm and contributing only a few ppb Au to the analyzed 40 g sample aliquots. The highest analysis of 95 ppb Au coincides with the highest gold grain count from the 068 Train in which the gold grains are coarser than normal. The heads of both gold grain dispersal trains are also weakly anomalous in Ag, As, Zn and Pb, and the head of the Blackwater train is significantly anomalous in Mn, reflecting the high spessartine content of the till. A weak but persistent Ag-Zn-Pb anomaly is also present 3 km northwest of and parallel to the 068 Train. While lacking a gold association, this anomaly is of interest because, together with the 068 gold grain dispersal train, it indicates that the large outlier of infertile Eocene volcanics that was thought to cover this area is interrupted by erosional windows in which fertile Cretaceous volcanics are locally exposed.

CONCLUSIONS

Conclusions have been derived directly from the ODM internal reports for New Gold Inc.

The main objective of the survey was to use glacially dispersed indicator minerals in the till that mantles most of the bedrock on the Blackwater property to identify, from afar using widely spaced samples, key bedrock lithologies and prospective zones of hydrothermal alteration and/or mineralization. Only a few alluvial gravel samples were tested because gravel is depleted in gold, the most important indicator mineral, due to the very small size of most gold grains. The -0.063 mm till fines were also analyzed geochemically but these analyses were not expected to be as effective as the indicator mineral grain counts because the till samples were collected from the deep, C-horizon soil level where very little mobilization of the primary metals has occurred rather than from the overlying, metal-scavenging B horizon that is traditionally sampled on soil surveys.

Spessartine garnet is as useful as gold as an indicator mineral on the Blackwater property because:

(a) being a Mn and Al-rich mineral, it specifically indicates volcanogenic hydrothermal alteration proximal to the vents of a volcanic center;

(b) the known bedrock occurrences of spessartine on the property are directly associated with well mineralized, vent-facies volcanic rocks (coarse, chaotic breccia at Blackwater and subvolcanic dykes at Capoose); and

(c) the spessartine is further restricted to the only known occurrences on the property of Cretaceous-age, Kasalka-Group volcanics which, regionally, occur only around isolated volcanic centers (Diakow et al. 1997).

Furthermore, due to the lack of regional metamorphism in the area, metamorphic almandine garnet does not overwhelm the heavy mineral fraction of the till and impede the identification of spessartine grains as in most other parts of Canada (Averill 2012a). In summary, the presence of anomalous levels of spessartine grains in the till anywhere on the property should indicate proximity to hydrothermally altered and thus prospective ventfacies, Kasalka Group volcanics.

The value of spessartine as an indicator mineral is particularly well illustrated in the Capoose area where high levels of spessartine are present in the till not only down-ice from the known Au-Ag deposit but also extend 5 km up-ice (Holmes et al. 2013) into an area that was thought to be unaltered (Fig. 10) and underlain entirely by unprospective quartz monzonite of the Capoose Batholith (Fig. 15). The indicated presence of additional, hydrothermally altered and highly prospective, vent-facies, Kasalka Group volcanics in this area is further demonstrated by the abundant, Zn-bearing gahnite grains that accompany the spessartine as a result of thermal metamorphism of the western part of the alteration zone by the Capoose Batholith, and by a significant new gold grain dispersal train identified within the spessartine-gahnite train. The till near the Blackwater deposit is devoid of gahnite because the hydrothermal alteration zone associated with this deposit has not been thermally metamorphosed.

Most of the area southwest of the Blackwater deposit, i.e. glacially up-ice and further upslope on Mount Davidson, is covered by young Eocene volcanics (Fig. 15) that would tend to mask any prospective, spessartine-bearing Cretaceous rocks. The Eocene rocks are part of a large outlier that extends 10 km westward from the mountain. The location of this outlier may not be coincidental but rather could reflect continued, post-mineralization subsidence on vertical caldera or other synvolcanic faults associated with the mineralized Cretaceous volcanic center at Blackwater. The 068 gold grain dispersal train and the Ag-Zn-Pb geochemical anomaly further to the west (Figs. 30, 33, 34) have little or no associated spessartine but nevertheless suggest that mineralized, vent-facies Cretaceous volcanics are present in the Eocene-covered area and are locally exposed in erosional windows through the cover rocks.

The broad spessartine anomaly on the eastern flank of Mount Davidson (Plan 2), east of the Eocene outlier (Fig. 15), is accompanied by anomalous levels of gold grains only in the area of Samples 145, 147 and 161 (Plan 1) but indicates that additional, undiscovered ocurrences of hydrothermally altered Cretaceous volcanics are present in this area. The spessartine anomaly encountered in the gravel of Davidson Creek (Fig. 26) north of the limit of till sampling (Fig. 15) is similar in strength to those in the creeks near the Blackwater deposit, suggesting that another occurrence of altered Cretaceous rocks is present here and also that the till from which the gravel is derived is sufficiently thin for surface sampling to be effective, unlike in the area of thick till drilled by New Gold closer to the Blackwater deposit (Fig. 7). The spessartine anomalies in the gravel near the Blackwater deposit are not as strong as those in the neighboring till because the gravel is derived from both anomalous and barren till and spessartine grains are not of a sufficient density to be hydraulically concentrated during gravel sedimentation.

Andradite garnet is a less important indicator in the Blackwater sector of the property than in the Capoose sector because it is appears to be derived from propylitic alteration zones associated with granitic intrusions and the only large intrusions occur in the Capoose sector. The main andradite anomaly, and by extension the main propylitic alteration zone, occurs between the Laidman and Capoose Batholiths. It is probably of the same Jurassic age as the Laidman Batholith and the altered Hazelton Group volcanics between the batholiths, not of Cretaceous age and genetically related to the Capoose Batholith as assumed by Diakow et al. (1997) and Awmack et al. (2010). Weak gold grain anomalies were obtained from many of the andradite-rich till samples, suggesting that the propylitic alteration zone is locally mineralized.

Olivine, being derived exclusively from the alkaline Miocene flood basalts of the Chilcotin Group, is a useful indicator mineral because it outlines areas where the older and potentially mineralized Jurassic and especially Cretaceous rocks are covered by the unprospective basalt. The distribution of chromite, a mineral that appears not to have been recognized previously in the basalt, mirrors that of olivine but the chromite anomalies are weaker. In the Blackwater sector, the distribution of olivine and chromite in the till shows that the main known basalt outlier at the eastern end of the survey area extends northwest beyond its mapped limit and also indicates that the till thins sufficiently in this part of the property for surface sampling to be effective. In the Capoose sector, the remarkable correlation of the large olivine-chromite and spessartine-gahnite dispersal trains that are centered on the Capoose Au-Ag deposit (Holmes et al. 2013) is probably not a coincidence but rather indicates that the vertical faults that control the distribution of the Chilcotin basalt, like those that control the distribution of the Eocene cover rocks near the Blackwater deposit, originated in the Late Cretaceous as caldera or other synvolcanic faults around the volcanic vents where the Au-Ag mineralization was deposited.

The major olivine-chromite dispersal train (Figs. 29 (b), (c)) that coincides with the spessartine-gahnite train (Figs. 29 (a)) is indicative only of Chilcotin basalt which is much younger than the Capoose deposit. Therefore the olivine and chromite are completely unrelated to the spessartine and gahnite even though the minerals consistently occur together in the till. Nevertheless, the olivine and chromite are important indicator minerals because they show that significant gold zones occurring near the head of the spessartine-gahnite train may be covered by the basalt and thus not represented in the till. The 7 km width of the olivine-chromite train further shows that the basalt outlier from which the olivine and chromite are derived is much larger than indicated by previous mapping but the presence of spessartine and gahnite in the till within the limits of the outlier shows that the basalt is discontinuous and thus probably very thin and not an impediment to mining.

Both the Capoose and 108 Trains were detected using a broad sample spacing of 300 x 1000-1500 metres, or a density of just 2 to 3 samples per km^2. However, gaps occur in the Capoose Train, possibly because the gold mineralization at Capoose occurs in a series of rhyolitic dikes and sills rather than in a discrete stratiform zone as at Blackwater where the gold dispersal train is very continuous (Averill et al. 2013). In most other respects, however, both the Capoose and 108 Trains are similar to the Blackwater Train. The concentration of gold in the trains increases progressively up-ice to >100 grains per sample, then falls abruptly to low background levels of 0 to 5 grains per sample. As expected, more than 90 percent of the gold grains in the trains are silt sized and the grains become progressively more pristine toward the heads of the trains. The calculated 0.8 g/t Au grade of the till HMCs near the head of the Capoose Train reflects the known low grade of the Capoose deposit. While the 108 Train is much smaller and the concentration of gold grains in the till near the head of the train is only half that in the Capoose Train, the grains are of a larger average size (Fig. 19) resulting in a calculated HMC grade of 1.6 g/t which suggests that the source mineralization may be of a correspondingly higher grade. Moreover, the very sharp cut-off of this train suggests that the source mineralization may be partly covered by the neighboring outlier of Chilcotin basalt and thus understated in the till.

The major, 5 x 15 km andradite anomaly in the till to the south between the Capoose and Laidman Batholiths suggests that a broad zone of propylitic alteration is present between the batholiths. The disposition of the andradite in the till indicates that the anomaly is genetically related to the Jurassic-age Laidman Batholith rather than the Cretaceous-age Capoose Batholith and that the alteration is hosted by the underlying Hazelton Group volcanics which are also of Jurassic age. The 1 to 4 km spacing of the till samples in this area was too great to delineate any gold dispersal trains but the frequency of single sample gold anomalies is unusually high, suggesting that significant gold mineralization is locally present within the indicated propylitic alteration zone. The style of mineralization is not evident but one possibility is epithermal vein swarms similar to those occurring in the Hazelton Group at Independence Gold's 3Ts deposit south of the Laidman Batholith.

While the till sampling in the Capoose survey area was very effective, the alluvial gravel sampling was ineffective, particularly for gold grains because most gold grains are so fine that they remain in suspension in high-energy streams where gravel is deposited. Only a single, weak gold grain response was obtained from the eleven gravel samples that were collected from streams crossing the gold grain dispersal train in the till down-ice from the Capoose deposit. Of the five useful coarser-grained indicator minerals in the Capoose area, only the one with the highest specific gravity, chromite, is enriched in the gravel relative to the till. Spessartine, gahnite, and andradite are all less anomalous and olivine, the lowest density indicator mineral, does not attain anomalous concentrations in the gravel.

The -0.063 mm geochemistry of the till complements the indicator mineralogy but the geochemical anomalies are more subdued and four of the indicator minerals – andradite, gahnite, olivine and chromite – are not reflected geochemically (the Zn anomalies shown in Figure 32 may appear to show the same pattern as the gahnite anomalies in Figure 37 but actually reflect sphalerite because gahnite is chemically inert). As well, spessartine (Fig. 34) is reflected in the Mn analyses (Fig. 30) only where its concentration exceeds 10,000 grains per sample. Both the Capoose and 108 gold grain dispersal trains (Fig. 19) are well reflected in the Au and Ag geochemistry. In the Capoose Train, Au correlates most closely with Pb (Fig. 33) and especially As (Fig. 31) but the till in the 108 Train is not anomalous in either Pb or As. The till 3 km south of the Capoose deposit is anomalous in As but not in gold; however the As anomaly may indicate significant gold potential at depth.

RECOMMENDATIONS

Recommendations have been derived directly from the ODM internal reports for New Gold Inc.

Blackwater Sector

Diamond drill follow-up has already been recommended on the 068 gold grain dispersal train (Averill 2012c). Similar drilling is recommended for the parallel Ag-Zn-Pb geochemical anomaly 3 km to the northwest. Infill till sampling should be done for 1.5 km up-ice on the identified gold-spessartine anomaly east of Mount Davidson to determine whether this weak anomaly represents a traceable dispersal train from a significant mineralized source. In addition, grid till sampling at 300 x 1000-1500 m spacing should be performed from the broad spessartine anomaly southeast of Mount Davidson southward to the southern property boundary.

Neither the southeastern nor southwestern corner of the Blackwater sector of the property was tested in the present survey and the till cover in both areas appears to be sufficiently thin and basement volcanics sufficiently well represented to justify surface till sampling at the above spacing. Similar till sampling should be performed around the spessartine anomaly identified in the gravel on Davidson Creek. Finally, deeper till sampling by reverse circulation drilling at the same 300 x 1000-1500 m spacing should be performed throughout the area of thick till indicated by New Gold's exploration and condemnation drilling downslope from the Blackwater deposit. The reverse circulation drill rigs should be specifically designed for till sampling.

The above program, if executed in its entirety, would total ~200 surface till samples and 150 reverse circulation drill holes. Contract sampling, sample processing, analytical, interpretation and reporting costs for the surface sampling program, based on the costs experienced in the present survey, are expected to average ~$900 per sample. For the reverse circulation drilling program, these plus contract drilling costs are expected to range from $6000 to $15,000 per hole for 30 to 80 m holes, or ~$200 per meter.

Capoose Sector

Two of the targets identified in the Capoose indicator mineral survey were defined at a sufficiently close sample spacing that they are now ready for diamond drilling. The first drill-ready target is the 108 Train gold grain anomaly. Drilling should be performed at and slightly southwest of (i.e. up-ice from) the head of this anomaly to locate the bedrock gold mineralization responsible for the abundant gold (Fig. 93c), spessartine (Fig. 29a) and gahnite (Fig. 29b) grains in the till. If a significant gold zone can be outlined here, this zone can be used as a model to explore for additional deposits hidden beneath the neighboring basalt outlier and thus not detected in the indicator mineral survey.

The second diamond drill target is the As geochemical anomaly identified in the till 3 km south of the Capoose deposit (Fig. 31). While the till here is not anomalous in Au, the As anomaly lies within the spessartine-defined limits of the large alteration zone that surrounds the Capoose Au-Ag deposit (Fig. 29a) and the till geochemistry near this deposit shows that As is the element most directly associated with Au. At least one vertical diamond drill hole should be drilled to identify the bedrock mineralization responsible for the As anomaly and determine whether the As zone is underlain by a significant Au zone.

While surface sampling was effective in outlining the large, Zn and Mn-rich, gahnite and spessartine-bearing hydrothermal alteration zone within which the Capoose and 108 gold zones occur, the till in a topographically low area on the southeastern edge of the alteration zone may be too thick for surface sampling to be responsive to any underlying mineralization. It is therefore recommended that this area be tested more thoroughly by drilling ~25 holes at 300 m spacing on three short traverses totaling ~7 km using a reverse circulation (RC) rig specifically designed for till sampling and also capable of routinely sampling 1.5 m of the underlying bedrock. The till samples obtained at depth will be unoxidized and thus will retain glacially dispersed grains of sulphide minerals that were not evident in the oxidized surface samples. The proposed RC drilling will provide the first complete, three dimensional view of all dispersed minerals as well as a map of the bedrock geology and alteration beneath the dispersal trains. In conjunction with the RC drilling, detailed geological mapping and boulder prospecting should be performed throughout the area of Mn alteration and Zn enrichment.

The main remaining area within the Capoose sector of the property requiring additional till sampling is the apparent propylitic alteration zone in the southwest indicated by the 5 x 15 km andradite anomaly between the Capoose and Laidman Batholiths (Fig. 35). While the high frequency of gold grain anomalies in the andradite-rich till suggests that the propylitic zone is fertile for gold, tighter sampling at the same 300 x 1500 m spacing, or ~2 samples per km2, that has proved effective elsewhere on the property is needed to resolve any gold grain dispersal trains indicative of significant mineralization. Since the andradite was routinely detected in the initial, widely spaced samples, most of the till appears to be sufficiently thin for surface sampling to be effective. However, it is recommended that the till samples on two traverses 7 to 8 km long and 5 to 7 km apart be obtained by RC drilling in order to sample the underlying bedrock and thereby confirm the inferred propylitic style of alteration and also to identify any sulphide minerals accompanying the andradite and gold grains in the till.

The recommended till sampling program totals ~70 RC drill holes and 400 surface till samples. Contract sampling, sample processing, analytical, interpretation and reporting costs for the surface sampling component of the program, based on the costs experienced in the present survey, are expected to average ~$900 per sample. For the RC drilling, these plus contract drilling costs are expected to average $6000 per hole assuming a hole depth of 10 to 30 m. Therefore estimated contract costs for the entire program are $780,000.

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CERTIFICATE OF QUALIFICATIONS

Mark A. Petersen
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12200 East Briarwood Ave. - Suite 165
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Phone: (303) 796-0221
Email: mark.petersen@newgold.com

I, Mark A. Petersen, of Centennial Colorado USA, do hereby certify that:

1. I graduated the College of Wooster, B.A., geology major in 1981.
2. I completed a M.Sc. in geology from Kent State University in 1984.
3. I completed an M.B.A. at the University of Colorado in 2000.
4. I have been practicing my profession as an exploration and economic geologist continuously since 1981.
5. I am a Professional Geologist registered with the American Institute of Professional Geologists (CPG-10563) with sufficient relevant experience to be a "Qualified Person" as per National Instrument 43-101.
6. I am a registered member of the Society for Mining, Metallurgy and Exploration (registration # 2519520RM) with sufficient relevant experience to be a "Qualified Person" as per National Instrument 43-101.
7. Since 2008, I have been continuously employed as Vice President, Exploration with New Gold Inc.
8. I contracted the original reports from Overburden Drilling Management Ltd. and oversaw the completion of the work.
9. I supervised the preparation of this report entitled "Blackwater Region Indicator Mineral Report 2015" for assessment credit. I believe that this report accurately depicts the material obtained to date.

Dated at Centennial Colorado USA, this 20th day of February, 2015



Mark. A Petersen

CERTIFICATE OF QUALIFICATIONS

Fran Macpherson
1311 Borregard Road
Quesnel, BC, Canada, V2J 3Z7

Phone: (250) 747-2821 Fax: 888-515-9204
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I, Frances J. (Fran) Macpherson currently residing at 1311 Borregard Road, Quesnel, British Columbia, V2J 3Z7, Canada, do hereby certify that:

1. I graduated with a B.A. (Psychology) from McGill University, P.Q. in 1972

2. I graduated with an M.A. (Clinical Psychology) from the University of New Brunswick, Fredericton in 1975

3. I have been employed in the mining industry since 1993

4. I was employed as mine manager on a large mineral exploration and underground bulk sample project in Wells, B.C. from 2000 to 2005 during which period I was responsible for the drafting and compilation of numerous technical reports

5. I have owned and operated an independent consulting firm "Accurate Mining Services Ltd." since 2005

6. I visited the Blackwater property when it was operated by Richfield Ventures Corp.

7. New Gold Inc. has been a client of my company since 2005

Dated at Quesnel B.C. this 23rd day of February 2015



Fran Macpherson, M.A.

Appendix A

Statement of Costs

Exploration Work Type	Detail				Totals
Personnel (Name)* / Position	**Field Days**	**Days**	**Rate**	**Subtotal**	**Total**
Donald Holmes	2012: Jun 7-29, Aug 1-17	42	$ 1,000.00	$ 42,000.00	
Donald Holmes	2012: Jul 26-31. 2013: Jun 6-30, Jul 1-5, Aug 13-31, Sep 1-12	65	$ 900.00	$ 58,500.00	
Peter Collins	2012: Jun 7-29, Jul 26-31, Aug 1-17	46	$ 900.00	$ 41,400.00	
Steven Keays	2012: Jul 26-31, Aug 1-17	23	$ 750.00	$ 17,250.00	
Steven Keays	2013: Aug 21-31, Sep 1-12	23	$ 650.00	$ 14,950.00	
Bohdan Rudnicki	2012: Jun 7-29. 2013: Jun 6-30, Jul 1-5, Aug 21-31, Sep 1-12	76	$ 450.00	$ 34,200.00	
Kenzie MacNeil	2013: Jun 6-27, Sep 9-18,	32	$ 900.00	$ 28,800.00	
Mike Michaud	2013: Jun 6-25	20	$ 900.00	$ 18,000.00	
Alex Korovessis	2013: Jun 6-27, Sep 9-18,	32	$ 400.00	$ 12,800.00	
David Hozjan	2013: Jun 24-30, Aug 1-16	23	$ 900.00	$ 20,700.00	
David Hozjan	2013: Jul 1-5	5	$ 800.00	$ 4,000.00	
James Sullivan	2013: Jun 6-30, Jul 1-5, Aug 1-9	39	$ 450.00	$ 17,550.00	
John Exelby	2013: Jun 6-30, Jul 1-5	30	$ 450.00	$ 13,500.00	
Shawn Hargadon	2013: Jun 6-30, Jul 1-5	30	$ 400.00	$ 12,000.00	
Michel Briere	2013: Aug 13-31, Sep 1-12,	31	$ 400.00	$ 12,400.00	$ 348,050.00
Geological Consulting	**Personnel**	**Hours**	**Rate**	**Subtotal**	**Total**
	Stu Averill	156	$ 120.00	$ 18,720.00	
	Donald Holmes	185	$ 100.00	$ 18,500.00	
	David Hozjan	79	$ 90.00	$ 7,110.00	
	Ben Cleland	39	$ 75.00	$ 2,925.00	
	Mike Michaud	101	$ 90.00	$ 9,090.00	
	Stephen Keays	11	$ 75.00	$ 825.00	
	Peter Collins	5	$ 90.00	$ 450.00	
	Bohdan Rudnicki	1	$ 65.00	$ 65.00	
	Kenzie MacNeil	12	$ 100.00	$ 1,200.00	
	James Sullivan	16	$ 66.00	$ 1,056.00	$ 59,941.00
Geological Analysis and Internal Reporting to NGD	Stu Averill	628	$ 120.00	$ 75,360.00	
	Donald Holmes	112	$ 100.00	$ 11,200.00	
	Kenzie MacNeil	201	$ 100.00	$ 20,100.00	
	Mike Michaud	187	$ 90.00	$ 16,830.00	
	David Hozjan	281	$ 90.00	$ 25,290.00	
	Susan Moreau	23	$ 65.00	$ 1,495.00	$ 150,275.00
Airborne Exploration Surveys	**Line Kilometres / Enter total invoiced amount**				
N/A					
Remote Sensing	**Area in Hectares / Enter total invoiced amount or list personnel**				
N/A					
Ground Exploration Surveys	**Area in Hectares / List Personnel**				
N/A					
Ground Geophysics	**Line Kilometres / Enter total amount invoiced or list personnel**				
N/A					
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Soil/Till	1828 Till samples	1828	$ 338.25	$ 618,321.00	
Stream	79 Stream samples	79	$ 353.03	$ 27,889.37	$ 646,210.37
Drilling	**No. of Holes, Size of Core and Metres**	**No.**	**Rate**	**Subtotal**	
N/A					
Other Operations	**Clarify**	**Metres / Tonnes**	**Rate**	**Subtotal**	
N/A					
Reclamation	**Clarify**	**No.**	**Rate**	**Subtotal**	
N/A					
Transportation					
See Miscellaneous					
Accomodation & Food	**Rates per Day**				
See Miscellaneous					
Miscellaneous					
Equipment Rentals		**No.**	**Rate**	**Subtotal**	
Sampling Supplies	Equipment rental	254	$ 84.61	$ 21,490.00	
Sampling Tools	Aluminium Scoops, Spring Scales, Augers, Hand Shovels			$ 986.72	
Satellite Phone		6	$ 112.00	$ 672.00	$ 23,148.72
Freight, rock samples					
Sample Freight	Manitoulin shipping from Vanderhoof to ODM				$ 14,680.91
TOTAL Expenditures					**$ 1,242,306.00**

Total person days: 517

Appendix B

Blackwater Primary Processing Weights and Physical Characteristics of the Till Samples

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total		<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
						%	Weight				
BWS-12-001	917.3	125.8	780.5	0.9	10.1	100	10.1	0.3	3.7	4.2	1.90
BWS-12-002	940.5	225.3	707.2	1.3	6.7	100	6.7	0.5	3.1	2.3	0.80
BWS-12-003	634.0	129.6	489.1	3.6	11.7	100	11.7	0.5	4.8	5.1	1.30
BWS-12-004	456.2	352.6	101.1	0.0	2.5	100	2.5	0.3	2.0	0.2	<0.01
BWS-12-005	732.5	338.2	385.0	0.2	9.1	100	9.1	1.4	6.3	1.2	0.20
BWS-12-006	1,005.9	188.7	797.7	1.3	18.2	100	18.2	1.6	9.9	5.8	0.90
BWS-12-007	598.9	257.7	331.9	0.1	9.2	100	9.2	1.6	6.2	1.4	0.04
BWS-12-008	363.3	78.1	275.6	0.8	8.8	100	8.8	0.7	4.8	2.9	0.40
BWS-12-012	574.8	58.1	511.2	0.5	5.0	100	5.0	0.3	1.7	2.0	1.00
BWS-12-013	671.5	128.0	517.0	3.5	23.0	100	23.0	1.4	7.9	8.9	4.80
BWS-12-014	607.5	86.1	507.3	2.1	12.0	100	12.0	0.6	4.4	5.7	1.30
BWS-12-015	573.2	99.3	451.9	3.1	18.9	100	18.9	0.8	8.5	7.6	2.00
BWS-12-016	451.0	278.4	170.8	0.1	1.7	100	1.7	0.3	1.3	0.1	<0.01
BWS-12-031	650.1	159.6	470.3	2.2	18.0	100	18.0	1.1	6.7	6.5	3.7
BWS-12-034	500.5	223.1	271.3	0.5	5.6	100	5.6	0.5	3.7	1.2	0.2
BWS-12-042	634.5	329.9	286.3	3.90	14.4	100	14.4	2.4	6.4	3.7	1.90
BWS-12-044	522.1	80.7	393.0	9.10	39.3	100	39.3	1.9	14.0	17.8	5.60
BWS-12-045	742.7	340.3	378.3	2.30	21.8	100	21.8	3.5	13.8	3.5	1.00
BWS-12-047	712.1	357.3	347.9	0.30	6.6	100	6.6	1.6	4.5	0.5	0.01
BWS-12-048	716.3	496.6	193.5	3.90	22.3	100	22.3	3.1	13.1	4.8	1.30
BWS-12-049	646.9	246.1	369.9	3.10	27.8	100	27.8	3.1	17.1	6.0	1.60
BWS-12-050	715.8	321.8	389.2	0.30	4.5	100	4.5	1.0	2.8	0.6	0.10
BWS-12-051	453.0	208.1	240.8	0.04	4.1	100	4.1	0.7	2.9	0.5	0.01
BWS-12-052	558.1	374.1	149.8	2.90	31.3	100	31.3	6.5	20.9	3.4	0.50
BWS-12-053	772.1	262.6	445.8	6.70	57.0	100	57.0	5.0	27.8	19.3	4.90
BWS-12-056	598.3	200.7	364.1	6.70	26.8	100	26.8	1.6	11.5	10.7	3.00
BWS-12-057	538.6	151.5	378.1	1.10	7.9	100	7.9	0.4	4.1	3.2	0.20
BWS-12-058	595.0	292.7	266.3	2.30	33.7	100	33.7	5.5	25.9	2.2	0.10
BWS-12-059	902.7	527.2	356.1	1.60	17.8	100	17.8	3.1	9.8	3.8	1.10
BWS-12-066	722.4	413.3	287.6	2.0	19.5	100	19.5	3.8	11.5	3.5	0.7
BWS-12-068	775.2	514.3	193.9	9.1	57.9	100	57.9	7.1	38.4	10.7	1.7
BWS-12-069	756.1	309.0	400.6	5.7	40.8	100	40.8	4.0	18.9	13.5	4.4
BWS-12-071	779.9	501.8	238.6	10.9	28.6	100	28.6	3.5	17.2	6.6	1.3

Appendix C

Blackwater Primary Processing Weights and Physical Characteristics of the Till Samples

Sample Number	Weight (kg)				Clasts >2.0 mm**					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
			**														
BWT-12-001	12.4	11.4	2.5	8.9	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-002	12.2	11.2	3.0	8.2	P	90	10	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-003	15.1	14.1	4.0	10.1	P	100	Tr	0	Tr	U	Y	Y	Y	N	MOC	MOC	TILL
BWT-12-004	13.3	12.3	3.8	8.5	P	95	5	0	Tr	U	+	Y	-	N	MOC	MOC	TILL
BWT-12-005	12.2	11.2	2.2	9.0	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-006	13.2	12.2	2.8	9.4	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-007	14.3	13.3	3.7	9.6	P	100	Tr	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-008	11.9	10.9	1.9	9.0	P	90	5	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-009	12.3	11.3	4.3	7.0	P	85	5	0	10	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-010	12.4	11.4	2.8	8.6	P	90	5	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-011	13.4	12.4	2.5	9.9	P	85	5	0	10	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-012	13.4	12.4	3.6	8.8	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-013	12.7	11.7	3.3	8.4	P	100	Tr	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-014	15.6	14.6	3.4	11.2	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-015	12.2	11.2	1.8	9.4	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-016	14.0	13.0	4.6	8.4	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-017	12.9	11.9	4.9	7.0	P	95	5	0	Tr	U	+	Y	-	Y	LOC	LOC	TILL
BWT-12-018	13.8	12.8	4.4	8.4	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-019	11.5	10.5	3.8	6.7	P	100	Tr	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-020	12.8	11.8	3.9	7.9	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-021	11.7	10.7	2.3	8.4	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-022	12.2	11.2	2.7	8.5	P	100	Tr	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-023	12.2	11.2	2.2	9.0	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-024	11.2	10.2	2.0	8.2	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-025	14.0	13.0	1.5	11.5	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-026	12.9	11.9	5.0	6.9	P	95	5	0	Tr	U	Y	Y	-	N	DOC	DOC	TILL
BWT-12-027	13.2	12.2	2.0	10.2	P	100	Tr	0	Tr	U	+	Y	Y	N	GB	GB	TILL
BWT-12-028	12.8	11.8	3.4	8.4	P	100	Tr	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-029	13.3	12.3	3.0	9.3	P	85	5	0	10	U	+	Y	Y	N	GB	GB	TILL
BWT-12-030	13.2	12.2	4.7	7.5	P	85	10	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-031	13.4	12.4	2.2	10.2	P	80	10	0	10	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-032	15.4	14.4	3.1	11.3	P	85	5	0	10	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-033	13.5	12.5	3.8	8.7	P	90	Tr	0	10	U	+	Y	-	N	OC	OC	TILL
BWT-12-034	13.0	12.0	6.1	5.9	P	95	Tr	5	5	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-035	13.0	12.0	3.4	8.6	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-036	14.0	13.0	6.0	7.0	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-037	12.3	11.3	6.1	5.2	P	85	15	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-038	13.0	12.0	6.1	5.9	P	20	80	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-039	12.5	11.5	4.9	6.6	P	60	40	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-040	13.4	12.4	2.5	9.9	P	90	10	0	Tr	U	Y	Y	Y	N	GB	GB	TILL
BWT-12-041	12.7	11.7	5.4	6.3	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-042	13.5	12.5	4.2	8.3	P	90	10	0	Tr	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-043	13.2	12.2	2.6	9.6	P	95	5	0	Tr	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-044	12.5	11.5	2.9	8.6	P	90	Tr	10	10	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-045	12.1	11.1	4.6	6.5	P	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-046	12.7	11.7	5.5	6.2	P	95	5	0	Tr	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-047	11.3	10.3	3.3	7.0	P	100	Tr	0	Tr	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-048	12.7	11.7	5.5	6.2	P	100	Tr	0	Tr	U	+	Y	-	N	BE	BE	TILL
BWT-12-049	16.5	15.5	6.0	9.5	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-050	13.9	12.9	3.8	9.1	P	95	5	0	Tr	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-051	14.1	13.1	3.6	9.5	P	85	10	0	5	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-052	12.8	11.8	4.6	7.2	P	95	5	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-053	11.9	10.9	4.9	6.0	P	85	15	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-054	13.6	12.6	4.8	7.8	P	85	15	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-055	11.4	10.4	2.5	7.9	P	90	5	0	5	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-056	13.0	12.0	2.9	9.1	P	90	10	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-057	14.3	13.3	3.2	10.1	P	90	10	0	Tr	U	+	Y	-	N	BE	BE	TILL
BWT-12-058	13.6	12.6	3.9	8.7	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-059	14.4	13.4	5.2	8.2	P	85	15	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-060	15.4	14.4	5.7	8.7	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-061	12.1	11.1	2.4	8.7	P	90	10	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-062	13.2	12.2	3.0	9.2	P	95	Tr	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-063	13.3	12.3	4.1	8.2	P	95	5	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-064	12.2	11.2	2.6	8.6	P	95	5	0	Tr	U	+	Y	-	N	BE	BE	TILL
BWT-12-065	13.2	12.2	5.3	6.9	P	95	5	0	Tr	U	+	Y	-	N	BE	BE	TILL
BWT-12-066	12.4	11.4	3.8	7.6	P	100	0	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-067	12.6	11.6	3.0	8.6	P	100	0	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-068	12.5	11.5	4.2	7.3	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm**					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
			**														
BWT-12-069	11.8	10.8	3.5	7.3	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-070	11.9	10.9	3.0	7.9	P	90	10	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-071	16.7	15.7	4.4	11.3	P	85	15	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-072	14.5	13.5	3.7	9.8	P	85	15	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-073	14.9	13.9	3.0	10.9	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-074	13.6	12.6	4.4	8.2	P	100	0	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-075	12.8	11.8	4.7	7.1	P	100	0	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-076	14.0	13.0	4.6	8.4	P	85	10	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-077	13.1	12.1	4.8	7.3	P	80	20	0	Tr	U	+	Y	-	N	BE	BE	TILL
BWT-12-078	12.6	11.6	4.9	6.7	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-079	15.0	14.0	3.0	11.0	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-080	12.9	11.9	3.3	8.6	P	95	5	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-081	11.0	10.0	6.1	3.9	P	95	5	0	0	U	+	-	-	N	DOC	DOC	TILL + SAND
BWT-12-082	12.1	11.1	2.7	8.4	P	85	10	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-083	10.3	9.3	2.3	7.0	P	95	5	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-084	12.5	11.5	3.1	8.4	P	90	10	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-085	12.4	11.4	2.6	8.8	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-086	11.3	10.3	1.7	8.6	P	80	Tr	0	20	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-087	11.4	10.4	5.1	5.3	P	90	10	0	Tr	U	+	-	-	N	OC	OC	TILL + SAND
BWT-12-088	11.6	10.6	3.2	7.4	P	90	10	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-089	15.0	14.0	2.8	11.2	P	90	10	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-090	12.3	11.3	2.3	9.0	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-091	14.5	13.5	2.1	11.4	P	90	10	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-092	12.2	11.2	2.5	8.7	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-093	12.7	11.7	3.1	8.6	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-094	11.9	10.9	2.9	8.0	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-095	13.9	12.9	4.7	8.2	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-096	14.6	13.6	2.9	10.7	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-097	14.2	13.2	3.0	10.2	P	90	10	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-098	13.5	12.5	3.8	8.7	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-099	12.3	11.3	3.4	7.9	C	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-100	12.1	11.1	2.3	8.8	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-101	12.1	11.1	4.6	6.5	P	100	0	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-103	13.2	12.2	2.8	9.4	P	100	0	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-109	14.2	13.2	2.6	10.6	P	90	10	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-116	11.7	10.7	5.3	5.4	P	95	Tr	5	Tr	U	Y	Y	-	N	OC	OC	TILL
BWT-12-117	12.8	11.8	2.8	9.0	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-118	12.3	11.3	2.5	8.8	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-119	12.7	11.7	2.8	8.9	P	100	Tr	0	Tr	U	+	Y	Y	N	DOC	DOC	TILL
BWT-12-120	12.9	11.9	3.4	8.5	P	95	5	0	Tr	U	+	Y	Y	N	OC	OC	TILL
BWT-12-121	10.4	9.4	2.3	7.1	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-122	12.2	11.2	4.7	6.5	P	95	5	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-123	12.2	11.2	3.4	7.8	P	90	10	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-124	13.2	12.2	2.9	9.3	P	85	10	0	5	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-125	12.7	11.7	4.2	7.5	P	85	10	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-126	11.0	10.0	4.5	5.5	P	100	0	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-127	11.4	10.4	4.5	5.9	P	95	5	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-128	12.2	11.2	3.5	7.7	P	100	0	0	0	U	Y	Y	-	N	DOC	DOC	TILL
BWT-12-129	9.7	8.7	2.0	6.7	P	100	0	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-130	12.3	11.3	2.1	9.2	P	100	0	0	0	U	Y	Y	Y	N	GB	GB	TILL
BWT-12-131	11.3	10.3	2.2	8.1	P	98	2	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-132	12.0	11.0	3.1	7.9	P	100	0	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-133	12.2	11.2	2.9	8.3	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-134	12.8	11.8	3.4	8.4	P	100	0	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-135	12.8	11.8	2.7	9.1	P	100	0	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-136	13.2	12.2	2.3	9.9	P	85	15	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-137	14.3	13.3	5.1	8.2	P	80	15	0	5	U	+	-	-	N	OC	OC	TILL
BWT-12-138	14.5	13.5	3.0	10.5	P	85	15	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-139	11.6	10.6	0.8	9.8	P	70	30	0	0	U	-	Y	+	Y	LOC	LOC	TILL
BWT-12-140	13.1	12.1	4.3	7.8	P	95	5	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-141	11.1	10.1	3.0	7.1	P	100	Tr	0	0	U	+	-	-	N	DOC	DOC	TILL
BWT-12-142	13.9	12.9	3.4	9.5	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-143	11.7	10.7	2.2	8.5	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-144	11.6	10.6	1.6	9.0	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-145	11.4	10.4	2.0	8.4	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-146	11.2	10.2	3.0	7.2	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-147	12.1	11.1	2.3	8.8	P	100	Tr	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-148	11.1	10.1	2.4	7.7	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm**					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
			**														
BWT-12-149	12.2	11.2	2.1	9.1	P	100	Tr	0	0	U	Y	+	-	N	OC	OC	TILL
BWT-12-150	12.3	11.3	2.8	8.5	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-151	11.9	10.9	2.0	8.9	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-152	11.0	10.0	3.2	6.8	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-153	12.8	11.8	3.5	8.3	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-154	11.7	10.7	2.5	8.2	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-161	13.4	12.4	2.9	9.5	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-162	15.6	14.6	3.3	11.3	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-163	14.0	13.0	3.5	9.5	P	100	Tr	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-164	12.3	11.3	3.0	8.3	P	100	Tr	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-165	12.1	11.1	3.0	8.1	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-166	11.7	10.7	2.1	8.6	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-167	14.2	13.2	3.2	10.0	P	95	Tr	5	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-168	12.3	11.3	4.8	6.5	P	95	5	0	0	U	+	Y	-	N	BE	BE	TILL
BWT-12-169	11.2	10.2	2.0	8.2	P	100	0	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-170	12.2	11.2	3.0	8.2	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-171	11.8	10.8	2.7	8.1	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-172	12.2	11.2	2.2	9.0	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-173	12.5	11.5	4.6	6.9	P	100	0	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-199	14.2	13.2	2.0	11.2	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-200	12.3	11.3	2.2	9.1	P	80	15	Tr	5	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-201	12.5	11.5	2.8	8.7	P	95	5	Tr	Tr	U	Y	Y	Y	N	GB	GB	TILL
BWT-12-203	10.8	9.8	2.5	7.3	P	90	Tr	Tr	10	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-223	12.3	11.3	1.1	10.2	P	90	10	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-224	10.9	9.9	2.1	7.8	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-225	11.5	10.5	4.1	6.4	P	100	Tr	0	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-226	13.6	12.6	2.0	10.6	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-227	12.8	11.8	3.9	7.9	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-228	12.5	11.5	2.3	9.2	P	100	Tr	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-229	11.5	10.5	2.3	8.2	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-230	12.2	11.2	2.2	9.0	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-231	12.3	11.3	2.2	9.1	P	95	5	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-232	11.8	10.8	2.9	7.9	P	90	10	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-233	10.3	9.3	1.5	7.8	P	100	Tr	0	Tr	U	-	+	Y	N	OC	OC	TILL
BWT-12-234	13.5	12.5	3.0	9.5	P	90	10	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-235	11.5	10.5	1.9	8.6	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-236	12.6	11.6	2.0	9.6	P	85	5	10	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-237	11.7	10.7	1.9	8.8	P	95	5	Tr	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-238	13.2	12.2	2.1	10.1	P	85	10	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-239	12.9	11.9	1.6	10.3	P	85	10	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-240	12.5	11.5	1.2	10.3	P	75	20	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-241	13.0	12.0	4.3	7.7	P	90	10	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-242	12.4	11.4	1.8	9.6	P	50	30	0	20	U	-	Y	+	N	OC	OC	TILL
BWT-12-244	10.7	9.7	2.5	7.2	P	70	30	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-245	12.4	11.4	1.9	9.5	G	85	10	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-246	10.7	9.7	1.0	8.7	G	80	20	Tr	Tr	U	-	Y	+	N	OC	OC	TILL
BWT-12-247	10.1	9.1	1.6	7.5	G	70	30	0	0	U	-	Y	+	N	OC	OC	TILL
BWT-12-250	12.2	11.2	2.6	8.6	P	100	Tr	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-253	12.7	11.7	3.4	8.3	P	90	Tr	0	10	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-254	14.1	13.1	3.1	10.0	P	90	Tr	10	Tr	U	-	Y	+	N	OC	OC	TILL
BWT-12-255	12.0	11.0	2.0	9.0	G	100	Tr	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-256	12.6	11.6	2.3	9.3	P	95	5	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-257	12.5	11.5	2.2	9.3	P	85	10	5	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-258	12.1	11.1	4.1	7.0	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-259	12.6	11.6	2.7	8.9	P	95	5	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-260	14.7	13.7	2.4	11.3	P	25	40	30	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-261	8.7	7.7	0.3	7.4	P	100	Tr	0	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-262	9.8	8.8	1.1	7.7	P	90	Tr	10	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-263	12.7	11.7	3.3	8.4	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-267	12.9	11.9	2.1	9.8	G	80	20	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-268	12.3	11.3	4.0	7.3	G	90	10	Tr	0	U	-	+	Y	N	LOC	LOC	TILL
BWT-12-269	12.7	11.7	2.3	9.4	G	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-270	12.0	11.0	2.2	8.8	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-271	9.8	8.8	1.3	7.5	P	80	Tr	20	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-276	13.3	12.3	4.7	7.6	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-277	13.6	12.6	4.2	8.4	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-278	12.7	11.7	2.6	9.1	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-279	13.7	12.7	4.0	8.7	P	20	40	40	Tr	U	+	Y	-	N	DOC	DOC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm**					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
			**														
BWT-12-280	10.3	9.3	4.3	5.0	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-281	11.8	10.8	2.8	8.0	P	95	5	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-282	11.2	10.2	3.8	6.4	P	80	20	Tr	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWT-12-283	12.5	11.5	2.0	9.5	P	80	20	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-284	15.8	14.8	3.2	11.6	P	70	30	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-285	12.7	11.7	5.0	6.7	P	95	5	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-286	13.2	12.2	3.1	9.1	P	90	5	5	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-287	12.8	11.8	1.8	10.0	P	95	Tr	5	0	U	-	Y	+	N	OC	OC	TILL
BWT-12-288	12.9	11.9	2.6	9.3	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-289	12.1	11.1	3.6	7.5	P	80	20	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-290	10.4	9.4	2.0	7.4	P	80	20	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-291	11.6	10.6	2.9	7.7	P	90	5	5	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-292	11.1	10.1	3.1	7.0	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-293	10.5	9.5	3.2	6.3	P	95	Tr	0	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-294	13.7	12.7	4.7	8.0	P	95	5	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-295	14.4	13.4	3.5	9.9	P	95	Tr	5	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-296	14.2	13.2	2.8	10.4	P	90	10	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-297	14.4	13.4	5.9	7.5	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-467	11.2	10.2	2.7	7.5	P	80	10	10	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-468	12.1	11.1	0.0	11.1	No clasts					S	FM	+	-	N	OC	OC	SAND + SILT
BWT-12-469	11.4	10.4	2.0	8.4	P	80	10	10	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-470	13.3	12.3	3.3	9.0	P	80	10	10	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-471	14.2	13.2	2.8	10.4	P	70	15	15	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-472	12.6	11.6	2.7	8.9	P	60	10	25	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-473	15.1	14.1	2.8	11.3	P	65	10	25	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-474	12.9	11.9	3.0	8.9	P	65	10	25	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-475	13.4	12.4	1.5	10.9	P	60	5	35	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-476	14.6	13.6	2.9	10.7	P	60	5	35	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-477	12.8	11.8	1.8	10.0	P	80	Tr	20	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-478	11.3	10.3	2.3	8.0	P	75	5	20	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-479	11.9	10.9	1.7	9.2	P	50	20	30	Tr	U	Y	-	-	N	OC	OC	TILL
BWT-12-480	11.0	10.0	3.3	6.7	P	80	10	10	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-481	10.4	9.4	3.6	5.8	P	90	Tr	10	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-482	11.1	10.1	3.4	6.7	P	80	20	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-483	16.0	15.0	4.8	10.2	P	80	20	Tr	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-484	13.3	12.3	3.7	8.6	P	90	5	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-485	11.7	10.7	4.5	6.2	P	90	5	5	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-486	12.5	11.5	2.3	9.2	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-487	13.0	12.0	2.9	9.1	P	100	Tr	Tr	Tr	U	Y	Y	-	N	DOC	DOC	TILL
BWT-12-488	12.2	11.2	2.5	8.7	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-489	12.2	11.2	5.2	6.0	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-490	12.3	11.3	3.7	7.6	P	90	10	Tr	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-491	12.4	11.4	4.2	7.2	P	90	10	Tr	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-492	13.2	12.2	2.2	10.0	P	100	Tr	Tr	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-493	12.0	11.0	3.5	7.5	P	100	Tr	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-494	12.8	11.8	3.8	8.0	P	100	0	Tr	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-495	11.0	10.0	2.3	7.7	P	100	Tr	Tr	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-496	11.2	10.2	3.0	7.2	P	100	Tr	Tr	Tr	U	+	Y	-	N	DOC	DOC	TILL

*Clasts listed as "other" are metagreywacke (probably Proterozoic).

** Screened to 11.2 mm (2 mesh) in the field.

Appendix D

Blackwater Heavy Mineral Concentrate Weights, Alluvial Gravel

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total		<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
						%	Weight				
BWS-12-001	917.3	125.8	780.5	0.9	10.1	100	10.1	0.3	3.7	4.2	1.90
BWS-12-002	940.5	225.3	707.2	1.3	6.7	100	6.7	0.5	3.1	2.3	0.80
BWS-12-003	634.0	129.6	489.1	3.6	11.7	100	11.7	0.5	4.8	5.1	1.30
BWS-12-004	456.2	352.6	101.1	0.0	2.5	100	2.5	0.3	2.0	0.2	<0.01
BWS-12-005	732.5	338.2	385.0	0.2	9.1	100	9.1	1.4	6.3	1.2	0.20
BWS-12-006	1,005.9	188.7	797.7	1.3	18.2	100	18.2	1.6	9.9	5.8	0.90
BWS-12-007	598.9	257.7	331.9	0.1	9.2	100	9.2	1.6	6.2	1.4	0.04
BWS-12-008	363.3	78.1	275.6	0.8	8.8	100	8.8	0.7	4.8	2.9	0.40
BWS-12-012	574.8	58.1	511.2	0.5	5.0	100	5.0	0.3	1.7	2.0	1.00
BWS-12-013	671.5	128.0	517.0	3.5	23.0	100	23.0	1.4	7.9	8.9	4.80
BWS-12-014	607.5	86.1	507.3	2.1	12.0	100	12.0	0.6	4.4	5.7	1.30
BWS-12-015	573.2	99.3	451.9	3.1	18.9	100	18.9	0.8	8.5	7.6	2.00
BWS-12-016	451.0	278.4	170.8	0.1	1.7	100	1.7	0.3	1.3	0.1	<0.01
BWS-12-031	650.1	159.6	470.3	2.2	18.0	100	18.0	1.1	6.7	6.5	3.7
BWS-12-034	500.5	223.1	271.3	0.5	5.6	100	5.6	0.5	3.7	1.2	0.2
BWS-12-042	634.5	329.9	286.3	3.90	14.4	100	14.4	2.4	6.4	3.7	1.90
BWS-12-044	522.1	80.7	393.0	9.10	39.3	100	39.3	1.9	14.0	17.8	5.60
BWS-12-045	742.7	340.3	378.3	2.30	21.8	100	21.8	3.5	13.8	3.5	1.00
BWS-12-047	712.1	357.3	347.9	0.30	6.6	100	6.6	1.6	4.5	0.5	0.01
BWS-12-048	716.3	496.6	193.5	3.90	22.3	100	22.3	3.1	13.1	4.8	1.30
BWS-12-049	646.9	246.1	369.9	3.10	27.8	100	27.8	3.1	17.1	6.0	1.60
BWS-12-050	715.8	321.8	389.2	0.30	4.5	100	4.5	1.0	2.8	0.6	0.10
BWS-12-051	453.0	208.1	240.8	0.04	4.1	100	4.1	0.7	2.9	0.5	0.01
BWS-12-052	558.1	374.1	149.8	2.90	31.3	100	31.3	6.5	20.9	3.4	0.50
BWS-12-053	772.1	262.6	445.8	6.70	57.0	100	57.0	5.0	27.8	19.3	4.90
BWS-12-056	598.3	200.7	364.1	6.70	26.8	100	26.8	1.6	11.5	10.7	3.00
BWS-12-057	538.6	151.5	378.1	1.10	7.9	100	7.9	0.4	4.1	3.2	0.20
BWS-12-058	595.0	292.7	266.3	2.30	33.7	100	33.7	5.5	25.9	2.2	0.10
BWS-12-059	902.7	527.2	356.1	1.60	17.8	100	17.8	3.1	9.8	3.8	1.10
BWS-12-066	722.4	413.3	287.6	2.0	19.5	100	19.5	3.8	11.5	3.5	0.7
BWS-12-068	775.2	514.3	193.9	9.1	57.9	100	57.9	7.1	38.4	10.7	1.7
BWS-12-069	756.1	309.0	400.6	5.7	40.8	100	40.8	4.0	18.9	13.5	4.4
BWS-12-071	779.9	501.8	238.6	10.9	28.6	100	28.6	3.5	17.2	6.6	1.3

Appendix E

Blackwater Heavy Mineral Concentrate Weights, Till

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
											*
BWT-12-001	647.1	539.3	98.0	2.7	7.1	100	7.1	1.5	4.2	1.3	0.10
BWT-12-002	620.5	375.7	235.1	2.5	7.2	100	7.2	0.9	4.1	1.7	0.50
BWT-12-003	776.8	568.2	197.2	3.3	8.1	100	8.1	1.1	4.7	2.0	0.30
BWT-12-004	405.0	323.6	77.2	1.5	2.7	100	2.7	0.6	1.6	0.4	0.10
BWT-12-005	598.6	445.5	149.1	0.6	3.4	100	3.4	0.5	2.0	0.7	0.20
BWT-12-006	786.0	643.8	130.8	2.0	9.4	100	9.4	0.9	6.1	2.0	0.40
BWT-12-007	713.8	392.7	317.3	0.5	3.3	100	3.3	0.4	1.7	0.8	0.40
BWT-12-008	788.7	558.1	227.2	1.0	2.4	100	2.4	0.5	1.4	0.4	0.08
BWT-12-009	546.5	357.3	186.4	0.4	2.4	100	2.4	0.2	1.5	0.5	0.20
BWT-12-010	454.7	306.5	146.1	0.2	1.9	100	1.9	0.2	1.1	0.5	0.10
BWT-12-011	748.3	466.6	272.9	2.2	6.6	100	6.6	0.6	3.7	1.7	0.60
BWT-12-012	520.6	367.8	147.2	1.4	4.2	100	4.2	0.5	2.8	0.8	0.09
BWT-12-013	546.7	331.5	212.4	1.1	1.7	100	1.7	0.7	1.0	0.0	<0.01
BWT-12-014	913.2	490.4	414.0	1.8	7.0	100	7.0	0.6	3.7	1.9	0.80
BWT-12-015	464.8	397.3	59.0	4.9	3.6	100	3.6	0.8	2.3	0.5	0.01
BWT-12-016	740.0	540.8	194.3	0.6	4.3	100	4.3	0.5	2.8	0.9	0.08
BWT-12-017	604.5	325.6	275.3	0.3	3.3	100	3.3	0.4	1.8	0.8	0.30
BWT-12-018	435.7	308.7	121.9	0.8	4.3	100	4.3	0.6	2.5	1.0	0.20
BWT-12-019	599.2	236.0	360.7	0.1	2.4	100	2.4	0.5	1.2	0.6	0.10
BWT-12-020	697.5	452.9	239.2	1.6	3.8	100	3.8	0.7	2.5	0.6	0.04
BWT-12-021	635.1	301.6	330.0	0.80	2.7	100	2.7	0.4	1.6	0.6	0.10
BWT-12-022	611.0	448.8	158.1	1.60	2.5	100	2.5	0.8	1.4	0.3	0.03
BWT-12-023	832.4	493.5	336.1	1.10	1.7	100	1.7	0.5	0.9	0.3	0.02
BWT-12-024	742.0	367.8	370.6	0.90	2.7	100	2.7	0.2	1.6	0.7	0.20
BWT-12-025	830.7	525.1	300.3	1.50	3.8	100	3.8	0.5	2.4	0.8	0.10
BWT-12-026	476.3	293.8	178.6	0.70	3.2	100	3.2	0.7	1.8	0.6	0.10
BWT-12-027	613.4	390.6	221.3	0.20	1.3	100	1.3	0.4	0.7	0.2	0.04
BWT-12-028	510.8	324.9	183.2	0.60	2.1	100	2.1	0.4	1.3	0.4	0.03
BWT-12-029	664.6	441.1	217.8	1.60	4.1	100	4.1	0.5	2.7	0.8	0.07
BWT-12-030	510.9	343.9	163.3	1.20	2.5	100	2.5	0.4	1.7	0.4	0.03
BWT-12-031	695.4	508.1	182.2	1.60	3.5	100	3.5	0.6	2.2	0.6	0.06
BWT-12-032	760.4	528.9	228.3	0.90	2.3	100	2.3	0.8	1.4	0.0	0.04
BWT-12-033	1,011.7	564.2	443.8	0.50	3.2	100	3.2	0.5	1.9	0.7	0.09
BWT-12-034	658.2	315.8	341.2	0.08	1.1	100	1.1	0.1	0.6	0.3	0.07
BWT-12-035	682.6	340.1	341.7	0.20	0.6	100	0.6	0.2	0.3	0.1	0.02
BWT-12-036	716.3	437.3	275.7	0.80	2.5	100	2.5	0.5	1.5	0.5	0.04
BWT-12-037	591.6	156.1	432.8	0.30	2.4	100	2.4	0.3	1.5	0.5	0.10
BWT-12-038	682.6	377.3	303.6	0.60	1.1	100	1.1	0.1	0.6	0.4	0.01
BWT-12-039	607.9	335.1	270.5	0.80	1.5	100	1.5	0.5	0.8	0.2	0.03
BWT-12-040	644.3	479.5	160.3	1.10	3.4	100	3.4	0.5	2.2	0.6	0.06
BWT-12-041	888.2	448.6	433.0	2.1	4.5	100	4.5	0.8	2.6	0.9	0.20
BWT-12-042	748.7	396.6	345.8	1.6	4.7	100	4.7	0.5	2.9	1.1	0.20
BWT-12-043	789.7	438.5	346.6	1.3	3.3	100	3.3	0.4	2.0	0.7	0.20
BWT-12-044	579.1	318.9	252.1	2.0	6.1	100	6.1	0.6	3.7	1.5	0.30
BWT-12-045	687.1	536.3	138.7	4.6	7.5	100	7.5	0.9	4.3	1.7	0.60
BWT-12-046	639.4	370.3	268.1	0.3	0.7	100	0.7	0.0	0.4	0.2	0.08
BWT-12-047	881.8	505.3	374.0	0.9	1.6	100	1.6	0.2	0.9	0.4	0.10
BWT-12-048	677.7	358.9	317.6	0.4	0.8	100	0.8	0.2	0.5	0.1	0.03
BWT-12-049	721.6	476.1	241.8	0.9	2.8	100	2.8	0.4	1.9	0.5	0.01
BWT-12-050	597.8	290.9	304.4	0.6	1.9	100	1.9	0.2	1.1	0.5	0.10
BWT-12-051	963.0	612.9	344.8	1.4	3.9	100	3.9	0.5	2.4	0.8	0.20
BWT-12-052	705.8	369.7	332.7	0.9	2.5	100	2.5	0.5	1.5	0.4	0.10
BWT-12-053	559.3	248.5	299.4	4.4	7.0	100	7.0	1.1	4.6	1.1	0.20

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
											*
BWT-12-054	714.8	431.5	275.3	2.9	5.1	100	5.1	0.7	2.9	1.3	0.20
BWT-12-055	694.7	497.2	191.9	1.7	3.9	100	3.9	0.9	2.1	0.8	0.10
BWT-12-056	822.7	565.5	252.3	1.3	3.6	100	3.6	0.6	2.2	0.7	0.10
BWT-12-057	614.3	326.6	282.4	0.9	4.4	100	4.4	0.5	2.6	1.0	0.30
BWT-12-058	1,040.0	563.6	471.5	0.6	4.3	100	4.3	0.5	2.3	1.1	0.40
BWT-12-059	943.2	468.7	460.4	3.3	10.8	100	10.8	0.6	4.4	3.7	2.10
BWT-12-060	688.2	500.9	183.9	0.6	2.8	100	2.8	0.4	1.8	0.5	0.10
BWT-12-061	1,034.0	444.4	587.0	0.3	2.3	100	2.3	0.3	1.2	0.6	0.20
BWT-12-062	787.8	557.0	225.0	1.7	4.1	100	4.1	0.7	2.2	1.0	0.20
BWT-12-063	977.5	390.6	583.3	0.9	2.7	100	2.7	0.3	1.5	0.7	0.20
BWT-12-064	607.8	371.5	232.5	1.1	2.7	100	2.7	0.3	1.7	0.6	0.10
BWT-12-065	466.7	280.4	181.3	1.4	3.6	100	3.6	0.3	2.2	0.8	0.30
BWT-12-066	743.6	344.7	396.1	0.6	2.2	100	2.2	0.3	1.1	0.6	0.20
BWT-12-067	903.2	492.9	408.3	0.2	1.8	100	1.8	0.3	1.0	0.4	0.10
BWT-12-068	630.6	300.0	329.4	0.1	1.1	100	1.1	0.1	0.6	0.3	0.10
BWT-12-069	751.1	497.0	251.5	0.9	1.7	100	1.7	0.3	1.2	0.2	0.02
BWT-12-070	971.5	455.9	512.8	0.6	2.2	100	2.2	0.3	1.2	0.5	0.20
BWT-12-071	620.1	462.5	152.5	1.4	3.7	100	3.7	0.5	2.3	0.8	0.10
BWT-12-072	802.4	381.0	412.6	1.8	7.0	100	7.0	0.6	4.0	1.7	0.70
BWT-12-073	671.2	556.7	107.9	1.4	5.2	100	5.2	0.5	3.5	1.0	0.20
BWT-12-074	673.2	412.5	256.0	1.2	3.5	100	3.5	0.4	2.3	0.7	0.10
BWT-12-075	720.1	271.8	444.5	1.0	2.8	100	2.8	0.4	1.6	0.6	0.20
BWT-12-076	837.3	344.6	483.4	1.7	7.6	100	7.6	0.5	4.0	2.2	0.90
BWT-12-077	536.0	374.6	155.8	1.4	4.2	100	4.2	0.4	2.4	1.2	0.20
BWT-12-078	636.3	382.6	246.8	2.0	4.9	100	4.9	0.8	2.9	1.0	0.20
BWT-12-079	1,184.6	805.2	370.9	1.7	6.8	100	6.8	0.9	4.0	1.5	0.40
BWT-12-080	1,051.8	551.0	485.9	4.9	10.0	100	10.0	1.2	5.4	2.3	1.10
BWT-12-081	497.0	183.2	310.0	1.2	2.6	100	2.6	0.2	1.7	0.6	0.10
BWT-12-082	741.3	436.0	300.0	0.7	4.6	100	4.6	0.8	2.8	0.9	0.10
BWT-12-083	649.0	317.1	327.5	0.6	3.8	100	3.8	0.2	2.4	0.9	0.30
BWT-12-084	717.9	474.8	236.9	0.9	5.3	100	5.3	1.0	3.1	1.0	0.20
BWT-12-085	785.7	444.3	337.4	1.3	2.7	100	2.7	0.4	1.5	0.6	0.20
BWT-12-086	560.7	266.4	293.3	0.2	0.8	100	0.8	0.3	0.4	0.1	0.03
BWT-12-087	1,054.3	259.7	787.0	2.3	5.3	100	5.3	0.7	2.6	1.6	0.40
BWT-12-088	765.7	384.2	379.0	0.3	2.2	100	2.2	0.3	1.1	0.6	0.20
BWT-12-089	1,244.5	545.6	694.4	1.0	3.5	100	3.5	0.5	1.9	0.8	0.30
BWT-12-090	759.3	423.1	332.9	0.8	2.5	100	2.5	0.2	1.5	0.6	0.20
BWT-12-091	772.3	578.8	186.6	1.5	5.4	100	5.4	1.0	3.1	1.1	0.20
BWT-12-092	548.1	399.4	144.3	1.3	3.1	100	3.1	0.4	1.9	0.7	0.10
BWT-12-093	740.9	410.8	323.4	1.8	4.9	100	4.9	0.5	2.7	1.3	0.40
BWT-12-094	728.0	446.8	276.4	1.3	3.5	100	3.5	0.6	1.9	0.8	0.20
BWT-12-095	1,016.1	500.6	509.4	0.7	5.4	100	5.4	0.7	2.7	1.4	0.60
BWT-12-096	943.7	417.2	519.1	1.2	6.2	100	6.2	0.4	3.2	1.9	0.70
BWT-12-097	771.2	486.4	274.2	2.1	8.5	100	8.5	1.0	4.6	2.2	0.70
BWT-12-098	910.5	487.1	415.6	0.7	7.1	100	7.1	0.6	3.7	2.0	0.80
BWT-12-099	805.2	411.4	383.1	3.8	6.9	100	6.9	1.0	3.6	1.8	0.50
BWT-12-100	602.0	305.2	292.0	1.6	3.2	100	3.2	0.4	1.6	0.8	0.40
BWT-12-101	672.9	318.8	351.9	0.6	1.6	100	1.6	0.2	0.9	0.4	0.1
BWT-12-103	677.4	385.0	287.5	1.8	3.1	100	3.1	0.8	1.6	0.5	0.2
BWT-12-109	565.0	383.9	171.7	1.2	8.2	100	8.2	1.2	4.9	1.8	0.3
BWT-12-116	668.9	194.2	469.1	0.2	5.4	100	5.4	0.4	2.0	2.0	1.0
BWT-12-117	1,162.6	401.3	754.2	1.5	5.6	100	5.6	0.5	3.1	1.4	0.6
BWT-12-118	797.4	269.8	521.0	1.7	4.9	100	4.9	0.5	2.3	1.6	0.5

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
											*
BWT-12-119	664.7	415.4	244.4	2.0	2.9	100	2.9	0.7	1.5	0.6	0.1
BWT-12-120	856.3	320.3	531.2	2.2	2.6	100	2.6	0.5	1.4	0.6	0.1
BWT-12-121	527.2	276.1	247.7	1.1	2.3	100	2.3	0.3	1.4	0.5	0.10
BWT-12-122	531.5	199.3	328.7	1.2	2.3	100	2.3	0.3	1.1	0.7	0.20
BWT-12-123	417.1	250.7	162.1	0.5	3.8	100	3.8	0.5	2.3	0.8	0.20
BWT-12-124	682.7	366.1	310.0	1.0	5.6	100	5.6	0.3	3.5	1.5	0.30
BWT-12-125	620.1	383.7	231.5	0.5	4.4	100	4.4	0.3	2.6	1.1	0.40
BWT-12-126	523.3	268.8	251.6	1.6	1.3	100	1.3	0.1	0.8	0.3	0.06
BWT-12-127	671.9	231.4	436.8	1.3	2.4	100	2.4	0.6	1.2	0.5	0.10
BWT-12-128	682.8	292.4	389.1	0.5	0.8	100	0.8	0.3	0.4	0.1	0.03
BWT-12-129	503.3	314.1	187.7	0.2	1.3	100	1.3	0.1	0.8	0.3	0.10
BWT-12-130	897.9	360.9	533.6	0.7	2.7	100	2.7	0.1	1.5	0.8	0.30
BWT-12-131	682.7	353.5	325.3	1.7	2.2	100	2.2	0.4	1.2	0.5	0.10
BWT-12-132	655.4	258.7	394.7	0.8	1.2	100	1.2	0.2	0.6	0.3	0.10
BWT-12-133	728.8	358.1	367.8	0.9	2.0	100	2.0	0.8	1.1	0.0	0.10
BWT-12-134	764.5	391.8	370.4	0.7	1.6	100	1.6	0.4	0.9	0.3	0.04
BWT-12-135	885.2	399.8	481.4	1.2	2.8	100	2.8	0.4	1.5	0.7	0.20
BWT-12-136	538.5	366.5	163.8	2.6	5.6	100	5.6	0.6	3.4	1.2	0.40
BWT-12-137	627.8	311.5	307.8	2.2	6.3	100	6.3	0.6	3.8	1.5	0.40
BWT-12-138	775.2	373.5	394.1	1.3	6.3	100	6.3	0.7	3.6	1.6	0.40
BWT-12-139	587.4	241.8	344.8	0.2	0.6	100	0.6	0.1	0.2	0.2	0.10
BWT-12-140	870.0	315.6	544.9	4.5	5.0	100	5.0	1.3	2.1	1.2	0.40
BWT-12-141	700.7	354.0	343.1	0.7	2.9	100	2.9	0.3	1.7	0.7	0.20
BWT-12-142	1,106.3	575.3	524.8	1.8	4.4	100	4.4	0.5	2.6	1.0	0.30
BWT-12-143	580.6	334.6	241.7	1.0	3.3	100	3.3	0.4	2.0	0.8	0.10
BWT-12-144	956.0	561.6	390.8	1.0	2.6	100	2.6	0.3	1.4	0.6	0.30
BWT-12-145	792.7	393.7	393.3	1.4	4.3	100	4.3	0.5	2.5	1.0	0.30
BWT-12-146	681.7	493.5	184.8	0.7	2.7	100	2.7	0.5	1.6	0.5	0.10
BWT-12-147	633.0	490.9	137.2	1.1	3.8	100	3.8	0.6	2.4	0.7	0.10
BWT-12-148	648.4	352.6	292.7	0.6	2.5	100	2.5	0.5	1.4	0.5	0.10
BWT-12-149	715.9	548.7	163.2	1.1	2.9	100	2.9	0.4	1.9	0.5	0.06
BWT-12-150	622.6	351.1	267.7	1.1	2.7	100	2.7	0.3	1.6	0.6	0.20
BWT-12-151	597.5	300.7	293.4	1.0	2.4	100	2.4	0.1	1.4	0.7	0.20
BWT-12-152	543.2	448.5	89.2	1.5	4.0	100	4.0	0.6	2.5	0.8	0.10
BWT-12-153	693.2	378.4	310.8	1.0	3.0	100	3.0	0.2	1.8	0.7	0.30
BWT-12-154	1,011.0	675.9	333.0	0.8	1.3	100	1.3	0.3	0.8	0.2	0.02
BWT-12-161	546.7	322.0	220.3	1.5	2.9	100	2.9	0.3	1.8	0.6	0.20
BWT-12-162	898.5	520.8	372.1	0.4	5.2	100	5.2	0.4	3.1	1.3	0.40
BWT-12-163	540.5	408.7	126.4	1.1	4.3	100	4.3	0.4	2.7	1.0	0.20
BWT-12-164	513.2	299.7	211.9	0.4	1.2	100	1.2	0.1	0.7	0.3	0.07
BWT-12-165	546.7	350.9	193.0	1.0	1.8	100	1.8	0.3	1.1	0.4	0.01
BWT-12-166	508.4	353.6	152.9	0.1	1.8	100	1.8	0.2	1.0	0.5	0.10
BWT-12-167	877.2	487.1	387.1	1.1	1.9	100	1.9	0.2	1.0	0.5	0.20
BWT-12-168	581.6	226.2	353.5	0.5	1.4	100	1.4	0.2	0.8	0.3	0.06
BWT-12-169	651.4	473.4	175.8	0.6	1.6	100	1.6	0.4	0.8	0.2	0.20
BWT-12-170	677.9	428.3	246.5	1.1	2.0	100	2.0	0.2	1.2	0.5	0.10
BWT-12-171	750.0	414.4	333.1	0.8	1.7	100	1.7	0.2	1.0	0.4	0.06
BWT-12-172	776.2	550.8	218.2	2.1	5.1	100	5.1	0.7	3.1	1.2	0.10
BWT-12-173	566.4	341.1	222.0	1.4	1.9	100	1.9	0.2	1.2	0.4	0.06
BWT-12-199	887.3	651.0	230.0	2.1	4.2	100	4.2	0.4	2.8	0.9	0.1
BWT-12-200	864.5	425.6	428.2	2.8	7.9	100	7.9	0.4	4.7	2.0	0.8
BWT-12-201	792.1	353.8	431.9	1.7	4.7	100	4.7	0.4	2.8	1.1	0.4
BWT-12-203	734.6	387.0	344.5	0.5	2.6	100	2.6	0.2	1.4	0.7	0.3

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
											*
BWT-12-223	1,012.2	681.0	319.6	1.4	10.2	100	10.2	1.5	6.2	1.9	0.6
BWT-12-224	922.3	500.8	412.2	1.6	7.7	100	7.7	0.8	4.7	1.8	0.4
BWT-12-225	697.6	335.6	346.6	3.8	11.6	100	11.6	3.6	6.0	1.9	0.1
BWT-12-226	1,188.7	474.8	702.2	1.6	10.1	100	10.1	1.1	6.1	2.3	0.6
BWT-12-227	831.4	347.9	463.9	1.6	18.0	100	18.0	2.8	9.9	4.0	1.3
BWT-12-228	1,072.4	533.5	527.1	1.0	10.8	100	10.8	1.2	6.1	2.8	0.7
BWT-12-229	905.5	424.7	470.6	0.8	9.4	100	9.4	1.7	5.3	2.3	0.1
BWT-12-230	819.7	447.2	362.5	1.2	8.8	100	8.8	1.1	5.0	2.2	0.5
BWT-12-231	814.2	344.3	463.0	1.1	5.8	100	5.8	1.1	3.0	1.6	0.1
BWT-12-232	999.4	553.1	435.4	1.1	9.8	100	9.8	1.2	5.9	2.2	0.5
BWT-12-233	1,065.8	499.7	556.0	1.7	8.4	100	8.4	1.2	4.8	1.8	0.6
BWT-12-234	1,005.1	467.6	526.9	0.6	10.0	100	10.0	1.4	5.6	2.4	0.6
BWT-12-235	917.4	462.0	444.1	1.3	10.0	100	10.0	1.1	5.8	2.3	0.8
BWT-12-236	951.7	532.4	405.3	3.5	10.5	100	10.5	1.1	6.4	2.4	0.6
BWT-12-237	709.4	438.1	263.6	0.4	7.3	100	7.3	1.0	4.2	1.7	0.4
BWT-12-238	995.3	626.2	355.7	1.8	11.6	100	11.6	2.2	7.2	2.2	0.1
BWT-12-239	891.4	616.1	268.7	0.4	6.2	100	6.2	0.8	3.5	1.4	0.5
BWT-12-240	853.0	510.4	334.8	0.8	7.0	100	7.0	1.3	4.0	1.4	0.3
BWT-12-241	949.6	521.1	408.7	2.7	17.1	100	17.1	2.1	10.4	3.7	0.90
BWT-12-242	1,232.5	763.3	455.5	2.7	11.0	100	11.0	1.3	6.4	2.6	0.70
BWT-12-244	771.9	429.2	333.7	1.1	7.9	100	7.9	0.7	4.6	2.1	0.50
BWT-12-245	662.0	408.1	244.1	0.4	9.4	100	9.4	1.2	5.4	2.2	0.60
BWT-12-246	676.8	409.4	260.8	0.5	6.1	100	6.1	0.8	3.5	1.2	0.60
BWT-12-247	440.2	285.6	148.5	0.6	5.5	100	5.5	0.6	3.3	1.1	0.50
BWT-12-250	490.9	248.8	240.1	0.4	1.6	100	1.6	0.3	0.9	0.3	0.08
BWT-12-253	546.9	162.8	376.7	0.2	7.2	100	7.2	1.4	3.1	2.6	0.08
BWT-12-254	1,106.1	724.6	373.0	1.7	6.8	100	6.8	0.8	4.0	1.6	0.40
BWT-12-255	879.0	464.5	408.2	0.4	5.9	100	5.9	0.9	3.7	1.1	0.20
BWT-12-256	642.8	403.3	234.2	0.8	4.5	100	4.5	0.6	2.7	1.0	0.20
BWT-12-257	533.3	354.5	171.1	1.2	6.5	100	6.5	0.8	3.8	1.5	0.40
BWT-12-258	1,067.6	471.1	594.7	0.3	1.5	100	1.5	0.3	0.8	0.3	0.06
BWT-12-259	540.7	325.5	211.5	0.3	3.4	100	3.4	0.5	2.0	0.7	0.20
BWT-12-260	478.7	296.2	178.7	0.9	2.9	100	2.9	0.3	1.8	0.6	0.20
BWT-12-261	749.8	469.7	277.5	0.5	2.1	100	2.1	0.5	1.2	0.3	0.07
BWT-12-262	584.8	387.5	190.0	1.6	5.7	100	5.7	1.2	2.9	1.3	0.30
BWT-12-263	754.7	359.3	393.5	0.6	1.3	100	1.3	0.5	0.6	0.2	0.04
BWT-12-267	997.7	526.9	459.9	1.3	9.6	100	9.6	1.3	4.9	2.5	0.90
BWT-12-268	973.2	466.6	496.5	0.7	9.4	100	9.4	1.3	4.9	2.4	0.80
BWT-12-269	1,098.5	449.7	641.6	0.8	6.4	100	6.4	1.1	3.5	1.4	0.40
BWT-12-270	805.2	455.4	342.6	1.8	5.4	100	5.4	0.9	2.9	1.2	0.40
BWT-12-271	740.7	389.8	342.6	2.6	5.7	100	5.7	0.8	2.8	1.5	0.60
BWT-12-276	585.5	335.0	247.3	1.0	2.2	100	2.2	0.5	1.1	0.5	0.10
BWT-12-277	761.4	500.3	255.0	1.6	4.5	100	4.5	1.0	2.4	0.9	0.20
BWT-12-278	835.9	507.9	322.6	1.3	4.1	100	4.1	0.8	2.1	0.9	0.30
BWT-12-279	1,466.5	682.5	779.3	1.0	3.7	100	3.7	0.4	2.0	0.9	0.40
BWT-12-280	584.8	270.2	311.7	0.4	2.5	100	2.5	0.5	1.2	0.6	0.20
BWT-12-281	881.0	394.7	480.1	1.2	5.0	100	5.0	0.9	2.6	1.1	0.4
BWT-12-282	1,063.1	451.7	597.0	2.0	12.4	100	12.4	1.4	7.6	2.3	1.1
BWT-12-283	968.3	566.6	390.3	0.8	10.6	100	10.6	1.0	5.9	2.7	1.0
BWT-12-284	945.7	543.4	397.7	1.2	3.4	100	3.4	0.5	1.9	0.8	0.2
BWT-12-285	780.7	430.5	348.7	0.1	1.4	100	1.4	0.1	0.7	0.4	0.2
BWT-12-286	852.7	473.6	377.0	0.4	1.7	100	1.7	0.6	0.9	0.0	0.2
BWT-12-287	579.7	375.8	199.7	1.1	3.1	100	3.1	0.5	1.7	0.7	0.2

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
											*
BWT-12-288	972.8	588.0	381.0	0.9	2.9	100	2.9	1.1	1.5	0.1	0.2
BWT-12-289	681.9	365.6	311.0	1.0	4.3	100	4.3	0.6	2.4	1.1	0.2
BWT-12-290	711.2	406.8	300.3	0.5	3.6	100	3.6	0.5	2.0	0.9	0.2
BWT-12-291	812.9	430.5	378.6	1.0	2.8	100	2.8	0.3	1.6	0.7	0.2
BWT-12-292	703.4	332.5	369.5	0.0	1.4	100	1.4	0.2	0.8	0.3	0.1
BWT-12-293	488.5	303.5	183.2	0.5	1.3	100	1.3	0.1	0.8	0.3	0.1
BWT-12-294	961.1	474.3	479.4	1.1	6.3	100	6.3	0.7	2.7	1.9	1.0
BWT-12-295	758.6	430.0	325.4	0.6	2.6	100	2.6	0.2	1.6	0.6	0.2
BWT-12-296	1,049.2	576.4	467.6	0.6	4.6	100	4.6	0.4	2.6	1.2	0.4
BWT-12-297	1,586.5	482.7	1,097.8	1.2	4.8	100	4.8	0.4	2.2	1.4	0.8
BWT-12-467	1,147.2	688.0	447.8	3.2	8.2	100	8.2	0.7	4.9	2.0	0.60
BWT-12-468	1,140.1	1,019.9	111.9	2.2	6.1	100	6.1	1.4	4.4	0.3	0.01
BWT-12-469	1,447.1	711.3	725.6	2.8	7.4	100	7.4	0.9	4.3	1.7	0.50
BWT-12-470	1,509.9	622.7	875.3	3.0	8.9	100	8.9	0.8	4.9	2.3	0.90
BWT-12-471	1,490.2	937.3	540.0	2.7	10.2	100	10.2	1.0	5.6	2.4	1.20
BWT-12-472	593.8	337.9	248.8	1.3	5.8	100	5.8	0.6	3.2	1.3	0.70
BWT-12-473	1,392.5	874.5	502.9	3.4	11.7	100	11.7	1.5	7.0	2.3	0.90
BWT-12-474	779.2	332.5	438.2	1.6	6.9	100	6.9	0.5	3.8	1.9	0.70
BWT-12-475	1,047.6	734.4	305.9	1.0	6.3	100	6.3	0.7	3.6	1.4	0.60
BWT-12-476	903.0	418.5	476.2	0.6	7.7	100	7.7	0.7	4.4	2.0	0.60
BWT-12-477	1,239.5	778.6	452.1	1.8	7.0	100	7.0	1.0	4.3	1.4	0.30
BWT-12-478	754.2	411.9	333.5	2.4	6.4	100	6.4	0.5	3.8	1.6	0.50
BWT-12-479	1,083.8	559.2	519.7	0.7	4.2	100	4.2	0.4	2.3	1.2	0.30
BWT-12-480	851.9	450.0	398.3	1.1	2.5	100	2.5	0.3	1.4	0.6	0.20
BWT-12-481	810.9	376.9	430.0	1.3	2.7	100	2.7	0.6	1.4	0.6	0.10
BWT-12-482	820.3	421.7	396.0	0.1	2.5	100	2.5	0.5	1.3	0.6	0.10
BWT-12-483	825.8	494.7	324.9	2.2	4.0	100	4.0	0.6	2.4	0.8	0.20
BWT-12-484	1,409.0	660.3	737.0	2.8	8.9	100	8.9	1.0	4.2	2.8	0.90
BWT-12-485	743.4	570.7	168.1	0.8	3.8	100	3.8	0.1	2.5	0.5	0.70
BWT-12-486	796.1	292.5	501.3	0.8	1.5	100	1.5	0.2	0.8	0.4	0.08
BWT-12-487	1,348.1	929.2	413.0	2.1	3.8	100	3.8	0.5	2.3	0.8	0.20
BWT-12-488	796.0	390.2	401.9	1.4	2.5	100	2.5	0.4	1.3	0.6	0.20
BWT-12-489	833.4	624.6	207.1	0.8	0.9	100	0.9	0.1	0.6	0.2	0.04
BWT-12-490	913.8	418.4	487.5	2.4	5.5	100	5.5	0.5	3.1	1.4	0.50
BWT-12-491	807.0	631.4	170.7	1.6	3.3	100	3.3	0.5	2.0	0.6	0.20
BWT-12-492	1,310.2	474.6	831.5	1.2	2.9	100	2.9	0.3	1.6	0.8	0.20
BWT-12-493	1,315.2	827.0	483.1	2.1	3.0	100	3.0	0.5	1.8	0.6	0.10
BWT-12-494	674.0	291.8	380.1	0.5	1.6	100	1.6	0.3	0.8	0.4	0.10
BWT-12-495	672.6	440.8	229.7	0.6	1.5	100	1.5	0.2	1.0	0.3	0.04
BWT-12-496	915.3	608.9	301.1	2.2	3.1	100	3.1	0.7	1.7	0.6	0.10

* Values greater than 0.1 g were weighed only to one decimal place; the zero was added in the second decim position to facilitate column alignment.

Appendix F

Blackwater Indicator Mineralogy of 20 Till Samples Tested for Supergene Minerals

	0.25-0.5 mm						
			Major Sulphates				
Sample Number	% Cu Minerals	Misc. Prime Alteration Indicators	% Jarosite	% Alunite	% Tourmaline	Remarks	Picked Grains
BWT-12-001	0	0	Tr (~100 gr)	0	0	SEM check from 1.0-2.0 mm fraction: 1 jarosite versus sericite candidate = 1 jarosite. SEM checks from 0.5-1.0 mm fraction: 6 jarosite versus sericite candidates = 1 jarosite and 5 sericite. SEM checks from 0.25-0.5 mm fraction: 15 jarosite versus sericite candidates = 10 jarosite and 5 sericite.	1.0-2.0 mm fraction: 1 jarosite 0.5-1.0 mm fraction: 1 jarosite 5 sericite resembling jarosite 0.25-0.5 mm fraction: 10 representative jarosite 5 sericite resembling jarosite
BWT-12-002	0	0	Tr (~30 gr)	0	0	SEM checks from 0.5-1.0 mm fraction: 9 jarosite versus sericite candidates = 9 sericite. SEM checks from 0.25-0.5 mm fraction: 10 jarosite versus sericite candidates = 3 jarosite and 7 sericite.	0.5-1.0 mm fraction: 9 sericite resembling jarosite 0.25-0.5 mm fraction: 3 representative jarosite 7 sericite resembling jarosite
BWT-12-003	0	0	Tr (~20 gr)	0	0	SEM checks from 0.25-0.5 mm fraction: 7 jarosite versus sericite candidates = 4 jarosite and 3 sericite.	0.25-0.5 mm fraction: 4 representative jarosite 3 sericite resembling jarosite
BWT-12-004	0	0	0	0	0		
BWT-12-005	0	0	0	0	0		
BWT-12-006	0	0	Tr (~10 gr)	0	0	SEM checks from 0.25-0.5 mm fraction: 5 jarosite versus sericite candidates = 2 jarosite ± sericite and 3 sericite.	0.25-0.5 mm fraction: 2 representative jarosite 3 sericite resembling jarosite
BWT-12-007	0	0	0	0	0		
BWT-12-008	0	0	0	0	0		
BWT-12-009	0	0	0	0	0		
BWT-12-010	0	0	0	0	0	SEM checks from 0.25-0.5 mm fraction: 5 jarosite versus sericite candidates = 5 sericite.	0.25-0.5 mm fraction: 5 sericite resembling jarosite
BWT-12-011	0	0	Tr (~10 gr)	0	0	SEM checks from 1.0-2.0 mm fraction: 2 jarosite versus sericite candidates = 2 sericite. SEM checks from 0.5-1.0 mm fraction: 4 jarosite versus sericite candidates = 1 jarosite and 3 sericite. SEM checks from 0.25-0.5 mm fraction: 15 jarosite versus sericite candidates = 3 jarosite, and 12 sericite.	1.0-2.0 mm fraction: 2 sericite resembling jarosite 0.5-1.0 mm fraction: 1 jarosite 3 sericite resembling jarosite 0.25-0.5 mm fraction: 3 representative jarosite 12 sericite resembling jarosite
BWT-12-012	0	0	0	0	0		
BWT-12-013	0	0	0	0	0		
BWT-12-014	0	0	Tr (~20 gr)	0	0	SEM checks from 0.25-0..5 mm fraction: 5 jarosite versus sericite candidates = 4 jarosite and 1 sericite.	0.25-0.5 mm fraction: 4 representative jarosite 1 sericite resembling jarosite
BWT-12-015	0	0	0	0	0		
BWT-12-016	0	0	Tr (1 gr)	0	0	SEM checks from 0.25-0.5 mm fraction: 5 jarosite versus sericite candidates = 1 jarosite and 4 sericite.	0.25-0.5 mm fraction: 1 jarosite 4 sericite resembling jarosite
BWT-12-017	0	0	0	0	0		
BWT-12-018	0	0	Tr (4 gr)	0	0	SEM checks from 0.25-0.5 mm fraction: 9 jarosite versus sericite candidates = 4 jarosite and 5 sericite.	0.25-0.5 mm fraction: 4 jarosite 5 sericite resembling jarosite
BWT-12-019	0	0	0	0	0		
BWT-12-020	0	0	0	0	0		

Appendix G

Blackwater Hypogene Indicator Mineralogy, Till

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-001	0	0	0	20	0	Tr Mn-epidote (~20 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	Tr	0	15 (~2000 gr)	0	1 (Fo)	Tr	Tr (3 gr)	0	0	Hematite-goethite-spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 chromite versus hercynite candidates = 2 hercynite; and 5 representative forsterite candidates = 5 forsterite. SEM checks from 0.25-0.5 mm fraction: 10 chromite versus hercynite candidates = 3 chromite, 1 tourmaline, 2 allanite and 4 ilmenite; and 10 spessartine (major paramagnetic assemblage mineral) versus andradite candidates = 10 spessartine.	0.5-1.0 mm fraction: 2 hercynite 5 forsterite 0.25-0.5 mm fraction: 10 representative Mn-epidote 3 low-Cr diopside 30 representative spessartine 3 chromite 1 tourmaline resembling chromite 2 allanite resembling chromite 4 ilmenite resembling chromite
BWT-12-002	0	0	Tr (3 gr)	10	3 black hercynite	Tr Mn-epidote (6 gr) Tr low-Cr diopside (4 gr)	0	8	Tr	Tr	0	8 (~1000 gr)	0	0.5 (Fo)	Tr	Tr (2 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 pale brown spessartine candidates = 5 spessartine; and 6 chromite versus hercynite candidates = 2 chromite, 3 hercynite and 1 ilmenite.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 3 hercynite 6 Mn-epidote 4 low-Cr diopside 25 representative spessartine 2 chromite 1 ilmenite resembling chromite
BWT-12-003	0	0	Tr (2 gr)	20	2 black hercynite	Tr Mn-epidote (12 gr) Tr low-Cr diopside (9 gr)	0	Tr	Tr	Tr	0	Tr (3 gr)	0	Tr (Fo)	Tr	Tr (5 gr)	0	0	Hematite-goethite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 chromite versus hercynite candidates = 5 chromite and 2 hercynite.	0.5-1.0 mm fraction: 5 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 2 hercynite 12 Mn-epidote 9 low-Cr diopside 3 spessartine 5 chromite
BWT-12-004	0	Tr plumbo-gummite (1 gr)	Tr (2 gr)	8	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	8	2	0	0	Tr (5 gr)	0	Tr (Fo)	Tr	Tr (2 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 jarosite candidate = 1 plumbogummite (PbAl3(PO4)2(OH)5$H2O); 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 5 spessartine versus almandine candidates = 5 spessartine.	0.25-0.5 mm fraction: 1 plumbogummite 1 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 2 chromite*
BWT-12-005	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr)	0	8	Tr	Tr	0	Tr (~16 gr)	0	Tr (Fo)	Tr	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sapphire corundum versus kyanite candidate = 1 sapphire corundum; and 2 chromite versus hercynite candidates = 2 chromite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 16 spessartine 5 chromite*
BWT-12-006	Tr (1 gr)	Tr plumbo-gummite (1 gr)	0	5	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (5 gr)	0	10	Tr	Tr	0	75 (~25,000 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 jarosite versus plumbogummite candidate = 1 plumbogummite; and 2 sapphire corundum candidates = 2 sapphire corundum.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 1 plumbogummite 8 Mn-epidote 5 low-Cr diopside 20 representative spessartine 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-007	0	0	0	Tr	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	0	Tr (3 gr)	0	Tr (Fo)	Tr	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 spessartine versus almandine candidates = 3 spessartine.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 9 Mn-epidote 1 low-Cr diopside 3 spessartine
BWT-12-008	0	0	Tr (3 gr)	20	0	Tr Mn-epidote (16 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	0	0	Tr	0	Tr (4 gr)	0	Tr (Fo)	Tr	0	0	0	Hematite-goethite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum; and 5 spessartine candidates = 4 spessartine and 1 zircon.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 16 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 4 spessartine 1 zircon resembling spessartine
BWT-12-009	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	Tr	0	30 (~1500 gr)	0	0	Tr	Tr (2 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 2 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-010	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	6	Tr	Tr	0	12 (~600 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum; and 2 chromite versus hercynite candidates = 2 chromite.	0.25-0.5 mm fraction: 2 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine 2 chromite
BWT-12-011	0	0	Tr (1 gr)	10	0	Tr Mn-epidote (18 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	0	25 (~2500 gr)	0	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite-spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 jarosite versus plumbogummite candidates = 2 plumbogummite.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 1 Mn-epidote 2 plumbogummite 6 chromite* 0.25-0.5 mm fraction: 18 Mn-epidote 3 sapphire corundum 2 low-Cr diopside 20 representative spessartine 9 chromite*
BWT-12-012	0	0	Tr (1 gr)	12	0	Tr Mn-epidote (11 gr) Tr low-Cr diopside (2 gr)	0	4	Tr	Tr	0	20 (~2500 gr)	0	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite-ilmenite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 11 Mn-epidote 2 low-Cr diopside 20 representative spessartine 7 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-013	0	0	0	5	2 black hercynite; 1 black Cr-spinel	Tr Mn-epidote (2 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	4 (~200 gr)	0	2 (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 chromite versus hercynite candidates = 1 chromite and 1 ilmenite. SEM checks from 0.25-0.5 mm fraction: 10 chromite versus hercynite candidates = 1 chromite, 2 hercynite, 1 Cr-spinel; 2 allanite and 4 ilmenite.	0.5-1.0 mm fraction: 1 chromite 1 ilmenite resembling chromite 0.25-0.5 mm fraction: 2 hercynite 1 Cr-spinel 2 Mn-epidote 4 low-Cr diopside 20 representative spessartine 1 chromite 2 allanite resembling chromite 4 ilmenite resembling chromite
BWT-12-014	0	0	0	3	0	Tr Mn-epidote (19 gr) Tr low-Cr diopside (8 gr)	0	3	2	Tr	0	5 (~500 gr)	0	0	0	Tr (21 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 6 chromite* 0.25-0.5 mm fraction: 19 Mn-epidote 8 low-Cr diopside 20 representative spessartine 21 chromite*
BWT-12-015	0	Tr plumbo-gummite (3 gr)	Tr (1 gr)	8	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (1 gr)	0	6	Tr	Tr	0	8 (~800 gr)	0	0	0	Tr (6 gr)	1	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 beudantite versus jarosite candidates = 3 plumogummite and 1 monazite (lost in transfer to vial).	0.25-0.5 mm fraction: 3 plumbogummite 1 monazite resembling beudantite 7 Mn-epidote 1 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-016	0	0	Tr (2 gr)	Tr	1 black Cr-hercynite	Tr Mn-epidote (12 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	5	Tr	0	0	80 (~12,000 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sphalerite candidate = 1 spessartine; 1 red Cr-spinel versus red rutile candidate = 1 red rutile; and 4 chromite versus hercynite candidates = 3 chromite and 1 Cr-hercynite.	0.5-1.0 mm fraction: 1 chromite** 0.25-0.5 mm fraction: 1 Cr-hercynite 12 Mn-epidote 1 low-Cr diopside 1 red rutile 21 representative spessartine 3 chromite
BWT-12-017	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	10	0.5	0	0	20 (~1500 gr)	0	Tr (Fo)	0	Tr (12 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 12 chromite*
BWT-12-018	0	0	0	1	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	0	8	Tr	0	0	15 (~1200 gr)	0	Tr (Fo)	0	Tr (15 gr)	0	0	Hematite-ilmenite-spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 8 chromite versus hercynite candidates = 8 chromite. SEM check from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum.	0.5-1.0 mm fraction: 1 low-Cr diopside 8 chromite 0.25-0.5 mm fraction: 12 Mn-epidote 1 sapphire corundum 8 low-Cr diopside 20 representative spessartine 15 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-019	0	0	0	10	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	5 (~200 gr)	0	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 2 low-Cr diopside 20 representative spessartine 10 chromite*
BWT-12-020	0	0	Tr (2 gr)	10	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (6 gr)	0	5	Tr	0	0	3 (~200 gr)	0	Tr (Fo)	0	Tr (12 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 14 Mn-epidote 1 sapphire corundum 6 low-Cr diopside 20 representative spessartine 12 chromite*
BWT-12-021	0	Tr plumbo-gummite (3 gr)	0	5	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (2 gr)	0	6	Tr	Tr	0	8 (~400 gr)	0	Tr (Fo)	Tr	Tr (7 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 plumbogummite versus jarosite candidates = 3 plumbogummite.	0.25-0.5 mm fraction: 3 plumbogummite 10 Mn-epidote 2 low-Cr diopside 20 representative spessartine 7 chromite*
BWT-12-022	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (1 gr)	0	5	1	Tr	0	4 (~250 gr)	0	Tr (Fo)	0	Tr (18 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 1 low-Cr diopside 20 representative spessartine 18 chromite*
BWT-12-023	0	0	Tr (1 gr)	12	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (1 gr)	0	8	1	0	0	Tr (2 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 3 Mn-epidote 1 low-Cr diopside 2 spessartine 2 chromite*
BWT-12-024	0	0	0	8	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (1 gr)	0	6	Tr	Tr	0	Tr (26 gr)	0	Tr (Fo)	0	0	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 1 low-Cr diopside 26 spessartine
BWT-12-025	0	0	0	5	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	4	Tr	Tr	0	15 (~800 gr)	0	4 (Fo)	0	0	0	0	Hematite-ilmenite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine
BWT-12-026	0	0	0	0	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	8 (~800 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 9 Mn-epidote 2 low-Cr diopside 20 representative spessartine 4 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-027	0	Tr native copper (1 gr)	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	1 (~40 gr)	0	Tr (Fo)	0	0	0	0	Hematite-ilmenite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 native copper candidate = 1 native copper.	0.25-0.5 mm fraction: 1 native copper 5 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine
BWT-12-028	0	0	Tr (1 gr)	4	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	0.5 (~40 gr)	0	1 (Fo)	0	Tr (4 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 2 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-029	0	0	0	2	0	Tr Mn-epidote (~30 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	1 (~80 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 1 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-030	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (8 gr)	0	5	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 8 spessartine 1 chromite*
BWT-12-031	0	0	0	0	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	5	Tr	0	0	2 (~40 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-032	0	0	0	2	0	Tr Mn-epidote (13 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	8	Tr	0	0	Tr (14 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus almandine candidates = 2 spessartine and 3 almandine.	0.25-0.5 mm fraction: 13 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 2 spessartine 3 almandine resembling spessartine 12 unchecked spessartine
BWT-12-033	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (19 gr) Tr sapphire corundum (3 gr)	0	6	Tr	Tr	0	Tr (10 gr)	0	Tr (Fo)	Tr	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 19 Mn-epidote 3 sapphire corundum 10 spessartine 2 chromite*
BWT-12-034	0	0	0	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	5	Tr	0	0	Tr (3 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 chromite versus hercynite candidates = 2 chromite.	0.25-0.5 mm fraction: 8 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 3 spessartine 2 chromite

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm														Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp				
								% Titanite														
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-035	0	0	10 (~40 gr)	5	0	0	0	Tr	0	0	0	Tr (2 gr)	0	Tr (Fo)	0	0	5	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 spessartine
BWT-12-036	0	0	0	Tr	0	Tr Mn-epidote (13 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	0	0	Tr (13 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 13 Mn-epidote 1 low-Cr diopside 13 spessartine 1 chromite*
BWT-12-037	0	0	0	Tr	0	Tr Mn-epidote (4 gr)	0	4	Tr	Tr	0	Tr (5 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 5 spessartine
BWT-12-038	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	0	2	0	0	0	0	0	0.5 (Fo)	0	0	0.5	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside
BWT-12-039	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	Tr (7 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 1 low-Cr diopside 7 spessartine
BWT-12-040	0	0	0	2	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	Tr	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 15 Mn-epidote 2 low-Cr diopside 8 spessartine
BWT-12-041	0	0	0	2	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	4	1	0	0	Tr (18 gr)	0	0.5 (Fo)	0	Tr (2 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 18 spessartine 2 chromite*
BWT-12-042	0	0	0	4	0	Tr Mn-epidote (8 gr) Tr low-Cr diopside (5 gr)	Tr (1 gr)	5	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 plumbogummite candidate = 1 epidote; and 1 chromite versus hercynite candidate = 1 hercynite.	0.5-1.0 mm fraction: 1 epidote resembling plumbogummite 1 hercynite 2 Mn-epidote 0.25-0.5 mm fraction: 8 Mn-epidote 5 low-Cr diopside 1 red rutile 8 spessartine 1 chromite*
BWT-12-043	0	0	0	2	0	Tr Mn-epidote (13 gr)	0	4	Tr	0	0	Tr (11 gr)	0	0.5 (Fo)	Tr	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 13 Mn-epidote 11 spessartine 4 chromite*
BWT-12-044	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~40 gr)	0	3	Tr	Tr	0	Tr (~50 gr)	0	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 2 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 8 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-045	0	Tr plumbo-gummite (1 gr)	0	2	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (9 gr)	0	4	Tr	0	0	1 (~150 gr)	0	1 (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 plumbogummite candidate = 1 plumbogummite. Also picked 1 reshaped 100 x 375 x 375µm gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 1 gold 1 plumbogummite 14 Mn-epidote 9 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-046	0	0	0	Tr	0	Tr Mn-epidote (4 gr)	0	1	Tr	0	0	Tr (3 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 3 spessartine
BWT-12-047	0	0	0	4	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	0	0	2	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 2 low-Cr diopside 10 spessartine
BWT-12-048	0	0	0	1	0	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr)	0	2	Tr	0	0	Tr (3 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 1 sapphire corundum 3 spessartine
BWT-12-049	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (3 gr)	0	8	Tr	Tr	0	Tr (10 gr)	0	1 (Fo)	Tr	0	Tr	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 chromite candidate = 1 romanechite ((BaMn)Mn8O16(OH)4).	0.5-1.0 mm fraction: 2 Mn-epidote 1 romanechite resembling chromite 0.25-0.5 mm fraction: 14 Mn-epidote 3 low-Cr diopside 10 spessartine
BWT-12-050	0	0	0	2	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (12 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 10 Mn-epidote 2 low-Cr diopside 12 spessartine
BWT-12-051	0	0	0	2	1 black Cr-spinel	Tr Mn-epidote (17 gr) Tr sapphire corundum (1 gr)	0	4	0	0	0	Tr (16 gr)	0	Tr (Fo)	0	Tr (2 gr)	0.5	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum; and 3 chromite versus hercynite candidates = 2 chromite and 1 Cr-spinel.	0.25-0.5 mm fraction: 1 Cr-spinel 17 Mn-epidote 1 sapphire corundum 16 spessartine 2 chromite
BWT-12-052	0	0	Tr (5 gr)	5	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	0	0	Tr (14 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 10 Mn-epidote 2 low-Cr diopside 14 spessartine 5 chromite*
BWT-12-053	0	0	Tr (8 gr)	2	0	Tr Mn-epidote (1 gr)	0	4	Tr	Tr	0	Tr (27 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 27 spessartine 1 chromite*
BWT-12-054	0	0	0	2	0	Tr Mn-epidote (11 gr) Tr low-Cr diopside (2 gr)	Tr (1 gr)	3	Tr	0	0	Tr (15 gr)	0	Tr (Fo)	0	Tr (12 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 11 Mn-epidote 2 low-Cr diopside 1 red rutile 15 spessartine 12 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-055	0	0	0	5	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (2 gr)	0	4	Tr	0	0	Tr (11 gr)	0	Tr (Fo)	0	Tr (6 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 2 low-Cr diopside 11 spessartine 6 chromite*
BWT-12-056	0	0	0	2	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (7 gr)	0	5	Tr	Tr	0	Tr (16 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 yellow andradite versus blond titanite candidates = 2 andradite.	0.25-0.5 mm fraction: 2 Mn-epidote 7 low-Cr diopside 16 spessartine 2 andradite 5 chromite*
BWT-12-057	0	0	0	2	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (8 gr)	0	3	Tr	Tr	0	Tr (19 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 8 low-Cr diopside 19 spessartine 5 chromite*
BWT-12-058	0	0	0	2	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (5 gr)	0	5	Tr	Tr	0	0.5 (~40 gr)	0	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 chromite versus hercynite candidates = 1 chromite and 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 anatase.	0.5-1.0 mm fraction: 1 hercynite 1 Mn-epidote 1 chromite 0.25-0.5 mm fraction: 7 Mn-epidote 1 anatase resembling sapphire corundum 5 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-059	0	0	0	1	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (9 gr)	0	4	Tr	Tr	0	1 (~150 gr)	0	2 (Fo)	0	Tr (11 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 3 chromite versus hercynite candidates = 1 chromite and 2 hercynite.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 2 hercynite 1 Mn-epidote 2 low-Cr diopside 1 chromite 5 unchecked chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 9 low-Cr diopside 20 representative spessartine 11 chromite*
BWT-12-060	0	0	0	2	0	Tr Mn-epidote (8 gr) Tr low-Cr diopside (3 gr)	0	3	Tr	Tr	0	Tr (19 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 3 low-Cr diopside 19 spessartine 4 chromite*
BWT-12-061	0	0	0	0.5	0	Tr Mn-epidote (3 gr)	0	6	0.5	Tr	0	Tr (8 gr)	0	Tr (Fo)	Tr	Tr (1 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 8 spessartine 1 chromite*
BWT-12-062	0	0	0	Tr	0	Tr Mn-epidote (21 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	3	1	Tr	0	Tr (5 gr)	0	Tr (Fo)	Tr	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 21 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 5 spessartine 2 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm														Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp							>1.0 amp			
								% Titanite														
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-063	0	0	0	4	0	Tr Mn-epidote (8 gr)	0	4	Tr	Tr	0	Tr (13 gr)	0	Tr (Fo)	Tr	Tr (1 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 tourmaline versus orthopyroxene candidate = 1 orthopyroxene.	0.25-0.5 mm fraction: 8 Mn-epidote 1 orthopyroxene resembling tourmaline 13 spessartine 5 chromite*
BWT-12-064	0	0	0	1	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	0	Tr (6 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 10 Mn-epidote 1 low-Cr diopside 6 spessartine
BWT-12-065	0	0	0	1	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (3 gr)	0	4	2	Tr	0	Tr (14 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (9 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 3 low-Cr diopside 14 spessartine 1 andradite 9 chromite*
BWT-12-066	0	0	0	20	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	Tr	0	Tr (3 gr)	Tr (1 gr)	Tr (Fo)	0	0	Tr	0	Hematite-goethite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 1 low-Cr diopside 3 spessartine 1 andradite
BWT-12-067	0	0	0	1	0	Tr Mn-epidote (6 gr) Tr topaz (1 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	Tr	0	Tr (11 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 colourless corundum versus quartz candidate = 1 topaz.	0.25-0.5 mm fraction: 6 Mn-epidote 1 topaz 2 low-Cr diopside 11 spessartine 1 chromite*
BWT-12-068	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (2 gr)	0	8	Tr	0	0	Tr (3 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 pale yellow plumbogummite candidates = 2 epidote (Fe-stained). Also picked 1 modified 250 x 250 x 400µm gold grain from 0.25-0.5 mm fraction.	0.25-0.5 mm fraction: 1 gold 2 epidote resembling plumbogummite 2 Mn-epidote 3 spessartine 4 chromite*
BWT-12-069	0	0	0	3	0	Tr low-Cr diopside (3 gr)	0	4	2	0	0	Tr (17 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 17 spessartine 4 chromite*
BWT-12-070	0	0	Tr (1 gr)	1	0	Tr Mn-epidote (9 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	1	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	Tr	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 10 spessartine 4 chromite*
BWT-12-071	0	0	0	2	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (10 gr)	0	2	Tr	0	0	Tr (16 gr)	0	0.5 (Fo)	Tr	Tr (7 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 10 low-Cr diopside 16 spessartine 7 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-072	0	0	0	1	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (6 gr)	Tr (1 gr)	5	1	Tr	0	Tr (21 gr)	Tr (3 gr)	0.5 (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 6 low-Cr diopside 1 red rutile 21 spessartine 3 andradite 4 chromite*
BWT-12-073	0	0	0	1	0	Tr Mn-epidote (22 gr) Tr low-Cr diopside (11 gr)	0	2	1	Tr	0	Tr (22 gr)	0	Tr (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 22 Mn-epidote 11 low-Cr diopside 22 spessartine 2 chromite*
BWT-12-074	0	0	0	2	0	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (11 gr)	0	Tr (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 11 spessartine 7 chromite*
BWT-12-075	0	0	0	1	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (2 gr)	0	4	Tr	0	0	Tr (8 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (11 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 6 Mn-epidote 2 low-Cr diopside 8 spessartine 2 andradite 11 chromite*
BWT-12-076	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (24 gr)	Tr (1 gr)	2	Tr	Tr	0	Tr (~50 gr)	0	1 (Fo)	0	Tr (8 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 1.0-2.0 mm fraction: 1 sapphire corundum versus anatase candidate = 1 sapphire corundum.	1.0-2.0 mm fraction: 1 sapphire corundum 0.5-1.0 mm fraction: 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 24 low-Cr diopside 1 red rutile 20 representative spessartine 8 chromite*
BWT-12-077	0	0	0	3	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (6 gr)	0	2	Tr	Tr	0	Tr (~40 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 4 chromite* 0.25-0.5 mm fraction: 14 Mn-epidote 6 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-078	0	0	Tr (1 gr)	1	0	Tr Mn-epidote (29 gr) Tr low-Cr diopside (2 gr)	0	4	Tr	0	0	Tr (14 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage. Also picked 1 reshaped 25 x 350 x 350µm gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 1 gold 29 Mn-epidote 2 low-Cr diopside 14 spessartine 4 andradite 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-079	0	0	0	4	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (6 gr)	0	2	Tr	0	0	Tr (~40 gr)	0	1 (Fo)	Tr	Tr (7 gr)	Tr	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 14 Mn-epidote 6 low-Cr diopside 20 representative spessartine 7 chromite*
BWT-12-080	0	0	0	2	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (16 gr)	0	2	Tr	0	0	Tr (26 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (7 gr)	0	Tr	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 16 low-Cr diopside 26 spessartine 1 andradite 7 chromite*
BWT-12-081	0	0	0	0	0	Tr sapphire corundum (1 gr)	0	15	5	0	0	Tr (4 gr)	0	Tr	0	Tr (3 gr)	0	0	Hematite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 1 sapphire corundum 1 low-Cr diopside 4 grossular 3 chromite*
BWT-12-082	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (3 gr)	Tr (1 gr)	5	Tr	Tr	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 sapphire corundum 3 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 3 low-Cr diopside 1 red rutile 8 spessartine 7 chromite*
BWT-12-083	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	8	Tr	Tr	0	0.5 (~50 gr)	0	0.5 (Fo)	Tr	Tr (10 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 10 chromite*
BWT-12-084	0	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (4 gr)	0	20	5	Tr	0	Tr (~40 gr)	0	Tr	0	Tr (7 gr)	0	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 11 pink, pink-orange spessartine versus almandine candidates = 2 spessartine and 9 almandine.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 12 Mn-epidote 2 sapphire corundum 4 low-Cr diopside 22 representative spessartine 9 almandine resembling spessartine 7 chromite*
BWT-12-085	0	0	0	1	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (1 gr)	0	20	1	Tr	0	1 (~60 gr)	0	Tr	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 1 low-Cr diopside 20 representative spessartine 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-086	0	0	0	Tr	0	Tr Mn-epidote (3 gr)	0	2	Tr	0	0	Tr (3 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 3 Mn-epidote 3 spessartine 1 chromite*
BWT-12-087	0	0	0	Tr	0	Tr Mn-epidote (11 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	1 (~6 gr)	0	0.5 (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 andradite versus titanite candidates = 3 titanite.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 11 Mn-epidote 1 low-Cr diopside 20 representative spessartine 3 titanite resembling andradite 7 chromite*
BWT-12-088	0	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	Tr (12 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 12 Mn-epidote 1 low-Cr diopside 12 spessartine 5 chromite*
BWT-12-089	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	1 (~80 gr)	0	2 (Fo)	0	Tr (9 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 3 low-Cr diopside 20 representative spessartine 9 chromite*
BWT-12-090	0	0	0	Tr	0	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (3 gr)	0	Tr	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	0	Tr (6 gr)	Tr	0	Hematite/epidote assemblage. 7 Mn-epidote from 0.25-0.5 mm fraction lost during transfer to vial.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 10 Mn-epidote 1 sapphire corundum 3 low-Cr diopside 10 spessartine 6 chromite*
BWT-12-091	0	0	0	4	0	Tr Mn-epidote (8 gr) Tr low-Cr diopside (8 gr)	0	4	Tr	Tr	0	Tr (7 gr)	0	0.5 (Fo)	0	Tr (11 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 8 low-Cr diopside 7 spessartine 11 chromite*
BWT-12-092	0	0	0	3	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	0	0	Tr (7 gr)	0	1	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 3 low-Cr diopside 7 spessartine 4 chromite*
BWT-12-093	0	0	0	Tr	0	Tr Mn-epidote (11 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	Tr	0	Tr (11 gr)	0	Tr (Fo)	0	Tr (3 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 11 Mn-epidote 3 sapphire corundum 3 low-Cr diopside 11 spessartine 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-094	0	0	0	2	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	4	Tr	0	0	Tr (27 gr)	0	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 27 spessartine 9 chromite*
BWT-12-095	0	0	0	Tr	0	Tr Mn-epidote (21 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (11 gr)	0	2	Tr	Tr	0	Tr (17 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 0.25-0.5 mm fraction: 21 Mn-epidote 4 sapphire corundum 11 low-Cr diopside 17 spessartine 4 chromite*
BWT-12-096	0	0	0	5	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	20 (~2500 gr)	0	Tr	0	Tr (7 gr)	Tr	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 4 low-Cr diopside 20 representative spessartine 7 chromite*
BWT-12-097	0	0	0	4	0	Tr Mn-epidote (19 gr) Tr low-Cr diopside (8 gr)	0	1	Tr	0	0	10 (~800 gr)	0	Tr (Fo)	0	Tr (8 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: chromite* 0.25-0.5 mm fraction: 19 Mn-epidote 8 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-098	0	0	0	2	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (8 gr)	0	4	Tr	Tr	0	15 (~2,000 gr)	0	Tr	Tr	Tr (11 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 9 Mn-epidote 8 low-Cr diopside 20 representative spessartine 11 chromite*
BWT-12-099	0	0	0	2	0	Tr Mn-epidote (~30 gr) Tr low-Cr diopside (8 gr)	0	2	Tr	0	0	Tr (18 gr)	0	1 (Fo)	Tr	Tr (5 gr)	Tr	0	Ilmenite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 8 low-Cr diopside 18 spessartine 5 chromite*
BWT-12-100	0	0	0	8	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	0	0	5 (~100 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 1 low-Cr diopside 20 representative spessartine
BWT-12-101	0	0	Tr (1 gr)	10	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	30 (~800 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 2 low-Cr diopside 20 representative spessartine 5 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-103	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	5 (~300 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 2 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-109	0	0	Tr (2 gr)	1	0	Tr Mn-epidote (~50 gr) Tr low-Cr diopside (18 gr)	Tr (1 gr)	1	Tr	0	0	Tr (13 gr)	0	1 (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage. Picked 1 reshaped 100x450x525µ gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 4 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 1 gold 30 representative Mn-epidote 18 low-Cr diopside 1 red rutile 13 spessartine 2 chromite*
BWT-12-116	0	0	0	Tr	0	Tr Mn-epidote (15 gr)	0	2	Tr	0	0	Tr (~150 gr)	0	Tr (Fo)	0	0	Tr	0	Almandine-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 almandine (major paramagnetic assemblage mineral) versus spessartine candidates = 1 almandine and 5 Mn-almandine.	0.25-0.5 mm fraction: 15 Mn-epidote 20 representative spessartine 6 representative almandine
BWT-12-117	0	0	0	Tr	0	Tr Mn-epidote (24 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	Tr (~50 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 24 Mn-epidote 2 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-118	0	0	0	1	0	Tr Mn-epidote (9 gr)	0	1	0	0	0	30 (~4,000 gr)	0	0.5 (Fo)	0	Tr (4 gr)	0	0	Hematite-spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 pale orange spessartine versus almandine candidates = 3 spessartine and 2 Mn-almandine. Spessartine and Mn-almandine form a single, visually inseparable population.	0.5-1.0 mm fraction: 1 Mn-epidote 3 chromite* 0.25-0.5 mm fraction: 9 Mn-epidote 3 spessartine 20 representative unchecked spessartine 2 Mn-almandine resembling spessartine 4 chromite*
BWT-12-119	0	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	1 (~100 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 12 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 20 representative spessartine
BWT-12-120	0	0	Tr (1 gr)	1	0	Tr Mn-epidote (3 gr)	Tr (1 gr)	1	Tr	0	0	Tr (13 gr)	0	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 1 red rutile 13 spessartine 10 chromite*
BWT-12-121	0	0	0	4	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	0	0	Tr (16 gr)	0	0.5 (Fo)	0	Tr (4 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 2 low-Cr diopside 16 spessartine 4 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-122	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (3 gr)	0	3	2	0	0	0	0	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 3 low-Cr diopside 8 chromite*
BWT-12-123	0	0	0	Tr	0	Tr Mn-epidote (18 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	1 (~100 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 18 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-124	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (3 gr)	0	1	Tr	0	0	Tr (2 gr)	0	Tr (Fo)	0	Tr (11 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 3 low-Cr diopside 2 spessartine 11 chromite*
BWT-12-125	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (25 gr)	Tr (3 gr)	0	0	Tr (14 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 2 low-Cr diopside 25 spessartine 3 andradite 14 chromite*
BWT-12-126	0	0	0	6	0	Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	10	Tr	Tr	0	Tr (6 gr)	0	2	0	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 1 sapphire corundum 5 low-Cr diopside 6 spessartine 5 chromite*
BWT-12-127	0	0	0	2	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	5	0	0	0	3 (~120 gr)	0	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside 20 representative spessartine 9 chromite*
BWT-12-128	0	0	0	Tr	0	Tr Mn-epidote (2 gr)	0	5	Tr	0	0	Tr (1 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 1 spessartine 2 chromite*
BWT-12-129	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	5 (~250 gr)	0	0	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 1 low-Cr diopside 40 representative spessartine 4 chromite*
BWT-12-130	0	0	0	1	0	Tr Mn-epidote (11 gr)	0	3	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 11 Mn-epidote 8 spessartine 8 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-131	0	0	0	Tr	0	Tr Mn-epidote (5 gr)	0	1	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 5 Mn-epidote 8 spessartine 1 chromite*
BWT-12-132	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (1 gr)	0	10	Tr	0	0	3 (~100 gr)	0	Tr (Fo)	Tr	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 20 representative spessartine 6 chromite*
BWT-12-133	0	0	0	2	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	0	4	Tr	Tr	0	2 (~80 gr)	0	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 5 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-134	0	0	0	Tr	0	Tr Mn-epidote (11 gr)	0	5	Tr	0	0	1 (~60 gr)	0	Tr (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 11 Mn-epidote 20 representative spessartine 2 chromite*
BWT-12-135	0	0	0	Tr	0	Tr Mn-epidote (6 gr)	0	2	Tr	0	0	1 (~100 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 30 representative spessartine 2 andradite 7 chromite*
BWT-12-136	0	0	0	2	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	Tr (~30 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 15 Mn-epidote 4 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-137	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (3 gr)	0	1	Tr	Tr	0	Tr (~80 gr)	0	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 4 sapphire corundum 3 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-138	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	Tr (~40 gr)	Tr (3 gr)	Tr (Fo)	0	Tr (13 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 6 chromite* 0.25-0.5 mm fraction: 5 Mn-epidote 1 low-Cr diopside 20 representative spessartine 3 andradite 13 chromite*
BWT-12-139	0	0	0	0	0	Tr sapphire corundum (1 gr)	0	Tr	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 sapphire corundum 1 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-140	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (2 gr)	0	Tr	Tr	Tr	0	Tr (1 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite-almandine/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 1 spessartine 3 chromite*
BWT-12-141	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (3 gr)	0	Tr	Tr	0	0	Tr (18 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 3 low-Cr diposide 18 spessartine 4 chromite*
BWT-12-142	0	0	0	2	0	Tr Mn-epidote (16 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	Tr (~30 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 16 Mn-epidote 4 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-143	0	0	Tr (5 gr)	Tr	0	Tr Mn-epidote (16 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	Tr (~60 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 16 Mn-epidote 1 low-Cr diopside 20 representative spessartine 1 andradite 4 chromite*
BWT-12-144	0	0	0	Tr	0	Tr Mn-epidote (11 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	Tr	0	1 (~50 gr)	0	Tr (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 11 Mn-epidote 2 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-145	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (6 gr)	0	2	Tr	0	0	1 (~100 gr)	Tr (1 gr)	1 (Fo)	0	Tr (9 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 pale orange spessartine versus almandine candidates = 4 spessartine and 1 Mn-almandine; and 5 brown spessartine versus almandine candidates = 4 spessartine and 1 Mn-andradite.	0.5-1.0 mm fraction: 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 6 low-Cr diopside 28 representative spessartine 1 Mn-almandine resembling spessartine 1 Mn-andradite 9 chromite*
BWT-12-146	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (9 gr)	0	Tr	Tr	Tr	0	6 (~1500 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus titanite candidates = 8 spessartine and 2 titanite.	0.25-0.5 mm fraction: 9 Mn-epidote 18 representative spessartine 2 titanite resembling spessartine 1 andradite 2 chromite*
BWT-12-147	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	0	0	4 (~150 gr)	Tr (1 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 spessartine versus andradite candidates = 2 spessartine and 1 andradite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 2 chromite* 0.25-0.5 mm fraction; 12 Mn-epidote 2 low-Cr diopside 22 representative spessartine 1 andradite

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-148	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	Tr	0	15 (~150 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 1 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-149	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	8 (~800 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 brown-orange spessartine versus almandine candidates = 5 spessartine.	0.25-0.5 mm fraction: 6 Mn-epidote 1 low-Cr diopside 25 representative spessartine 4 chromite*
BWT-12-150	0	0	0	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	0	0	1 (~40 gr)	0	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 8 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-151	0	0	0	Tr	0	Tr Mn-epidote (5 gr)	0	Tr	Tr	Tr	0	3 (~300 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (2 gr)	Tr	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine candidates = 5 spessartine.	0.25-0.5 mm fraction: 5 Mn-epidote 25 representative spessartine 1 andradite 2 chromite*
BWT-12-152	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (2 gr)	0	4	1	0	0	Tr (15 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 2 sapphire corundum 15 spessartine 5 chromite*
BWT-12-153	0	0	0	Tr	0	Tr Mn-epidote (21 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	0	1 (~50 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 21 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-154	0	0	0	1	0	Tr low-Cr diopside (2 gr)	0	Tr	Tr	0	0	Tr (6 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 6 spessartine 5 chromite*
BWT-12-161	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (6 gr)	0	Tr	Tr	0	0	1 (~50 gr)	0	1 (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 6 low-Cr diopside 20 representative spessartine 2 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-162	0	0	0	Tr	1 black hercynite; 1 black Cr-spinel	Tr Mn-epidote (7 gr) Tr low-Cr diopside (5 gr)	0	2	Tr	Tr	0	Tr (~40 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 spessartine versus almandine candidate = 1 Mn-grossular; and 4 chromite versus ilmenite candidates = 3 chromite and 1 hercynite, SEM checks from 0.25-0.5 mm fraction: 6 chromite versus ilmenite candidates = 4 chromite, 1 hercynite and 1 Cr-spinel.	0.5-1.0 mm fraction: 1 black hercynite 3 Mn-epidote 1 Mn-grossular resembling spessartine 3 chromite 0.25-0.5 mm fraction: 1 hercynite 1 Cr-spinel 7 Mn-epidote 5 low-Cr diopside 20 representative spessartine 4 chromite
BWT-12-163	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr low-Cr diopside (6 gr)	0	1	Tr	0	0	0.5 (~40 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.54 mm fraction: 20 representative Mn-epidote 6 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-164	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr sapphire corundum (2 gr)	0	Tr	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 2 sapphire corundum 10 spessartine 1 chromite*
BWT-12-165	0	0	0	5	2 black hercynite	Tr Mn-epidote (3 gr)	0	1	Tr	0	0	Tr (6 gr)	Tr (5 gr)	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 5 andradite; and 2 chromite versus hercynite candidates = 2 hercynite.	0.25-0.5 mm fraction: 2 hercynite 3 Mn-epidote 6 spessartine 5 andradite
BWT-12-166	0	0	0	Tr	0	Tr Mn-epidote (4 gr)	0	5	1	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (3 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 8 spessartine 3 chromite*
BWT-12-167	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (8 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	Tr (12 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 8 Mn-epidote 1 low-Cr diopside 12 spessartine
BWT-12-168	Tr (1 gr)	0	0	Tr	0	Tr Mn-epidote (12 gr)	0	Tr	Tr	0	0	Tr (11 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 1 chalcopyrite 12 Mn-epidote 11 spessartine
BWT-12-169	0	Tr molybdenite (1 gr)	0	Tr	1 black hercynite	Tr Mn-epidote (9 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	Tr	0	Tr (16 gr)	Tr (1 gr)	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 molybdenite candidate = 1 molybdenite (lost in transfer to vial); 1 hercynite versus chromite candidate = 1 hercynite; 1 spessartine versus almandine candidate = 1 almandine; and 1 andradite versus titanite candidate = 1 andradite.	0.25-0.5 mm fraction: 1 molybdenite 1 hercynite 9 Mn-epidote 1 low-Cr diopside 16 spessartine 1 almandine resembling spessartine 1 andradite

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-170	0	0	0	Tr	0	Tr Mn-epidote (9 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	0.5 (~80 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-171	0	0	0	Tr	0	Tr Mn-epidote (3 gr)	0	Tr	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage. 0.8-1.0 amp 0.25-0.5 mm fraction accidentally spilled prior to picking; recovered and picked 30% of spilled fraction.	0.25-0.5 mm fraction: 3 Mn-epidote 10 spessartine
BWT-12-172	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	0	0	Tr (6 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 7 Mn-epidote 3 low-Cr diopside 6 low-Cr diopside 4 chromite*
BWT-12-173	0	0	0	Tr	0	Tr Mn-epidote (2 gr)	0	15	8	0	0	Tr (~40 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 andradite versus titanite candidates = 1 andradite and 1 grossular; and 2 chromite candidates = 1 chromite and 1 allanite.	0.25-0.5 mm fraction: 2 Mn-epidote 20 representative spessartine 1 andradite 1 grossular resembling andradite 1 chromite 1 allanite resembling chromite
BWT-12-199	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (3 gr)	0	3	Tr	0	0	2 (~80 gr)	0	1 (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 2 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-200	0	0	0	1	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	0	0	Tr (14 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 20 representative Mn-epidote 1 sapphire corundum 1 low-Cr diopside 14 spessartine 1 chromite*
BWT-12-201	0	0	0	Tr	0	Tr Mn-epidote (14 gr)	0	Tr	Tr	0	0	Tr (~60 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 14 Mn-epidote 20 representative spessartine 4 chromite*
BWT-12-203	0	0	Tr (5 gr)	5	0	Tr Mn-epidote (11 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	Tr	0	1 (~30 gr)	0	Tr (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 11 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine 1 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-223	0	0	0	3	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (5 gr)	0	Tr	Tr	0	0	Tr (4 gr)	0.5 (~100 gr)	1 (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 8 spessartine versus andradite candidates = 1 spessartine and 7 andradite.	0.5-1.0 mm fraction: 2 Mn-epidote 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 5 low-Cr diopside 4 spessartine 27 representative andradite 3 chromite*
BWT-12-224	0	0	0	2	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (21 gr)	0	4	Tr	0	0	Tr (5 gr)	2 (~250 gr)	2 (Fo)	0	Tr (15 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 andradite versus spessartine candidates = 7 andradite, 2 spessartine and 1 almandine.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 1 sapphire corundum 21 low-Cr diopside 5 spessartine 27 representative andradite 1 almandine resembling andradite 15 chromite*
BWT-12-225	0	0	Tr (3 gr)	0.5	0	Tr sapphire corundum (3 gr) Tr low-Cr diopside (7 gr)	0	Tr	0	0	0	Tr (12 gr)	Tr (~40 gr)	Tr (Fo)	0	Tr (1 gr)	Tr	0	Augite/epidote assemblage.	0.25-0.5 mm fraction: 3 sapphire corundum 7 low-Cr diopside 12 spessartine 20 representative andradite 1 chromite*
BWT-12-226	0	0	0	1	0	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (10 gr)	Tr (1 gr)	1	Tr	0	0	0	1 (~200 gr)	1 (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 9 andradite versus spessartine candidates = 9 andradite.	0.5-1.0 mm fraction: 3 low-Cr diopside 0.25-0.5 mm fraction: 3 Mn-epidote 1 sapphire corundum 10 low-Cr diopside 1 red rutile 29 representative andradite 7 chromite*
BWT-12-227	0	0	0	1	0	Tr Mn-epidote (~80 gr) Tr sapphire corundum (1 gr) Tr topaz (2 gr) Tr low-Cr diopside (~60 gr)	0	Tr	0	0	0	Tr (~40 gr)	0	70 (Fo)	0	Tr (~80 gr)	0	0	Forsterite-hematite/epidote assemblage. Also picked 1 reshaped 75 x 425 x 625µm gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 5 Mn-epidote 5 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 1 gold 20 representative Mn-epidote 1 sapphire corundum 2 topaz 20 representative low-Cr diopside 20 representative spessartine 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-228	0	0	0	Tr	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (10 gr)	0	0	0	0	0	Tr (2 gr)	Tr (~60 gr)	20 (Fo)	0	Tr (~50 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 5 chromite* 0.25-0.5 mm fraction: 9 Mn-epidote 10 low-Cr diopside 2 spessartine 20 representative andradite 20 representative chromite*
BWT-12-229	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (17 gr)	0	1	Tr	0	0	Tr (7 gr)	Tr (~80 gr)	1 (Fo)	0	Tr (14 gr)	0	0	Hematite-augite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 5 Mn-epidote 1 sapphire corundum 17 low-Cr diopside 7 spessartine 20 representative andradite 14 chromite*
BWT-12-230	0	0	0	2	0	Tr Mn-epidote (~30 gr) Tr low-Cr diopside (11 gr)	Tr (1 gr)	1	Tr	0	0	Tr (3 gr)	Tr (~100 gr)	1 (Fo)	0	Tr (13 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 11 low-Cr diopside 1 red rutile 3 spessartine 20 representative andradite 13 chromite*
BWT-12-231	0	0	0	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (16 gr)	0	Tr	0	0	0	Tr (9 gr)	Tr (16 gr)	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 2 sapphire corundum 16 low-Cr diopside 9 spessartine 16 andradite 4 chromite*
BWT-12-232	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (~60 gr) Tr sapphire corundum (6 gr) Tr topaz (2 gr) Tr low-Cr diopside (~30 gr)	0	Tr	0	0	0	Tr (18 gr)	Tr (7 gr)	2 (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 8 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 6 sapphire corundum 2 topaz 20 representative low-Cr diopside 18 spessartine 7 andradite 6 chromite*
BWT-12-233	0	0	Tr (~15 gr)	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (10 gr)	Tr (1 gr)	Tr	0	0	0	Tr (~30 gr)	Tr (~40 gr)	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 2 sapphire corundum 10 low-Cr diopside 1 red rutile 20 representative spessartine 20 representative andradite 4 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-234	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~50 gr)	Tr (1 gr)	Tr	0	0	0	1 (~150 gr)	Tr (1 gr)	60 (Fo)	0	Tr (17 gr)	0	0	Forsterite-augite/epidote assemblage. SEM checks from 0.25-0..5 mm fraction: 10 spessartine versus andradite candidates = 9 spessartine and 1 andradite.	0.5-1.0 mm fraction: 4 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 1 red rutile 29 representative spessartine 1 andradite 17 chromite*
BWT-12-235	0	0	0	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	1	Tr	0	0	Tr (4 gr)	Tr (~80 gr)	40 (Fo)	0	Tr (~40 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 5 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 4 spessartine 20 representative andradite 20 representative chromite*
BWT-12-236	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (3 gr) Tr topaz (1 gr) Tr low-Cr diopside (6 gr)	0	1	0	0	0	Tr (17 gr)	Tr (4 gr)	5 (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 6 Mn-epidote 2 sapphire corundum 0.25-0.5 mm fraction: 20 representative Mn-epidote 3 sapphire corundum 1 topaz 6 low-Cr diopside 17 spessartine 4 andradite 6 chromite*
BWT-12-237	0	0	0	Tr	0	Tr Mn-epidote (16 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (19 gr)	0	Tr	0	0	0	Tr (15 gr)	Tr (~40 gr)	Tr Fo)	0	Tr (9 gr)	0	0	Hematite-augite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 16 Mn-epidote 4 sapphire corundum 19 low-Cr diopside 15 spessartine 20 representative andradite 9 chromite*
BWT-12-238	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	Tr	0	0	0	Tr (6 gr)	Tr (~40 gr)	1 (Fo)	0	Tr (15 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 6 spessartine 20 representative andradite 15 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-239	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~120 gr)	0	Tr	0	0	0	Tr (18 gr)	Tr (11 gr)	3 (Fo)	0	Tr (~60 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 16 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 18 spessartine 11 andradite 20 representative chromite*
BWT-12-240	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~50 gr)	0	Tr	0	0	0	Tr (3 gr)	Tr (~40 gr)	70 (Fo)	0	Tr (~50 gr)	0	0	Forsterite-hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 21 low-Cr diopside 11 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 3 spessartine 20 representative andradite 20 representative chromite*
BWT-12-241	0	0	0	Tr	0	Tr Mn-epidote (~80 gr) Tr sapphire corundum (7 gr) Tr topaz (3 gr) Tr low-Cr diopside (~60 gr)	0	Tr	0	0	0	Tr (~100 gr)	Tr (13 gr)	40 (Fo)	0	Tr (~60 gr)	0	0	Hematite-forsterite/epidote assemblage.	1.0-2.0 mm fraction: 2 Mn-epidote 0.5-1.0 mm fraction: 6 Mn-epidote 3 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 7 sapphire corundum 3 topaz 20 representative low-Cr diopside 20 representative spessartine 13 andradite 20 representative chromite*
BWT-12-242	0	0	0	0	0	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~40 gr)	0	Tr	0	0	0	Tr (2 gr)	Tr (~80 gr)	70 (Fo)	0	Tr (~50 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 11 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 10 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 2 spessartine 30 representative andradite 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-244	0	0	0	Tr	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (8 gr)	0	Tr	0	0	0	Tr (~40 gr)	Tr (~50 gr)	Tr (Fo)	0	Tr (9 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chalcopyrite 3 Mn-epidote 3 chromite* 0.25-0.5 mm fraction: 14 Mn-epidote 2 sapphire corundum 8 low-Cr diopside 20 representative spessartine 20 representative andradite 9 chromite*
BWT-12-245	0	0	0	3	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (~40 gr)	0	3	Tr	0	0	Tr (6 gr)	Tr (~50 gr)	3 (Fo)	0	Tr (~30 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 6 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 10 Mn-epidote 20 representative low-Cr diopside 6 spessartine 20 representative andradite 20 representative chromite*
BWT-12-246	0	0	0	Tr	0	Tr Mn-epidote (22 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (24 gr)	0	Tr	0	0	0	Tr (23 gr)	Tr (24 gr)	6 (Fo)	0	Tr (~30 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 22 Mn-epidote 1 sapphire corundum 24 low-Cr diopside 23 spessartine 24 andradite 20 representative chromite*
BWT-12-247	0	0	0	3	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (4 gr)	0	4	Tr	0	0	Tr (5 gr)	Tr (~40 gr)	2 (Fo)	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 4 low-Cr diopside 5 spessartine 20 representative andradite 5 chromite*
BWT-12-250	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	Tr (3 gr)	Tr (7 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 12 Mn-epidote 1 low-Cr diopside 3 spessartine 7 andradite
BWT-12-253	0	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (11 gr)	0	5	1	0	0	Tr (~60 gr)	Tr (11 gr)	Tr (Fo)	0	Tr (14 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 3 spessartine and 2 andradite.	0.5-1.0 mm fraction: 4 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 12 Mn-epidote 3 sapphire corundum 11 low-Cr diopside 23 representative spessartine 11 andradite 14 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-254	0	0	0	Tr	0	Tr Mn-epidote (~50 gr) Tr sapphire corundum (2 gr) Tr topaz (1 gr) Tr low-Cr diopside (5 gr)	0	Tr	Tr	0	0	Tr (18 gr)	Tr (1 gr)	1 (Fo)	0	Tr (7 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 5 Mn-epidote 2 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 1 topaz 5 low-Cr diopside 18 spessartine 1 andradite 7 chromite*
BWT-12-255	0	0	0	1	0	Tr Mn-epidote (11 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (7 gr)	0	3	Tr	0	0	Tr (16 gr)	Tr (~100 gr)	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 13 spessartine versus andradite candidates = 3 spessartine and 10 andradite.	0.25-0.5 mm fraction: 11 Mn-epidote 4 sapphire corundum 7 low-Cr diopside 16 spessartine 30 representative andradite 6 chromite*
BWT-12-256	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	Tr (3 gr)	Tr (~60 gr)	Tr (Fo)	Tr	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 spessartine versus andradite candidates = 3 spessartine and 4 andradite.	0.5-1.0 mm fraction: 3 Mn-epidote 0.25-0.5 mm fraction: 15 Mn-epidote 2 low-Cr diopside 3 spessartine 24 representative andradite
BWT-12-257	0	0	0	Tr	0	0.5% Mn-epidote (~100 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (4 gr)	0	Tr	0	0	0	Tr (14 gr)	Tr (2 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 10 Mn-epidote 0.25-0.5 mm fraction: 20 representative Mn-epidote 3 sapphire corundum 4 low-Cr diopside 14 spessartine 2 andradite 3 chromite*
BWT-12-258	0	0	0	Tr	0	Tr Mn-epidote (18 gr) Tr low-Cr diopside (1 gr)	0	10	1	0	0	0	Tr (2 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 andradite versus titanite candidates = 2 andradite and 3 titanite.	0.25-0.5 mm fraction: 18 Mn-epidote 1 low-Cr diopside 2 andradite 3 titanite resembling andradite
BWT-12-259	0	0	0	Tr	0	Tr Mn-epidote (3 gr)	0	5	Tr	0	0	Tr (2 gr)	Tr (~50 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 spessartine versus andradite candidates = 2 spessartine and 5 andradite.	0.25-0.5 mm fraction: 3 Mn-epidote 2 spessartine 25 representative andradite 2 chromite*
BWT-12-260	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (1 gr)	0	5	0	0	0	Tr (~40 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 2 sapphire corundum 1 low-Cr diopside 20 representative spessartine 5 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-261	0	0	0	Tr	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 10 Mn-epidote 2 low-Cr diopside 8 spessartine 1 chromite*
BWT-12-262	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (4 gr)	0	5	Tr	0	0	Tr (11 gr)	0.5 (~100 gr)	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 4 sapphire corundum 11 spessartine 20 representative andradite
BWT-12-263	0	0	0	15	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (1 gr)	0	15	0	0	0	0	Tr (12 gr)	Tr (Fo)	0	0	0	0	Hematite-goethite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 0.25-0.5 mm fraction: 4 Mn-epidote 1 low-Cr diopside 12 andradite
BWT-12-267	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (12 gr)	0	3	0	0	0	Tr (15 gr)	Tr (7 gr)	Tr (Fo)	0	Tr (15 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 4 sapphire corundum 12 low-Cr diopside 15 spessartine 7 andradite 15 chromite*
BWT-12-268	0	0	Tr (1 gr)	0	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (8 gr)	0	5	0	0	0	Tr (18 gr)	1 (~200 gr)	Tr (Fo)	0	Tr (17 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 3 sapphire corundum 8 low-Cr diopside 18 spessartine 20 representative andradite 17 chromite*
BWT-12-269	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (8 gr)	0	3	0	0	0	Tr (17 gr)	Tr (~150 gr)	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 3 sapphire corundum 8 low-Cr diopside 17 spessartine 20 representative andradite 10 chromite*
BWT-12-270	0	0	0	5	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (3 gr)	0	8	Tr	0	0	Tr (5 gr)	Tr (8 gr)	Tr (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 3 low-Cr diopside 5 spessartine 8 andradite 8 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-271	0	0	0	2	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (4 gr)	0	5	0	0	0	Tr (6 gr)	Tr (8 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 14 Mn-epidote 2 sapphire corundum 4 low-Cr diopside 6 spessartine 8 andradite 3 chromite*
BWT-12-276	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr)	0	3	0	0	0	Tr (3 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 1 sapphire corundum 3 spessartine 2 chromite*
BWT-12-277	0	0	0	1	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (2 gr)	0	8	1	0	0	Tr (9 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 5 Mn-epidote 2 low-Cr diopside 9 spessartine 2 andradite 2 chromite*
BWT-12-278	0	0	0	6	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr)	0	20	3	0	0	Tr (4 gr)	Tr (18 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 4 spessartine 18 andradite
BWT-12-279	0	0	0	3	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	8	0	0	0	Tr (~30 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (8 gr)	3	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 spessartine versus andradite candidate = 1 andradite.	0.25-0.5 mm fraction: 6 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 1 andradite 8 chromite*
BWT-12-280	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (2 gr)	0	12	Tr	0	0	Tr (7 gr)	0.5 (~40 gr)	1 (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 2 low-Cr diopside 7 spessartine 20 representative andradite 4 chromite*
BWT-12-281	0	0	0	2	0	Tr Mn-epidote (6 gr)	0	2	0	0	0	Tr (8 gr)	Tr (~100 gr)	Tr (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 spessartine versus andradite candidates = 6 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 8 spessartine 26 representative andradite 7 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-282	Tr (3 gr)	0	Tr (6 gr)	1	0	Tr Mn-epidote (11 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (11 gr)	0	8	Tr	0	0	1 (~300 gr)	1 (~300 gr)	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 3 chalcopyrite 11 Mn-epidote 6 sapphire corundum 11 low-Cr diopside 20 representative spessartine 20 representative andradite 6 chromite*
BWT-12-283	0	0	0	Tr	0	Tr Mn-epidote (16 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (3 gr)	0	5	0	0	0	0.5 (~50 gr)	3 (~300 gr)	Tr (Fo)	0	Tr (15 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 andradite versus spessartine candidates = 4 andradite and 1 forsterite.	0.5-1.0 mm fraction: 2 Mn-epidote 3 chromite* 0.25-0.5 mm fraction: 16 Mn-epidote 2 sapphire corundum 3 low-Cr diopside 20 representative spessartine 24 representative andradite 1 forsterite resembling andradite 15 chromite*
BWT-12-284	0	0	0	2	0	Tr Mn-epidote (9 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (3 gr)	0	3	Tr	0	0	Tr (6 gr)	Tr (10 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 1 sapphire corundum 3 low-Cr diopside 6 spessartine 10 andradite
BWT-12-285	0	0	0	2	0	0	0	2	Tr	0	0	0	Tr (1 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 1 andradite 1 chromite*
BWT-12-286	0	0	0	3	0	Tr Mn-epidote (2 gr)	0	3	Tr	0	0	Tr (5 gr)	Tr (1 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 5 spessartine 1 andradite 1 chromite*
BWT-12-287	0	0	0	Tr	0	Tr Mn-epidote (21 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (10 gr)	Tr (7 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 21 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 10 spessartine 7 andradite 2 chromite*
BWT-12-288	0	0	0	3	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	Tr (8 gr)	Tr (2 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 1 low-Cr diopside 8 spessartine 2 andradite

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-289	0	0	0	3	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	Tr (11 gr)	Tr (22 gr)	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 14 Mn-epidote 4 low-Cr diopside 11 spessartine 22 andradite 9 chromite*
BWT-12-290	0	0	0	2	0	Tr Mn-epidote (16 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	Tr (6 gr)	Tr (7 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 Mn-epidote 0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 16 Mn-epidote 1 low-Cr diopside 6 spessartine 7 andradite 3 chromite*
BWT-12-291	0	0	0	1	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (3 gr)	0	10	Tr	0	0	Tr (9 gr)	0	0.5 (Fo)	0	Tr (2 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 3 low-Cr diopside 9 spessartine 2 chromite*
BWT-12-292	0	0	0	Tr	0	Tr Mn-epidote (9 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	3	Tr	0	0	Tr (9 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 9 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 9 spessartine 1 chromite*
BWT-12-293	0	0	0	Tr	0	Tr Mn-epidote (2 gr)	0	2	Tr	0	0	Tr (2 gr)	Tr (6 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 2 spessartine 6 andradite
BWT-12-294	0	0	0	20	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (2 gr)	0	5	Tr	0	0	Tr (3 gr)	Tr (6 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite-goethite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 2 low-Cr diopside 3 spessartine 6 andradite 1 chromite*
BWT-12-295	0	0	0	Tr	0	Tr Mn-epidote (18 gr) Tr sapphire corundum (2 gr)	0	3	Tr	0	0	Tr (6 gr)	Tr (4 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 18 Mn-epidote 2 sapphire corundum 6 spessartine 4 andradite 2 chromite*
BWT-12-296	0	0	0	2	0	Tr Mn-epidote (9 gr) Tr low-Cr diposide (3 gr)	0	5	Tr	0	0	Tr (14 gr)	Tr (9 gr)	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 3 low-Cr diopside 14 spessartine 9 andradite 7 chromite*
BWT-12-297	0	Tr anglesite (3 gr) Tr plumbo-gummite (5 gr)	Tr (1 gr)	10	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr)	0	5	Tr	0	0	Tr (3 gr)	Tr (5 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 8 earthy secondary sulphate mineral candidates = 3 anglesite and 5 plumbogummite. Also picked 1 pristine 125 x 350 x 400µm gold grain from 0.25-0.5 mm fraction.	0.25-0.5 mm fraction: 1 gold 3 anglesite 5 plumbogummite 20 representative Mn-epidote 2 low-Cr diopside 3 spessartine 5 andradite 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-467	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (7 gr)	0	5	Tr	Tr	0	Tr (9 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 7 low-Cr diopside 9 spessartine
BWT-12-468	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	Tr	0	Tr (7 gr)	Tr (3 gr)	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 15 Mn-epidote 1 sapphire corundum 3 low-Cr diopside 7 spessartine 3 andradite 9 chromite*
BWT-12-469	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	Tr (9 gr)	0	Tr (Fo)	0	Tr (17 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 6 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 3 low-Cr diopside 9 spessartine 17 chromite*
BWT-12-470	0	0	0	Tr	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	Tr (~50 gr)	Tr (6 gr)	Tr (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 14 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 6 andradite 7 chromite*
BWT-12-471	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	0	0	Tr (~40 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 20 representative Mn-epidote 5 sapphire corundum 3 low-Cr diopside 20 representative spessartine
BWT-12-472	0	0	0	Tr	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	Tr	0	Tr (18 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 9 Mn-epidote 2 low-Cr diopside 18 spessartine 5 chromite*
BWT-12-473	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	0	Tr	Tr (11 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 1 sapphire corundum 3 low-Cr diopside 11 spessartine 5 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-474	0	0	0	1	2 blue-green gahnite	Tr Mn-epidote (10 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (4 gr)	0	3	Tr	Tr	0	Tr (~30 gr)	0	Tr (Fo)	0	Tr (16 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus diopside candidates = 2 gahnite.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 gahnite 10 Mn-epidote 3 sapphire corundum 4 low-Cr diopside 20 representative spessartine 16 chromite*
BWT-12-475	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	0	Tr (15 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 3 Mn-epidote 1 low-Cr diopside 15 spessartine 2 andradite 6 chromite*
BWT-12-476	0	0	0	Tr	0	Tr sapphirine (1 gr) Tr Mn-epidote (23 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	0	Tr (~40 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Ilmenite-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 sapphirine 23 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-477	0	Tr malachite (1 gr)	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	Tr	0	Tr (13 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 7 Mn-epidote 1 sapphire corundum 0.25-0.5 mm fraction: 1 malachite 20 representative Mn-epidote 3 sapphire corundum 4 low-Cr diopside 13 spessartine 2 andradite 4 chromite*
BWT-12-478	0	0	0	Tr	0	Tr Mn-epidote (25 gr) Tr low-Cr diopside (1 gr)	0	5	Tr	Tr	0	Tr (19 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 25 Mn-epidote 1 low-Cr diopside 19 spessartine
BWT-12-479	0	0	0	Tr	0	Tr Mn-epidote (17 gr)	0	3	Tr	Tr	0	Tr (5 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.25 mm fraction: 17 Mn-epidote 5 spessartine 3 chromite*
BWT-12-480	0	0	0	Tr	0	Tr Mn-epidote (7 gr)	0	5	Tr	Tr	0	Tr (1 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 1 spessartine 1 chromite*
BWT-12-481	0	0	0	Tr	0	Tr Mn-epidote (1 gr)	0	4	Tr	Tr	0	Tr (1 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 1 spessartine 3 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz		
BWT-12-482	0	0	0	Tr	0	Tr Mn-epidote (11 gr)	0	7	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 11 Mn-epidote 1 chromite*
BWT-12-483	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (2 gr)	0	8	1	Tr	0	Tr (18 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 2 low-Cr diopside 18 spessartine 4 chromite*
BWT-12-484	0	0	0	Tr	0	Tr Mn-epidote (19 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	Tr	0	Tr (12 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 19 epidote 1 sapphire corundum 2 low-Cr diopside 12 spessartine
BWT-12-485	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (3 gr)	0	4	Tr	0	0	Tr (2 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.25-05 mm fraction: 5 Mn-epidote 3 low-Cr diopside 2 spessartine 3 chromite*
BWT-12-486	0	0	0	Tr	0	0	0	10	1	Tr	0	Tr (2 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 spessartine
BWT-12-487	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr low-Cr diopside (2 gr)	0	10	5	Tr	0	0	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 2 low-Cr diopside 1 chromite*
BWT-12-488	0	0	0	Tr	0	Tr Mn-epidote (6 gr)	0	5	Tr	Tr	0	Tr (8 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 0.25-0.5 mm fraction: 6 Mn-epidote 8 spessartine 2 chromite*
BWT-12-489	0	0	0	Tr	0	Tr Mn-epidote (7 gr)	0	3	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 7 Mn-epidote 1 chromite*
BWT-12-490	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (1 gr)	0	2	Tr	Tr	0	Tr (7 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 4 Mn-epidote 1 low-Cr diopside 7 spessartine
BWT-12-491	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (8 gr)	0	10	2	Tr	0	Tr (9 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 8 Mn-epidote 9 spessartine
BWT-12-492	0	0	0	Tr	0	Tr Mn-epidote (16 gr)	0	2	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 16 Mn-epidote 6 chromite*
BWT-12-493	0	0	0	Tr	0	Tr Mn-epidote (17 gr) Tr low Cr diopside (3 gr)	0	2	Tr	Tr	0	Tr (3 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 17 Mn-epidote 3 low-Cr diopside 3 spessartine

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr*	% Ap	% Mz	Remarks	Picked Grains
BWT-12-494	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low Cr diopside (2 gr)	0	2	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 1 chromite*
BWT-12-495	0	0	0	Tr	0	Tr Mn-epidote (4 gr)	0	10	3	Tr	0	0	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 4 chromite*
BWT-12-496	0	0	0	Tr	0	Tr Mn-epidote (26 gr) Tr sapphire corundum (4 gr)	0	2	Tr	Tr	0	0	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 26 Mn-epidote 4 sapphire corundum 2 chromite*

Appendix H

Blackwater Hypogene Indicator Mineralogy, Alluvial Gravel

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-001	0	0	0	0	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	0	1 (~250 gr)	0	Tr (Fo)	0	Tr (12 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 2 low-Cr diopside 20 representative spessartine 12 chromite*
BWS-12-002	0	0	0	0	0	Tr Mn-epidote (4 gr)	0	Tr	Tr	0	0	Tr (26 gr)	0	0	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 26 spessartine 2 chromite*
BWS-12-003	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr low-Cr diopside (5 gr)	Tr (1 gr)	2	Tr	0	0	Tr (14 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative Mn-epidote 5 low-Cr diopside 1 red rutile 14 spessartine
BWS-12-004	0	0	0	0	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	Tr (1 gr)	0	0	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 1 low-Cr diopside 1 spessartine 1 chromite*
BWS-12-005	0	0	Tr (1 gr)	0	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (5 gr)	0	Tr	Tr	0	0	Tr (2 gr)	0	0	0	Tr (2 gr)	0	0	Hematite-augite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 glassy augite versus tourmaline candidates = 2 augite.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 2 augite resembling tourmaline 0.25-0.5 mm fraction: 6 Mn-epidote 5 low-Cr diopside 2 spessartine 2 chromite*
BWS-12-006	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr low-Cr diopside (~30 gr)	Tr (1 gr)	2	Tr	0	0	5 (~1000 gr)	0	0	0	0	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine candidates = 5 spessartine.	0.5-1.0 mm fraction: 2 Mn-epidote 1 sapphire corundum 1 low-Cr diopside 0.25-0.5 mm fraction: 15 Mn-epidote 20 representative low-Cr diopside 1 red rutile 25 representative spessartine

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-007	0	0	0	0	0	Tr Mn-epidote (25 gr) Tr low-Cr diopside (28 gr)	0	Tr	Tr	0	0	Tr (15 gr)	Tr (~100 gr)	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 12 spessartine versus andradite candidates = 5 spessartine and 7 andradite.	0.25-0.5 mm fraction: 25 Mn-epidote 28 low-Cr diopside 15 spessartine 20 representative andradite 5 chromite*
BWS-12-008	0	0	0	0	0	Tr Mn-epidote (~40 gr) Tr low-Cr diopside (16 gr)	0	Tr	Tr	0	0	1 (~100 gr)	0	1 (Fo)	Tr	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 4 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 16 low-Cr diopside 20 representative spessartine 4 chromite*
BWS-12-012	0	0	0	0	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (1 gr)	0	3	2	0	0	Tr (~60 gr)	0	Tr (Fo)	0	Tr (3 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 1 low-Cr diopside 20 representative spessartine 3 chromite*
BWS-12-013	0	Tr plumbo- gummite (1 gr)	0	2	0	Tr Mn-epidote (~60 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (17 gr)	0	3	Tr	0	0	12 (~1200 gr)	0	1 (Fo)	0	1 (~120 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 plumbogummite versus goethite candidate = 1 plumbogummite.	1.0-2.0 mm fraction: 2 chromite* 0.5-1.0 mm fraction: 5 Mn-epidote 1 low-Cr diopside 23 chromite* 0.25-0.5 mm fraction: 1 plumbogummite 20 representative Mn-epidote 5 sapphire corundum 17 low-Cr diopside 20 representative spessartine 20 representative chromite*
BWS-12-014	0	0	0	Tr	0	Tr Mn-epidote (14 gr) Tr low-Cr diopside (3 gr)	Tr (1 gr)	5	2	0	0	10 (~1000 gr)	0	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 14 Mn-epidote 3 low-Cr diopside 20 representative spessartine 10 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp				>1.0 amp			
								% Titanite											
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-015	0	0	0	Tr	0	Tr Mn-epidote (~60 gr) Tr low-Cr diopside (6 gr)	0	2	Tr	0	0	Tr (~60 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 6 Mn-epidote 0.25-0.5 mm fraction: 25 representative Mn-epidote 6 low-Cr diopside 20 representative spessartine 1 chromite*
BWS-12-016	0	0	0	0	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	5 (~500 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 9 Mn-epidote 1 low-Cr diopside 20 representative spessartine
BWS-12-031	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr low-Cr diopside (2 gr)	0	20	Tr	0	0	Tr (~100 gr)	0	Tr (Fo)	0	Tr (9 gr)	Tr	0	Hematite-ilmenite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 chalcopyrite 2 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 low-Cr diopside 20 representative spessartine 9 chromite*
BWS-12-034	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	Tr (~80 gr)	0	Tr (Fo)	0	Tr (8 gr)	Tr	0	Hematite-ilmenite/epidote assemblage.	0.25-0.5 mm fraction: 20 representative Mn-epidote 3 low-Cr diopside 20 representative spessartine 8 chromite*
BWS-12-042	0	0	0	Tr	0	Tr Mn-epidote (20 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (2 gr)	0	7	0.5	0	0	Tr (~50 gr)	Tr (14 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 20 Mn-epidote 3 sapphire corundum 2 low-Cr diopside 20 representative spessartine 14 andradite 1 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-044	0	0	Tr (7 gr)	Tr	0	Tr Mn-epidote (17 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (16 gr)	Tr (1 gr)	0.5	Tr	0	0	Tr (~100 gr)	Tr (~50 gr)	Tr (Fo)	0	Tr (17 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 5 low-Cr diopside 11 chromite* 0.25-0.5 mm fraction: 17 Mn-epidote 5 sapphire corundum 16 low-Cr diopside 1 red rutile 20 representative spessartine 20 representative andradite 17 chromite*
BWS-12-045	0	0	0	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	4	Tr	0	0	Tr (~30 gr)	1 (~200 gr)	Tr (Fo)	0	Tr (18 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 6 low-Cr diopside 7 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 18 chromite*
BWS-12-047	0	0	0	Tr	1 black hercynite	Tr Mn-epidote (~30 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~30 gr)	0	2	Tr	0	0	0	1 (~120 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 Mn-epidote versus ruby corundum candidate = 1 Mn-epidote; 10 spessartine versus andradite candidates = 10 andradite; and 1 hercynite versus spinel candidate = 1 hercynite.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 1 hercynite 21 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 30 representative andradite
BWS-12-048	0	0	Tr (7 gr)	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (~80 gr)	0	Tr	0	0	0	Tr (~50 gr)	Tr (17 gr)	25 (Fo)	0	Tr (~40 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 6 low-Cr diopside 10 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 4 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 17 andradite 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-049	0	0	Tr (2 gr)	0	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (~50 gr)	0	1	Tr	0	0	Tr (~200 gr)	Tr (~100 gr)	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 1 sapphire corundum 5 low-Cr diopside 9 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 6 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 9 chromite*
BWS-12-050	0	0	0	Tr	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (3 gr)	0	3	0	0	0	0	Tr (~60 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 10 Mn-epidote 3 low-Cr diopside 20 representative andradite
BWS-12-051	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (12 gr)	0	2	0	0	0	0	Tr (~40 gr)	Tr (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 12 Mn-epidote 20 representative andradite 2 chromite*
BWS-12-052	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (3 gr) Tr sapphire corundum (5 gr) 1% low-Cr diopside (~500 gr)	0	0.5	0	0	0	Tr (~40 gr)	Tr (~200 gr)	70 (Fo)	0	Tr (16 gr)	0	0	Forsterite-hematite/epidote assemblage. 0.5-1.0 mm fraction contains 1% (~40 grains) low-Cr diopside.	1.0-2.0 mm fraction: 2 low-Cr diopside 0.5-1.0 mm fraction: 20 representative low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 5 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 16 chromite*
BWS-12-053	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (10 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (~60 gr)	0	Tr	0	0	0	Tr (~60 gr)	Tr (~60 gr)	60 (Fo)	0	Tr (~60 gr)	0	0	Forsterite-hematite/epidote assemblage. 0.5-1.0 mm fraction contains trace (~40 grains) low-Cr diopside and trace (~30 grains) chromite*.	1.0-2.0 mm fraction: 8 chromite* 0.5-1.0 mm fraction: 6 Mn-epidote 20 representative low-Cr diopside 20 representative chromite* 0.25-0.5 mm fraction: 10 Mn-epidote 6 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-056	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (16 gr)	0	1	Tr	0	0	0.5 (~300 gr)	1 (~500 gr)	Tr (Fo)	0	Tr (17 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 5 sapphire corundum 16 low-Cr diopside 20 representative spessartine 20 representative andradite 17 chromite*
BWS-12-057	0	0	Tr (1 gr)	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (1 gr) Tr topaz (2 gr) Tr low-Cr diopside (21 gr)	0	2	0	0	0	0.5 (~80 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (19 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 2 sapphire corundum 4 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 1 sapphire corundum 2 topaz 21 low-Cr diopside 20 representative spessartine 2 andradite 19 chromite*
BWS-12-058	0	0	0	Tr	0	Tr Mn-epidote (17 gr) Tr sapphire corundum (10 gr) Tr topaz (1 gr) 0.5% low-Cr diopside (~300 gr)	0	Tr	0	0	0	Tr (14 gr)	0.5 (~200 gr)	Tr (Fo)	0	Tr (~100 gr)	0	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 topaz candidate = 1 topaz.	0.5-1.0 mm fraction: 1 Mn-epidote 24 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 17 Mn-epidote 10 sapphire corundum 1 topaz 20 representative low-Cr diopside 14 spessartine 20 representative andradite 20 representative chromite*
BWS-12-059	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	Tr	0	0	0	Tr (~80 gr)	Tr (~40 gr)	10 (Fo)	0	Tr (15 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 7 Mn-epidote 5 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 15 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-066	Tr (1 gr)	0	0	Tr	0	Tr Mn-epidote (~80 gr) Tr low-Cr diopside (12 gr)	0	Tr	0	0	0	Tr (~120 gr)	0	Tr (Fo)	0	Tr (~30 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 20 representative Mn-epidote 12 low-Cr diopside 20 representative spessartine 20 representative chromite*
BWS-12-068	0	0	0	0	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	Tr (1 gr)	2	Tr	0	0	0.5 (~1200 gr)	0	Tr (Fo)	0	Tr (~200 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 15 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 1 red rutile 20 representative spessartine 20 representative chromite*
BWS-12-069	Tr (1 gr)	0	0	0	1 green gahnite	Tr Mn-epidote (23 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (6 gr)	0	12	1	0	0	Tr (~100 gr)	Tr (7 gr)	Tr (Fo)	0	Tr (22 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite candidate = 1 gahnite.	0.5-1.0 mm fraction: 2 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 1 gahnite 23 Mn-epidote 6 sapphire corundum 6 low-Cr diopside 20 representative spessartine 7 andradite 22 chromite*
BWS-12-071	0	0	0	0	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	4	1	0	0	Tr (9 gr)	0	Tr (Fo)	1	Tr (9 gr)	0	0	Hematite-ilmenite/epidote assemblage. SEM check from 1.0-2.0 mm fraction: 1 romanechite candidate = 1 romanechite.	1.0-2.0 mm fraction: 1 romanechite 0.5-1. mm fraction: 1 Mn-epidote 2 sapphire corundum 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 9 spessartine 9 chromite*

Appendix I

Blackwater Proportion & Analyzed Weight of –0.063 mm Fines, Till

	Weight of Archived Split (g)			%	Analyzed Weight of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-001	493.6	160.4	67.2	41.9	35.4	30.4	5.0
BWT-12-002	316.9	156.3	71.3	45.6	35.5	30.2	5.3
BWT-12-003	377.9	125.2	51.0	40.7	35.4	30.3	5.1
BWT-12-004	404.0	103.4	35.6	34.4	35.6	30.1	5.5
BWT-12-005	428.0	142.2	61.2	43.0	35.1	30.1	5.0
BWT-12-006	445.9	149.6	44.1	29.5	35.5	30.3	5.2
BWT-12-007	399.6	140.8	72.9	51.8	35.4	30.3	5.1
BWT-12-008	288.1	142.9	65.0	45.5	35.6	30.5	5.1
BWT-12-009	423.3	301.0	36.6	12.2	36.6	30.0	6.6
BWT-12-010	377.1	139.1	63.4	45.6	35.3	30.0	5.3
BWT-12-011	488.1	295.8	45.2	15.3	35.8	30.8	5.0
BWT-12-012	391.5	166.3	40.8	24.5	35.1	29.9	5.2
BWT-12-013	447.5	370.9	36.6	9.9	36.6	29.9	6.7
BWT-12-014	314.5	163.3	45.0	27.6	35.3	30.3	5.0
BWT-12-015	480.5	381.5	35.5	9.3	35.5	29.1	6.4
BWT-12-016	461.3	272.8	43.9	16.1	36.0	30.8	5.2
BWT-12-017	438.1	346.3	41.2	11.9	31.2	26.1	5.1
BWT-12-018	476.8	339.8	37.0	10.9	32.9	27.8	5.1
BWT-12-019	319.2	319.2	29.4	9.2	29.4	24.0	5.4
BWT-12-020	465.6	280.3	68.0	24.3	38.0	30.0	8.0
BWT-12-021	422.9	166.4	35.3	21.2	35.3	30.6	4.7
BWT-12-022	341.8	236.8	48.2	20.4	36.7	31.6	5.1
BWT-12-023	369.4	217.9	48.5	22.3	36.4	31.1	5.3
BWT-12-024	367.0	367.0	36.9	10.1	36.9	30.1	6.8
BWT-12-025	471.4	174.5	49.0	28.1	36.3	31.1	5.2
BWT-12-026	395.7	395.7	25.7	6.5	25.7	20.0	5.7
BWT-12-027	380.6	281.0	36.6	13.0	36.6	30.1	6.5
BWT-12-028	335.6	200.0	44.4	22.2	35.3	30.0	5.3
BWT-12-029	419.9	261.1	44.5	17.0	35.4	30.4	5.0
BWT-12-030	574.7	299.8	35.0	11.7	35.0	30.8	4.2
BWT-12-031	415.5	230.7	42.9	18.6	35.5	30.2	5.3
BWT-12-032	319.5	319.5	49.0	15.3	35.3	30.1	5.2
BWT-12-033	420.6	309.0	36.2	11.7	36.2	30.1	6.1
BWT-12-034	350.6	350.6	31.3	8.9	31.3	25.0	6.3
BWT-12-035	401.9	151.4	42.7	28.2	35.6	30.3	5.3
BWT-12-036	460.5	187.9	68.7	36.6	38.7	30.2	8.5
BWT-12-037	545.3	545.3	8.3	1.5	8.3	7.0	1.3
BWT-12-038	465.2	465.2	30.8	6.6	30.8	25.2	5.6
BWT-12-039	441.4	441.4	33.2	7.5	33.2	26.4	6.8
BWT-12-040	420.1	257.2	35.9	14.0	35.9	30.2	5.7
BWT-12-041	559.8	409.7	44.6	10.9	35.4	30.0	5.4
BWT-12-042	535.1	535.1	88.6	16.6	35.6	30.5	5.1
BWT-12-043	424.5	199.3	47.9	24.0	35.6	30.3	5.3
BWT-12-044	418.5	199.9	98.8	49.4	37.2	31.8	5.4
BWT-12-045	476.8	476.8	38.2	8.0	38.2	30.9	7.3
BWT-12-046	441.6	199.6	36.2	18.1	36.2	30.0	6.2
BWT-12-047	467.4	199.2	35.3	17.7	35.3	30.2	5.1
BWT-12-048	468.7	199.5	35.7	17.9	35.7	30.2	5.5
BWT-12-049	415.2	199.8	116.2	58.2	35.7	30.7	5.0
BWT-12-050	502.0	199.6	59.9	30.0	35.3	30.1	5.2
BWT-12-051	452.6	199.5	92.8	46.5	43.3	37.8	5.5
BWT-12-052	456.3	456.3	49.7	10.9	35.2	30.0	5.2
BWT-12-053	452.8	452.8	35.5	7.8	35.5	30.0	5.5
BWT-12-054	529.1	199.4	53.9	27.0	37.0	31.7	5.3
BWT-12-055	403.6	249.5	38.3	15.4	38.3	31.8	6.5
BWT-12-056	456.9	199.5	50.8	25.5	35.5	30.1	5.4
BWT-12-057	489.1	129.8	35.9	27.7	35.9	30.2	5.7
BWT-12-058	341.5	149.5	44.6	29.8	36.1	31.0	5.1
BWT-12-059	381.8	381.8	20.6	5.4	20.6	17.6	3.0
BWT-12-060	478.1	199.8	53.3	26.7	35.5	30.1	5.4
BWT-12-061	415.7	200.9	38.4	19.1	38.4	30.1	8.3
BWT-12-062	382.2	281.8	37.8	13.4	37.8	30.1	7.7
BWT-12-063	450.9	358.1	37.2	10.4	37.2	30.2	7.0

	Weight of Archived Split (g)			%	Analyzed Weight of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-064	417.9	340.4	37.4	11.0	37.4	30.1	7.3
BWT-12-065	601.3	601.3	30.5	5.1	30.5	25.0	5.5
BWT-12-066	560.5	560.5	38.1	6.8	38.1	30.0	8.1
BWT-12-067	426.7	218.8	39.3	18.0	34.3	29.0	5.3
BWT-12-068	328.1	162.4	37.0	22.8	30.7	25.5	5.2
BWT-12-069	467.2	313.5	37.2	11.9	37.2	30.1	7.1
BWT-12-070	441.5	225.1	39.0	17.3	39.0	30.3	8.7
BWT-12-071	485.2	238.1	36.3	15.2	36.3	30.1	6.2
BWT-12-072	414.8	200.1	66.5	33.2	36.0	30.4	5.6
BWT-12-073	473.5	196.7	83.0	42.2	36.1	30.6	5.5
BWT-12-074	522.8	446.3	37.4	8.4	37.4	30.0	7.4
BWT-12-075	532.1	324.4	44.4	13.7	35.6	30.6	5.0
BWT-12-076	365.9	296.7	98.4	33.2	35.1	30.1	5.0
BWT-12-077	459.0	435.1	42.0	9.7	35.1	30.1	5.0
BWT-12-078	502.9	337.7	36.5	10.8	35.1	30.0	5.1
BWT-12-079	443.8	333.4	77.2	23.2	35.5	30.5	5.0
BWT-12-080	563.3	245.2	36.8	15.0	35.2	30.1	5.1
BWT-12-081	501.2	501.2	15.1	3.0	15.1	12.1	3.0
BWT-12-082	410.1	297.2	55.6	18.7	35.5	30.4	5.1
BWT-12-083	463.8	298.2	147.1	49.3	35.5	30.4	5.1
BWT-12-084	464.0	235.8	139.9	59.3	35.1	30.0	5.1
BWT-12-085	452.4	198.1	45.0	22.7	35.4	30.2	5.2
BWT-12-086	383.1	153.0	42.8	28.0	35.1	30.1	5.0
BWT-12-087	533.2	533.2	12.5	2.3	12.5	9.5	3.0
BWT-12-088	428.1	217.8	36.7	16.9	36.7	30.0	6.7
BWT-12-089	481.9	278.9	59.4	21.3	35.0	30.0	5.0
BWT-12-090	402.8	238.8	51.9	21.7	35.1	30.0	5.1
BWT-12-091	307.2	307.2	67.4	21.9	35.4	30.0	5.4
BWT-12-092	428.1	243.5	53.0	21.8	35.8	30.4	5.4
BWT-12-093	577.4	249.8	36.0	14.4	36.0	30.0	6.0
BWT-12-094	396.7	198.9	40.2	20.2	40.2	31.4	8.8
BWT-12-095	437.9	208.5	53.4	25.6	35.3	30.1	5.2
BWT-12-096	575.4	215.9	59.8	27.7	35.6	30.1	5.5
BWT-12-097	349.1	213.3	46.1	21.6	35.8	30.2	5.6
BWT-12-098	341.5	236.8	68.7	29.0	35.3	30.2	5.1
BWT-12-099	357.3	357.3	37.6	10.5	37.6	30.5	7.1
BWT-12-100	415.3	264.1	71.2	27.0	36.0	30.5	5.5
BWT-12-101	455.0	455.0	38.8	8.5	31.0	26.0	5.0
BWT-12-103	330.4	330.4	12.0	3.6	12.0	9.1	2.9
BWT-12-109	286.3	214.0	48.6	22.7	32.4	27.0	5.4
BWT-12-116	394.2	394.2	29.7	7.5	29.7	24.7	5.0
BWT-12-117	523.3	523.3	25.9	4.9	25.9	22.9	3.0
BWT-12-118	464.8	358.0	34.2	9.6	34.2	28.3	5.9
BWT-12-119	439.5	246.9	39.1	15.8	39.1	31.0	8.1
BWT-12-120	454.6	231.9	37.3	16.1	37.3	30.4	6.9
BWT-12-121	424.1	252.4	35.4	14.0	35.4	30.1	5.3
BWT-12-122	304.0	184.7	30.9	16.7	30.9	27.1	3.8
BWT-12-123	513.1	248.7	30.3	12.2	30.3	25.0	5.3
BWT-12-124	382.1	215.2	43.8	20.4	35.9	30.2	5.7
BWT-12-125	461.1	267.4	37.1	13.9	37.1	31.1	6.0
BWT-12-126	422.6	422.6	37.2	8.8	37.2	28.3	8.9
BWT-12-127	354.7	354.7	13.8	3.9	13.8	10.7	3.1
BWT-12-128	455.2	455.2	40.4	8.9	29.0	23.9	5.1
BWT-12-129	329.4	218.1	50.3	23.1	33.0	27.0	6.0
BWT-12-130	291.3	217.7	114.6	52.6	37.9	29.1	8.8
BWT-12-131	386.3	259.4	35.4	13.6	35.4	30.0	5.4
BWT-12-132	455.6	206.6	31.4	15.2	31.4	26.4	5.0
BWT-12-133	396.7	268.7	32.7	12.2	32.7	29.0	3.7
BWT-12-134	352.4	290.3	36.1	12.4	36.1	30.6	5.5
BWT-12-135	469.3	316.5	35.4	11.2	35.4	30.0	5.4
BWT-12-136	435.6	282.7	38.1	13.5	38.1	30.4	7.7
BWT-12-137	426.1	264.4	31.7	12.0	31.7	29.0	2.7
BWT-12-138	431.5	189.3	52.0	27.5	34.8	29.6	5.2

	Weight of Archived Split (g)			%	Analyzed Weight of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-139	343.5	147.2	27.7	18.8	27.7	22.8	4.9
BWT-12-140	492.1	252.8	26.8	10.6	26.8	22.9	3.9
BWT-12-141	402.9	353.3	36.1	10.2	36.1	30.9	5.2
BWT-12-142	353.2	269.1	35.5	13.2	35.5	30.0	5.5
BWT-12-143	468.5	231.8	36.6	15.8	36.6	30.6	6.0
BWT-12-144	499.6	256.5	37.5	14.6	37.5	30.5	7.0
BWT-12-145	495.6	230.9	39.1	16.9	35.6	30.0	5.6
BWT-12-146	467.3	217.7	31.8	14.6	31.8	26.7	5.1
BWT-12-147	504.9	222.7	33.7	15.1	33.7	28.7	5.0
BWT-12-148	370.3	370.3	35.7	9.6	35.7	30.0	5.7
BWT-12-149	381.8	341.0	35.7	10.5	35.7	29.7	6.0
BWT-12-150	551.7	460.9	26.7	5.8	26.7	22.2	4.5
BWT-12-151	363.2	242.0	46.0	19.0	33.3	28.0	5.3
BWT-12-152	375.5	153.5	43.4	28.3	37.9	31.4	6.5
BWT-12-153	526.4	281.0	37.0	13.2	37.0	32.0	5.0
BWT-12-154	448.4	246.0	34.6	14.1	34.6	28.9	5.7
BWT-12-161	484.9	353.9	39.8	11.2	35.0	29.2	5.8
BWT-12-162	410.6	203.3	65.3	32.1	34.5	29.0	5.5
BWT-12-163	294.0	294.0	35.9	12.2	30.9	25.0	5.9
BWT-12-164	362.6	196.1	52.4	26.7	31.8	26.0	5.8
BWT-12-165	403.0	403.0	33.2	8.2	33.2	28.1	5.1
BWT-12-166	370.7	370.7	30.5	8.2	30.5	26.0	4.5
BWT-12-167	412.8	261.5	32.0	12.2	32.0	26.8	5.2
BWT-12-168	544.8	403.4	28.4	7.0	28.4	23.3	5.1
BWT-12-169	439.4	194.0	37.1	19.1	33.5	27.7	5.8
BWT-12-170	323.6	175.3	33.7	19.2	33.7	31.3	2.4
BWT-12-171	275.1	157.3	24.8	15.8	24.8	21.9	2.9
BWT-12-172	420.1	250.6	63.9	25.5	36.8	30.1	6.7
BWT-12-173	447.2	228.6	11.3	4.9	11.3	9.0	2.3
BWT-12-199	447.9	284.6	31.5	11.1	31.5	26.1	5.4
BWT-12-200	475.9	309.3	135.3	43.7	37.8	32.2	5.6
BWT-12-201	429.1	373.4	23.4	6.3	23.4	20.0	3.4
BWT-12-203	479.0	183.7	32.4	17.6	32.4	23.5	8.9
BWT-12-223	423.9	325.5	37.2	11.4	37.2	32.0	5.2
BWT-12-224	526.1	412.0	37.8	9.2	37.8	30.5	7.3
BWT-12-225	426.5	354.2	22.6	6.4	22.6	17.2	5.4
BWT-12-226	550.3	317.8	43.3	13.6	31.4	25.2	6.2
BWT-12-227	490.8	319.8	19.2	6.0	19.2	14.8	4.4
BWT-12-228	439.8	318.8	27.5	8.6	27.5	21.9	5.6
BWT-12-229	435.2	258.5	29.5	11.4	29.5	24.3	5.2
BWT-12-230	443.2	269.8	39.2	14.5	35.1	27.6	7.5
BWT-12-231	445.1	265.0	31.7	12.0	31.7	26.0	5.7
BWT-12-232	408.4	408.4	16.9	4.1	16.9	12.5	4.4
BWT-12-233	418.3	236.6	26.0	11.0	26.0	21.0	5.0
BWT-12-234	378.6	284.2	54.5	19.2	32.8	27.2	5.6
BWT-12-235	488.9	315.5	64.5	20.4	34.3	29.1	5.2
BWT-12-236	456.7	323.6	47.8	14.8	35.7	29.7	6.0
BWT-12-237	389.1	215.6	52.5	24.4	35.0	28.4	6.6
BWT-12-238	471.8	200.8	61.3	30.5	36.3	31.1	5.2
BWT-12-239	471.8	204.8	38.2	18.7	38.2	30.2	8.0
BWT-12-240	417.5	208.0	36.0	17.3	36.0	31.0	5.0
BWT-12-241	518.8	207.7	46.5	22.4	36.2	30.8	5.4
BWT-12-242	363.4	205.1	34.7	16.9	34.7	30.2	4.5
BWT-12-244	551.6	205.0	38.4	18.7	38.4	30.7	7.7
BWT-12-245	396.6	207.0	51.1	24.7	38.0	32.2	5.8
BWT-12-246	405.6	200.9	38.4	19.1	38.4	30.0	8.4
BWT-12-247	497.0	329.7	66.5	20.2	33.2	28.2	5.0
BWT-12-250	427.6	202.6	51.4	25.4	35.2	30.0	5.2
BWT-12-253	447.1	447.1	33.0	7.4	33.0	28.0	5.0
BWT-12-254	378.6	246.5	38.9	15.8	38.9	31.3	7.6
BWT-12-255	464.1	243.1	37.3	15.3	37.3	30.5	6.8
BWT-12-256	436.8	288.1	81.7	28.4	36.9	30.3	6.6
BWT-12-257	533.0	307.4	26.5	8.6	26.5	21.1	5.4

	Weight of Archived Split (g)			%	Analyzed Weight of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-258	573.3	496.9	24.2	4.9	24.2	19.1	5.1
BWT-12-259	441.0	252.0	33.6	13.3	33.6	28.4	5.2
BWT-12-261	398.4	173.3	82.9	47.8	36.7	29.8	6.9
BWT-12-262	461.7	299.8	47.9	16.0	36.2	30.7	5.5
BWT-12-263	434.2	362.0	15.3	4.2	15.3	10.6	4.7
BWT-12-270	455.1	356.7	45.8	12.8	37.5	31.2	6.3
BWT-12-271	459.1	305.0	40.7	13.3	40.7	32.9	7.8
BWT-12-276	550.3	206.2	35.2	17.1	35.2	30.1	5.1
BWT-12-277	508.7	204.0	33.3	16.3	33.3	28.3	5.0
BWT-12-278	388.8	204.3	70.6	34.6	35.7	30.7	5.0
BWT-12-260	492.9	200.6	35.3	17.6	35.3	30.3	5.0
BWT-12-267	403.8	200.4	56.1	28.0	35.1	30.1	5.0
BWT-12-268	497.0	202.9	47.7	23.5	34.7	29.7	5.0
BWT-12-269	437.6	202.2	52.4	25.9	35.3	30.3	5.0
BWT-12-279	486.8	203.1	38.0	18.7	38.0	31.1	6.9
BWT-12-280	353.4	204.0	73.7	36.1	35.1	30.0	5.1
BWT-12-281	376.4	204.3	35.7	17.5	35.7	30.6	5.1
BWT-12-282	517.8	517.8	10.9	2.1	10.9	9.9	1.0
BWT-12-283	485.3	201.3	42.9	21.3	35.1	30.1	5.0
BWT-12-284	485.0	307.6	34.0	11.1	34.0	26.3	7.7
BWT-12-285	407.0	264.3	40.1	15.2	28.1	22.6	5.5
BWT-12-286	450.0	330.1	25.7	7.8	25.7	20.3	5.4
BWT-12-287	471.4	255.8	19.7	7.7	19.7	14.8	4.9
BWT-12-288	392.3	309.0	16.9	5.5	16.9	12.1	4.8
BWT-12-289	373.7	202.6	66.4	32.8	36.2	30.9	5.3
BWT-12-290	486.1	203.0	48.3	23.8	35.6	30.0	5.6
BWT-12-291	432.1	200.8	44.4	22.1	34.9	29.7	5.2
BWT-12-292	442.4	199.9	23.1	11.6	23.1	20.1	3.0
BWT-12-293	516.1	202.7	54.2	26.7	32.0	26.6	5.4
BWT-12-294	495.3	203.9	26.0	12.8	26.0	21.7	4.3
BWT-12-295	436.3	201.6	49.6	24.6	35.1	30.0	5.1
BWT-12-296	393.1	203.8	65.5	32.1	35.3	30.2	5.1
BWT-12-297	454.1	274.6	29.8	10.9	29.8	25.5	4.3
BWT-12-467	449.0	200.8	35.7	17.8	35.7	30.2	5.5
BWT-12-468	350.6	200.3	35.5	17.7	35.5	30.2	5.3
BWT-12-469	490.1	370.7	50.8	13.7	37.1	30.8	6.3
BWT-12-470	531.2	340.6	35.9	10.5	35.9	30.0	5.9
BWT-12-471	518.9	382.2	42.3	11.1	37.2	30.6	6.6
BWT-12-472	510.1	510.1	43.6	8.5	35.2	30.1	5.1
BWT-12-473	399.0	399.0	29.6	7.4	29.6	24.9	4.7
BWT-12-474	414.6	414.6	30.0	7.2	30.0	25.0	5.0
BWT-12-475	438.4	302.7	41.2	13.6	36.4	30.6	5.8
BWT-12-476	566.1	326.6	39.4	12.1	39.4	31.6	7.8
BWT-12-477	423.4	312.5	45.5	14.6	37.8	31.6	6.2
BWT-12-478	485.5	316.2	46.1	14.6	37.2	30.3	6.9
BWT-12-479	392.7	277.3	35.2	12.7	35.2	30.2	5.0
BWT-12-480	519.0	267.9	38.1	14.2	38.1	30.5	7.6
BWT-12-481	406.6	406.6	38.0	9.3	38.0	30.1	7.9
BWT-12-482	476.4	405.4	40.9	10.1	36.1	29.7	6.4
BWT-12-483	444.4	353.3	37.3	10.6	37.3	30.2	7.1
BWT-12-484	450.0	450.0	36.1	8.0	36.1	30.1	6.0
BWT-12-485	441.5	441.5	21.0	4.8	21.0	16.7	4.3
BWT-12-486	417.2	297.9	41.4	13.9	35.4	29.8	5.6
BWT-12-487	480.6	300.7	39.3	13.1	39.3	31.3	8.0
BWT-12-488	484.2	484.2	37.8	7.8	37.8	30.3	7.5
BWT-12-489	466.1	466.1	35.2	7.6	35.2	30.0	5.2
BWT-12-490	391.2	391.2	39.9	10.2	35.7	30.6	5.1
BWT-12-491	570.4	369.3	36.0	9.7	36.0	30.2	5.8
BWT-12-492	434.0	346.7	57.7	16.6	36.4	30.1	6.3
BWT-12-493	380.4	380.4	38.6	10.1	38.6	31.4	7.2
BWT-12-494	384.3	384.3	33.7	8.8	33.7	29.0	4.7
BWT-12-495	391.2	391.2	38.7	9.9	38.7	30.8	7.9
BWT-12-496	460.5	377.7	38.8	10.3	38.8	31.2	7.6

Appendix J

Capoose Primary Processing Weights and Physical Characteristics of the Till Samples

Sample Number	Weight (kg)				Clasts >2.0 mm*					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts *	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT**	S/U	SD	ST	CY	Org	Sand	Clay	
BWT-12-102	12.2	11.2	1.8	9.4	P	95	0	5	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-104	12.3	11.3	3.0	8.3	P	95	5	Tr	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-105	13.6	12.6	2.4	10.2	P	100	Tr	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-106	12.3	11.3	3.0	8.3	P	0	0	100	0	S	C	Y	-	N	BE	BE	GRUS
BWT-12-107	15.3	14.3	4.0	10.3	P	95	5	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-108	15.3	14.3	4.8	9.5	P	90	5	5	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-110	13.2	12.2	2.5	9.7	P	95	5	Tr	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-111	12.4	11.4	1.7	9.7	P	40	Tr	60	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-112	12.9	11.9	2.3	9.6	P	40	Tr	60	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-113	12.6	11.6	1.5	10.1	P	15	Tr	85	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-114	12.1	11.1	2.2	8.9	P	65	Tr	30	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-115	13.2	12.2	1.8	10.4	P	25	Tr	70	5	U	Y	Y	-	N	OC	OC	TILL
BWT-12-155	12.1	11.1	2.9	8.2	P	Tr	0	100	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-156	11.6	10.6	3.4	7.2	P	30	Tr	70	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-157	12.6	11.6	2.5	9.1	P	90	5	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-158	11.0	10.0	2.1	7.9	P	95	5	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-159	11.9	10.9	1.5	9.4	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-160	11.7	10.7	1.2	9.5	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-174	14.3	13.3	3.1	10.2	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-175	15.8	14.8	3.1	11.7	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-176	15.2	14.2	2.4	11.8	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-177	13.5	12.5	2.7	9.8	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-178	12.9	11.9	1.9	10.0	P	40	Tr	60	0	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-179	15.1	14.1	2.6	11.5	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-180	15.2	14.2	3.8	10.4	P	10	Tr	90	0	U	+	Y	-	N	BE	BE	TILL
BWT-12-181	12.2	11.2	2.1	9.1	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-182	12.7	11.7	1.7	10.0	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-183	12.4	11.4	1.7	9.7	P	95	5	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-184	12.2	11.2	2.0	9.2	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-185	11.6	10.6	2.4	8.2	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-186	12.0	11.0	1.7	9.3	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-187	12.9	11.9	2.0	9.9	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-188	12.7	11.7	4.8	6.9	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-189	12.6	11.6	2.4	9.2	P	95	Tr	5	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-190	15.2	14.2	3.5	10.7	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-191	15.8	14.8	5.1	9.7	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-192	13.7	12.7	3.8	8.9	P	95	Tr	5	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-193	12.0	11.0	2.5	8.5	P	90	10	0	0	U	+	Y	-	N	BN	BN	TILL
BWT-12-194	15.4	14.4	4.7	9.7	P	90	10	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-195	13.2	12.2	4.3	7.9	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-196	12.6	11.6	4.8	6.8	C	100	0	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-197	11.6	10.6	2.1	8.5	P	85	15	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-198	13.7	12.7	5.2	7.5	P	85	15	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-202	15.2	14.2	3.9	10.3	P	95	5	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-204	12.5	11.5	1.7	9.8	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-205	11.9	10.9	2.1	8.8	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-206	12.4	11.4	2.7	8.7	P	90	5	0	5	U	-	+	Y	N	OC	OC	TILL
BWT-12-207	13.7	12.7	3.6	9.1	P	90	5	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-208	11.2	10.2	3.1	7.1	P	90	5	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-209	12.7	11.7	2.2	9.5	P	40	5	50	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-210	13.8	12.8	6.1	6.7	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-211	13.5	12.5	5.0	7.5	P	95	Tr	5	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-212	11.4	10.4	2.1	8.3	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-213	11.5	10.5	3.5	7.0	P	95	5	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-214	11.7	10.7	2.4	8.3	P	30	70	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-215	12.9	11.9	2.9	9.0	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-216	11.5	10.5	3.1	7.4	P	95	5	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-217	12.1	11.1	3.8	7.3	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-218	11.9	10.9	3.1	7.8	P	95	5	Tr	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-219	11.7	10.7	2.8	7.9	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-220	11.2	10.2	3.1	7.1	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-221	11.2	10.2	3.1	7.1	P	40	60	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-222	12.8	11.8	1.6	10.2	P	85	15	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-243	13.9	12.9	2.7	10.2	P	90	5	0	5	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-248	10.3	9.3	2.0	7.3	G	95	Tr	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-249	10.6	9.6	2.5	7.1	G	100	Tr	Tr	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-251	12.1	11.1	5.3	5.8	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-252	11.7	10.7	3.1	7.6	P	95	Tr	0	5	U	+	Y	-	N	OC	OC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm*					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts *	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT**	S/U	SD	ST	CY	Org	Sand	Clay	
BWT-12-264	13.3	12.3	5.3	7.0	P	95	5	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-265	12.4	11.4	2.9	8.5	G	90	10	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-266	12.3	11.3	2.5	8.8	G	95	5	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-272	10.7	9.7	2.0	7.7	P	80	10	10	Tr	U	Y	Y	-	N	OC	OC	TILL
BWT-12-273	11.7	10.7	5.1	5.6	P	90	10	0	Tr	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-274	11.8	10.8	1.9	8.9	G	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-275	11.4	10.4	2.0	8.4	G	90	10	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-301	11.0	10.0	2.8	7.2	P	100	0	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-302	10.5	9.5	1.8	7.7	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-303	12.2	11.2	3.4	7.8	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-304	13.5	12.5	3.9	8.6	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-305	11.0	10.0	3.1	6.9	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-306	13.5	12.5	2.7	9.8	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-307	12.0	11.0	1.3	9.7	P	95	0	5	0	U	+	Y	N	N	OC	OC	TILL
BWT-12-308	12.9	11.9	1.8	10.1	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-309	13.6	12.6	7.4	5.2	P	100	0	0	0	U	+	Y	-	N	GY	GY	RUBBLE + TILL
BWT-12-310	12.5	11.5	2.8	8.7	P	100	0	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-311	15.8	14.8	5.6	9.2	P	100	0	Tr	0	U	+	Y	-	N	GY	GY	RUBBLE + TILL
BWT-12-312	12.2	11.2	2.9	8.3	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-313	13.8	12.8	2.6	10.2	P	70	30	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-314	13.1	12.1	3.2	8.9	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-315	12.3	11.3	2.1	9.2	P	100	Tr	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-316	16.1	15.1	3.5	11.6	P	100	Tr	Tr	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-317	12.3	11.3	1.5	9.8	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-318	11.1	10.1	2.8	7.3	P	100	0	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-319	11.8	10.8	1.8	9.0	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-320	11.9	10.9	3.5	7.4	P	100	Tr	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-321	12.1	11.1	1.9	9.2	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-322	14.0	13.0	2.9	10.1	P	100	Tr	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-323	11.0	10.0	3.8	6.2	P	100	Tr	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-324	11.0	10.0	2.1	7.9	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-325	11.6	10.6	5.5	5.1	P	70	5	Tr	25	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWT-12-326	11.1	10.1	1.2	8.9	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-327	11.7	10.7	2.5	8.2	P	60	Tr	40	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-328	12.7	11.7	2.4	9.3	P	85	5	10	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-374	11.2	10.2	1.7	8.5	P	100	Tr	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-330	13.0	12.0	2.1	9.9	P	100	0	Tr	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-332	12.5	11.5	1.5	10.0	P	95	5	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-333	12.8	11.8	1.0	10.8	P	90	5	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-334	12.5	11.5	2.4	9.1	P	95	5	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-335	12.4	11.4	1.3	10.1	P	95	5	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-298	10.5	9.5	4.3	5.2	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-299	10.5	9.5	2.3	7.2	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-300	11.9	10.9	1.6	9.3	P	95	5	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-329	10.9	9.9	1.9	8.0	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-331	12.0	11.0	2.4	8.6	P	100	0	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-336	11.0	10.0	2.1	7.9	P	100	0	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-337	13.3	12.3	5.0	7.3	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-338	10.3	9.3	2.3	7.0	P	100	Tr	0	0	U	Y	+	-	N	OC	OC	TILL
BWT-12-339	11.2	10.2	2.7	7.5	P	100	0	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-340	10.8	9.8	2.9	6.9	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-341	11.0	10.0	3.6	6.4	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-342	13.0	12.0	3.9	8.1	P	100	0	Tr	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-349	12.3	11.3	1.9	9.4	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-350	12.9	11.9	2.8	9.1	P	90	5	5	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-351	12.2	11.2	3.6	7.6	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-352	12.2	11.2	2.9	8.3	P	100	0	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-353	12.6	11.6	3.2	8.4	P	100	0	Tr	0	U	Y	+	-	N	OC	OC	TILL
BWT-12-356	10.4	9.4	5.0	4.4	P	100	Tr	Tr	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-357	11.2	10.2	5.5	4.7	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-358	11.6	10.6	3.4	7.2	P	100	Tr	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-359	12.8	11.8	3.7	8.1	P	95	5	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-360	11.2	10.2	1.9	8.3	P	95	5	Tr	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-361	10.8	9.8	2.8	7.0	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-362	11.6	10.6	3.3	7.3	P	95	5	Tr	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-363	12.5	11.5	3.8	7.7	P	95	5	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-364	12.3	11.3	2.6	8.7	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-369	12.5	11.5	4.5	7.0	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm*					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts *	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT**	S/U	SD	ST	CY	Org	Sand	Clay	
BWT-12-370	12.8	11.8	3.9	7.9	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-371	12.8	11.8	3.8	8.0	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-376	11.0	10.0	5.1	4.9	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-381	10.4	9.4	1.4	8.0	P	80	10	10	Tr	U	-	+	Y	N	OC	OC	TILL
BWT-12-389	11.8	10.8	4.4	6.4	P	100	Tr	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-391	11.2	10.2	1.7	8.5	P	100	Tr	0	Tr	U	-	+	Y	N	OC	OC	TILL
BWT-12-392	12.0	11.0	1.9	9.1	P	90	10	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-393	14.5	13.5	3.3	10.2	P	100	0	0	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-343	12.5	11.5	0.9	10.6	P	100	Tr	0	Tr	U	-	+	Y	N	DOC	DOC	TILL
BWT-12-344	12.5	11.5	3.1	8.4	P	100	0	0	Tr	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-345	12.5	11.5	2.6	8.9	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-346	12.3	11.3	4.0	7.3	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-347	12.2	11.2	3.5	7.7	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-348	13.1	12.1	5.6	6.5	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-354	12.7	11.7	4.0	7.7	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-355	12.3	11.3	3.0	8.3	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-365	12.0	11.0	5.2	5.8	P	100	0	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-366	12.2	11.2	3.4	7.8	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-367	12.9	11.9	2.8	9.1	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-368	11.5	10.5	2.7	7.8	P	95	5	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-372	12.8	11.8	2.9	8.9	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-373	11.9	10.9	3.4	7.5	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-375	15.0	14.0	7.5	6.5	P	95	Tr	0	5	U	+	Y	-	N	OC	OC	TILL
BWT-12-377	12.4	11.4	2.9	8.5	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-378	11.6	10.6	3.9	6.7	P	95	5	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-379	9.7	8.7	2.5	6.2	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-380	11.3	10.3	3.5	6.8	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-382	12.2	11.2	2.7	8.5	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-383	12.2	11.2	2.3	8.9	P	20	0	80	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-384	12.8	11.8	2.1	9.7	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-385	11.9	10.9	1.6	9.3	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-386	11.8	10.8	4.2	6.6	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-387	13.1	12.1	3.4	8.7	P	90	Tr	0	10	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-388	12.4	11.4	2.5	8.9	P	90	Tr	5	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-390	12.3	11.3	1.8	9.5	P	90	Tr	Tr	10	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-394	11.6	10.6	6.1	4.5	P	100	0	Tr	Tr	U	-	Y	+	N	OC	OC	TILL
BWT-12-395	10.7	9.7	3.8	5.9	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-396	9.6	8.6	1.6	7.0	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-397	11.2	10.2	2.6	7.6	P	95	5	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-398	11.2	10.2	1.4	8.8	P	100	0	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-399	11.6	10.6	2.5	8.1	P	100	0	Tr	Tr	U	-	+	Y	N	OC	OC	TILL
BWT-12-400	10.4	9.4	3.3	6.1	P	100	0	Tr	Tr	U	-	+	Y	N	OC	OC	TILL
BWT-12-401	11.5	10.5	1.4	9.1	P	100	0	Tr	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-402	11.4	10.4	3.5	6.9	P	95	Tr	5	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-403	10.8	9.8	0.9	8.9	P	100	0	Tr	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-404	11.2	10.2	2.5	7.7	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-405	12.8	11.8	3.1	8.7	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-406	13.5	12.5	3.1	9.4	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-407	13.5	12.5	1.7	10.8	P	90	Tr	10	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-408	12.7	11.7	2.3	9.4	P	100	Tr	0	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-409	11.9	10.9	2.6	8.3	P	100	0	Tr	Tr	U	Y	Y	Y	Y	OC	OC	TILL
BWT-12-410	12.2	11.2	2.2	9.0	P	100	0	0	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-411	12.5	11.5	4.2	7.3	P	100	0	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-412	12.5	11.5	3.6	7.9	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-413	12.1	11.1	5.9	5.2	P	100	Tr	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-414	13.1	12.1	6.0	6.1	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-415	10.0	9.0	3.0	6.0	P	80	5	15	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-416	11.6	10.6	5.4	5.2	P	100	Tr	Tr	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-417	11.7	10.7	3.9	6.8	P	95	Tr	5	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-418	10.4	9.4	3.8	5.6	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-419	10.5	9.5	2.6	6.9	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-420	11.4	10.4	2.8	7.6	P	95	0	0	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-421	13.3	12.3	2.8	9.5	P	95	0	0	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-422	9.7	8.7	2.0	6.7	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-423	10.7	9.7	1.6	8.1	P	95	0	0	5	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-424	10.3	9.3	2.8	6.5	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-425	12.4	11.4	4.0	7.4	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-426	12.4	11.4	4.3	7.1	P	100	0	0	0	U	+	Y	-	N	OC	OC	TILL

Sample Number	Weight (kg)				Clasts >2.0 mm*					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT**	S/U	SD	ST	CY	Org	Sand	Clay	
			*														
BWT-12-427	12.1	11.1	3.3	7.8	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-428	12.6	11.6	2.3	9.3	P	100	0	Tr	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-429	12.9	11.9	3.2	8.7	P	85	5	Tr	10	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-430	12.5	11.5	3.4	8.1	P	75	20	0	5	S	FM	Y	N	N	DOC	NA	SAND + GRAVEL
BWT-12-431	12.9	11.9	4.5	7.4	P	100	Tr	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-432	11.9	10.9	2.8	8.1	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-433	13.2	12.2	4.9	7.3	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-434	13.4	12.4	3.2	9.2	P	80	10	Tr	10	U	+	Y	-	N	OC	OC	TILL
BWT-12-435	12.2	11.2	4.2	7.0	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-436	12.7	11.7	6.6	5.1	P	100	Tr	0	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-437	12.2	11.2	4.6	6.6	P	100	0	0	0	U	+	Y	-	N	DOC	DOC	TILL
BWT-12-438	10.4	9.4	5.4	4.0	P	95	Tr	Tr	5	S	FMC	-	-	N	OC	NA	SAND + GRAVEL
BWT-12-439	11.3	10.3	3.4	6.9	P	90	Tr	Tr	10	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-440	10.6	9.6	1.9	7.7	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-441	10.1	9.1	1.4	7.7	P	100	0	Tr	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-442	9.9	8.9	1.3	7.6	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-443	11.9	10.9	6.2	4.7	P	95	Tr	Tr	5	S	FMC	-	-	N	LOC	NA	SAND + GRAVEL
BWT-12-444	11.1	10.1	4.2	5.9	P	100	0	Tr	0	U	+	Y	-	N	LOC	LOC	TILL
BWT-12-445	10.3	9.3	1.0	8.3	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-446	11.6	10.6	2.5	8.1	P	100	0	0	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-447	12.1	11.1	2.0	9.1	P	95	0	5	0	U	Y	Y	Y	N	BN	BN	TILL
BWT-12-448	12.6	11.6	2.4	9.2	P	100	0	0	Tr	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-449	13.3	12.3	4.5	7.8	P	100	0	0	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-450	12.7	11.7	3.2	8.5	P	100	0	0	Tr	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-451	11.3	10.3	2.7	7.6	P	100	0	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-452	12.2	11.2	3.9	7.3	P	95	Tr	5	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-453	12.3	11.3	3.4	7.9	P	100	Tr	0	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-454	13.9	12.9	4.9	8.0	P	95	Tr	5	0	U	Y	Y	Y	N	GB	GB	TILL
BWT-12-455	12.7	11.7	3.2	8.5	P	95	0	5	0	U	+	Y	-	N	OC	OC	TILL
BWT-12-456	13.0	12.0	3.1	8.9	P	100	Tr	0	0	U	Y	Y	Y	N	LOC	LOC	TILL
BWT-12-457	13.1	12.1	4.6	7.5	P	5	Tr	95	0	U	Y	Y	Y	N	BE	BE	TILL
BWT-12-458	13.9	12.9	1.3	11.6	P	70	Tr	30	0	U	Y	Y	-	N	OC	OC	TILL
BWT-12-459	13.8	12.8	2.9	9.9	P	70	Tr	30	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-460	11.5	10.5	1.7	8.8	P	50	0	50	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-461	10.6	9.6	1.4	8.2	P	80	0	20	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-462	10.6	9.6	3.6	6.0	P	90	0	10	0	U	Y	+	Y	N	OC	OC	TILL
BWT-12-463	12.2	11.2	4.0	7.2	P	70	Tr	30	0	U	-	+	Y	N	OC	OC	TILL
BWT-12-464	11.3	10.3	2.7	7.6	P	65	5	30	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-465	12.9	11.9	3.3	8.6	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-466	13.2	12.2	3.9	8.3	P	10	Tr	90	0	U	Y	Y	-	N	OC	OC	TILL
BWT-12-497	13.9	12.9	3.7	9.2	P	95	Tr	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-498	13.5	12.5	1.7	10.8	P	80	Tr	20	Tr	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-499	13.3	12.3	3.7	8.6	P	90	Tr	10	0	U	Y	Y	Y	N	DOC	DOC	TILL
BWT-12-500	11.3	10.3	1.2	9.1	P	80	0	20	0	U	Y	Y	Y	N	OC	OC	TILL
BWT-12-501	12.9	11.9	2.5	9.4	P	95	Tr	5	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-502	13.0	12.0	2.9	9.1	P	90	Tr	10	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-503	11.3	10.3	2.4	7.9	P	100	Tr	Tr	Tr	U	+	Y	-	N	OC	OC	TILL
BWT-12-504	14.3	13.3	2.6	10.7	P	90	Tr	10	Tr	U	+	Y	-	N	OC	OC	TILL

* Screened to 11.2 mm (2 mesh) in the field.

**Clasts listed as "other" are metagreywacke (probably Proterozoic).

Appendix K

Capoose Primary Processing Weights and Physical Characteristics of the Alluvial Gravel Samples

Sample Number	Weight (kg)				Clasts >2.0 mm**					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	Buff-Grey Volc.	Maroon Volc	GR	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
			**														
BWS-12-009	10.3	9.8	0.5	9.3	G	30	Tr	70	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWS-12-010	10.0	9.5	0.3	9.2	G	20	Tr	80	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-011	9.1	8.6	0.2	8.4	G	5	0	95	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-017	9.6	9.1	0.9	8.2	G	25	5	70	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-018	10.3	9.8	0.8	9.0	G	20	Tr	80	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-019	9.8	9.3	0.5	8.8	G	30	Tr	70	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-020	11.2	10.7	0.8	9.9	G	55	5	40	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-021	12.1	11.6	0.8	10.8	G	90	Tr	10	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-022	12.2	11.7	0.7	11.0	G	80	20	0	0	S	MC	-	N	N	BE	NA	SAND + GRAVEL
BWS-12-023	10.8	10.3	0.3	10.0	G	95	5	0	0	S	MC	-	N	Y	OC	NA	SAND + GRAVEL
BWS-12-024	9.1	8.6	0.7	7.9	G	100	Tr	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-025	10.3	9.8	1.1	8.7	G	95	5	Tr	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-026	9.7	9.2	1.1	8.1	G	95	Tr	0	5	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-027	9.8	9.3	0.9	8.4	G	95	5	0	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-028	11.2	10.7	0.6	10.1	G	95	5	Tr	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-029	9.9	9.4	0.6	8.8	G	90	5	Tr	5	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-030	10.7	10.2	0.6	9.6	G	90	5	0	5	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-032	11.8	11.3	0.4	10.9	G	95	5	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-033	10.9	10.4	0.6	9.8	G	90	5	5	0	S	C	N	N	N	OC	NA	SAND + GRAVEL
BWS-12-035	9.5	9.0	0.2	8.8	G	95	5	Tr	0	S	MC	-	N	N	BE	NA	SAND + GRAVEL
BWS-12-036	10.5	10.0	0.2	9.8	G	95	5	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BWS-12-037	9.3	8.8	0.8	8.0	G	90	10	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-038	9.8	9.3	0.9	8.4	G	90	10	0	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-039	10.0	9.5	0.8	8.7	G	95	5	0	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-040	9.4	8.9	1.3	7.6	G	90	10	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-041	9.8	9.3	0.3	9.0	G	90	5	5	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BWS-12-043	9.8	9.3	0.4	8.9	G	80	20	0	Tr	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-046	9.9	9.4	1.0	8.4	G	95	5	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BWS-12-054	8.0	7.5	0.0	7.5	No clasts***					S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-055	9.3	8.8	0.2	8.6	G	70	Tr	30	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BWS-12-060	10.3	9.8	1.0	8.8	G	90	5	5	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWS-12-061	8.7	8.2	0.7	7.5	G	95	Tr	5	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-062	8.6	8.1	0.3	7.8	G	85	15	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-063	9.2	8.7	1.0	7.7	G	90	10	Tr	0	S	MC	-	N	N	LOC	NA	SAND + GRAVEL
BWS-12-067	11.3	10.8	0.6	10.2	G	90	10	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-070	10.7	10.2	3.4	6.8	G	95	5	Tr	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-072	9.7	9.2	1.1	8.1	G	70	5	25	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWS-12-073	9.8	9.3	0.5	8.8	G	95	Tr	5	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWS-12-074	10.4	9.9	0.8	9.1	G	80	Tr	20	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-075	10.3	9.8	1.3	8.5	G	75	5	20	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-076	10.9	10.4	1.8	8.6	G	30	Tr	70	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-077	9.4	8.9	2.0	6.9	G	80	Tr	20	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-078	10.5	10.0	1.7	8.3	G	85	5	10	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-079	9.4	8.9	2.0	6.9	G	80	Tr	20	0	S	MC	-	N	N	DOC	NA	SAND + GRAVEL
BWS-12-080	10.1	9.6	0.8	8.8	G	95	Tr	5	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL
BWS-12-081	9.3	8.8	1.6	7.2	G	95	Tr	5	0	S	MC	-	N	N	OC	NA	SAND + GRAVEL

* Clasts listed as "other" are metagreywacke (probably Proterozoic).

** Screened to 2.4 mm (8 mesh) in the field.

Appendix L

Capoose Heavy Mineral Concentrate Weights, Till

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
	Total	-0.25 mm	0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
			Heavy Liquid Lights	Mag HMC	Nonferromagnetic HMC						
					Total	Processed Split					
						Total					
						%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWT-12-102	697.0	344.2	336.6	7.8	8.4	100	8.4	0.6	4.6	2.2	1.0
BWT-12-104	638.7	354.7	275.1	1.7	7.2	100	7.2	0.4	3.8	2.0	1.0
BWT-12-105	1,048.9	627.8	404.2	4.6	12.3	100	12.3	1.2	6.4	3.2	1.5
BWT-12-106	982.5	391.2	577.7	8.7	4.9	100	4.9	0.9	3.1	0.8	0.1
BWT-12-107	782.6	525.0	229.2	4.4	24.0	100	24.0	3.2	14.7	5.1	1.0
BWT-12-108	974.6	501.4	410.1	15.8	47.3	100	47.3	4.9	23.8	13.8	4.8
BWT-12-109	565.0	383.9	171.7	1.2	8.2	100	8.2	1.2	4.9	1.8	0.3
BWT-12-110	783.0	505.7	250.1	6.1	21.1	100	21.1	2.1	12.7	5.1	1.2
BWT-12-111	736.5	467.8	257.2	5.8	5.7	100	5.7	0.6	3.9	0.9	0.3
BWT-12-112	850.3	282.6	563.4	1.0	3.3	100	3.3	0.4	2.1	0.7	0.1
BWT-12-113	1,224.6	542.7	664.5	10.7	6.7	100	6.7	0.7	4.1	1.4	0.5
BWT-12-114	853.4	416.0	426.2	4.7	6.5	100	6.5	0.8	3.9	1.4	0.4
BWT-12-155	898.9	377.9	514.9	2.7	3.4	100	3.4	0.3	2.3	0.6	0.20
BWT-12-156	557.5	273.6	272.2	5.3	6.4	100	6.4	0.5	3.9	1.4	0.60
BWT-12-157	757.7	429.1	321.4	0.5	6.7	100	6.7	0.3	3.7	1.9	0.80
BWT-12-158	536.6	387.1	141.0	1.4	7.1	100	7.1	0.5	4.3	1.9	0.40
BWT-12-159	666.5	417.5	240.6	1.3	7.1	100	7.1	0.4	4.4	1.6	0.70
BWT-12-160	927.0	528.4	385.9	2.8	9.9	100	9.9	0.5	5.8	2.6	1.00
BWT-12-174	884.5	565.2	311.2	0.7	7.4	100	7.4	0.6	4.4	1.8	0.60
BWT-12-175	672.8	442.3	217.5	1.6	11.4	100	11.4	1.4	7.2	2.8	0.04
BWT-12-176	883.7	529.9	342.5	1.1	10.2	100	10.2	1.8	6.3	2.0	0.07
BWT-12-177	751.4	450.8	294.1	0.3	6.2	100	6.2	0.5	3.6	1.6	0.50
BWT-12-178	1,024.8	563.0	452.0	1.7	8.1	100	8.1	1.0	4.6	1.8	0.70
BWT-12-179	945.4	636.4	294.3	1.9	12.8	100	12.8	1.2	8.0	2.7	0.90
BWT-12-180	776.7	369.2	400.7	1.9	4.9	100	4.9	0.7	2.6	1.1	0.50
BWT-12-181	728.2	533.0	172.6	8.0	14.6	100	14.6	0.8	9.0	3.8	1.0
BWT-12-182	586.2	436.3	138.7	2.0	9.2	100	9.2	0.5	6.2	2.1	0.4
BWT-12-183	703.7	392.7	299.4	1.9	9.7	100	9.7	0.5	5.3	2.6	1.3
BWT-12-184	788.3	408.4	358.7	9.0	12.2	100	12.2	0.6	6.0	3.5	2.1
BWT-12-185	568.8	312.9	241.9	5.6	8.4	100	8.4	0.9	4.2	2.3	1.0
BWT-12-186	684.2	430.5	229.9	7.0	16.8	100	16.8	0.7	8.8	4.8	2.5
BWT-12-187	893.9	620.6	252.3	7.2	13.8	100	13.8	0.6	6.6	4.0	2.6
BWT-12-188	703.6	327.7	354.7	4.1	17.1	100	17.1	2.7	6.6	4.8	3.0
BWT-12-189	797.5	519.1	269.1	1.5	7.8	100	7.8	0.6	4.9	1.8	0.5
BWT-12-190	797.7	390.1	393.7	1.5	12.4	100	12.4	0.7	7.2	3.0	1.5
BWT-12-191	851.5	383.6	453.2	2.1	12.6	100	12.6	0.5	6.8	3.4	1.9
BWT-12-192	757.5	513.0	220.3	4.1	20.1	100	20.1	1.7	12.3	5.0	1.1
BWT-12-193	634.5	338.3	285.1	1.6	9.5	100	9.5	1.0	4.7	2.6	1.2
BWT-12-194	541.0	321.0	210.1	0.6	9.3	100	9.3	0.5	5.3	2.4	1.1
BWT-12-195	633.2	405.7	218.6	1.4	7.5	100	7.5	1.1	4.3	1.8	0.3
BWT-12-196	808.6	264.7	537.7	0.7	5.5	100	5.5	0.9	2.5	1.4	0.7
BWT-12-197	607.2	416.0	177.2	3.6	10.4	100	10.4	0.7	6.3	2.8	0.6
BWT-12-198	694.8	285.7	386.0	6.0	17.1	100	17.1	1.1	9.3	4.1	2.6
BWT-12-202	698.8	375.2	298.0	4.2	21.4	100	21.4	1.0	11.1	6.5	2.8
BWT-12-204	979.4	636.3	333.1	1.4	8.6	100	8.6	0.7	4.8	2.1	1.0
BWT-12-205	833.8	485.2	337.3	1.5	9.8	100	9.8	1.2	5.0	2.6	1.0
BWT-12-206	459.9	268.6	188.1	0.3	2.9	100	2.9	1.1	1.3	0.1	0.4
BWT-12-207	890.6	427.2	452.9	1.4	9.1	100	9.1	0.9	4.8	2.4	1.0
BWT-12-208	620.2	231.1	383.5	1.2	4.4	100	4.4	0.7	2.1	1.0	0.6
BWT-12-209	697.1	413.7	270.6	6.3	6.5	100	6.5	1.3	3.8	1.4	0.1
BWT-12-210	1,518.3	546.9	959.4	1.5	10.5	100	10.5	1.0	4.0	3.2	2.3
BWT-12-211	1,165.7	618.0	542.3	0.8	4.6	100	4.6	0.7	2.5	1.0	0.4
BWT-12-212	934.0	464.2	462.0	1.4	6.4	100	6.4	0.8	3.2	1.6	0.8

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
					Nonferromagnetic HMC						
						Processed Split					
						Total					
	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWT-12-213	787.1	374.3	408.1	0.6	4.1	100	4.1	0.6	2.0	1.1	0.4
BWT-12-214	1,128.8	620.6	496.6	1.2	10.4	100	10.4	1.7	5.6	2.5	0.6
BWT-12-215	1,057.7	433.8	614.6	1.5	7.8	100	7.8	1.6	3.7	1.9	0.6
BWT-12-216	872.2	366.3	498.1	1.3	6.5	100	6.5	0.8	3.5	1.7	0.5
BWT-12-217	1,359.5	665.3	683.1	1.7	9.4	100	9.4	1.8	4.7	2.2	0.7
BWT-12-218	748.4	324.1	412.5	3.6	8.2	100	8.2	1.0	4.6	2.0	0.6
BWT-12-219	898.8	369.9	522.1	0.9	5.9	100	5.9	0.8	3.2	1.5	0.4
BWT-12-220	763.3	324.4	432.4	0.3	6.2	100	6.2	0.7	3.2	1.7	0.6
BWT-12-221	1,314.4	646.2	655.6	1.1	11.5	100	11.5	1.7	7.0	2.1	0.7
BWT-12-222	1,090.9	603.0	469.2	3.4	15.3	100	15.3	3.4	8.6	3.2	0.1
BWT-12-243	867.1	490.0	371.7	0.4	5.0	100	5.0	0.6	3.1	1.0	0.30
BWT-12-248	697.7	412.4	277.8	1.9	5.6	100	5.6	0.6	3.3	1.3	0.40
BWT-12-249	1,042.9	614.8	412.2	0.6	15.3	100	15.3	1.6	7.6	3.5	2.60
BWT-12-251	617.9	286.2	328.4	0.3	3.0	100	3.0	0.7	1.5	0.6	0.20
BWT-12-252	635.7	303.2	323.5	0.1	8.9	100	8.9	0.9	4.7	2.5	0.80
BWT-12-264	415.2	167.0	246.5	0.4	1.3	100	1.3	0.3	0.7	0.2	0.10
BWT-12-265	1,043.7	489.8	543.9	2.3	7.7	100	7.7	1.0	4.2	1.7	0.80
BWT-12-266	1,071.3	514.3	548.4	0.5	8.1	100	8.1	0.9	3.9	2.3	1.00
BWT-12-272	1,349.6	825.5	511.3	2.0	10.8	100	10.8	3.2	6.2	1.2	0.20
BWT-12-273	915.1	324.8	579.4	1.9	9.0	100	9.0	0.9	4.7	2.6	0.80
BWT-12-274	734.1	395.8	315.7	4.0	18.6	100	18.6	2.4	8.5	5.6	2.10
BWT-12-275	697.9	316.1	351.2	4.3	26.3	100	26.3	2.2	9.8	8.3	6.00
BWT-12-301	972.9	419.8	544.1	0.7	8.30	100	8.30	1.1	4.20	2.20	0.80
BWT-12-302	729.5	376.4	344.9	1.4	6.80	100	6.80	1.4	3.70	1.40	0.30
BWT-12-303	615.8	350.3	257.6	3.2	4.70	100	4.70	1.4	2.20	0.90	0.20
BWT-12-304	980.3	431.7	538.1	2.9	7.60	100	7.60	1.5	3.50	2.00	0.60
BWT-12-305	710.3	314.0	387.6	2.9	5.80	100	5.80	1.2	2.20	1.70	0.70
BWT-12-306	1,241.9	555.7	667.8	3.3	15.10	100	15.10	4.8	7.80	2.50	0.05
BWT-12-307	960.3	496.2	449.2	4.9	10.00	100	10.00	2.2	5.10	2.20	0.50
BWT-12-308	869.8	457.2	393.8	2.4	16.40	100	16.40	3.4	9.00	3.90	0.07
BWT-12-309	443.9	241.7	182.3	19.9	0.04	100	0.04	0.0	0.02	0.01	0.00
BWT-12-310	604.8	491.4	100.3	5.2	7.90	100	7.90	2.1	4.00	1.50	0.30
BWT-12-311	640.6	454.0	176.5	3.5	6.60	100	6.60	1.9	4.00	0.70	0.01
BWT-12-312	450.9	353.4	89.4	3.4	4.70	100	4.70	1.8	2.50	0.40	0.02
BWT-12-313	752.8	589.9	104.7	2.8	55.40	100	55.40	10.1	33.40	11.40	0.50
BWT-12-314	754.7	487.4	232.7	1.2	33.40	100	33.40	3.8	20.10	8.20	1.30
BWT-12-315	456.5	361.2	87.9	2.4	5.00	100	5.00	1.4	3.10	0.50	0.02
BWT-12-316	480.1	376.4	96.5	2.1	5.10	100	5.10	1.3	3.40	0.40	0.03
BWT-12-317	438.0	400.7	35.6	0.6	1.10	100	1.10	0.3	0.60	0.20	0.02
BWT-12-318	291.3	247.4	40.3	1.4	2.20	100	2.20	0.9	1.20	0.09	0.01
BWT-12-319	487.5	432.4	45.5	1.7	7.90	100	7.90	3.0	4.40	0.50	0.01
BWT-12-320	479.9	369.1	99.1	4.4	7.30	100	7.30	2.4	4.20	0.70	0.02
BWT-12-321	443.4	346.5	92.2	2.1	2.6	100	2.6	0.7	1.6	0.3	0.00
BWT-12-322	575.5	431.1	87.8	0.6	56.0	100	56.0	13.4	29.4	11.8	1.40
BWT-12-323	470.0	296.7	158.0	4.9	10.4	100	10.4	1.8	5.9	2.4	0.30
BWT-12-324	482.6	388.4	58.1	2.0	34.1	100	34.1	8.3	21.2	4.5	0.10
BWT-12-325	380.1	266.0	106.8	1.0	6.3	100	6.3	2.0	3.6	0.7	0.03
BWT-12-326	615.8	409.9	195.1	2.7	8.1	100	8.1	1.3	4.1	2.0	0.70
BWT-12-327	1,160.4	594.1	556.1	1.7	8.5	100	8.5	1.5	4.4	1.8	0.80
BWT-12-328	699.6	416.8	267.9	2.6	12.3	100	12.3	1.8	7.2	2.4	0.90
BWT-12-374	653.6	385.1	259.5	1.10	7.9	100	7.9	1.1	4.6	1.8	0.40
BWT-12-330	764.6	473.8	283.5	2.1	5.2	100	5.2	1.1	2.5	1.2	0.40
BWT-12-332	597.1	459.5	128.7	1.2	7.7	100	7.7	1.4	4.9	1.3	0.10

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
					Nonferromagnetic HMC						
						Processed Split					
						Total					
	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWT-12-333	508.6	379.5	115.4	2.7	11.0	100	11.0	2.4	6.4	2.0	0.20
BWT-12-334	470.3	318.9	144.3	0.6	6.5	100	6.5	1.3	3.7	1.3	0.20
BWT-12-335	471.4	380.3	84.5	0.6	6.0	100	6.0	1.0	3.5	1.4	0.10
BWT-12-298	769.2	378.4	379.1	0.7	11.0	100	11.0	3.2	6.1	1.4	0.30
BWT-12-299	419.4	302.2	113.7	0.1	3.4	100	3.4	0.9	1.9	0.4	0.20
BWT-12-300	440.3	370.8	58.0	1.7	9.8	100	9.8	2.7	5.7	1.3	0.10
BWT-12-329	385.8	307.7	73.0	1.2	3.9	100	3.9	1.4	2.2	0.3	0.01
BWT-12-331	390.4	327.1	51.3	7.1	4.9	100	4.9	1.6	2.6	0.7	0.02
BWT-12-336	587.4	418.7	158.0	4.1	6.6	100	6.6	2.2	3.5	0.9	0.02
BWT-12-337	521.1	346.5	149.4	1.8	23.4	100	23.4	5.1	14.0	4.0	0.30
BWT-12-338	494.1	299.7	186.8	1.6	6.0	100	6.0	1.5	3.3	1.1	0.10
BWT-12-339	956.3	569.2	380.1	2.7	4.3	100	4.3	0.8	2.2	1.0	0.30
BWT-12-340	637.3	379.5	250.4	1.5	5.9	100	5.9	1.2	3.2	1.2	0.30
BWT-12-341	896.7	493.4	397.1	1.0	5.2	100	5.2	1.0	2.7	1.2	0.30
BWT-12-342	1,332.6	580.5	728.4	3.9	19.8	100	19.8	2.6	10.4	5.2	1.60
BWT-12-349	899.8	506.2	370.5	0.7	22.4	100	22.4	6.0	12.4	3.6	0.40
BWT-12-350	1,066.1	439.5	619.4	0.9	6.3	100	6.3	0.7	3.0	2.0	0.60
BWT-12-351	752.5	393.7	353.5	2.0	3.3	100	3.3	0.6	1.7	0.8	0.20
BWT-12-352	949.1	575.5	366.7	2.8	4.1	100	4.1	0.8	2.2	0.9	0.20
BWT-12-353	514.8	281.9	230.5	1.0	1.4	100	1.4	0.3	0.7	0.3	0.06
BWT-12-356	653.2	384.0	260.3	1.3	7.6	100	7.6	1.0	4.2	2.0	0.40
BWT-12-357	573.0	339.2	224.9	0.6	8.3	100	8.3	1.0	5.0	2.1	0.20
BWT-12-358	1,066.1	572.5	480.8	1.6	11.2	100	11.2	1.3	5.9	3.3	0.70
BWT-12-359	1,397.3	628.4	758.3	0.6	10.0	100	10.0	1.5	4.7	2.6	1.20
BWT-12-360	1,316.0	883.7	422.7	1.2	8.4	100	8.4	1.5	4.9	1.6	0.40
BWT-12-361	873.0	526.5	338.2	0.9	7.4	100	7.4	0.7	3.8	2.1	0.80
BWT-12-362	1,173.1	628.8	526.3	2.2	15.8	100	15.8	2.3	8.7	3.5	1.30
BWT-12-363	998.7	537.9	448.6	2.1	10.1	100	10.1	1.3	5.3	2.7	0.80
BWT-12-364	1,101.9	539.2	543.5	2.5	16.7	100	16.7	2.2	9.3	4.3	0.90
BWT-12-369	923.0	531.4	380.4	1.8	9.4	100	9.4	1.2	5.5	2.3	0.40
BWT-12-370	785.9	504.1	271.6	2.80	7.4	100	7.4	1.5	4.5	1.2	0.20
BWT-12-371	697.5	397.6	279.9	6.60	13.4	100	13.4	2.2	6.1	3.9	1.20
BWT-12-376	625.0	401.5	212.5	0.30	10.7	100	10.7	1.9	6.6	1.9	0.30
BWT-12-381	1,036.4	632.2	400.2	0.80	3.2	100	3.2	0.6	1.8	0.6	0.20
BWT-12-389	913.8	295.5	608.7	3.00	6.6	100	6.6	1.0	3.2	1.9	0.50
BWT-12-391	593.5	332.2	260.2	0.30	0.8	100	0.8	0.2	0.4	0.2	0.04
BWT-12-392	529.7	418.3	102.8	3.00	5.6	100	5.6	1.5	3.1	0.8	0.20
BWT-12-393	1,189.9	770.5	409.6	0.01	9.8	100	9.8	1.2	4.5	3.5	0.60
BWT-12-343	647.6	519.0	112.4	3.50	12.7	100	12.7	1.9	7.7	2.6	0.50
BWT-12-344	856.8	578.0	265.8	2.50	10.5	100	10.5	1.6	6.3	2.2	0.40
BWT-12-345	900.6	630.3	258.5	2.60	9.2	100	9.2	1.3	5.2	2.2	0.50
BWT-12-346	1,089.8	657.1	405.8	5.30	21.6	100	21.6	3.7	11.9	5.0	1.00
BWT-12-347	1,193.4	610.7	570.3	7.30	5.1	100	5.1	0.8	2.9	1.2	0.20
BWT-12-348	822.7	491.7	301.5	6.60	22.9	100	22.9	1.7	15.0	5.6	0.60
BWT-12-354	496.6	376.5	115.4	1.90	2.8	100	2.8	0.5	1.7	0.5	0.10
BWT-12-355	664.4	369.9	289.7	2.10	2.7	100	2.7	0.9	1.2	0.5	0.10
BWT-12-365	894.3	310.5	581.0	0.50	2.3	100	2.3	0.3	0.6	0.8	0.60
BWT-12-366	1,089.6	510.9	574.1	1.80	2.8	100	2.8	0.8	1.3	0.6	0.07
BWT-12-367	1,070.4	637.4	427.3	1.30	4.4	100	4.4	0.8	2.3	1.0	0.30
BWT-12-368	723.7	375.8	338.9	0.50	8.5	100	8.5	2.4	5.0	0.8	0.3
BWT-12-372	918.2	521.6	390.7	3.00	2.9	100	2.9	0.2	1.7	0.8	0.2
BWT-12-373	629.8	291.0	328.5	0.30	10.0	100	10.0	1.4	5.4	2.4	0.8
BWT-12-375	990.2	216.2	758.6	0.10	15.3	100	15.3	1.8	7.1	4.9	1.5

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
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						Total					
	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWT-12-377	756.4	294.0	449.3	0.50	12.6	100	12.6	1.9	7.3	2.7	0.7
BWT-12-378	905.5	560.2	333.2	1.30	10.8	100	10.8	1.3	6.0	2.7	0.8
BWT-12-379	523.4	240.1	277.0	1.00	5.3	100	5.3	0.7	3.0	1.3	0.3
BWT-12-380	709.2	341.9	364.7	0.80	1.8	100	1.8	0.3	1.1	0.3	0.1
BWT-12-382	961.5	446.3	506.4	3.70	5.1	100	5.1	0.7	2.9	1.2	0.3
BWT-12-383	650.2	374.9	272.1	0.04	3.2	100	3.2	1.6	0.8	0.7	0.1
BWT-12-384	624.9	285.6	334.6	1.50	3.2	100	3.2	0.4	1.5	0.9	0.4
BWT-12-385	663.6	381.4	276.6	1.50	4.1	100	4.1	0.6	2.2	1.0	0.3
BWT-12-386	680.4	358.4	318.2	0.50	3.3	100	3.3	0.4	1.8	0.9	0.2
BWT-12-387	840.6	292.4	537.3	2.70	8.2	100	8.2	1.0	4.3	2.1	0.8
BWT-12-388	995.8	493.8	492.1	2.70	7.2	100	7.2	0.9	4.0	1.7	0.6
BWT-12-390	750.1	411.4	327.9	2.50	8.3	100	8.3	1.2	4.8	1.9	0.4
BWT-12-394	704.9	250.7	444.5	1.70	8.0	100	8.0	1.1	2.8	2.6	1.5
BWT-12-395	661.1	234.5	421.0	1.50	4.1	100	4.1	0.6	1.9	1.1	0.5
BWT-12-396	601.5	322.2	275.0	0.80	3.5	100	3.5	0.5	1.9	0.9	0.2
BWT-12-397	1,109.0	557.5	530.7	1.00	19.8	100	19.8	2.9	7.0	6.6	3.3
BWT-12-398	454.9	261.9	188.7	1.2	3.1	100	3.1	0.5	1.7	0.7	0.20
BWT-12-399	480.0	318.8	156.1	1.1	4.0	100	4.0	0.2	2.9	0.8	0.20
BWT-12-400	480.8	221.3	253.5	1.6	4.4	100	4.4	0.5	2.5	1.1	0.30
BWT-12-401	577.5	327.5	242.4	1.6	6.0	100	6.0	0.7	3.3	1.6	0.40
BWT-12-402	1,026.6	490.2	528.7	2.3	5.4	100	5.4	0.7	2.8	1.5	0.40
BWT-12-403	458.4	286.6	170.6	0.3	0.9	100	0.9	0.1	0.6	0.2	0.02
BWT-12-404	644.8	201.4	440.1	1.2	2.1	100	2.1	0.3	1.1	0.5	0.20
BWT-12-405	739.7	402.2	330.4	1.9	5.2	100	5.2	0.5	3.0	1.4	0.30
BWT-12-406	761.2	343.3	412.1	1.9	3.9	100	3.9	0.4	2.3	0.9	0.30
BWT-12-407	836.3	559.1	266.5	3.5	7.2	100	7.2	0.9	4.3	1.6	0.40
BWT-12-408	880.5	462.4	407.6	2.8	7.7	100	7.7	0.2	5.0	1.9	0.60
BWT-12-409	921.0	342.4	572.5	2.5	3.6	100	3.6	0.6	2.0	0.8	0.20
BWT-12-410	760.4	322.2	431.5	1.7	5.0	100	5.0	0.7	2.8	1.1	0.40
BWT-12-411	855.4	479.7	367.9	2.3	5.5	100	5.5	0.6	3.2	1.4	0.30
BWT-12-412	611.2	243.7	363.0	1.4	3.1	100	3.1	0.0	2.0	0.9	0.20
BWT-12-413	671.6	260.1	404.3	2.1	5.1	100	5.1	0.5	2.5	1.4	0.70
BWT-12-414	971.3	277.8	682.8	3.3	7.4	100	7.4	0.9	4.2	1.8	0.50
BWT-12-415	638.0	344.8	281.2	6.8	5.2	100	5.2	1.2	2.6	1.0	0.40
BWT-12-416	514.0	165.6	339.2	2.8	6.4	100	6.4	0.9	2.3	2.2	1.00
BWT-12-417	794.6	407.2	381.0	2.8	3.6	100	3.6	0.9	1.8	0.7	0.20
BWT-12-418	526.8	271.8	251.1	1.3	2.6	100	2.6	0.7	1.1	0.6	0.20
BWT-12-419	1,003.8	345.5	646.6	3.3	8.4	100	8.4	1.7	3.7	2.4	0.60
BWT-12-420	663.2	423.8	236.6	0.7	2.1	100	2.1	0.9	1.0	0.2	0.03
BWT-12-421	1,329.5	466.4	851.5	3.6	8.0	100	8.0	1.4	3.4	2.2	1.00
BWT-12-422	630.7	315.2	312.0	1.1	2.4	100	2.4	0.8	1.2	0.4	0.04
BWT-12-423	953.9	522.4	425.1	1.9	4.5	100	4.5	1.0	2.4	0.9	0.20
BWT-12-424	1,031.1	557.7	464.1	1.9	7.4	100	7.4	1.5	3.4	1.9	0.60
BWT-12-425	671.2	152.3	510.2	3.8	4.9	100	4.9	1.2	2.0	1.2	0.50
BWT-12-426	971.7	516.5	435.2	3.0	17.0	100	17.0	3.5	9.0	3.4	1.10
BWT-12-427	694.4	263.6	428.0	1.0	1.8	100	1.8	0.6	0.7	0.4	0.10
BWT-12-428	720.7	290.6	428.5	0.2	1.4	100	1.4	0.3	0.7	0.3	0.10
BWT-12-429	957.1	497.9	450.6	2.4	6.2	100	6.2	0.7	3.6	1.6	0.30
BWT-12-430	908.2	625.1	262.8	3.6	16.7	100	16.7	3.4	10.5	2.5	0.30
BWT-12-431	967.5	533.3	427.7	1.4	5.1	100	5.1	1.3	2.4	1.1	0.30
BWT-12-432	838.7	404.6	426.0	1.9	6.2	100	6.2	1.0	3.0	1.6	0.60
BWT-12-433	878.6	545.1	324.0	2.3	7.2	100	7.2	1.3	3.6	1.9	0.40
BWT-12-434	917.3	585.9	319.0	2.7	9.7	100	9.7	1.5	5.8	2.2	0.20

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
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						Processed Split					
							Total				
	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWT-12-435	776.3	498.5	273.3	1.0	3.5	100	3.5	0.8	2.0	0.6	0.08
BWT-12-436	668.5	316.2	338.9	4.7	8.7	100	8.7	1.6	4.3	2.4	0.40
BWT-12-437	713.8	404.5	300.9	2.3	6.1	100	6.1	1.5	3.6	0.9	0.06
BWT-12-438	694.4	297.0	385.6	3.7	8.1	100	8.1	1.5	4.3	1.70	0.60
BWT-12-439	869.0	527.2	329.4	2.6	9.8	100	9.8	2.3	5.4	1.60	0.50
BWT-12-440	982.1	674.2	301.4	1.9	4.6	100	4.6	1.8	2.4	0.40	0.02
BWT-12-441	741.1	581.2	158.2	0.4	1.3	100	1.3	0.6	0.6	0.06	0.00
BWT-12-442	946.7	749.9	194.5	0.6	1.7	100	1.7	1.0	0.6	0.09	0.02
BWT-12-443	480.5	199.9	271.6	3.0	6.0	100	6.0	1.5	3.3	1.20	0.04
BWT-12-444	742.0	423.0	315.5	1.1	2.4	100	2.4	0.4	1.4	0.50	0.08
BWT-12-445	1,118.6	584.6	525.2	1.5	7.3	100	7.3	2.0	3.7	1.20	0.40
BWT-12-446	818.4	384.1	428.5	1.7	4.1	100	4.1	1.2	1.8	0.90	0.20
BWT-12-447	629.4	260.4	358.7	2.4	7.9	100	7.9	1.1	3.9	2.10	0.80
BWT-12-448	1,022.8	444.6	564.4	4.8	9.0	100	9.0	1.9	4.2	2.30	0.60
BWT-12-449	649.1	312.4	323.1	3.7	9.9	100	9.9	2.3	4.7	2.10	0.80
BWT-12-450	996.7	323.5	658.7	3.8	10.7	100	10.7	2.0	4.9	2.90	0.90
BWT-12-451	764.9	231.7	520.4	3.0	9.8	100	9.8	2.7	3.5	2.60	1.00
BWT-12-452	853.5	208.9	634.5	1.7	8.4	100	8.4	1.0	3.0	3.00	1.40
BWT-12-453	675.5	353.2	302.1	1.5	18.7	100	18.7	2.1	7.6	6.60	2.40
BWT-12-454	1,113.6	392.3	699.5	4.0	17.8	100	17.8	2.6	8.2	5.00	2.00
BWT-12-455	946.5	381.2	556.1	3.1	6.1	100	6.1	1.3	2.3	1.50	1.00
BWT-12-456	1,029.4	381.6	633.2	4.5	10.1	100	10.1	2.3	4.7	2.40	0.70
BWT-12-457	847.6	342.1	501.5	1.7	2.3	100	2.3	0.6	1.3	0.30	0.08
BWT-12-458	1,396.3	634.9	748.7	2.8	9.9	100	9.9	1.6	5.6	2.00	0.70
BWT-12-459	742.3	405.4	319.1	2.5	15.3	100	15.3	3.0	9.6	2.70	0.05
BWT-12-460	964.3	444.1	514.0	0.9	5.3	100	5.3	0.8	2.8	1.30	0.40
BWT-12-461	864.2	359.0	497.0	2.7	5.5	100	5.5	1.3	2.6	1.20	0.40
BWT-12-462	1,155.1	471.6	678.0	0.5	5.0	100	5.0	0.9	2.4	1.20	0.50
BWT-12-463	777.3	331.8	440.0	0.1	5.4	100	5.4	0.6	2.8	1.50	0.50
BWT-12-464	1,251.1	581.7	658.9	1.8	8.7	100	8.7	1.6	4.4	1.90	0.80
BWT-12-465	854.1	381.5	458.7	2.2	11.7	100	11.7	2.7	6.0	2.50	0.50
BWT-12-466	1,281.7	481.2	794.8	1.1	4.6	100	4.6	1.0	2.5	0.80	0.30
BWT-12-497	1,263.7	822.6	408.6	9.4	23.1	100	23.1	3.1	13.8	4.9	1.3
BWT-12-498	1,467.1	886.9	564.1	4.0	12.1	100	12.1	1.9	7.5	2.3	0.4
BWT-12-499	805.0	508.2	287.3	1.3	8.2	100	8.2	1.0	4.7	1.9	0.6
BWT-12-500	1,080.9	841.7	219.3	4.2	15.7	100	15.7	2.8	9.8	2.6	0.5
BWT-12-501	1,218.8	728.9	468.8	6.4	14.7	100	14.7	2.2	8.6	3.2	0.7
BWT-12-502	1,029.5	771.8	233.3	5.1	19.3	100	19.3	3.3	11.1	3.8	1.1
BWT-12-503	413.1	332.5	51.7	2.2	26.7	100	26.7	3.9	17.5	4.8	0.5
BWT-12-504	693.5	521.3	142.0	7.0	23.2	100	23.2	3.4	12.6	5.3	1.9

* Values greater than 0.1 g were weighed only to one decimal place; the zero was added in the second decimal position to facilitate column alignment.

Appendix M

Capoose Heavy Mineral Concentrate Weights, Alluvial Gravel

	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
					Nonferromagnetic HMC						
						Processed Split					
						Total					
Sample Number	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
BWS-12-009	630.7	121.5	455.7	29.9	23.6	100	23.6	2.1	11.7	8.4	1.40
BWS-12-010	648.7	174.5	432.4	17.4	24.4	100	24.4	2.9	14.3	6.0	1.20
BWS-12-011	710.7	331.2	316.3	34.2	29.0	100	29.0	2.6	16.0	7.7	2.70
BWS-12-017	599.8	158.5	422.8	7.2	11.3	100	11.3	1.0	5.1	3.8	1.40
BWS-12-018	599.7	145.2	422.0	9.8	22.7	100	22.7	1.3	11.5	7.1	2.80
BWS-12-019	733.9	390.9	287.7	3.5	51.8	100	51.8	3.9	31.2	11.8	4.90
BWS-12-020	746.6	244.9	483.2	2.5	16.0	100	16.0	1.7	8.8	3.9	1.60
BWS-12-021	863.1	298.3	514.7	5.3	44.8	100	44.8	3.2	23.2	12.6	5.8
BWS-12-022	683.4	258.1	408.6	0.9	15.8	100	15.8	1.1	7.8	4.3	2.6
BWS-12-023	669.1	304.0	323.3	5.5	36.3	100	36.3	2.6	18.8	9.4	5.5
BWS-12-024	823.1	140.5	629.9	4.2	48.5	100	48.5	3.4	15.6	18.7	10.8
BWS-12-025	788.3	120.3	422.3	138.0	107.7	100	107.7	3.4	21.6	40.4	42.3
BWS-12-026	946.0	115.0	785.7	8.6	36.7	100	36.7	1.8	12.6	14.8	7.5
BWS-12-027	1,023.4	125.7	850.1	11.7	35.9	100	35.9	1.6	14.0	14.4	5.9
BWS-12-028	837.6	294.2	497.7	7.0	38.7	100	38.7	2.8	19.5	12.1	4.3
BWS-12-029	824.2	280.6	457.7	35.0	50.9	100	50.9	4.2	28.5	12.2	6.0
BWS-12-030	754.5	279.2	356.7	34.3	84.3	100	84.3	6.8	62.3	11.5	3.7
BWS-12-032	576.5	335.9	179.9	9.3	51.4	100	51.4	2.6	28.2	13.6	7.0
BWS-12-033	777.9	165.6	558.3	20.9	33.1	100	33.1	1.7	18.2	10.6	2.6
BWS-12-035	716.6	223.9	478.0	1.9	12.8	100	12.8	1.3	6.5	3.9	1.1
BWS-12-036	737.2	328.6	365.8	0.5	42.3	100	42.3	3.0	22.4	12.2	4.7
BWS-12-037	753.1	180.2	549.0	2.4	21.5	100	21.5	0.6	10.9	7.7	2.3
BWS-12-038	892.5	273.0	563.5	5.5	50.5	100	50.5	2.2	19.5	15.8	13.0
BWS-12-039	688.0	224.7	436.5	2.3	24.5	100	24.5	1.2	10.2	8.4	4.7
BWS-12-040	646.5	280.6	323.5	3.4	39.0	100	39.0	1.7	12.2	15.7	9.4
BWS-12-041	657.8	353.1	268.8	11.20	24.7	100	24.7	3.3	12.0	6.5	2.90
BWS-12-043	667.0	344.0	302.6	2.90	17.5	100	17.5	2.8	9.2	4.2	1.30
BWS-12-046	643.9	116.3	513.6	2.40	11.6	100	11.6	1.9	5.5	4.1	0.08
BWS-12-054	589.4	385.8	188.9	3.00	11.7	100	11.7	3.4	6.6	1.4	0.30
BWS-12-055	681.6	343.3	302.2	2.30	33.8	100	33.8	3.3	19.9	9.4	1.20
BWS-12-060	492.8	296.8	161.7	6.70	27.6	100	27.6	2.8	13.9	7.7	3.20
BWS-12-061	465.1	111.4	344.1	2.4	7.2	100	7.2	0.5	4.6	1.8	0.3
BWS-12-062	968.1	125.1	785.9	7.2	49.9	100	49.9	1.5	18.9	22.9	6.6
BWS-12-063	997.7	94.0	866.5	6.0	31.2	100	31.2	0.9	10.2	15.0	5.1
BWS-12-067	582.1	238.4	270.2	8.6	64.9	100	64.9	5.7	38.2	17.0	4.0
BWS-12-070	411.2	131.4	261.4	7.3	11.1	100	11.1	1.2	6.1	3.0	0.8
BWS-12-072	584.9	113.1	395.4	24.2	52.2	100	52.2	4.5	21.2	19.4	7.1
BWS-12-073	524.2	167.9	321.0	15.8	19.5	100	19.5	2.6	11.3	4.9	0.7
BWS-12-074	645.6	192.5	421.1	5.3	26.7	100	26.7	2.5	12.3	8.7	3.2
BWS-12-075	609.2	176.8	412.8	5.2	14.4	100	14.4	1.3	5.9	5.2	2.0
BWS-12-076	643.2	219.7	402.2	9.5	11.8	100	11.8	1.3	5.6	3.5	1.4
BWS-12-077	541.0	137.7	377.5	5.7	20.1	100	20.1	2.2	10.4	5.5	2.0
BWS-12-078	603.7	132.5	457.0	3.6	10.6	100	10.6	1.2	4.0	3.9	1.5
BWS-12-079	609.0	219.8	357.6	3.9	27.7	100	27.7	2.1	13.5	9.3	2.8
BWS-12-080	887.0	298.4	573.9	1.4	13.3	100	13.3	1.7	6.9	3.8	0.9
BWS-12-081	766.6	101.1	648.1	3.0	14.4	100	14.4	1.6	6.8	4.7	1.3

Appendix N

Capoose Indicator Mineralogy, Till

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-102	0	0	0	1	1 blue-green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (13 gr)	0	30	5	0	0	5 (~600 gr)	0	5 (Fo)	0	Tr (13 gr)	Tr	0	Hematite/epidote-titanite assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite.	0.5-1.0 mm fraction: 1 Mn-epidote 3 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 1 gahnite 4 Mn-epidote 2 sapphire corundum 13 low-Cr diopside 20 representative spessartine 13 chromite*
BWT-12-104	0	0	0	1	2 blue-green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (16 gr)	Tr (25 gr)	30	8	0	0	4 (~400 gr)	0	0.5 (Fo)	0	Tr (9 gr)	Tr	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 2 gahnite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 2 gahnite 3 Mn-epidote 1 sapphire corundum 16 low-Cr diopside 25 red rutile 20 representative spessartine 9 chromite*
BWT-12-105	0	0	0	2	4 blue-green gahnite	Tr Mn-epidote (14 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~40 gr)	Tr (15 gr)	5	Tr	0	0	5 (~300 gr)	0	2 (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 blue-green gahnite versus spinel candidates = 4 gahnite.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 3 Mn-epidote 2 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 14 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 15 red rutile 20 representative spessartine 5 chromite*
BWT-12-106	0	0	0	Tr	0	0	0	98	98	0	0	0	0	0	0	0	Tr	0	Hematite/titanite assemblage.	
BWT-12-107	0	0	0	0	9 blue-green gahnite	Tr Mn-epidote (~30 gr) Tr sapphire corundum (9 gr) Tr low-Cr diopside (~100 gr)	Tr (4 gr)	5	Tr	0	0	2 (~1,000 gr)	0	40 (Fo)	0	0	Tr	0	Hematite-forsterite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 blue-green gahnite versus spinel candidates = 4 gahnite. Also picked 1 reshaped 100x250x900µ gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 3 Mn-epidote 8 low-Cr diopside 0.25-0.5 mm fraction: 1 gold 9 gahnite 20 representative Mn-epidote 9 sapphire corundum 20 representative low-Cr diopside 4 red rutile 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-108	0	0	0	12	~800 (3%) blue-green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	Tr (21 gr)	6	1	0	0	30 (~30,000 gr)	0	50 (Fo)	0	Tr (19 gr)	0	0	Forsterite-spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 blue-green gahnite versus spinel candidates = 10 gahnite.	1.0-2.0 mm fraction: 1 low-Cr diopside 2 chromite* 0.5-1.0 mm fraction: 33 gahnite 2 sapphire corundum 10 low-Cr diopside 11 chromite* 0.25-0.5 mm fraction: 100 representative gahnite 3 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 21 red rutile 20 representative spessartine 19 chromite*
BWT-12-110	0	0	0	3	59 (0.3%) blue-green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (7 gr) Tr low-Cr diopside (45 gr)	Tr (2 gr)	6	1	0	0	3 (~2,000 gr)	0	50 (Fo)	0	Tr (~40 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 59 gahnite 1 Mn-epidote 7 sapphire corundum 45 low-Cr diopside 2 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-111	Tr (1 gr)	0	0	Tr	0	Tr low-Cr diopside (8 gr)	0	25	25	Tr	0	2 (~250 gr)	0	20 (Fo)	0	0	Tr	0	Hematite-forsterite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 8 low-Cr diopside 20 representative spessartine
BWT-12-112	0	0	0	Tr	0	0	0	80	60	0	0	Tr (6 gr)	0	15 (Fo)	0	0	Tr	0	Hematite-forsterite/titanite-epidote assemblage.	0.25-0.5 mm fraction: 6 spessartine
BWT-12-113	0	0	0	Tr	5 black hercynite 3 black Cr-spinel	Tr low-Cr diopside (6 gr)	Tr (1 gr)	60	50	Tr	0	Tr (17 gr)	0	20 (Fo)	0	Tr (~20 gr)	Tr	0	Hematite-forsterite/titanite-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 15 hercynite versus chromite candidates = 5 hercynite (with minor Cr), 3 Cr-spinel, 5 allanite and 2 chromite.	0.5-1.0 mm fraction: 2 low-Cr diopside 2 spessartine 1 chromite* 0.25-0.5 mm fraction: 5 hercynite 3 Cr-spinel 5 allanite resembling hercynite 6 low-Cr diopside 1 red rutile 17 spessartine 2 representative chromite

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-114	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (11 gr)	0	60	40	0	0	Tr (~60 gr)	0	15 (Fo)	0	0	Tr	0	Hematite-forsterite/titanite-epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 5 Mn-epidote 2 sapphire corundum 11 low-Cr diopside 20 representative spessartine
BWT-12-115	0	0	0	2	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (7 gr)	0	60	40	0	0	Tr (11 gr)	0	3 (Fo)	0	Tr (4 gr)	Tr	0	Hematite/titanite-epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 2 Mn-epidote 7 low-Cr diopside 11 spessartine 4 chromite*
BWT-12-155	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (7 gr)	0	20	5	0	0	Tr (7 gr)	0	40 (Fo)	0	Tr (2 gr)	Tr	0	Forsterite-hematite-ilmenite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 1 sapphire corundum 7 low-Cr diopside 7 spessartine 2 chromite*
BWT-12-156	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (~30 gr)	0	15	5	0	0	1 (~1500 gr)	0	15 (Fo)	0	Tr (3 gr)	Tr	0	Hematite-forsterite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 3 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 7 Mn-epidote 5 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-157	0	0	0	Tr	1 blue-green gahnite	Tr Mn-epidote (19 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~100 gr)	Tr (2 gr)	10	2	0	0	1 (~100 gr)	0	10 (Fo)	0	Tr (8 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 1 sapphire corundum 9 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 1 gahnite 19 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 2 red rutile 20 representative spessartine 8 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-158	0	0	0	Tr	0	Tr Mn-epidote (13 gr) Tr low-Cr diopside (20 gr)	0	Tr	Tr	0	0	2 (~50 gr)	0	Tr (Fo)	0	0	Tr	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 black Cr-spinel candidate = 1 Cr-spinel.	0.5-1.0 mm fraction: 1 Cr-spinel 1 sapphire corundum 0.25-0.5 mm fraction: 13 Mn-epidote 20 low-Cr diopside 20 representative spessartine
BWT-12-159	0	0	0	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (~40 gr)	0	Tr	Tr	Tr	0	1 (~150 gr)	Tr (1 gr)	2 (Fo)	0	Tr (2 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 yellow andradite versus titanite candidate = 1 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative Mn-epidote 4 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 1 andradite 2 chromite*
BWT-12-160	0	0	0	Tr	0	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (18 gr)	0	Tr	Tr	Tr	0	7 (~300 gr)	0	4 (Fo)	0	Tr (6 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 10 Mn-epidote 1 sapphire corundum 18 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-174	0	0	0	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (~40 gr)	0	2	2	0	0	3 (~400 gr)	0	5 (Fo)	0	Tr (4 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 6 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-175	0	0	0	Tr	5 blue-green gahnite	Tr Mn-epidote (13 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~50 gr)	Tr (1 gr)	5	2	0	0	2 (~500 gr)	0	10 (Fo)	0	Tr (18 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 blue-green gahnite versus augite candidates = 5 gahnite and 2 pumpellyite.	0.5-1.0 mm fraction: 3 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 5 gahnite 2 pumpellyite resembling gahnite 13 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 1 red rutile 20 representative spessartine 18 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-176	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~30 gr)	0	2	Tr	0	0	Tr (~60 gr)	Tr (3 gr)	4 (Fo)	0	Tr (~30 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 2 chromite candidates = 1 chromite and 1 hercynite. SEM checks from 0.25-0.5 mm fraction: 4 blue-green gahnite versus pumpellyite candidates = 1 gahnite and 3 pumpellyite; 1 sapphirine versus sapphire corundum candidate = 1 sapphire corundum; and 8 spessartine versus andradite candidates = 5 spessartine and 3 andradite.	0.5-1.0 mm fraction: 1 black hercynite 1 Mn-epidote 4 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 1 gahnite 3 pumpellyite resembling gahnite 2 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 25 representative spessartine 3 andradite 20 representative chromite*
BWT-12-177	0	0	0	Tr	2 blue-green gahnite	Tr Mn-epidote (14 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (21 gr)	Tr (1 gr)	3	2	0	0	1 (~150 gr)	0	2 (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 2 gahnite (lost in transfer to vial).	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 2 gahnite 14 Mn-epidote 1 sapphire corundum 21 low-Cr diopside 1 red rutile 20 representative spessartine 1 chromite*
BWT-12-178	0	0	0	Tr	2 green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	7	2	0	0	Tr (~60 gr)	Tr (1 gr)	60 (Fo)	0	Tr (1 gr)	0	0	Forsterite-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 green gahnite versus spinel candidates = 2 gahnite.	0.5-1.0 mm fraction: 1 sapphire corundum 2 low-Cr diopside 0.25-0.5 mm fraction: 2 gahnite 1 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 20 representative spessartine 1 andradite 1 chromite*
BWT-12-179	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (8 gr) Tr low-Cr diopside (~40 gr)	0	2	2	Tr	0	Tr (~250 gr)	0	12 (Fo)	0	Tr (14 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 8 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 14 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-180	0	0	0	Tr	0	Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	2	Tr	0	0	Tr (~30 gr)	0	2 (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 1 sapphire corundum 5 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-181	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (~30 gr)	Tr (3 gr)	40	25	0	0	30 (~8000 gr)	Tr (3 gr)	1 (Fo)	0	Tr (~60 gr)	Tr	0	Hematite-spessartine/epidote-titanite assemblage.	0.5-1.0 mm fraction: 6 low-Cr diopside 10 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 3 sapphire corundum 20 representative low-Cr diopside 3 red rutile 20 representative spessartine 3 andradite 20 representative chromite*
BWT-12-182	0	0	0	Tr	0	Tr Mn-epidote (21 gr) Tr sapphire corundum (2 gr) Tr topaz (2 gr) Tr low-Cr diopside (13 gr)	0	3	Tr	0	0	5 (2000 gr)	15 (~800 gr.)	0.5 (Fo)	0	0	Tr	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 topaz versus leucosapphire corundum candidates = 2 topaz.	0.5-1.0 mm fraction: 1 Mn-epidote 2 low-Cr diopside 0.25-0.5 mm fraction: 21 Mn-epidote 2 sapphire corundum 2 topaz 13 low-Cr diopside 20 representative spessartine 20 representative andradite
BWT-12-183	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (12 gr)	0	2	Tr	0	0	Tr (1 gr)	20 (~2000 gr)	1 (Fo)	0	Tr (11 gr)	Tr	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 orange spessartine versus andradite (major paramagnetic assemblage mineral) candidates = 9 andradite and 1 spessartine.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 2 sapphire corundum 12 low-Cr diopside 1 spessartine 29 representative andradite 11 chromite*
BWT-12-184	0	0	Tr (8 gr)	1	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (4 gr)	0	2	Tr	0	0	Tr (12 gr)	50 (~8000 gr)	Tr (Fo)	0	Tr (3 gr)	Tr	0	Andradite-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 white scheelite versus zoisite candidates = 5 diopside; and 10 spessartine versus andradite candidates = 10 andradite.	0.25-0.5 mm fraction: 5 diopside resembling scheelite 4 Mn-epidote 4 low-Cr diopside 12 spessartine 20 representative andradite 3 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-185	0	0	Tr (12 gr)	Tr	1 blue-green gahnite	Tr low-Cr diopside (4 gr)	Tr (2 gr)	3	Tr	0	0	1 (~150 gr)	60 (~10,000 gr)	Tr (Fo)	0	Tr (5 gr)	Tr	0	Andradite-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite candidate = 1 gahnite; and 25 spessartine versus andradite candidates = 20 spessartine and 5 andradite.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 gahnite 4 low-Cr diopside 2 red rutile 40 representative spessartine 25 representative andradite 5 chromite*
BWT-12-186	0	0	0	0	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	0	10 (~3000 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 red-brown spessartine candidate = 1 andradite. SEM checks from 0.25-0.5 mm fraction: 10 orange spessartine versus titanite candidates = 10 andradite.	0.5-1.0 mm fraction: 1 andradite 0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside 30 representative andradite 3 chromite*
BWT-12-187	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (10 gr)	0	2	Tr	0	0	2 (~150 gr)	60 (~600 gr)	Tr (Fo)	0	Tr (6 gr)	Tr	0	Andradite-hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 white scheelite versus epidote candidates = 5 diopside.	0.5-1.0 mm fraction: 5 diopside resembling scheelite 4 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 4 Mn-epidote 10 low-Cr diopside 20 representative spessartine 20 representative andradite 6 chromite*
BWT-12-188	Tr (1 gr)	0	Tr (15 gr)	Tr	0	0	0	Tr	Tr	0	0	1 (4 gr)	70 (~8000 gr)	Tr (Fo)	0	Tr (4 gr)	Tr	0	Andradite-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 4 spessartine 20 representative andradite 4 chromite*
BWT-12-189	0	0	0	0	0	Tr low-Cr diopside (9 gr)	0	1	Tr	0	0	0.5 (~60 gr)	Tr (3 gr)	8 (Fo)	0	Tr (20 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 9 low-Cr diopside 20 representative spessartine 3 andradite 20 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-190	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~30 gr)	0	1	Tr	0	0	1 (~400 gr)	Tr (~40 gr)	3 (Fo)	0	Tr (~30 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 8 spessartine versus andradite candidates = 5 spessartine and 3 andradite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 5 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 5 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 25 representative spessartine 23 representative andradite 20 representative chromite*
BWT-12-191	0	0	0	Tr	0	Tr Mn-epidote (16 gr) Tr sapphire corundum (9 gr) Tr low-Cr diopside (~40 gr)	0	1	Tr	0	0	Tr (~100 gr)	Tr (~100 gr)	5 (Fo)	0	Tr (9 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 16 Mn-epidote 9 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 9 chromite*
BWT-12-192	0	0	Tr (5 gr)	1	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	Tr (3 gr)	2	Tr	0	0	Tr (~100 gr)	2 (~600 gr)	8 (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.25 mm fraction: 5 andradite versus spessartine candidates = 5 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 2 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 8 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 3 red rutile 20 representative spessartine 25 representative andradite 10 chromite*
BWT-12-193	0	0	Tr (2 gr)	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (8 gr)	0	2	Tr	0	0	5 (~50 gr)	10 (~100 gr)	Tr (Fo)	0	Tr (11 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 8 spessartine versus andradite candidates = 8 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 3 Mn-epidote 8 low-Cr diopside 20 representative spessartine 28 representative andradite 11 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-194	0	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (6 gr)	0	5	3	0	0	Tr (~100 gr)	2 (~500 gr)	Tr (Fo)	0	Tr (14 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 12 Mn-epidote 6 low-Cr diopside 20 representative spessartine 20 representative andradite 14 chromite*
BWT-12-195	0	0	0	1	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (3 gr)	0	1	Tr	0	0	Tr (~40 gr)	70 (~15,000 gr)	0	0	Tr (11 gr)	0	0	Andradite-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 pale orange grossular versus titanite candidates = 10 andradite (major nonparamagnetic assemblage mineral).	0.25-0.5 mm fraction: 1 Mn-epidote 2 sapphire corundum 3 low-Cr diopside 20 representative spessartine 30 representative andradite 11 chromite*
BWT-12-196	0	0	Tr (1 gr)	5	0	Tr low-Cr diopside (5 gr)	0	2	Tr	0	0	Tr (~40 gr)	20 (~10,000 gr)	Tr (Fo)	0	0	Tr	0	Hematite-andradite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 8 grossular versus andradite candidates = 8 andradite; and 5 white diopside (major nonparamagnetic assemblage mineral) candidates = 5 diopside.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 5 low-Cr diopside 20 representative spessartine 28 representative andradite 5 representative diopside
BWT-12-197	0	0	0	1	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	0	0	5 (~200 gr)	Tr (4 gr)	Tr (Fo)	0	Tr (3 gr)	Tr	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 spessartine versus andradite candidates = 2 spessartine and 4 andradite.	0.25-0.5 mm fraction: 4 Mn-epidote 2 low-Cr diopside 1 red rutile 22 representative spessartine 4 andradite 3 chromite*
BWT-12-198	0	0	0	Tr	0	Tr sapphire corundum (2 gr) Tr low-Cr diopside (5 gr)	0	Tr	Tr	0	0	Tr (9 gr)	0	1 (Fo)	0	Tr (12 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 sapphire corundum 5 low-Cr diopside 9 spessartine 12 chromite*
BWT-12-202	0	0	0	1	0	Tr sapphire corundum (2 gr) Tr low-Cr diopside (6 gr)	0	Tr	Tr	0	0	Tr (14 gr)	70 (~50,000 gr)	Tr (Fo)	0	Tr (9 gr)	0	0	Andradite-hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 5 orange spessartine versus andradite candidates = 5 andradite; and 10 pale orange-yellow grossular versus andradite (major paramagnetic assemblage mineral) candidates = 10 andradite.	0.5-1.0 mm fraction: 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 2 sapphire corundum 6 low-Cr diopside 14 spessartine 35 representative andradite 9 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-204	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	1	0	0	0	Tr (~40 gr)	Tr (5 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 spessartine versus andradite candidates = 2 spessartine and 5 andradite.	0.5-1.0 mm fraction: 3 low-Cr diopside 0.25-0.5 mm fraction: 6 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 22 representative spessartine 5 andradite 2 chromite*
BWT-12-205	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (17 gr)	0	Tr	0	0	0	Tr (9 gr)	15 (~2000 gr)	Tr (Fo)	0	0	0	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 andradite versus spessartine candidates = 5 andradite.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 4 Mn-epidote 1 sapphire corundum 17 low-Cr diopside 9 spessartine 25 representative andradite
BWT-12-206	0	Tr barite (4 gr)	0	2	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (2 gr)	0	Tr	0	0	0	Tr (12 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 barite versus zoisite candidate = 1 barite. SEM checks from 0.25-0.5 mm fraction: 6 barite versus zoisite candidates = 4 barite and 2 forsterite.	0.5-1.0 mm fraction: 1 barite 0.25-0.5 mm fraction: 4 barite 2 forsterite resembling barite 2 Mn-epidote 2 low-Cr diopside 12 spessartine
BWT-12-207	0	0	0	Tr	0	Tr Mn-epidote (18 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (14 gr)	0	Tr	Tr	0	0	0	5 (~300 gr)	Tr (Fo)	0	Tr (13 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 andradite versus spessartine candidates = 10 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 18 Mn-epidote 1 sapphire corundum 14 low-Cr diopside 30 representative andradite 13 chromite*
BWT-12-208	0	0	0.5 (~50 gr)	5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	0	Tr	0	0	0	Tr (4 gr)	3 (~300 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 andradite versus spessartine candidates = 10 andradite. Pyrite is mantled by goethite.	0.25-0.5 mm fraction: 1 Mn-epidote 6 low-Cr diopside 4 spessartine 30 representative andradite
BWT-12-209	Tr (2 gr)	0	0	Tr	0	Tr Mn-epidote (13 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (3 gr)	0	8	Tr	0	0	Tr (~50 gr)	Tr (2 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite 13 Mn-epidote 6 sapphire corundum 3 low-Cr diopside 20 representative spessartine 2 andradite 1 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-210	0	0	0.5 (~100 gr)	20	0	Tr Mn-epidote (9 gr)	0	Tr	Tr	0	0	Tr (~30 gr)	Tr (4 gr)	Tr (Fo)	0	0	0	0	Hematite-goethite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 4 andradite versus spessartine candidates = 4 andradite.	0.5-1.0 mm fraction: 2 Mn-epidote 0.25-0.5 mm fraction: 9 Mn-epidote 20 representative spessartine 4 andradite
BWT-12-211	0	0	0	5	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (3 gr)	0	Tr	0	0	0	0	5 (~300 gr)	Tr (Fo)	0	Tr (6 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 12 Mn-epidote 3 low-Cr diopside 20 representative andradite 6 chromite*
BWT-12-212	0	0	Tr (2 gr)	2	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (4 gr)	0	Tr	0	0	0	Tr (3 gr)	1 (~150 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 10 andradite versus spessartine candidates = 10 andradite.	0.25-0.5 mm fraction: 5 Mn-epidote 4 low-Cr diopside 3 spessartine 30 representative andradite 1 chromite*
BWT-12-213	0	0	0	8	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	0	Tr	Tr	0	0	0	1 (~100 gr)	Tr (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 5 low-Cr diopside 20 representative andradite 5 chromite*
BWT-12-214	0	0	0	Tr	0	Tr corundum (3 gr) Tr low-Cr diopside (11 gr)	0	Tr	0	0	0	Tr (11 gr)	Tr (~40 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 corundum versus diopside candidates = 3 corundum.	0.25-0.5 mm fraction: 3 corundum 11 low-Cr diopside 11 spessartine 20 representative andradite 3 chromite*
BWT-12-215	0	0	Tr (~25 gr)	1	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (~30 gr)	Tr (1 gr)	Tr	0	0	0	5 (~400 gr)	Tr (8 gr)	Tr (Fo)	0	Tr (~40 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 4 sapphire corundum 20 representative low-Cr diopside 1 red rutile 20 representative spessartine 8 andradite 20 representative chromite*
BWT-12-216	0	0	0	3	0	Tr Mn-epidote (10 gr)	0	Tr	0	0	0	Tr (3 gr)	Tr (~150 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM check from 0.5-1.0 mm fraction: 5 andradite versus spessartine candidates = 5 andradite.	0.25-0.5 mm fraction: 10 Mn-epidote 3 spessartine 25 representative andradite

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-217	0	0	0	Tr	0	Tr Mn-epidote (~60 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	Tr	0	0	0	0.5 (~40 gr)	0	Tr (Fo)	0	0	0	0	Augite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 10 Mn-epidote 0.25-0.5 mm fraction: 20 representative Mn-epidote 1 sapphire corundum 1 low-Cr diopside 20 representative spessartine
BWT-12-218	0	0	0	1	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	2	0	0	0	Tr (16 gr)	1 (~120 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 10 andradite versus spessartine candidates = 9 andradite and 1 spessartine.	0.25-0.5 mm fraction: 5 Mn-epidote 2 sapphire corundum 2 low-Cr diopside 16 spessartine 29 representative andradite
BWT-12-219	Tr (1 gr)	0	Tr (5 gr)	Tr	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (2 gr) Tr topaz (1 gr) Tr low-Cr diopside (2 gr)	0	Tr	0	0	0	Tr (~40 gr)	Tr (5 gr)	Tr (Fo)	0	Tr (7 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 topaz candidate = 1 topaz.	0.25-0.5 mm fraction: 1 chalcopyrite 1 Mn-epidote 2 sapphire corundum 1 topaz 2 low-Cr diopside 20 representative spessartine 5 andradite 7 chromite*
BWT-12-220	0	Tr barite (4 gr)	0	Tr	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (3 gr)	0	Tr	0	0	0	Tr (6 gr)	Tr (10 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 4 barite 6 Mn-epidote 3 low-Cr diopside 6 spessartine 10 andradite
BWT-12-221	0	0	Tr (2 gr)	2	0	Tr low-Cr diopside (~30 gr)	Tr (1 gr)	Tr	0	0	0	Tr (2 gr)	Tr (~100 gr)	1 (Fo)	0	Tr (~40 gr)	Tr	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 2 spessartine and 3 andradite.	0.5-1.0 mm fraction: 3 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative low-Cr diopside 1 red rutile 2 spessartine 23 representative andradite 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-222	0	0	0	Tr	0	Tr Mn-epidote (~150 gr) Tr sapphire corundum (3 gr) Tr topaz (17 gr) Tr low-Cr diopside (~60 gr)	0	2	Tr	0	0	Tr (~40 gr)	Tr (~30 gr)	Tr (Fo)	0	Tr (12 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 topaz versus leucosapphire corundum candidates = 5 topaz (3 lost in transfer to vial).	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 11 Mn-epidote 1 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 3 sapphire corundum 17 topaz 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 12 chromite*
BWT-12-243	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (1 gr)	0	Tr	0	0	0	Tr (14 gr)	Tr (~40 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 5 Mn-epidote 2 sapphire corundum 1 low-Cr diopside 14 spessartine 20 representative andradite 3 chromite*
BWT-12-248	0	0	0	1	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	Tr (17 gr)	Tr (~60 gr)	1 (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 6 Mn-epidote 1 low-Cr diopside 17 spessartine 20 representative andradite
BWT-12-249	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (6 gr)	Tr (1 gr)	5	Tr	0	0	Tr (10 gr)	15 (~2000 gr)	2 (Fo)	0	0	0	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 10 andradite.	0.25-0.5 mm fraction: 2 Mn-epidote 1 sapphire corundum 6 low-Cr diopside 1 red rutile 10 spessartine 20 representative andradite

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-251	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (4 gr)	0	Tr	Tr	0	0	Tr (11 gr)	10 (~200 gr)	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	1.0-2.0 mm fraction: 3 Mn-epidote 0.5-1.0 mm fraction: 6 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 5 sapphire corundum 4 low-Cr diopside 11 spessartine 20 representative andradite 6 chromite*
BWT-12-252	0	0	0	2	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (7 gr)	0	Tr	Tr	0	0	Tr (7 gr)	Tr (~60 gr)	1 (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 6 Mn-epidote 3 sapphire corundum 7 low-Cr diopside 7 spessartine 20 representative andradite 1 chromite*
BWT-12-264	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	5	0	0	0	0	Tr (~30 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 20 representative andradite 1 chromite*
BWT-12-265	0	0	0	Tr	0	Tr Mn-epidote (13 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (3 gr)	0	2	0	0	0	Tr (~40 gr)	Tr (7 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 13 Mn-epidote 3 sapphire corundum 3 low-Cr diopside 20 representative spessartine 7 andradite
BWT-12-266	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (14 gr)	0	5	Tr	0	0	Tr (~60 gr)	Tr (~40 gr)	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 spessartine versus andradite candidates = 6 spessartine and 1 andradite.	0.5-1.0 mm fraction: 2 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 14 low-Cr diopside 26 representative spessartine 21 representative andradite 6 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-272	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (14 gr)	Tr (2 gr)	2	Tr	0	0	5 (~1200 gr)	Tr (~50 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 8 spessartine, 1 andradite and 1 Mn-epidote.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 1 sapphire corundum 14 low-Cr diopside 2 red rutile 28 representative spessartine 21 representative andradite 1 chromite*
BWT-12-273	0	0	0	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (18 gr) Tr topaz (25 gr) Tr low-Cr diopside (17 gr)	Tr (4 gr)	2	Tr	0	0	2 (~400 gr)	3 (~600 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 2 sapphire corundum 1 topaz 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 18 sapphire corundum 25 topaz 17 low-Cr diopside 4 red rutile 20 representative spessartine 20 representative andradite 3 chromite*
BWT-12-274	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	0	0	Tr (~40 gr)	45 (~8000 gr)	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 10 andradite.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 2 low-Cr diopside 20 representative spessartine 30 representative andradite 2 chromite*
BWT-12-275	0	0	0	Tr	0	Tr Mn-epidote (20 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	Tr (2 gr)	12 (~4000 gr)	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 0.25-0.5 mm fraction: 20 Mn-epidote 3 low-Cr diopside 2 spessartine 20 representative andradite 3 chromite*
BWT-12-301	0	0	0	0	5 green gahnite	Tr low-Cr diopside (5 gr)	0	5	2	Tr	0	Tr (~40 gr)	0	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 gahnite 5 low-Cr diopside 20 representative spessartine 10 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-302	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (26 gr)	0	12	2	0	0	Tr (~50 gr)	Tr (2 gr)	60 (Fo)	0	Tr (6 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 3 sapphire corundum 26 low-Cr diopside 20 representative spessartine 2 andradite 6 chromite*
BWT-12-303	0	0	0	0	1 green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (4 gr)	0	4	1	0	0	Tr (16 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 gahnite 1 sapphire corundum 4 low-Cr diopside 16 spessartine 2 chromite*
BWT-12-304	0	0	0	2	10 green, blue-green gahnite	Tr sapphire corundum (6 gr) Tr low-Cr diopside (1 gr)	Tr (2 gr)	25	2	0	0	25 (~8000 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite-spessartine/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus spinel candidates = 4 gahnite and 1 diopside; and 10 spessartine versus andradite candidates = 10 spessartine.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 10 gahnite 1 diopside resembling gahnite 6 sapphire corundum 1 low-Cr diopside 2 red rutile 30 representative spessartine 4 chromite*
BWT-12-305	0	0	0	2	1 green gahnite	Tr low-Cr diopside (1 gr)	0	20	5	0	0	40 (~4000 gr)	0	5 (Fo)	0	Tr (3 gr)	0	0	Spessartine-hematite/epidote-titanite assemblage. Sole gahnite lost in transfer to vial.	0.5-1.0 mm fraction: 1 sapphire corundum 0.25-0.5 mm fraction: 1 gahnite 1 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-306	0	0	0	2	15 green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	1	0	0	0	75 (50,000 gr)	0	10 (Fo)	0	Tr (3 gr)	Tr	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 spessartine versus andradite candidates = 6 spessartine.	0.25-0.5 mm fraction: 15 gahnite 1 sapphire corundum 5 low-Cr diopside 26 representative spessartine 3 chromite*
BWT-12-307	0	0	0.5 (~40 gr)	5	19 (0.2%) green gahnite	Tr low-Cr diopside (5 gr)	Tr (1 gr)	60	50	0	0	90 (~40,000 gr)	0	10 (Fo)	0	0	0	0	Spessartine/titanite-epidote assemblage.	0.25-0.5 mm fraction: 19 gahnite 5 low-Cr diopside 1 red rutile 20 representative spessartine
BWT-12-308	0	0	Tr (1 gr)	3	21 (0.4%) green gahnite	Tr low-Cr diopside (2 gr)	0	1	Tr	0	0	90 (~60,000 gr)	0	1 (Fo)	0	Tr (2 gr)	0	0	Spessartine/epidote assemblage.	0.25-0.5 mm fraction: 21 gahnite 2 low-Cr diopside 20 representative spessartine 2 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-309	0	0	0	90	0	0	0	0	0	0	0	0	1 (1 gr)	0	0	0	0	0	Goethite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 andradite
BWT-12-310	0	0	Tr (1 gr)	Tr	9 blue-green, green gahnite	Tr low-Cr diopside (2 gr)	0	30	5	0	0	60 (~12,000 gr)	0	10 (Fo)	0	Tr (3 gr)	0	0	Spessartine-hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus spinel candidates = 5 gahnite; and 6 spessartine versus andradite candidates = 6 spessartine.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 9 gahnite 2 low-Cr diopside 26 representative spessartine 3 chromite*
BWT-12-311	0	0	0	Tr	0	Tr Mn-epidote (11 gr) Tr low-Cr diopside (12 gr)	0	10	Tr	0	0	4 (~400 gr)	0	15 (Fo)	0	Tr (1 gr)	Tr	0	Hematite-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 11 Mn-epidote 12 low-Cr diopside 40 representative spessartine 1 chromite*
BWT-12-312	0	0	0	Tr	8 blue-green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (3 gr)	0	10	Tr	0	0	3 (~300 gr)	0	20 (Fo)	0	Tr (12 gr)	Tr	0	Hematite-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 8 gahnite 2 Mn-epidote 3 low-Cr diopside 20 representative spessartine 12 chromite*
BWT-12-313	0	0.3% undifferentiated anglesite/ plumbogummite (~40 gr)	0	3	~120 (0.8%) green gahnite	0	Tr (3 gr)	1	Tr	0	0	95 (~300,000 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Spessartine/epidote assemblage.	0.5-1.0 mm fraction: 6 undifferentiated anglesite/ plumbogummite 9 green gahnite 1 chromite* 0.25-0.5 mm fraction: 20 representative undifferentiated anglesite/ plumbogummite 60 representative gahnite 3 red rutile 20 representative spessartine 1 chromite*
BWT-12-314	0	Tr anglesite (2 gr) 0.2% plumbo-gummite (8 gr) 0.4% undifferentiated anglesite/ plumbogummite (21 gr)	2 (~100 gr)	15	~200 (4%) blue-green, green gahnite	Tr low-Cr diopside (3 gr)	Tr (3 gr)	30	Tr	0	0	80 (~100,000 gr)	0	5 (Fo)	0	0	Tr	0	Spessartine-goethite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 10 earthy plumbogummite candidates = 8 plumbogummite and 2 anglesite.	0.5-1.0 mm fraction: 5 green gahnite 1 low-Cr diopside 0.25-0.5 mm fraction: 2 anglesite 8 plumbogummite 21 undifferentiated anglesite/ plumbogummite 20 representative gahnite 3 low-Cr diopside 3 red rutile 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-315	0	0	0	2	9 blue-green gahnite	Tr low-Cr diopside (4 gr)	0	Tr	0	0	0	80 (~16,000 gr)	0	20 (Fo)	0	Tr (3 gr)	0	0	Spessartine-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 9 gahnite 4 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-316	0	0	0	1	5 green gahnite	Tr Mn-epidote (5 gr) Tr sapphire corundum (7 gr) Tr low-Cr diopside (7 gr)	0	Tr	0	0	0	60 (~8000 gr)	0	20 (Fo)	0	Tr (8 gr)	Tr	0	Spessartine-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 5 gahnite 5 Mn-epidote 7 sapphire corundum 7 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-317	0	0	Tr (2 gr)	Tr	1 green gahnite	Tr low-Cr diopside (1 gr)	0	5	Tr	0	0	10 (~350 gr)	0	10 (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 gahnite 1 low-Cr diopside 20 representative spessartine
BWT-12-318	0	0	0	40	~40 (1%) green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	Tr (2 gr)	40	30	0	0	15 (~500 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Hematite-goethite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 20 representative gahnite 1 Mn-epidote 2 low-Cr diopside 2 red rutile 20 representative spessartine 2 chromite*
BWT-12-319	0	0	0	Tr	~80 (~0.5%) green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (19 gr)	0	Tr	0	0	0	40 (~6000 gr)	0	40 (Fo)	0	Tr (10 gr)	0	0	Forsterite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 2 Mn-epidote 19 low-Cr diopside 20 representative spessartine 10 chromite*
BWT-12-320	0	0	0	Tr	~120 (1.5%) green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	Tr (4 gr)	60	40	0	0	35 (~10,000 gr)	0	Tr (Fo)	0	0	0	0	Hematite-spessartine/titanite-epidote assemblage.	0.25-0.5 mm fraction: 20 representative gahnite 1 sapphire corundum 5 low-Cr diopside 4 red rutile 20 representative spessartine
BWT-12-321	0	0	Tr (3 gr)	8	7 blue-green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (7 gr)	0	40	5	0	0	2 (~120 gr)	0	6 (Fo)	0	Tr (5 gr)	Tr	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 4 andradite versus spessartine candidates = 4 spessartine.	0.25-0.5 mm fraction: 7 gahnite 1 Mn-epidote 7 low-Cr diopside 24 representative spessartine 5 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-322	0	Tr plumbogummite (14 gr)	Tr (1 gr)	2	~50 (0.5%) green gahnite	Tr low-Cr diopside (3 gr)	Tr (1 gr)	2	Tr	0	0	95 (~250,000 gr)	0	Tr (Fo)	0	0	0	0	Spessartine/epidote assemblage.	0.25-0.5 mm fraction: 14 plumbogummite 30 representative gahnite 3 low-Cr diopside 1 red rutile 20 representative spessartine
BWT-12-323	0	Tr plumbogummite (2 gr)	Tr (5 gr)	10	~50 (0.6%) blue-green, dark green gahnite	Tr Mn-epidote (6 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (18 gr)	Tr (4 gr)	20	Tr	0	0	80 (~25,000 gr)	0	2 (Fo)	0	0	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 earthy plumbogummite candidates = 2 plumbogummite.	0.25-0.5 mm fraction: 2 plumbogummite 20 representative gahnite 6 Mn-epidote 1 sapphire corundum 18 low-Cr diopside 4 red rutile 20 representative spessartine
BWT-12-324	0	Tr plumbogummite (6 gr) Tr plumbojarosite (1 gr)	0	Tr	~500 (5%) blue-green, green gahnite	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	Tr (7 gr)	1	Tr	0	0	80 (~100,000 gr)	0	3 (Fo)	0	0	0	0	Spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 secondary Pb mineral candidates = 1 plumbogummite, 1 plumbojarosite, 1 bismutite (BiO)2CO3) and 2 jarosite. SEM checks from 0.25-0.5 mm fraction: 16 secondary Pb mineral candidates = 6 plumbogummite, 1 plumbojarosite and 9 jarosite.	0.5-1.0 mm fraction: 1 plumbogummite 2 jarosite resembling plumbogummite 1 plumbojarosite 1 bismutite 10 green gahnite 0.25-0.5 mm fraction: 6 plumbogummite 9 jarosite resembling plumbogummite 1 plumbojarosite 20 representative gahnite 2 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 7 red rutile 20 representative spessartine
BWT-12-325	0	0	0	Tr	6 green gahnite	Tr low-Cr diopside (7 gr)	Tr (1 gr)	2	Tr	0	0	Tr (~40 gr)	0	70 (Fo)	0	Tr (16 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.25-0.5 mm fraction: 6 gahnite 7 low-Cr diopside 1 red rutile 20 representative spessartine 16 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-326	0	0	0	20	~50 (0.1%) green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~30 gr)	Tr (11 gr)	5	Tr	0	0	50 (~12,000 gr)	0	20 (Fo)	0	Tr (~40 gr)	0	0	Spessartine-forsterite-goethite/epidote assemblage.	0.5-1.0 mm fraction: 5 green gahnite 2 low-Cr diopside 7 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 3 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 11 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-327	0	0	0	5	10 blue-green; green gahnite	Tr Mn-epidote (5 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (21 gr)	0	40	5	0	0	Tr (~60 gr)	0	10 (Fo)	0	0	Tr	0	Hematite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 10 gahnite 5 Mn-epidote 4 sapphire corundum 21 low-Cr diopside 20 representative spessartine
BWT-12-328	0	0	0	Tr	5 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (11 gr)	Tr (1 gr)	5	Tr	Tr	0	Tr (~40 gr)	0	30 (Fo)	0	Tr (7 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 5 gahnite 1 Mn-epidote 11 low-Cr diopside 1 red rutile 20 representative spessartine 7 chromite*
BWT-12-374	0	0	0	5	10 pale blue, green, blue gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (1 gr)	Tr (1 gr)	30	5	Tr	0	80 (~30,000 gr)	0	3 (Fo)	0	Tr (4 gr)	0	0	Spessartine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 10 gahnite 1 Mn-epidote 1 low-Cr diopside 1 red rutile 20 representative spessartine 4 chromite*
BWT-12-330	0	0	0	1	~30 (0.3%) green gahnite	Tr Mn-epidote (5 gr) Tr low-Cr diopside (5 gr)	0	15	5	0	0	10 (~1200 gr)	0	15 (Fo)	0	0	0	0	Hematite-forsterite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 20 representative gahnite 5 Mn-epidote 5 low-Cr diopside 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-332	0	0	0	5	1 green gahnite	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~30 gr)	0	15	Tr	0	0	1 (~80 gr)	Tr (3 gr)	5 (Fo)	0	Tr (~30 gr)	0	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 9 spessartine versus andradite candidates = 6 spessartine and 3 andradite.	0.5-1.0 mm fraction: 2 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 1 gahnite 10 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 26 representative spessartine 3 andradite 20 representative chromite*
BWT-12-333	0	Tr secondary AgSi mineral (1 gr)	0	5	~50 (0.2%) blue-green; green gahnite	Tr Mn-epidote (10 gr) Tr sapphire corundum (2 gr) Tr topaz (1 gr) Tr low-Cr diopside (~60 gr)	Tr (2 gr)	10	Tr	0	0	10 (~12,000 gr)	0	15 (Fo)	0	Tr (5 gr)	Tr	0	Hematite-forsterite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 pale green secondary mineral = 1 unidentified AgSi mineral.	1.0-2.0 mm fraction: 3 chromite* 0.5-1.0 mm fraction: 7 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 1 AgSi mineral 20 representative gahnite 10 Mn-epidote 2 sapphire corundum 1 topaz 20 representative low-Cr diopside 2 red rutile 20 representative spessartine 5 chromite*
BWT-12-334	0	0	0	5	8 green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (~30 gr)	Tr (1 gr)	15	Tr	0	0	20 (~200 gr)	0	10 (Fo)	0	Tr (~40 gr)	0	0	Hematite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 8 gahnite 1 sapphire corundum 20 representative low-Cr diopside 1 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-335	0	0	0	5	10 green gahnite	Tr Mn-epidote (7 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (12 gr)	0	20	Tr	0	0	30 (~400 gr)	Tr (4 gr)	15 (Fo)	0	Tr (10 gr)	0	0	Hematite-spessartine-forsterite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 6 spessartine and 4 andradite.	0.5-1.0 mm fraction: 3 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 10 gahnite 7 Mn-epidote 2 sapphire corundum 12 low-Cr diopside 26 representative spessartine 4 andradite 10 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-298	0	0	0	0	2 green gahnite	Tr Mn-epidote (4 gr) Tr low-Cr diopside (9 gr)	0	Tr	Tr	0	0	Tr (13 gr)	0	90 (Fo)	0	0	0	0	Forsterite/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 4 Mn-epidote 9 low-Cr diopside 13 spessartine
BWT-12-299	0	0	0	0	1 green gahnite	Tr low-Cr diopside (12 gr)	0	1	Tr	0	0	Tr (15 gr)	0	5 (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 gahnite 12 low-Cr diopside 15 spessartine 8 chromite*
BWT-12-300	0	0	0	1	4 green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (29 gr)	Tr (3 gr)	10	2	0	0	0.5 (~120 gr)	0	60 (Fo)	0	Tr (7 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 4 gahnite 4 Mn-epidote 2 sapphire corundum 29 low-Cr diopside 3 red rutile 20 representative spessartine 7 chromite*
BWT-12-329	0	0	Tr (2 gr)	2	3 green gahnite	Tr low-Cr diopside (18 gr)	Tr (4 gr)	Tr	Tr	0	0	50 (~8000 gr)	0	30 (Fo)	0	Tr (8 gr)	0	0	Spessartine-forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 3 gahnite 18 low-Cr diopside 4 red rutile 20 representative spessartine 8 chromite*
BWT-12-331	0	0	0	1	9 green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (9 gr)	Tr (10 gr)	15	10	0	0	60 (~10,000 gr)	0	15 (Fo)	0	0	0	0	Spessartine-hematite-forsterite/epidote-titanite assemblage.	0.25-0.5 mm fraction: 9 gahnite 2 Mn-epidote 9 low-Cr diopside 10 red rutile 20 representative spessartine
BWT-12-336	0	0	0	1	7 green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (19 gr)	Tr (2 gr)	10	5	0	0	30 (~6000 gr)	0	40 (Fo)	0	Tr (12 gr)	0	0	Forsterite-spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 7 gahnite 2 Mn-epidote 19 low-Cr diopside 2 red rutile 20 representative spessartine 12 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-337	0	Tr plumbogummite (2 gr)	0	Tr	69 (1%) green gahnite	Tr low-Cr diopside (3 gr)	Tr (4 gr)	1	Tr	0	0	95 (~100,000 gr)	0	Tr (Fo)	0	0	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 earthy plumbogummite candidates = 2 plumbogummite and 2 jarosite.	0.25-0.5 mm fraction: 2 plumbogummite 2 jarosite resembling plumbogummite 69 gahnite 3 low-Cr diopside 4 red rutile 20 representative spessartine
BWT-12-338	0	0	20 (~800 gr)	Tr	11 (0.3%) green gahnite	Tr low-Cr diopside (7 gr)	0	15	10	0	0	90 (~25,000 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Spessartine/epidote-pyrite-titanite assemblage.	0.25-0.5 mm fraction: 11 gahnite 7 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-339	0	0	0	25	6 green gahnite	Tr sapphire corundum (7 gr) Tr low-Cr diopside (7 gr)	Tr (22 gr)	2	Tr	0	0	15 (~2000 gr)	0	10 (Fo)	Tr	Tr (5 gr)	0	0	Hematite-goethite-spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 andradite versus spessartine candidates = 5 spessartine.	0.5-1.0 mm fraction: 1 low-Cr diopside 2 red rutile 0.25-0.5 mm fraction: 6 gahnite 7 sapphire corundum 6 low-Cr diopside 22 red rutile 25 representative spessartine 5 chromite*
BWT-12-340	0	0	0	10	2 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (9 gr)	Tr (6 gr)	1	Tr	0	0	5 (~500 gr)	0	40 (Fo)	0	Tr (10 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 gahnite 1 Mn-epidote 9 low-Cr diopside 6 red rutile 20 representative spessartine 10 chromite*
BWT-12-341	0	Tr undifferentiated anglesite/ plumbogummite (1 gr)	3 (~100 gr)	50	14 (0.5%) blue-green, green gahnite	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (11 gr)	Tr (6 gr)	3	Tr	0	0	15 (~500 gr)	0	25 (Fo)	0	0	0	0	Goethite-forsterite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 undifferentiated anglesite/ plumbogummite 14 gahnite 5 Mn-epidote 1 sapphire corundum 11 low-Cr diopside 6 red rutile 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-342	0	0	0	3	~60 (0.3%) green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (22 gr)	Tr (2 gr)	2	Tr	0	0	50 (~25,000 gr)	0	25 (Fo)	0	Tr (10 gr)	0	0	Spessartine-forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 30 representative gahnite 1 Mn-epidote 22 low-Cr diopside 2 red rutile 20 representative spessartine 10 chromite*
BWT-12-349	0	Tr plumbogummite (6 gr)	0	8	45 (0.6%) blue-green, green gahnite	Tr low-Cr diopside (6 gr)	0	Tr	0	0	0	85 (~80,000 gr)	0	2 (Fo)	0	Tr (4 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 7 plumbogummite versus goethite candidates = 6 plumbogummite and 1 goethite; and 5 spessartine versus andradite candidates = 5 spessartine.	0.5-1.0 mm fraction: 2 gahnite 1 low-Cr diopside 0.25-0.5 mm fraction: 6 plumbogummite 1 goethite resembling plumbogummite 45 gahnite 6 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-350	0	Tr bismutite (1 gr)	0	10	7 blue-green, green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	0	5	Tr	0	0	80 (~4000 gr)	0	5 (Fo)	0	0	0	0	Spessartine/epidote assemblage. SEM check from 0.25-0.5 mm fraction 1 grey-beige secondary mineral = 1 bismutite.	0.25-0.5 mm fraction: 1 bismutite 7 gahnite 4 Mn-epidote 1 sapphire corundum 8 low-Cr diopside 20 representative spessartine
BWT-12-351	0	0	0	Tr	0	Tr low-Cr diopside (2 gr)	0	4	Tr	0	0	60 (~600 gr)	0	25 (Fo)	0	0	0	0	Spessartine-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 2 low-Cr diopside 20 representative spessartine
BWT-12-352	0	0	0	5	2 blue-green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (4 gr)	0	Tr	Tr	0	0	10 (~500 gr)	0	10 (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 3 Mn-epidote 3 sapphire corundum 4 low-Cr diopside 20 representative spessartine
BWT-12-353	0	0	0	5	3 blue-green gahnite	Tr low-Cr diopside (3 gr)	0	30	10	0	0	10 (~500 gr)	0	25 (Fo)	0	0	0	0	Hematite-spessartine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 3 gahnite 3 low-Cr diopside 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-356	0	0	0	3	~40 (0.5%) green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (16 gr)	Tr (1 gr)	35	Tr	0	0	70 (~20,000 gr)	0	20 (Fo)	0	Tr (4 gr)	0	0	Spessartine-forsterite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 6 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 1 sapphire corundum 16 low-Cr diopside 1 red rutile 20 representative spessartine 4 chromite*
BWT-12-357	0	0	0	5	~60 (2%) green gahnite	0	0	1	Tr	0	0	90 (~40,000 gr)	0	2 (Fo)	0	0	0	0	Spessartine/epidote assemblage.	0.25-0.5 mm fraction: 30 representative gahnite 20 representative spessartine
BWT-12-358	0	0	1 (~50 gr)	10	26 green, blue-green gahnite	Tr low-Cr diopside (4 gr)	Tr (1 gr)	10	2	0	0	90 (~40,000 gr)	0	Tr (Fo)	0	Tr (2 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 1 plumbogummite versus goethite candidate = 1 plumbogummite; and 1 green gahnite candidate = 1 gahnite.	0.5-1.0 mm fraction : 1 plumbogummite 1 gahnite 0.25-0.5 mm fraction: 26 gahnite 4 low-Cr diopside 1 red rutile 20 representative spessartine 2 chromite*
BWT-12-359	0	0	0	5	4 blue-green gahnite	Tr Mn-epidote (9 gr) Tr sapphire corundum (11 gr) Tr topaz (2 gr) Tr low-Cr diopside (~30 gr)	0	2	Tr	0	0	2 (~150 gr)	0	50 (Fo)	0	0	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 2 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 9 Mn-epidote 11 sapphire corundum 2 topaz 20 representative low-Cr diopside 20 representative spessartine
BWT-12-360	0	0	0	Tr	2 blue-green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (9 gr)	0	2	Tr	0	0	Tr (~50 gr)	0	25 (Fo)	0	Tr (15 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 2 chromite* 0.25-0.5 mm fraction: 2 gahnite 2 Mn-epidote 9 low-Cr diopside 20 representative spessartine 15 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-361	0	0	0	Tr	4 green gahnite	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (27 gr)	0	1	Tr	0	0	0.5 (~60 gr)	0	15 (Fo)	0	Tr (12 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 10 Mn-epidote 1 sapphire corundum 27 low-Cr diopside 20 representative spessartine 12 chromite*
BWT-12-362	0	0	0	Tr	1 green gahnite	Tr Mn-epidote (6 gr) Tr topaz (5 gr) Tr low-Cr diopside (~30 gr)	0	1	Tr	0	0	2 (~150 gr)	0	30 (Fo)	0	Tr (~60 gr)	0	0	Hematite-forsterite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 pale blue sapphire corundum candidates = 5 topaz.	0.5-1.0 mm fraction: 3 low-Cr diopside 7 chromite* 0.25-0.5 mm fraction: 1 gahnite 6 Mn-epidote 5 topaz 10 representative low-Cr diopside 20 representative spessartine 10 representative chromite*
BWT-12-363	0	0	0	2	~60 (0.4%) green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	Tr (6 gr)	5	Tr	0	0	70 (~15,000 gr)	0	5 (Fo)	0	Tr (~40 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 40 representative gahnite 1 sapphire corundum 8 low-Cr diopside 6 red rutile 20 representative spessartine 30 representative chromite*
BWT-12-364	0	0	0	2	~50 (0.3%) blue-green; green gahnite	Tr Mn-epidote (4 gr) Tr low-Cr diopside (15 gr)	Tr (4 gr)	8	1	0	0	80 (~40,000 gr)	Tr (4 gr)	5 (Fo)	0	Tr (~30 gr)	0	0	Spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 30 representative gahnite 4 Mn-epidote 15 low-Cr diopside 4 red rutile 20 representative spessartine 4 andradite 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-369	0	Tr plumbogummite (2 gr)	0	5	53 (0.5%) blue green, green gahnite	Tr low-Cr diopside (9 gr)	Tr (4 gr)	2	Tr	0	0	80 (~30,000 gr)	0	5 (Fo)	0	Tr (7 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 plumbogummite candidates = 2 plumbogummite and 2 goethite.	0.5-1.0 mm fraction: 2 green gahnite 0.25-0.5 mm fraction: 2 plumbogummite 2 goethite resembling plumbogummite 53 gahnite 9 low-Cr diopside 4 red rutile 20 representative spessartine 7 chromite*
BWT-12-370	0	0	0	2	2 blue-green gahnite	Tr Mn-epidote (5 gr) Tr sapphire corundum (3 gr) Tr topaz (1 gr) Tr low-Cr diopside (12 gr)	Tr (8 gr)	1	Tr	0	0	20 (~2000 gr)	0	5 (Fo)	0	Tr (3 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 2 gahnite 5 Mn-epidote 3 sapphire corundum 1 topaz 12 low-Cr diopside 8 red rutile 20 representative spessartine 3 chromite*
BWT-12-371	0	0	Tr (2 gr)	2	1 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (17 gr)	Tr (20 gr)	3	1	0	0	40 (~12,000 gr)	0	Tr (Fo)	0	Tr (~40 gr)	0	0	Hematite-spessartine/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus diopside candidate = 1 gahnite.	0.5-1.0 mm fraction: 2 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 1 gahnite 1 Mn-epidote 17 low-Cr diopside 20 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-376	0	0	0	2	400 (~10%) green, blue-grey gahnite	Tr sapphire corundum (2 gr) Tr low-Cr diopside (3 gr)	0	Tr	0	0	0	90 (~50,000 gr)	0	Tr (Fo)	0	0	Tr	0	Spessartine/epidote assemblage.	0.5-1.0 mm fraction: 3 gahnite 0.25-0.5 mm fraction: 30 representative gahnite 2 sapphire corundum 3 low-Cr diopside 20 representative spessartine
BWT-12-381	0	0	0	5	4 blue-green gahnite	Tr sapphire corundum (2 gr) Tr low-Cr diopside (6 gr)	0	80	80	0	0	20 (~2000 gr)	0	5 (Fo)	0	Tr (5 gr)	0	0	Hematite-spessartine/titanite-epidote assemblage.	0.25-0.5 mm fraction: 4 gahnite 2 sapphire corundum 6 low-Cr diopside 20 representative spessartine 5 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-389	0	0	0	5	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (9 gr)	0	2	Tr	0	0	10 (~600 gr)	0	1 (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 9 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-391	0	0	0	Tr	0	0	0	40	20	0	0	0	0	3 (Fo)	0	0	0	0	Almandine/epidote-titanite assemblage.	
BWT-12-392	0	0	0	5	6 blue-green, green gahnite	Tr Mn-epidote (7 gr) Tr sapphire corundum (2 gr) Tr topaz (3 gr) Tr low-Cr diopside (18 gr)	0	60	25	0	0	5 (~2500 gr)	0	Tr (Fo)	0	0	0	0	Hematite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 6 gahnite 7 Mn-epidote 2 sapphire corundum 3 topaz 18 low-Cr diopside 20 representative spessartine
BWT-12-393	0	0	0	0	~10,000 (60%) green gahnite	0	0	8	Tr	0	0	99 (~30,000 gr)	0	0	0	0	0	0	Spessartine/gahnite-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 20 green gahnite candidates = 20 gahnite; and 10 spessartine candidates = 10 spessartine. 0.5-1.0 mm fraction contains 5% (~150 grains) green gahnite ± spessartine + quartz.	1.0-2.0 mm fraction: 6 gahnite + quartz ± spessartine 0.5-1.0 mm fraction: 20 representative gahnite + quartz ± spessartine 0.25-0.5 mm fraction: 40 representative gahnite + quartz 30 representative spessartine + quartz
BWT-12-343	0	0	0	Tr	~50 (%) dark blue, green, blue-green gahnite	Tr Mn-epidote (4 gr) Tr low-Cr diopside (~60 gr)	Tr (11 gr)	2	Tr	0	0	Tr (~100 gr)	0	2 (Fo)	0	Tr (~50 gr)	0	0	Hematite-almandine/epidote assemblage.	0.5-1.0 mm fraction: 6 low-Cr diopside 11 chromite* 0.25-0.5 mm fraction: 25 representative gahnite 4 Mn-epidote 20 representative low-Cr diopside 11 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-344	0	0	0	10	20 dark green, blue-green gahnite	Tr Mn-epidote (7 gr) Tr sapphire corundum (5 gr) Tr topaz (3 gr) Tr low-Cr diopside (~30 gr)	Tr (15 gr)	2	Tr	0	0	5 (~500 gr)	0	20 (Fo)	0	Tr (8 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 4 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 20 gahnite 7 Mn-epidote 5 sapphire corundum 3 topaz 20 low-Cr diopside 15 red rutile 20 representative spessartine 8 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-345	0	0	0.2 (~50 gr)	30	14 green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	Tr (10 gr)	Tr	Tr	0	0	15 (~3000 gr)	0	Tr (Fo)	0	Tr (~30 gr)	0	0	Hematite-goethite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 green gahnite 1 sapphire corundum 2 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 14 gahnite 4 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 10 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-346	0	Tr hedleyite (1 gr)	Tr (3 gr)	70	~30 (2%) green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (22 gr)	Tr (16 gr)	Tr	Tr	Tr	0	5 (~1500 gr)	0	5 (Fo)	0	Tr (10 gr)	0	0	Goethite-hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 silver-coloured arsenopryite versus pyrite candidate = 1 hedleyite (Bi7Te3).	0.5-1.0 mm fraction: 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 1 hedleyite 20 representative gahnite 3 Mn-epidote 3 sapphire corundum 22 low-Cr diopside 16 red rutile 20 representative spessartine 10 chromite*
BWT-12-347	0	0	0	20	1 green gahnite	Tr Mn-epidote (5 gr) Tr low-Cr diopside (15 gr)	Tr (26 gr)	5	2	0	0	20 (~2000 gr)	0	15 (Fo)	0	Tr (13 gr)	0	0	Hematite-spessartine-goethite-forsterite/ epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 1 gahnite 5 Mn-epidote 15 low-Cr diopside 26 red rutile 20 representative spessartine 13 chromite*
BWT-12-348	0.2 (2 gr)	0	0	Tr	2 (0.2%) green gahnite	0	1 (10 gr)	0.5	Tr	0	0	99 (~150,000 gr)	0	Tr (Fo)	0	0	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus almandine candidates = 5 spessartine.	0.25-0.5 mm fraction: 2 chalcopyrite 2 gahnite 10 red rutile 25 representative spessartine
BWT-12-354	0	0	0	60	0	Tr low-Cr diopside (2 gr)	Tr (1 gr)	Tr	Tr	0	0	20 (~1000 gr)	0	5 (Fo)	0	Tr (2 gr)	0	0	Goethite-spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 2 low-Cr diopside 1 red rutile 20 representative spessartine 2 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-355	0	0	Tr (7 gr)	5	7 dark green, blue-green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (4 gr)	Tr (8 gr)	2	Tr	0	0	2 (~150 gr)	0	15 (Fo)	0	0	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 gahnite 1 Mn-epidote 1 sapphire corundum 4 low-Cr diopside 8 red rutile 20 representative spessartine
BWT-12-365	Tr (1 gr)	0	Tr (1 gr)	40	0	0	0	Tr	Tr	0	0	Tr (21 gr)	0	Tr (Fo)	0	0	0	0	Hematite-goethite/epidote assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 21 spessartine
BWT-12-366	0	0	1 (~30 gr)	40	2 dark green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (2 gr)	Tr (7 gr)	Tr	0	0	0	8 (~600 gr)	0	10 (Fo)	0	0	Tr	0	Goethite-hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 3 Mn-epidote 3 sapphire corundum 2 low-Cr diopside 7 red rutile 20 representative spessartine
BWT-12-367	0	0	0	20	3 green gahnite	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	Tr	0	0	30 (~3500 gr)	0	0	0	Tr (3 gr)	0	0	Hematite-spessartine-goethite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 3 gahnite 1 low-Cr diopside 1 red rutile 20 representative spessartine 3 chromite*
BWT-12-368	0	0	Tr (2 gr)	2	18 (1%) green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	0	70 (~25,000 gr)	0	2 (Fo)	0	Tr (2 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 10 spessartine.	0.25-0.5 mm fraction: 18 gahnite 1 Mn-epidote 1 low-Cr diopside 30 representative spessartine 2 chromite*
BWT-12-372	0	0	0	Tr	2 blue-green gahnite	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	50	40	0	0	40 (~5000 gr)	0	5 (Fo)	0	Tr (6 gr)	0	0	Spessartine-hematite/titanite-apatite assemblage.	0.5-1.0 mm fraction: 2 chromite* 0.25-0.5 mm fraction: 2 gahnite 2 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-373	0	0	0	Tr	27 dark green, blue-green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (6 gr)	0	2	Tr	0	0	80 (~40,000 gr)	0	Tr (Fo)	0	0	0	0	Spessartine-hematite/diopside assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 27 gahnite 1 sapphire corundum 6 low-Cr diopside 20 representative spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-375	0	Tr plumbogummite (1 gr)	0	1	13 (0.5%) green gahnite	Tr low-Cr diopside (3 gr)	0	Tr	Tr	0	0	95 (~60,000 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 plumbogummite versus goethite candidates = 1 plumbogummite and 4 goethite.	0.25-0.5 mm fraction: 1 plumbogummite 4 goethite resembling plumbogummite 13 gahnite 3 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-377	0	0	Tr (5 gr)	Tr	~60 (1%) green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	0	2	2	0	0	95 (~60,000 gr)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 20 representative gahnite 1 Mn-epidote 6 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-378	0	0	Tr (2 gr)	3	7 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (8 gr)	0	2	Tr	0	0	40 (~10,000 gr)	0	3 (Fo)	0	Tr (10 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 7 gahnite 1 Mn-epidote 8 low-Cr diopside 20 representative spessartine 10 chromite*
BWT-12-379	0	0	Tr (5 gr)	2	1 green gahnite	Tr Mn-epidote (3 gr) Tr low-Cr diopside (5 gr)	0	2	Tr	0	0	60 (~10,000 gr)	0	3 (Fo)	0	Tr (5 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 gahnite 3 Mn-epidote 5 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-380	0	0	0	10	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	40 (~1200 gr)	0	5 (Fo)	0	0	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 3 low-Cr diopside 20 representative spessartine
BWT-12-382	0	0	0	Tr	~40 (0.8%) green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (21 gr)	0	70	60	0	0	20 (~1500 gr)	0	30 (Fo)	0	Tr (~30 gr)	0	0	Hematite-forsterite-spessartine/titanite-epidote assemblage.	0.5-1.0 mm fraction: 3 green gahnite 2 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 2 Mn-epidote 21 low-Cr diopside 20 representative spessartine 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-383	0	0	0	0	0	90% romanechite (~9000 gr)	0	5	0	0	0	95 (~150 gr)	0	0	0	0	0	0	Spessartine/romanechite assemblage. SEM checks from 0.25-0.5 mm fraction: 5 earthy black Mn-oxide candidates = 5 romanechite {(Ba,H2O)2Mn5O10}; and 10 spessartine versus andradite candidates = 10 spessartine. 1.0-2.0 mm and 0.5-1.0 mm fractions contain 90% (~30 grains and 99% (~800 grains) romanechite, respectively.	1.0-2.0 mm fraction: 30 romanechite 0.5-1.0 mm fraction: 20 representative romanechite 0.25-0.5 mm fraction: 25 representative romanechite 30 representative spessartine
BWT-12-384	0	0	Tr (1 gr)	10	1 dark green gahnite	Tr low-Cr diopside (2 gr)	0	15	5	0	0	20 (~1000 gr)	0	5 (Fo)	0	Tr (6 gr)	Tr	0	Hematite-spessartine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 1 gahnite 2 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-385	0	0	0	2	19 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (15 gr)	0	10	3	0	0	30 (~3000 gr)	0	5 (Fo)	0	Tr (9 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 19 gahnite 1 Mn-epidote 15 low-Cr diopside 20 representative spessartine 9 chromite*
BWT-12-386	0	0	Tr (3 gr)	5	0	Tr sapphirine (1 gr) Tr Mn-epidote (3 gr) Tr low-Cr diopside (13 gr)	0	10	5	0	0	30 (~2000 gr)	0	7 (Fo)	0	Tr (2 gr)	0	0	Almandine-spessartine-hematite/ epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 sapphirine 3 Mn-epidote 13 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-387	0	0	0	5	28 dark green, blue-green gahnite	Tr Mn-epidote (11 gr) Tr low-Cr diopside (15 gr)	Tr (1 gr)	10	3	0	0	20 (~2000 gr)	0	5 (Fo)	0	Tr (6 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 28 gahnite 11 Mn-epidote 15 low-Cr diopside 1 red rutile 20 representative spessartine 6 chromite*
BWT-12-388	0	0	0	3	~30 (0.2%) green gahnite	Tr Mn-epidote (6 gr) Tr low-Cr diopside (~40 gr)	0	15	5	0	0	30 (~6000 gr)	0	10 (Fo)	0	Tr (~40 gr)	0	0	Hematite-spessartine/epidote-titanite assemblage.	0.5-1.0 mm fraction: 7 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 6 Mn-epidote 20 representative low-Cr diopside 20 representative spessartine 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp					>1.0 amp			
								% Titanite												
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-390	0	0	0	2	8 dark green, blue-green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (~30 gr)	0	2	Tr	0	0	20 (~2500 gr)	0	2 (Fo)	0	Tr (1 gr)	Tr	0	Hematite-spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 augite.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 8 gahnite 1 augite resembling gahnite 1 Mn-epidote 20 representative low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-394	Tr (2 gr)	0	30	60	0	Tr low-Cr diopside (6 gr)	0	2	Tr	0	0	Tr (~200 gr)	0	3 (Fo)	0	Tr (2 gr)	Tr	0	Goethite-hematite/epidote-pyrite assemblage.	0.25-0.5 mm fraction: 2 chalcopyrite 6 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-395	0	0	0	3	3 green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (8 gr)	0	3	Tr	0	0	20 (~2000 gr)	0	5 (Fo)	0	Tr (6 gr)	Tr	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 3 gahnite 1 Mn-epidote 8 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-396	0	0	0	Tr	1 dark green gahnite	Tr Mn-epidote (10 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (3 gr)	0	5	Tr	0	0	Tr (~50 gr)	0	1 (Fo)	0	0	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 1 gahnite 10 Mn-epidote 1 sapphire corundum 3 low-Cr diopside 20 representative spessartine
BWT-12-397	0	0	0	15	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	2	Tr	0	0	Tr (10 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite-goethite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside 10 spessartine 1 chromite*
BWT-12-398	0	0	0	15	0	Tr low-Cr diopside (7 gr)	0	Tr	Tr	0	0	4 (~80 gr)	0	Tr (Fo)	Tr	Tr (2 gr)	0	0	Almandine-hornblende-goethite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-399	0	0	0	2	0	Tr low-Cr diopside (7 gr)	0	4	2	0	0	5 (~400 gr)	0	1 (Fo)	0	Tr (1 gr)	Tr	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 low-Cr diopside 20 representative spessartine 1 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-400	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	0	1	Tr	0	0	5 (~1200 gr)	0	2 (Fo)	0	0	0	0	Hornblende/epidote assemblage.	0.25-0.5 mm fraction: 1 low-Cr diopside 20 representative spessartine
BWT-12-401	0	0	0	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (2 gr)	0	2	1	0	0	5 (~1200 gr)	0	15 (Fo)	0	Tr (3 gr)	0	0	Augite-forsterite/epidote-diopside assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 2 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-402	0	0	0	7	1 pale blue gahnite	Tr low-Cr diopside (12 gr)	Tr (3 gr)	3	1	0	0	2 (~100 gr)	0	10 (Fo)	0	Tr (~30 gr)	0	0	Almandine-ilmenite/epidote assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 1 gahnite 12 low-Cr diopside 3 red rutile 20 representative spessartine 15 representative chromite*
BWT-12-403	0	0	0	5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (5 gr)	Tr (1 gr)	2	Tr	0	0	5 (~100 gr)	0	2 (Fo)	0	Tr (6 gr)	0	0	Hematite-almandine/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 5 low-Cr diopside 1 red rutile 20 representative spessartine 6 chromite*
BWT-12-404	0	0	0	Tr	0	Tr low-Cr diopside (5 gr)	0	Tr	0	0	0	10 (~300 gr)	0	1 (Fo)	0	0	Tr	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 low-Cr diopside 20 representative spessartine
BWT-12-405	0	0	0	4	7 green, blue-green gahnite	Tr Mn-epidote (4 gr) Tr low-Cr diopside (8 gr)	0	4	2	0	0	30 (~5000 gr)	0	3 (Fo)	0	Tr (2 gr)	Tr	0	Hematite-goethite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 gahnite 4 Mn-epidote 8 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-406	0	0	0	Tr	1 green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (5 gr)	0	2	1	0	0	15 (~1500 gr)	0	30 (Fo)	0	Tr (1 gr)	Tr	0	Hematite-forsterite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 1 gahnite 1 sapphire corundum 5 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-407	0	0	0	Tr	4 dark green gahnite	Tr Mn-epidote (6 gr) Tr low-Cr diopside (17 gr)	0	Tr	Tr	0	0	10 (~1200 gr)	0	5 (Fo)	0	Tr (1 gr)	Tr	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 6 Mn-epidote 17 low-Cr diopside 20 representative spessartine 1 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp					>1.0 amp			
								% Titanite												
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-408	0	0	0	Tr	1 green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (10 gr)	0	30	10	0	0	2 (~500 gr)	0	40 (Fo)	0	Tr (4 gr)	0	0	Hematite-forsterite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 gahnite 3 Mn-epidote 1 sapphire corundum 10 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-409	0	0	0	Tr	12 pale blue, blue-green, grey gahnite	Tr low-Cr diopside (3 gr)	0	30	10	0	0	0.5 (~100 gr)	0	8 (Fo)	0	Tr (4 gr)	0	0	Hematite-almandine/epidote-titanite assemblage.	0.25-0.5 mm fraction: 12 gahnite 3 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-410	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (4 gr)	0	5	2	0	0	40 (~4000 gr)	0	5 (Fo)	0	0	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 4 low-Cr diopside 20 representative spessartine
BWT-12-411	0	0	0	Tr	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (5 gr)	Tr (1 gr)	3	3	0	0	70 (~8000 gr)	0	3 (Fo)	0	Tr (9 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 5 low-Cr diopside 1 red rutile 20 representative spessartine 9 chromite*
BWT-12-412	0	0	0	Tr	3 dark green, green gahnite	Tr sapphire corundum (2 gr) Tr low-Cr diopside (2 gr)	0	3	Tr	0	0	20 (~500 gr)	0	5 (Fo)	0	Tr (5 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 dark green gahnite 0.25-0.5 mm fraction: 3 gahnite 2 sapphire corundum 2 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-413	0	0	0	Tr	5 dark green, green gahnite	Tr low-Cr diopside (4 gr)	0	5	2	0	0	40 (~4000 gr)	0	Tr (Fo)	0	0	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 5 gahnite 4 low-Cr diopside 20 representative spessartine
BWT-12-414	0	0	0	5	4 dark green, green gahnite	Tr Mn-epidote (7 gr) Tr low-Cr diopside (~30 gr)	0	3	Tr	0	0	8 (~1000 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 7 Mn-epidote 20 representative low-Cr diopside 20 representative spessartine 1 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-415	0	0	0	25	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (4 gr)	0	8	2	0	0	30 (~3000 gr)	0	Tr (Fo)	0	Tr (5 gr)	Tr	Tr	Hematite-spessartine-goethite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 4 low-Cr diopside 20 representative spessartine 5 chromite*
BWT-12-416	0	0	Tr (1 gr)	2	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (8 gr)	Tr (1 gr)	Tr	Tr	0	0	4 (~200 gr)	0	Tr (Fo)	0	Tr (4 gr)	Tr	0	Hornblende-hematite-almandine/ epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 dark green gahnite versus augite candidates = 6 augite.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 6 augite resembling gahnite 2 Mn-epidote 8 low-Cr diopside 1 red rutile 20 representative spessartine 4 chromite*
BWT-12-417	0	0	Tr (8 gr)	2	12 blue, pale blue, dark green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (1 gr)	0	20	10	0	0	20 (~30,000 gr)	0	10 (Fo)	0	Tr (3 gr)	Tr	0	Hematite-almandine-spessartine/ epidote-titanite assemblage.	0.25-0.5 mm fraction: 12 gahnite 2 Mn-epidote 1 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-418	0	0	Tr (1 gr)	5	5 green gahnite	Tr low-Cr diopside (1 gr)	0	20	10	0	0	40 (~3000 gr)	0	10 (Fo)	0	Tr (2 gr)	0	0	Spessartine-hematite/epidote-titanite assemblage. SEM check from 0.25-0.5 mm fraction: 1 black gahnite versus hercynite candidate = 1 allanite.	0.25-0.5 mm fraction: 5 gahnite 1 allanite resembling gahnite 1 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-419	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (12 gr)	0	3	1	0	0	10 (~1000 gr)	0	25 (Fo)	0	Tr (24 gr)	0	0	Hornblende-forsterite/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 5 dark green actinolite versus hornblende candidates = 5 hornblende (lacking typical black colour of heavy, Fe-rich variety).	0.5-1.0 mm fraction: 4 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 12 low-Cr diopside 20 representative spessartine 24 chromite* 5 representative hornblende
BWT-12-420	0	0	0	3	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	4	Tr	0	0	Tr (3 gr)	0	15 (Fo)	0	0	0	0	Hematite-hornblende-forsterite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 green-black hornblende (major paramagnetic mineral assemblage) versus actinolite candidates = 4 hornblende.	0.25-0.5 mm fraction: 1 low-Cr diopside 1 red rutile 3 spessartine 4 representative hornblende

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-421	Tr (1 gr)	0	0	5	6 green gahnite	Tr Mn-epidote (6 gr) Tr low-Cr diopside (14 gr)	0	10	3	0	0	10 (~800 gr)	0	5 (Fo)	0	Tr (3 gr)	0	0	Hematite-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 6 gahnite 6 Mn-epidote 14 low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-422	0	0	0	2	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (3 gr)	0	1	0	0	0	40 (~3000 gr)	0	8 (Fo)	0	Tr (6 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 2 sapphire corundum 3 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-423	0	0	0	2	4 green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (4 gr)	0	3	Tr	0	0	50 (~7000 gr)	0	15 (Fo)	0	Tr (6 gr)	0	0	Spessartine-hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 gahnite 1 Mn-epidote 1 sapphire corundum 4 low-Cr diopside 20 representative spessartine 6 chromite*
BWT-12-424	0	0	0	4	2 dark green gahnite	Tr Mn-epidote (5 gr) Tr low-Cr diopside (8 gr)	0	2	Tr	0	0	4 (~400)	0	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 5 Mn-epidote 8 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-425	Tr (1 gr)	0	0	2	3 green gahnite	Tr Mn-epidote (1 gr) Tr topaz (1 gr) Tr low-Cr diopside (5 gr)	Tr (2 gr)	5	2	0	0	5 (~500 gr)	0	1 (Fo)	0	Tr (21 gr)	0	0	Hematite-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 4 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 3 gahnite 1 Mn-epidote 1 topaz 5 low-Cr diopside 2 red rutile 20 representative spessartine 21 chromite*
BWT-12-426	0	0	0	1	0	Tr sapphire corundum (5 gr) Tr low-Cr diopside (14 gr)	0	Tr	0	0	0	2 (~1000 gr)	0	50 (Fo)	0	Tr (15 gr)	0	0	Forsterite-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 4 chromite* 0.25-0.5 mm fraction: 5 sapphire corundum 14 low-Cr diopside 20 representative spessartine 15 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-427	0	0	0	Tr	0	Tr low-Cr diopside (1 gr)	0	5	3	0	0	Tr (3 gr)	0	20 (Fo)	0	Tr (3 gr)	0	0	Almandine-hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 low-Cr diopside 3 spessartine 3 chromite*
BWT-12-428	0	0	0	80	0	Tr low-Cr diopside (3 gr)	0	Tr	0	0	0	Tr (5 gr)	0	3 (Fo)	0	0	0	0	Goethite/epidote assemblage.	0.25-0.5 mm fraction: 3 low-Cr diopside 5 spessartine
BWT-12-429	0	0	Tr (3 gr)	Tr	1 green gahnite	Tr low-Cr diopside (7 gr)	0	10	Tr	0	0	20 (~4000 gr)	0	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 gahnite 7 low-Cr diopside 20 representative spessartine 7 chromite*
BWT-12-430	0	0	Tr (3 gr)	1	0	Tr Mn-epidote (12 gr) Tr low-Cr diopside (~80 gr)	Tr (1 gr)	5	Tr	0	0	4 (~1000 gr)	0	2 (Fo)	0	Tr (~50 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 13 low-Cr diopside 13 chromite* 0.25-0.5 mm fraction: 12 Mn-epidote 20 representative low-Cr diopside 1 red rutile 20 representative spessartine 20 representative chromite*
BWT-12-431	0	0	0	5	1 green gahnite	Tr Mn-epidote (4 gr) Tr topaz (2 gr) Tr low-Cr diopside (6 gr)	0	5	2	0	0	20 (~1200 gr)	0	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite-spessartine/epidote assemblage.	0.25-0.5 mm fraction: 1 gahnite 4 Mn-epidote 2 topaz 6 low-Cr diopside 20 representative spessartine 1 chromite*
BWT-12-432	0	0	0.5 (~40 gr)	5	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (3 gr)	0	5	2	0	0	20 (~1000 gr)	0	15 (Fo)	0	Tr (9 gr)	0	0	Hematite-spessartine-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 3 Mn-epidote 3 low-Cr diopside 20 representative spessartine 9 chromite*
BWT-12-433	0	0	0	5	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (9 gr)	0	2	Tr	0	0	10 (~500 gr)	0	Tr (Fo)	0	Tr (3 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 Mn-epidote 2 sapphire corundum 9 low-Cr diopside 20 representative spessartine 3 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-434	0	0	0	2	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (17 gr)	0	2	0	0	0	8 (~800 gr)	Tr (1 gr)	30 (Fo)	0	Tr (12 gr)	0	0	Hematite-forsterite-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 andradite versus spessartine candidates = 1 andradite, 3 spessartine and 1 grossular.	0.5-1.0 mm fraction: 4 chromite* 0.25-0.5 mm fraction: 2 Mn-epidote 1 sapphire corundum 17 low-Cr diopside 33 representative spessartine 1 andradite 1 grossular 12 chromite*
BWT-12-435	0	0	0	4	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	0	1	Tr	0	0	1 (~50 gr)	0	0	0	Tr (4 gr)	0	0	Hematite-augite/epidote assemblage.	0.5-1.0 mm fraction: 1 chromite* 0.25-0.5 mm fraction: 1 Mn-epidote 6 low-Cr diopside 20 representative spessartine 4 chromite*
BWT-12-436	Tr (3 gr)	0	0.3 (~30 gr)	4	0	Tr Mn-epidote (3 gr) Tr low-Cr diopside (14 gr)	0	5	Tr	Tr	0	30 (~2000 gr)	0	10 (Fo)	0	Tr (14 gr)	0	0	Hematite-spessartine-hornblende/ epidote-diopside assemblage.	0.25-0.5 mm fraction: 3 chalcopyrite 3 Mn-epidote 14 low-Cr diopside 20 representative spessartine 14 chromite*
BWT-12-437	0	0	0	5	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (7 gr) Tr low-Cr diopside (~30 gr)	0	2	1	0	0	2 (~200 gr)	0	20 (Fo)	0	Tr (3 gr)	Tr	0	Hematite-forsterite-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 2 Mn-epidote 7 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 3 chromite*
BWT-12-438	0	0	0	5	2 green gahnite	Tr sapphire corundum (4 gr) Tr topaz (1 gr) Tr low-Cr diopside (20 gr)	Tr (2 gr)	5	2	0	0	5 (~1000 gr)	0	10 (Fo)	0	Tr (1 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 4 sapphire corundum 1 topaz 20 low-Cr diopside 2 red rutile 20 representative spessartine 1 chromite*
BWT-12-439	0	0	Tr (1 gr)	5	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (17 gr)	0	2	Tr	0	0	4 (~500 gr)	0	4 (Fo)	0	Tr (~50 gr)	0	0	Hematite-augite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 14 Mn-epidote 1 sapphire corundum 17 low-Cr diopside 20 representative spessartine 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-440	0	0	0	4	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (21 gr)	0	4	1	0	0	2 (~200 gr)	0	4 (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 2 Mn-epidote 21 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-441	0	0	0	15	2 pale blue-green gahnite	Tr ruby corundum (1 gr) Tr low-Cr diopside (3 gr)	0	10	5	0	0	7 (~100 gr)	0	10 (Fo)	0	Tr (2 gr)	0	0	Hematite-goethite-almandine/epidote assemblage.	0.25-0.5 mm fraction: 2 gahnite 1 ruby corundum 3 low-Cr diopside 20 representative spessartine 2 chromite*
BWT-12-442	0	0	0	5	0	Tr Mn-epidote (2 gr) Tr low-Cr diopside (3 gr)	0	2	Tr	0	0	3 (~80 gr)	0	5 (Fo)	0	0	0	0	Hematite-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 2 Mn-epidote 3 low-Cr diopside 20 representative spessartine
BWT-12-443	Tr (1 gr)	0	Tr (1 gr)	Tr	2 green gahnite	Tr low-Cr diopside (8 gr)	0	Tr	0	0	0	5 (~1000 gr)	0	30 (Fo)	0	Tr (8 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 2 gahnite 8 low-Cr diopside 20 representative spessartine 8 chromite*
BWT-12-444	0	0	0	2	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~40 gr)	0	2	Tr	0	0	2 (~80 gr)	0	10 (Fo)	0	Tr (12 gr)	0	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 pale blue spinel versus sapphire corundum candidate = 1 sapphire corundum.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 4 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 12 chromite*
BWT-12-445	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (42 gr)	0	3	Tr	0	0	3 (~100 gr)	0	50 (Fo)	0	Tr (~60 gr)	0	0	Forsterite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 6 low-Cr diopside 17 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 42 low-Cr diopside 20 representative spessartine 20 representative chromite*
BWT-12-446	0	0	0	3	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (17 gr)	0	3	Tr	0	0	Tr (8 gr)	0	10 (Fo)	0	Tr (16 gr)	0	0	Almandine-hornblende-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 Mn-epidote 17 low-Cr diopside 8 spessartine 16 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-447	0	0	Tr (1 gr)	2	0	Tr low-Cr diopside (15 gr)	0	1	Tr	0	0	0.5 (~120 gr)	0	10 (Fo)	0	0	0	0	Hornblende-almandine/epidote assemblage.	0.25-0.5 mm fraction: 15 low-Cr diopside 20 representative spessartine
BWT-12-448	Tr (1 gr)	0	Tr (1 gr)	3	0	Tr sapphire corundum (1 gr) 1% topaz (~60 gr) Tr low-Cr diopside (8 gr)	0	5	Tr	0	0	Tr (2 gr)	10 (~1500 gr)	5 (Fo)	0	Tr (5 gr)	0	0	Hematite-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 black-speckled emery corundum versus topaz candidates = 10 topaz; 5 orange spessartine versus andradite candidates = 2 spessartine and 3 andradite; and 5 orange-brown andradite versus spessartine candidates = 5 andradite.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 1 sapphire corundum 40 representative topaz 8 low-Cr diopside 2 spessartine 28 representative andradite 5 chromite*
BWT-12-449	Tr (1 gr)	0	0	4	0	Tr sapphire corundum (1 gr) Tr topaz (22 gr) Tr low-Cr diopside (6 gr)	0	4	Tr	0	0	Tr (8 gr)	1 (~100 gr)	4 (Fo)	0	0	0	0	Hornblende-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue sapphire corundum versus topaz candidate = 1 sapphire corundum; 2 speckled corundum candidates = 2 topaz; and 5 andradite candidates = 4 andradite and 1 spessartine.	0.25-0.5 mm fraction: 1 chalcopyrite 1 sapphire corundum 22 topaz 6 low-Cr diopside 8 spessartine 24 representative andradite
BWT-12-450	0	0	0	2	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (12 gr)	0	2	Tr	0	0	0.5 (~100 gr)	0	5 (Fo)	0	0	0	0	Hornblende-almandine/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 1 sapphire corundum 12 low-Cr diopside 20 representative spessartine
BWT-12-451	0	0	0	Tr	0	5% sapphire corundum (~100 gr) Tr low-Cr diopside (3 gr)	0	3	Tr	0	0	0	10 (~1500 gr)	5 (Fo)	0	Tr (2 gr)	0	0	Augite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 orange-brown andradite versus spessartine candidates = 5 andradite; and 5 green augite (major paramagnetic assemblage mineral) versus grunerite candidates = 5 augite.	0.5-1.0 mm fraction: 3 sapphire corundum 1 chromite* 0.25-0.5 mm fraction: 30 representative sapphire corundum 3 low-Cr diopside 25 representative andradite 2 chromite* 5 representative augite
BWT-12-452	0	0	0	Tr	0	Tr low-Cr diopside (5 gr)	0	1	Tr	0	0	Tr (5 gr)	0	4 (Fo)	0	Tr (2 gr)	0	0	Almandine-hornblende/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 5 low-Cr diopside 5 spessartine 2 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-453	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (9 gr)	0	Tr	Tr	0	0	0	0	Tr (Fo)	0	Tr (2 gr)	0	0	Almandine/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 2 sapphire corundum 9 low-Cr diopside 2 chromite*
BWT-12-454	0	0	0	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (24 gr)	0	2	Tr	0	0	0	Tr (~80 gr)	5 (Fo)	0	Tr (7 gr)	0	0	Almandine-ilmenite-hornblende/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 1 sapphire corundum 24 low-Cr diopside 20 representative andradite 7 chromite*
BWT-12-455	0	0	0	Tr	0	Tr sapphire corundum (3 gr) Tr corundum (1 gr) Tr low-Cr diopside (6 gr)	Tr (1 gr)	3	Tr	0	0	Tr (5 gr)	Tr (~50 gr)	3 (Fo)	0	Tr (11 gr)	0	0	Hematite/epidote assemblage. SEM check from 1.0-2.0 mm fraction: 1 white corundum versus zoisite candidate = 1 corundum. SEM check from 0.5-1.0 mm fraction: 1 black hercynite versus chromite candidate = 1 hercynite. SEM check from 0.25-0.5 mm fraction: 1 white corundum versus kyanite candidate = 1 corundum.	1.0-2.0 mm fraction: 1 corundum 0.5-1.0 mm fraction: 1 black hercynite 2 low-Cr diopside 0.25-0.5 mm fraction: 3 sapphire corundum 1 corundum 6 low-Cr diopside 1 red rutile 5 spessartine 20 representative andradite 11 chromite*
BWT-12-456	0	0	0	Tr	0	Tr topaz (1 gr) Tr low-Cr diopside (~40 gr)	0	Tr	0	0	0	Tr (16 gr)	Tr (~200 gr)	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite-hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 andradite versus almandine candidates = 1 andradite and 2 spessartine.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 1 topaz 20 representative low-Cr diopside 16 spessartine 22 representative andradite 4 chromite*
BWT-12-457	0	0	0	10	0	Tr low-Cr diopside (1 gr)	Tr (1 gr)	Tr	Tr	0	0	Tr (3 gr)	0	15 (Fo)	0	0	0	0	Hematite-forsterite/epidote assemblage.	0.25-0..5 mm fraction: 1 low-Cr diopside 1 red rutile 3 spessartine

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-458	0	0	Tr (1 gr)	10	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (5 gr) Tr topaz (2 gr) Tr low-Cr diopside (16 gr)	0	2	Tr	0	0	Tr (19 gr)	Tr (1 gr)	30 (Fo)	0	Tr (1 gr)	0	0	Hematite-forsterite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 4 spessartine and 1 andradite.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 12 Mn-epidote 5 sapphire corundum 2 topaz 16 low-Cr diopside 19 spessartine 1 andradite 1 chromite*
BWT-12-459	0	0	0	0	3 green gahnite	Tr low-Cr diopside (12 gr)	0	Tr	Tr	0	0	0	0	90 (Fo)	0	Tr (19 gr)	0	0	Forsterite/epidote assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 3 gahnite 12 low-Cr diopside 19 chromite*
BWT-12-460	0	0	0	2	0	Tr Mn-epidote (9 gr) Tr low-Cr diopside (~60 gr)	0	15	2	0	0	1 (~50 gr)	0	5 (Fo)	0	Tr (~60 gr)	0	Tr	Hematite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 6 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 9 Mn-epidote 40 representative low-Cr diopside 15 representative spessartine 30 representative chromite*
BWT-12-461	0	0	0	Tr	0	0.5% low-Cr diopside (~60 gr)	0	40	Tr	0	0	0.5 (~40 gr)	0	2 (Fo)	0	1 (~100 gr)	0	0	Hematite/epidote-titanite assemblage.	1.0-2.0 mm fraction: 1 low-Cr diopside 0.5-1.0 mm fraction: 8 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 20 representative low-Cr diopside 20 representative spessartine 20 representative chromite*
BWT-12-462	0	0	0	5	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (15 gr)	0	5	Tr	0	0	Tr (16 gr)	Tr (4 gr)	5 (Fo)	0	Tr (6 gr)	0	0	Hematite/epidote assemblage.	0.25-0.5 mm fraction: 5 Mn-epidote 1 sapphire corundum 15 low-Cr diopside 16 spessartine 4 andradite 6 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-463	0	0	0	Tr	1 green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (3 gr)	Tr (1 gr)	5	1	0	0	Tr (10 gr)	Tr (~30 gr)	5 (Fo)	0	Tr (15 gr)	0	0	Hematite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 green gahnite versus spinel candidate = 1 gahnite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 1 gahnite 1 Mn-epidote 3 sapphire corundum 3 low-Cr diopside 1 red rutile 10 spessartine 20 representative andradite 15 chromite*
BWT-12-464	0	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (17 gr)	Tr (1 gr)	4	1	0	0	Tr (~50 gr)	0	30 (Fo)	0	Tr (16 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 0.25-0.5 mm fraction: 7 Mn-epidote 1 sapphire corundum 17 low-Cr diopside 1 red rutile 20 representative spessartine 16 chromite*
BWT-12-465	0	0	0	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (19 gr)	0	2	Tr	0	0	Tr (10 gr)	0	15 (Fo)	0	Tr (2 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 6 Mn-epidote 1 sapphire corundum 19 low-Cr diopside 10 spessartine 2 chromite*
BWT-12-466	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (3 gr) Tr topaz (1 gr) Tr low-Cr diopside (11 gr)	0	2	Tr	0	0	Tr (14 gr)	0	20 (Fo)	0	Tr (4 gr)	0	0	Hematite-forsterite/epidote assemblage.	0.25-0.5 mm fraction: 4 Mn-epidote 3 sapphire corundum 1 topaz 11 low-Cr diopside 14 spessartine 4 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp					>1.0 amp			
								% Titanite												
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-497	0	0	0	5	~600 (2%) dark green, blue-green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~100 gr)	0	8	2	Tr	0	20 (~20,000 gr)	0	70 (Fo)	0	0.5 (~150 gr)	0	0	Forsterite-spessartine/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 green gahnite versus diopside candidates = 5 gahnite. 0.5-1.0 mm fraction contains trace (~40 grains) chromite.	1.0-2.0 mm fraction: 2 chromite* 0.5-1.0 mm fraction: 15 green gahnite 19 low-Cr diopside 20 representative chromite* 0.25-0.5 mm fraction: 20 representative gahnite 4 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative chromite*
BWT-12-498	0	0	Tr (2 gr)	15	~1000 (7%) dark green, blue-green gahnite	Tr Mn-epidote (5 gr) Tr low-Cr diopside (~60 gr)	Tr (6 gr)	2	Tr	0	0	50 (~20,000 gr)	0	15 (Fo)	0	Tr (15 gr)	0	0	Spessartine-goethite-forsterite-hematite/ epidote assemblage.	0.5-1.0 mm fraction: 36 dark green, blue-green gahnite 4 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 25 representative gahnite 5 Mn-epidote 30 representative low-Cr diopside 6 red rutile 20 representative spessartine 15 chromite*
BWT-12-499	0	0	0	5	~600 (5%) dark green, green, blue-green gahnite	Tr Mn-epidote (15 gr) Tr sapphire corundum (8 gr) Tr low-Cr diopside (~50 gr)	Tr (7 gr)	10	5	Tr	0	70 (~12,000 gr)	0	5 (Fo)	0	Tr (~40 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 35 green gahnite 1 Mn-epidote 4 low-Cr diopside 16 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 15 Mn-epidote 8 sapphire corundum 20 representative low-Cr diopside 7 red rutile 20 representative spessartine 20 representative chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-500	0	0	0	2	~1500 (20%) green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	Tr (12 gr)	Tr	Tr	0	0	30 (~25,000 gr)	0	60 (Fo)	0	Tr (5 gr)	0	0	Forsterite-spessartine/epidote-gahnite assemblage. SEM check from 0.5-1.0 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum.	1.0-2.0 mm fraction: 2 chromite* 0.5-1.0 mm fraction: 48 green gahnite 1 sapphire corundum 1 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 1 Mn-epidote 1 sapphire corundum 8 low-Cr diopside 12 red rutile 20 representative spessartine 5 chromite*
BWT-12-501	0	0	0	2	~1000 (7%) green, blue-green gahnite	Tr Mn-epidote (2 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (13 gr)	Tr (10 gr)	5	Tr	0	0	60 (~25,000 gr)	0	12 (Fo)	0	Tr (11 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.5-1.0 mm fraction: 55 green, blue-green gahnite 1 low-Cr diopside 5 chromite* 0.25-0.5 mm fraction: 30 representative gahnite 2 Mn-epidote 4 sapphire corundum 13 low-Cr diopside 10 red rutile 20 representative spessartine 11 chromite*
BWT-12-502	0	0	0	45	~1500 (5%) green, blue-green gahnite	Tr Mn-epidote (12 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (36 gr)	Tr (18 gr)	5	Tr	0	0	10 (~10,000 gr)	0	10 (Fo)	0	Tr (9 gr)	0	0	Goethite-forsterite/epidote assemblage. 0.5-1.0 mm fraction contains 1% (~60 grains) gahnite. Goethite occurs as pseudomorphs of pyrite.	0.5-1.0 mm fraction: 20 representative green, blue-green, brown gahnite 3 low-Cr diopside 0.25-0.5 mm fraction: 30 representative gahnite 12 Mn-epidote 1 sapphire corundum 36 low-Cr diopside 18 red rutile 20 representative spessartine 9 chromite*
BWT-12-503	0	0	0	1	~80 (1%) blue-green gahnite	Tr Mn-epidote (3 gr) Tr low-Cr diopside (~40 gr)	Tr (5 gr)	5	Tr	0	0	2 (~800 gr)	0	95 (Fo)	0	Tr (10 gr)	0	0	Forsterite/epidote assemblage.	0.5-1.0 mm fraction: 5 dark green, blue-green gahnite 6 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 3 Mn-epidote 20 low-Cr diopside 5 red rutile 20 representative spessartine 10 chromite*

Sample	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp					>1.0 amp			
								% Titanite												
Number	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWT-12-504	0	0	0	10	~500 (2%) dark green, green, blue-green gahnite	Tr Mn-epidote (16 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (~200 gr)	Tr (8 gr)	10	Tr	Tr	0	25 (~10,000 gr)	0	15 (Fo)	0	Tr (~30 gr)	0	0	Hematite-spessartine-forsterite/epidote assemblage.	0.5-1.0 mm fraction: 25 dark green, blue-green gahnite 5 Mn-epidote 3 sapphire corundum 11 low-Cr diopside 8 chromite* 0.25-0.5 mm fraction: 20 representative gahnite 16 Mn-epidote 6 sapphire corundum 20 representative low-Cr diopside 8 red rutile 20 representative spessartine 20 representative chromite*

Appendix O

Capoose Indicator Mineralogy, Alluvial Gravel

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-009	0	0	0	0	17 blue-green, green gahnite	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~30 gr)	Tr (1 gr)	80	60	0	0	5 (~500 gr)	0	5 (Fo)	0	Tr (~50 gr)	Tr	0	Hematite/titanite-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus spinel candidates = 5 gahnite; 1 sapphire corundum versus fluorite candidate = 1 sapphire corundum; and 10 spessartine versus andradite candidates = 10 spessartine.	0.5-1.0 mm fraction: 1 Mn-epidote 8 low-Cr diopside 15 chromite* 0.25-0.5 mm fraction: 17 gahnite 5 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 1 red rutile 30 representative spessartine 30 representative chromite*
BWS-12-010	0	0	0	Tr	1 blue-green gahnite	Tr sapphire corundum (1 gr) Tr low-Cr diopside (8 gr)	0	90	3	0	0	Tr (~40 gr)	0	1 (Fo)	0	0	Tr	0	Hematite/titanite assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite candidate = 1 gahnite.	0.25-0.5 mm fraction: 1 gahnite 1 sapphire corundum 8 low-Cr diopside 20 representative spessartine
BWS-12-011	0	0	0	0	3 green gahnite	Tr Mn-epidote (1 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (2 gr)	0	95	Tr	Tr	0	Tr (4 gr)	0	Tr (Fo)	0	Tr (40 gr)	0	0	Hematite/titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 3 green gahnite versus hercynite candidates = 3 gahnite.	0.5-1.0 mm fraction: 7 chromite* 0.25-0.5 mm fraction: 3 gahnite 1 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 4 spessartine 40 chromite*
BWS-12-017	0	0	0	Tr	0	Tr Mn-epidote (10 gr) Tr low-Cr diopside (~40 gr)	Tr (1 gr)	40	30	0	0	0.5 (~80 gr)	0	2 (Fo)	0	Tr (~30 gr)	0	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 3 spessartine versus andradite candidates = 3 spessartine.	1.0-2.0 mm fraction: 2 chromite* 0.5-1.0 mm fraction: 1 low-Cr diopside 12 chromite* 0.25-0.5 mm fraction: 10 Mn-epidote 20 representative low-Cr diopside 1 red rutile 23 representative spessartine 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm												Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp					>1.0 amp			
								% Titanite												
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-018	Tr (3 gr)	0	Tr (~100 gr)	Tr	2 blue-green gahnite	Tr Mn-epidote (22 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	20	12	Tr	0	10 (~2000 gr)	0	3 (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 2 gahnite.	0.5-1.0 mm fraction: 2 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 3 chalcopyrite 2 gahnite 22 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 4 chromite*
BWS-12-019	0	0	0	Tr	0	Tr Mn-epidote (17 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~100 gr)	0	20	10	0	0	0	30 (~3000 gr)	Tr (Fo)	0	Tr (~200 gr)	0	0	Hematite-andradite/epidote-titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 sapphire corundum candidate = 1 sapphire corundum; and 5 spessartine versus andradite candidates = 5 andradite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 6 low-Cr diopside 10 chromite* 0.25-0.5 mm fraction: 17 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 25 representative andradite
BWS-12-020	Tr (1 gr)	0	0	Tr	0	Tr Mn-epidote (12 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~40 gr)	0	15	4	0	0	1 (~80 gr)	Tr (6 gr)	Tr (Fo)	0	0	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 andradite versus grossular candidates = 6 andradite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 12 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 6 andradite

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-021	0	0	0	Tr	0	Tr Mn-epidote (16 gr) Tr sapphire corundum (3 gr) Tr topaz (2 gr) Tr low-Cr diopside (~60 gr)	0	10	5	0	0	5 (~2500 gr)	25 (~12,000 gr)	Tr (Fo)	0	Tr (~150 gr)	Tr	0	Hematite-andradite/epidote assemblage. 0.5-1.0 mm fraction contains trace (~80 grains) chromite. Also picked one 125 x 350 x 850µm gold from 0.25-0.5 mm fraction.	1.0-2.0 mm fraction: 4 chromite* 0.5-1.0 mm fraction: 4 Mn-epidote 4 low-Cr diopside 20 representative chromite* 0.25-0.5 mm fraction: 1 gold 16 Mn-epidote 3 sapphire corundum 2 topaz 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative chromite*
BWS-12-022	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (22 gr)	0	20	0	0	0	Tr (~60 gr)	20 (~5000 gr)	Tr (Fo)	0	Tr (~40 gr)	0	0	Hematite-andradite/epidote-titanite assemblage.	0.5-1.0 mm fraction: 1 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 3 sapphire corundum 22 low-Cr diopside 20 representative spessartine 20 representative andradite 25 representative chromite*
BWS-12-023	0	Tr molybdenite (1 gr)	0.1 (~80 gr)	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (5 gr) Tr topaz (7 gr) Tr low-Cr diopside (21 gr)	0	5	Tr	0	0	1 (~500 gr)	60 (~30,000 gr)	Tr (Fo)	0	Tr (~50 gr)	Tr	0	Andradite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 1 Mn-epidote 0.25-0.5 mm fraction: 1 molybdenite 20 representative Mn-epidote 5 sapphire corundum 7 topaz 21 low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-024	0	0	0	Tr	0	Tr Mn-epidote (4 gr) Tr low-Cr diopside (~60 gr)	0	5	1	0	0	Tr (15 gr)	60 (~20,000 gr)	Tr (Fo)	0	Tr (~50 gr)	0	0	Andradite-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 20 spessartine versus andradite candidates = 20 andradite.	1.0-2.0 mm fraction: 2 chromite* 0.5-1.0 mm fraction: 1 Mn-epidote 7 low-Cr diopside 10 chromite* 0.25-0.5 mm fraction: 4 Mn-epidote 20 representative low-Cr diopside 15 spessartine 40 representative andradite 20 representative chromite*
BWS-12-025	Tr (2 gr)	0	0.5 (~250 gr)	Tr	0	Tr Mn-epidote (9 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (26 gr)	0	2	Tr	0	0	Tr (~40 gr)	60 (~50,000 gr)	Tr (Fo)	0	Tr (~50 gr)	0	0	Andradite-hematite/epidote assemblage. 0.5-1.0 mm fraction contains trace (~40 grains) chromite.	1.0-2.0 mm fraction: 3 chromite* 0.5-1.0 mm fraction: 1 chalcopyrite 2 Mn-epidote 3 low-Cr diopside 20 representative chromite* 0.25-0.5 mm fraction: 2 chalcopyrite 9 Mn-epidote 1 sapphire corundum 26 low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative chromite*
BWS-12-026	0	0	Tr (5 gr)	Tr	0	Tr Mn-epidote (5 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (10 gr)	Tr (1 gr)	1	Tr	0	0	0	10 (~2000 gr)	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 10 andradite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 2 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 5 Mn-epidote 1 sapphire corundum 10 low-Cr diopside 1 red rutile 30 representative andradite 7 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-027	Tr (2 gr)	0	0	Tr	0	Tr Mn-epidote (7 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (11 gr)	0	Tr	Tr	0	0	Tr (1 gr)	10 (~2000 gr)	2 (Fo)	0	Tr (12 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 6 spessartine versus andradite candidates = 1 spessartine and 5 andradite.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 3 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 2 chalcopyrite 7 Mn-epidote 2 sapphire corundum 11 low-Cr diopside 1 spessartine 25 representative andradite 12 chromite*
BWS-12-028	0	0	Tr (~15 gr)	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (4 gr) Tr low-Cr diopside (~40 gr)	0	Tr	Tr	0	0	Tr (~50 gr)	15 (~3000 gr)	1 (Fo)	0	Tr (~40 gr)	0	0	Hematite-andradite/epidote assemblage.	0.5-1.0 mm fraction: 5 Mn-epidote 2 low-Cr diopside 3 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 4 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative chromite*
BWS-12-029	Tr (3 gr)	0	Tr (5 gr)	Tr	1 blue-green gahnite	Tr Mn-epidote (14 gr) Tr sapphire corundum (5 gr) Tr low-Cr diopside (~40 gr)	0	3	Tr	0	0	Tr (~50 gr)	30 (~1500 gr)	3 (Fo)	0	Tr (~50 gr)	0	0	Hematite-andradite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus pumpellyite candidate = 1 gahnite. Also picked one 350 x 450µm gold grain from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 2 Mn-epidote 4 low-Cr diopside 9 chromite* 0.25-0.5 mm fraction: 1 gold 3 chalcopyrite 1 gahnite 14 Mn-epidote 5 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 20 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-030	Tr (1 gr)	0	0.1 (~80 gr)	Tr	3 green gahnite	Tr Mn-epidote (~60 gr) Tr sapphire corundum (~30 gr) Tr topaz (5 gr) Tr low-Cr diopside (~100 gr)	Tr (3 gr)	2	Tr	0	0	3 (~8000 gr)	7 (~15,000 gr)	2 (Fo)	0	Tr (~100 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 green gahnite versus spinel candidates = 3 gahnite.	0.5-1.0 mm fraction: 4 Mn-epidote 1 sapphire corundum 2 low-Cr diopside 12 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 3 gahnite 20 representative Mn-epidote 20 representative sapphire corundum 5 topaz 20 representative low-Cr diopside 3 red rutile 20 representative spessartine 20 representative andradite 20 representative chromite*
BWS-12-032	0	0	0	Tr	0	Tr Mn-epidote (15 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~80 gr)	0	3	Tr	0	0	Tr (~40 gr)	Tr (~200 gr)	Tr (Fo)	0	Tr (~60 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 5 andradite.	0.5-1.0 mm fraction: 5 low-Cr diopside 14 chromite* 0.25-0.5 mm fraction: 15 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative spessartine 25 representative andradite 20 representative chromite*
BWS-12-033	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (~80 gr) Tr sapphire corundum (12 gr) Tr topaz (4 gr) Tr low-Cr diopside (7 gr)	Tr (2 gr)	1	Tr	0	0	Tr (~40 gr)	8 (~5000 gr)	Tr (Fo)	0	Tr (13 gr)	Tr	0	Ilmenite-hematite/epidote assemblage.	0.5-1.0 mm fraction: 9 Mn-epidote 2 sapphire corundum 0.25-0.5 mm fraction: 20 representative Mn-epidote 12 sapphire corundum 4 topaz 7 low-Cr diopside 2 red rutile 20 representative spessartine 20 representative andradite 13 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-035	0	Tr barite (~40 gr)	Tr (8 gr)	Tr	0	Tr Mn-epidote (1 gr) Tr low-Cr diopside (6 gr)	0	1	Tr	0	0	Tr (15 gr)	Tr (7 gr)	Tr (Fo)	0	0	0	0	Augite-hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 4 barite versus diopside cnadidates = 4 barite. SEM checks from 0.25-0.5 mm fraction: 7 andradite versus spessartine candidates = 7 andradite.	0.5-1.0 mm fraction: 4 barite 0.25-0.5 mm fraction: 20 representative barite 1 Mn-epidote 6 low-Cr diopside 15 spessartine 7 andradite
BWS-12-036	0	Tr molybdenite (1 gr)	Tr (~30 gr)	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	0	2	Tr	0	0	0	8 (~1000 gr)	Tr (Fo)	0	Tr (~40 gr)	0	0	Hornblende/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 spessartine versus andradite candidates = 10 andradite.	0.5-1.0 mm fraction: 3 Mn-epidote 8 chromite* 0.25-0.5 mm fraction: 1 molybdenite 20 representative Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 20 representative andradite 20 representative chromite*
BWS-12-037	0	0	0	Tr	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (14 gr)	0	Tr	0	0	0	Tr (~120 gr)	0	Tr (Fo)	0	Tr (10 gr)	0	0	Hematite-augite/epidote assemblage.	0.5-1.0 mm fraction: 7 Mn-epidote 3 low-Cr diopside 0.25-0.5 mm fraction: 14 Mn-epidote 2 sapphire corundum 14 low-Cr diopside 20 representative spessartine 10 chromite*
BWS-12-038	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (~40 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (27 gr)	0	Tr	0	0	0	Tr (~100 gr)	0	Tr (Fo)	0	Tr (5 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 Mn-epidote 4 low-Cr diopside 0.25-0.5 mm fraction: 20 representative Mn-epidote 3 sapphire corundum 27 low-Cr diopside 20 representative spessartine 5 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-039	0	1% barite (~50 gr)	Tr (7 gr)	Tr	0	Tr Mn-epidote (6 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (~40 gr)	0	Tr	Tr	0	0	0	Tr (~100 gr)	Tr (Fo)	0	Tr (~40 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 10 barite candidates = 10 barite; and 5 spessrtine versus andradite candidates = 5 andradite. 0.5-1.0 mm fraction contains 1% (~80 grains) barite.	1.0-2.0 mm fraction: 22 barite 0.5-1.0 mm fraction: 20 representative barite 1 Mn-epidote 5 low-Cr diopside 2 chromite* 0.25-0.5 mm faction: 20 representative barite 6 Mn-epidote 3 sapphire corundum 20 representative low-Cr diopside 25 representative andradite 20 representative chromite*
BWS-12-040	0	0	0	Tr	0	Tr Mn-epidote (19 gr) Tr sapphire corundum (7 gr) Tr topaz (4 gr) Tr low-Cr diopside (~60 gr)	0	Tr	Tr	0	0	1 (~300 gr)	10 (~3000 gr)	Tr (Fo)	0	Tr (17 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 Mn-epidote 1 sapphire corundum 5 low-Cr diopside 0.25-0.5 mm fraction: 19 Mn-epidote 7 sapphire corundum 4 topaz 20 representative low-Cr diopside 20 representative spessartine 20 representative andradite 17 chromite*
BWS-12-041	Tr (2 gr)	0	Tr (5 gr)	Tr	0	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (8 gr)	Tr (2 gr)	5	0	0	0	Tr (8 gr)	2 (~400 gr)	Tr (Fo)	0	Tr (4 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 2 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 2 chalcopyrite 8 Mn-epidote 2 sapphire corundum 8 low-Cr diopside 2 red rutile 8 spessartine 20 representative andradite 4 chromite*
BWS-12-043	Tr (2 gr)	0	Tr (4 gr)	Tr	0	Tr Mn-epidote (5 gr) Tr low-Cr diopside (~40 gr)	0	3	Tr	0	0	Tr (5 gr)	1 (~300 gr)	Tr (Fo)	0	Tr (18 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 4 low-Cr diopside 0.25-0.5 mm fraction: 2 chalcopyrite 5 Mn-epidote 20 representative low-Cr diopside 5 spessartine 20 representative andradite 18 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-046	0	0	Tr (4 gr)	2	1 blue-green gahnite	Tr Mn-epidote (7 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (20 gr)	Tr (5 gr)	1	0	0	0	12 (~2400 gr)	0	1 (Fo)	0	Tr (8 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite; and 10 spessartine versus andradite candidates = 9 spessartine and 1 almandine.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 gahnite 7 Mn-epidote 2 sapphire corundum 20 low-Cr diopside 5 red rutile 29 representative spessartine 1 almandine resembling spessartine 8 chromite*
BWS-12-054	0	Tr scheelite (1 gr)	0	Tr	0	Tr Mn-epidote (14 gr) Tr sapphire corundum (2 gr) Tr topaz (1 gr) Tr low-Cr diopside (5 gr)	0	1	Tr	0	0	Tr (13 gr)	15 (~1500 gr)	Tr (Fo)	0	Tr (1 gr)	0	0	Hematite-andradite/epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 barite versus diopside candidate = 1 scheelite.	0.5-1.0 mm fraction: 2 Mn-epidote 1 low-Cr diopside 0.25-0.5 mm fraction: 1 scheelite 14 Mn-epidote 2 sapphire corundum 1 topaz 5 low-Cr diopside 13 spessartine 20 representative andradite 1 chromite*
BWS-12-055	0	0	Tr (3 gr)	Tr	0	Tr Mn-epidote (~30 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (22 gr)	Tr (2 gr)	Tr	0	0	0	Tr (~50 gr)	15 (~12,000 gr)	Tr (Fo)	0	Tr (9 gr)	0	0	Hematite-ilmenite-andradite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 1 low-Cr diopside 2 chromite* 0.25-0.5 mm fraction: 20 representative Mn-epidote 6 sapphire corundum 22 low-Cr diopside 2 red rutile 20 representative spessartine 20 representative andradite 9 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates		Remarks	Picked Grains
	>1 amp			<1.0 amp	>1.0 amp			% Titanite				<0.8 amp						>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz		
BWS-12-060	Tr (2 gr)	0	0	Tr	0	Tr Mn-epidote (~80 gr) Tr sapphire corundum (19 gr) Tr topaz (6 gr) Tr low-Cr diopside (16 gr)	0	Tr	0	0	0	Tr (~80 gr)	3 (~1000 gr)	Tr (Fo)	0	Tr (13 gr)	0	0	Hematite/epidote assemblage.	0.5-1.0 mm fraction: 3 Mn-epidote 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 2 chalcopyrite 20 representative Mn-epidote 19 sapphire corundum 6 topaz 16 low-Cr diopside 20 representative spessartine 20 representative andradite 13 chromite*
BWS-12-061	Tr (3 gr)	Tr barite (15 gr)	Tr (3 gr)	2	0	Tr sapphire corundum (1 gr) Tr low-Cr diopside (1 gr)	0	5	Tr	0	0	Tr (20 gr)	Tr (3 gr)	Tr (Fo)	0	Tr (7 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.5-1.0 mm fraction: 5 barite candidates = 5 barite. SEM checks from 0.25-0.5 mm fraction: 5 spessartine versus andradite candidates = 2 spessartine and 3 andradite.	0.5-1.0 mm fraction: 5 barite 0.25-0.5 mm fraction: 3 chalcopyrite 15 barite 1 sapphire corundum 1 low-Cr diopside 20 spessartine 3 andradite 7 chromite*
BWS-12-062	Tr (3 gr)	Tr barite (3 gr)	Tr (~20 gr)	Tr	1 green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (7 gr) Tr low-Cr diopside (29 gr)	Tr (2 gr)	Tr	0	0	0	8 (~8000 gr)	0	Tr (Fo)	0	Tr (22 gr)	0	0	Hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 barite candidates = 2 barite.	1.0-2.0 mm fraction: 1 sapphire corundum 1 chromite* 0.5-1.0 mm fraction: 1 chalcopyrite 2 barite 1 sapphire corundum 7 low-Cr diopside 20 chromite* 0.25-0.5 mm fraction: 3 chalcopyrite 3 barite 1 gahnite 3 Mn-epidote 7 sapphire corundum 29 low-Cr diopside 2 red rutile 20 representative spessartine 22 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-063	Tr (1 gr)	Tr barite (3 gr)	Tr (6 gr)	Tr	0	Tr Mn-epidote (6 gr) Tr low-Cr diopside (10 gr)	0	3	Tr	0	0	Tr (11 gr)	0	Tr (Fo)	0	Tr (6 gr)	0	0	Hematite-almandine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 4 barite versus zoisite candidates = 3 barite and 1 zoisite.	0.5-1.0 mm fraction: 1 Mn-epidote 2 low-Cr diopside 4 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 3 barite 1 zoisite resembling barite 6 Mn-epidote 10 low-Cr diopside 11 spessartine 6 chromite*
BWS-12-067	0	0	0	Tr	0	Tr Mn-epidote (2 gr) Tr sapphire corundum (6 gr) Tr low-Cr diopside (24 gr)	0	Tr	Tr	0	0	Tr (~40 gr)	30 (~40,000 gr)	Tr (Fo)	0	Tr (~50 gr)	0	0	Hematite-andradite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 colourless to pale orange grossular versus andradite candidates = 3 grossular and 2 andradite. Grossular/andradite reports mostly to nonparamagnetic (>1 amp) fraction but is counted in the paramagnetic assemblage. Also picked 1 reshaped 25 x 300 x 650µ gold from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 2 low-Cr diopside 13 chromite* 0.25-0.5 mm fraction: 1 gold 2 Mn-epidote 6 sapphire corundum 24 low-Cr diopside 20 representative spessartine 22 representative andradite 3 representative grossular (counted as andradite) 30 representative chromite*
BWS-12-070	0	0	0	0	28 dark green, green gahnite	Tr Mn-epidote (8 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (~40 gr)	Tr (4 gr)	90	30	0	0	Tr (~150 gr)	0	Tr (Fo)	0	0	0	0	Hematite/titanite assemblage.	0.5-1.0 mm fraction: 3 dark green gahnite 1 Mn-epidote 2 sapphire corundum 5 low-Cr diopside 0.25-0.5 mm fraction: 28 gahnite 8 Mn-epidote 2 sapphire corundum 20 representative low-Cr diopside 4 red rutile 20 representative spessartine
BWS-12-072	0	0	Tr (~50 gr)	0	~80 (0.2%) blue-green, dark green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (~50 gr)	Tr (22 gr)	3	Tr	0	0	50 (~50,000 gr)	0	4 (Fo)	Tr	Tr (6 gr)	0	0	Spessartine-hematite-goethite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green to dark green gahnite candidates = 5 gahnite.	0.5-1.0 mm fraction: 2 blue-green gahnite 13 low-Cr diopside 1 chromite 0.25-0.5 mm fraction: 50 representative gahnite 4 Mn-epidote 1 sapphire corundum 20 representative low-Cr diopside 22 red rutile 20 representative spessartine 6 chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-073	0	0	3 (~600 gr)	60	~60 (0.3%) blue-green, pale blue-green, pale blue-grey gahnite	Tr Mn-epidote (2 gr) Tr sapphire corundum (2 gr) Tr topaz (3 gr) Tr low-Cr diopside (14 gr)	Tr (36 gr)	5	2	0	0	30 (~20,000 gr)	0	5 (Fo)	0	Tr (19 gr)	0	0	Goethite-spessartine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 1 intense blue azurite candidate = 1 lazulite (SG <3.2); 5 blue-green gahnite versus spinel candidates = 5 gahnite; 5 pale blue-green, pale blue-grey gahnite versus spinel candidates = 5 gahnite; and 3 colourless topaz versus zircon candidates = 3 topaz. Pyrite is mostly mantled by goethite.	0.5-1.0 mm fraction: 1 Mn-epidote 1 chromite* 0.25-0.5 mm fraction: 1 lazulite resembling azurite 40 representative gahnite 2 Mn-epidote 3 sapphire corundum 3 topaz 14 low-Cr diopside 36 red rutile 20 representative spessartine 19 chromite*
BWS-12-074	0	0	0	5	~40 dark green, green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (11 gr)	Tr (1 gr)	Tr	Tr	0	0	90 (~80,000 gr)	0	1 (Fo)	0	0	0	0	Spessartine/epidote assemblage.	0.5-1.0 mm fraction: 3 low-Cr diopside 0.25-0.5 mm fraction: 20 representative gahnite 4 Mn-epidote 1 sapphire corundum 11 low-Cr diopside 1 red rutile 20 representative spessartine
BWS-12-075	Tr (1 gr)	Tr barite (3 gr)	Tr (8 gr)	5	27 (0.1%) green gahnite	Tr Mn-epidote (3 gr) Tr sapphire corundum (3 gr) Tr low-Cr diopside (16 gr)	Tr (8 gr)	Tr	0	0	0	50 (~15,000 gr)	0	5 (Fo)	0	Tr (21 gr)	0	0	Spessartine-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 3 barite candidates = 3 barite.	0.5-1.0 mm fraction: 6 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 3 barite 27 gahnite 3 Mn-epidote 3 sapphire corundum 16 low-Cr diopside 8 red rutile 20 representative spessartine 21 chromite*
BWS-12-076	0	0	0	5	12 pale blue-green, blue-green gahnite	Tr Mn-epidote (2 gr) Tr ruby corundum (1 gr) Tr low-Cr diopside (9 gr)	0	30	10	0	0	4 (~400 gr)	0	2 (Fo)	0	Tr (~80 gr) gr)	Tr	0	Hematite-almandine/epidote-titanite assemblage.	0.5-1.0 mm fraction: 3 chromite* 0.25-0.5 mm fraction: 12 gahnite 2 Mn-epidote 2 ruby corundum 9 low-Cr diopside 20 representative spessartine 40 representative chromite*

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm													Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp						>1.0 amp			
								% Titanite													
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	Total	Blond	% Tm	% Ky/ Sil/St	% Sps	% Adr	% Ol	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
BWS-12-077	0	0	0	Tr	31 (0.2%) blue-green, green gahnite	Tr sapphire corundum (2 gr) Tr low-Cr diopside (6 gr)	Tr (1 gr)	3	Tr	0	0	80 (~50,000 gr)	0	2 (Fo)	0	Tr (17 gr)	0	0	Spessartine-hematite/epidote assemblage.	1.0-2.0 mm fraction: 1 chromite* 0.5-1.0 mm fraction: 1 green gahnite 4 low-Cr diopside 6 chromite* 0.25-0.5 mm fraction: 31 gahnite 2 sapphire corundum 6 low-Cr diopside 1 red rutile 20 representative spessartine 17 chromite*
BWS-12-078	Tr (1 gr)	0	0	Tr	4 dark green gahnite	Tr Mn-epidote (4 gr) Tr sapphire corundum (1 gr) Tr low-Cr diopside (9 gr)	0	1	0	0	0	15 (~10,000 gr)	0	5 (Fo)	0	Tr (3 gr)	0	0	Hornblende-hematite-spessartine/ epidote assemblage.	0.25-0..5 mm fraction: 1 chalcopyrite 4 gahnite 4 Mn-epidote 1 sapphire corundum 9 low-Cr diopside 20 representative spessartine 3 chromite*
BWS-12-079	Tr (1 gr)	0	0	3	3 blue-green, dark green gahnite	Tr Mn-epidote (2 gr) Tr low-Cr diopside (7 gr)	Tr (1 gr)	2	Tr	0	0	70 (~80,000 gr)	0	1 (Fo)	0	Tr (3 gr)	0	0	Spessartine-hematite/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green gahnite versus augite candidates = 5 augite.	0.5-1.0 mm fraction: 2 low-Cr diopside 0.25-0.5 mm fraction: 1 chalcopyrite 3 gahnite 5 augite resembling gahnite 2 Mn-epidote 7 low-Cr diopside 1 red rutile 20 representative spessartine 3 chromite*
BWS-12-080	Tr (1 gr)	0	Tr (1 gr)	0	0	Tr Mn-epidote (1 gr) Tr sapphire corundum (2 gr) Tr low-Cr diopside (15 gr)	0	10	Tr	0	0	15 (~3000 gr)	Tr (15 gr)	2 (Fo)	0	Tr (24 gr)	0	0	Hematite-hornblende-spessartine/ epidote assemblage.	0.5-1.0 mm fraction: 1 chalcopyrite 1 low-Cr diopside 1 chromite* 0.25-0.5 mm fraction: 1 chalcopyrite 1 Mn-epidote 2 sapphire corundum 15 low-Cr diopside 20 representative spessartine 15 andradite 24 chromite*
BWS-12-081	Tr (1 gr)	0	0	Tr	13 green, blue-green gahnite	Tr Mn-epidote (1 gr) Tr low-Cr diopside (10 gr)	0	2	Tr	0	0	60 (~20,000 gr)	0	2 (Fo)	0	Tr (12 gr)	0	0	Spessartine-hematite/epidote assemblage.	0.25-0.5 mm fraction: 1 chalcopyrite 13 gahnite 1 Mn-epidote 10 low-Cr diopside 20 representative spessartine 12 chromite*

Appendix P

Capoose Proportion & Analyzed Weight of –0.063 mm Fines, Till

	Weight of Archived Split (g)			%	Analyzed Wt. of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-102	405.1	336.0	35.5	10.6	35.5	30.0	5.5
BWT-12-104	384.8	194.4	39.3	20.2	35.1	30.1	5.0
BWT-12-105	395.4	227.6	82.0	36.0	36.0	30.5	5.5
BWT-12-106	437.5	437.5	25.0	5.7	25.0	20.0	5.0
BWT-12-107	501.5	244.0	82.6	33.9	36.0	30.4	5.6
BWT-12-108	372.7	222.9	49.0	22.0	35.4	30.2	5.2
BWT-12-110	479.3	252.3	49.4	19.6	35.7	30.2	5.5
BWT-12-111	446.2	238.6	74.7	31.3	36.0	30.9	5.1
BWT-12-112	519.0	519.0	38.5	7.4	33.0	28.0	5.0
BWT-12-113	352.2	178.4	35.7	20.0	35.4	30.0	5.4
BWT-12-114	372.2	160.4	41.0	25.6	35.0	29.3	5.7
BWT-12-115	365.8	274.5	34.8	12.7	34.8	29.9	4.9
BWT-12-155	456.8	241.3	50.7	21.0	38.0	30.5	7.5
BWT-12-156	544.1	249.9	43.5	17.4	43.5	33.2	10.3
BWT-12-157	354.2	231.3	150.4	65.0	35.7	30.2	5.5
BWT-12-158	492.8	240.6	48.0	20.0	36.8	30.3	6.5
BWT-12-159	409.9	259.3	93.1	35.9	36.5	30.6	5.9
BWT-12-160	454.7	249.5	71.8	28.8	36.0	30.2	5.8
BWT-12-174	346.7	249.1	94.0	37.7	41.1	32.7	8.4
BWT-12-175	505.3	265.4	128.4	48.4	33.4	26.5	6.9
BWT-12-176	405.6	255.1	151.8	59.5	35.3	28.1	7.2
BWT-12-177	488.6	241.2	57.1	23.7	34.9	27.7	7.2
BWT-12-178	410.6	207.8	38.6	18.6	38.6	29.1	9.5
BWT-12-179	504.7	278.4	43.9	15.8	43.9	34.3	9.6
BWT-12-180	389.4	194.2	27.0	13.9	27.0	23.8	3.2
BWT-12-181	362.2	174.4	65.8	37.7	37.9	32.6	5.3
BWT-12-182	490.0	263.3	29.8	11.3	29.8	24.5	5.3
BWT-12-183	508.3	202.3	34.3	17.0	34.3	29.6	4.7
BWT-12-184	451.8	451.8	13.4	3.0	13.4	10.7	2.7
BWT-12-185	387.8	242.5	31.0	12.8	31.0	26.0	5.0
BWT-12-186	529.7	305.1	23.6	7.7	23.6	19.6	4.0
BWT-12-187	432.5	190.1	38.9	20.5	38.9	31.7	7.2
BWT-12-188	351.1	265.3	21.4	8.1	21.4	17.2	4.2
BWT-12-189	445.6	316.0	24.6	7.8	24.6	20.6	4.0
BWT-12-190	571.0	379.1	38.9	10.3	38.9	31.7	7.2
BWT-12-191	467.1	292.4	46.6	15.9	35.4	30.0	5.4
BWT-12-192	452.6	298.6	32.0	10.7	32.0	25.8	6.2
BWT-12-193	433.7	327.2	16.2	5.0	16.2	11.6	4.6
BWT-12-194	331.9	208.8	59.6	28.5	34.4	28.7	5.7
BWT-12-195	468.5	317.9	29.3	9.2	29.3	25.0	4.3
BWT-12-196	434.8	345.9	24.7	7.1	24.7	20.5	4.2
BWT-12-197	336.1	219.2	45.6	20.8	33.6	28.1	5.5
BWT-12-198	525.6	407.1	19.8	4.9	19.8	15.3	4.5
BWT-12-202	374.8	295.9	35.0	11.8	35.0	28.7	6.3
BWT-12-204	428.0	304.3	21.6	7.1	21.6	16.6	5.0
BWT-12-205	429.6	276.2	21.2	7.7	21.2	16.5	4.7
BWT-12-206	364.2	228.8	12.6	5.5	12.6	9.7	2.9
BWT-12-207	428.8	239.2	41.9	17.5	36.3	30.4	5.9
BWT-12-208	416.2	282.8	37.3	13.2	37.3	32.0	5.3
BWT-12-209	335.1	306.5	13.2	4.3	13.2	10.4	2.8
BWT-12-210	495.5	495.5	18.6	3.8	18.6	13.4	5.2
BWT-12-211	384.8	287.7	21.4	7.4	21.4	16.2	5.2

	Weight of Archived Split (g)			%	Analyzed Wt. of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-212	394.9	214.6	20.1	9.4	20.1	14.9	5.2
BWT-12-213	333.3	205.3	50.5	24.6	35.5	29.8	5.7
BWT-12-214	464.0	335.0	29.5	8.8	29.5	24.4	5.1
BWT-12-215	421.5	213.4	39.5	18.5	34.7	28.6	6.1
BWT-12-216	482.1	346.3	19.8	5.7	19.8	15.1	4.7
BWT-12-217	423.2	285.1	11.6	4.1	11.6	8.5	3.1
BWT-12-218	442.1	300.5	31.4	10.4	31.4	26.1	5.3
BWT-12-219	502.3	320.7	21.5	6.7	21.5	16.3	5.2
BWT-12-220	408.1	232.3	49.3	21.2	37.7	31.1	6.6
BWT-12-221	552.2	330.1	30.7	9.3	30.7	25.0	5.7
BWT-12-222	513.8	273.4	32.8	12.0	32.8	27.2	5.6
BWT-12-243	388.2	207.7	53.7	25.9	35.4	30.0	5.4
BWT-12-248	445.8	205.5	46.5	22.6	35.6	30.3	5.3
BWT-12-249	409.9	211.0	55.9	26.5	36.2	31.1	5.1
BWT-12-251	454.4	221.0	33.5	15.2	33.5	28.0	5.5
BWT-12-252	463.6	207.8	47.0	22.6	35.2	30.2	5.0
BWT-12-264	444.3	200.6	42.7	21.3	35.4	30.2	5.2
BWT-12-265	509.5	204.0	33.3	16.3	33.3	28.8	4.5
BWT-12-266	496.3	203.8	47.0	23.1	35.0	30.0	5.0
BWT-12-272	573.0	573.0	18.7	3.3	18.7	17.7	1.0
BWT-12-273	420.2	420.2	36.4	8.7	36.4	30.4	6.0
BWT-12-274	437.2	201.2	40.2	20.0	35.1	30.0	5.1
BWT-12-275	458.3	202.7	43.1	21.3	36.1	30.9	5.2
BWT-12-301	457.8	198.6	43.0	21.7	35.9	30.2	5.7
BWT-12-302	404.6	199.2	61.4	30.8	36.5	31.4	5.1
BWT-12-303	404.9	247.3	37.7	15.2	37.7	29.9	7.8
BWT-12-304	391.2	199.3	36.8	18.5	36.8	30.1	6.7
BWT-12-305	358.5	198.6	50.2	25.3	32.8	27.6	5.2
BWT-12-306	534.2	214.8	42.8	19.9	36.2	30.7	5.5
BWT-12-307	449.3	198.0	70.0	35.4	40.6	34.9	5.7
BWT-12-308	410.4	199.0	73.6	37.0	37.6	32.1	5.5
BWT-12-309	541.8	541.8	35.5	6.6	35.5	30.2	5.3
BWT-12-310	311.2	149.5	113.0	75.6	36.0	30.7	5.3
BWT-12-311	515.0	515.0	44.0	8.5	35.7	30.6	5.1
BWT-12-312	452.3	198.6	36.2	18.2	36.2	30.8	5.4
BWT-12-313	445.3	198.8	60.4	30.4	36.4	31.2	5.2
BWT-12-314	389.1	198.9	37.9	19.1	37.9	32.5	5.4
BWT-12-315	477.2	198.9	45.4	22.8	36.8	31.3	5.5
BWT-12-316	248.1	123.7	93.3	75.4	32.0	26.9	5.1
BWT-12-317	347.3	149.5	39.3	26.3	39.3	33.6	5.7
BWT-12-318	389.4	199.4	45.8	23.0	35.5	30.1	5.4
BWT-12-319	387.3	197.9	49.6	25.1	35.4	30.3	5.1
BWT-12-320	392.4	199.7	35.4	17.7	35.4	30.1	5.3
BWT-12-321	455.6	253.2	35.6	14.1	35.6	31.2	4.4
BWT-12-322	375.2	187.3	60.4	32.2	36.0	30.9	5.1
BWT-12-323	373.6	199.9	35.2	17.6	35.2	30.2	5.0
BWT-12-324	370.4	190.3	52.1	27.4	35.9	30.9	5.0
BWT-12-325	463.5	463.5	35.2	7.6	35.2	29.9	5.3
BWT-12-326	317.2	170.5	38.8	22.8	38.8	32.8	6.0
BWT-12-327	548.6	260.1	37.6	14.5	37.6	30.9	6.7
BWT-12-328	505.4	240.6	39.6	16.5	39.6	32.7	6.9
BWT-12-330	393.4	149.9	49.7	33.2	36.3	30.8	5.5

	Weight of Archived Split (g)			%	Analyzed Wt. of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-332	420.1	149.8	44.6	29.8	35.6	30.0	5.6
BWT-12-333	516.6	149.9	47.1	31.4	37.3	31.8	5.5
BWT-12-334	453.8	199.1	40.5	20.3	35.4	30.1	5.3
BWT-12-335	379.6	248.8	118.9	47.8	36.3	31.0	5.3
BWT-12-298	445.6	248.4	35.9	14.5	35.9	30.0	5.9
BWT-12-299	445.1	235.0	40.8	17.4	33.8	28.2	5.6
BWT-12-300	503.2	256.8	42.5	16.5	37.2	30.3	6.9
BWT-12-329	473.3	278.8	37.1	13.3	37.1	30.2	6.9
BWT-12-331	437.7	265.5	57.1	21.5	36.7	30.0	6.7
BWT-12-336	444.1	226.3	43.0	19.0	34.0	27.8	6.2
BWT-12-337	454.7	88.8	37.9	42.7	37.9	30.2	7.7
BWT-12-338	342.4	36.6	36.6	100.0	31.0	25.0	6.0
BWT-12-339	412.1	185.4	37.5	20.2	37.5	30.4	7.1
BWT-12-340	465.1	192.7	36.9	19.1	36.9	29.9	7.0
BWT-12-341	384.6	230.3	68.3	29.7	36.5	30.2	6.3
BWT-12-342	402.8	192.0	73.5	38.3	33.2	28.2	5.0
BWT-12-349	483.9	249.1	45.0	18.1	36.6	30.1	6.5
BWT-12-350	316.4	230.4	74.0	32.1	34.5	29.1	5.4
BWT-12-351	538.0	144.1	36.5	25.3	36.5	30.1	6.4
BWT-12-352	282.7	36.4	36.4	100.0	34.5	27.8	6.7
BWT-12-353	367.2	217.1	68.4	31.5	35.6	30.1	5.5
BWT-12-356	526.3	200.5	35.2	17.6	35.2	28.4	6.8
BWT-12-357	390.2	25.3	25.3	100.0	25.3	20.9	4.4
BWT-12-358	450.7	208.2	56.8	27.3	35.6	29.8	5.8
BWT-12-359	477.3	266.1	50.1	18.8	35.8	30.2	5.6
BWT-12-360	450.7	263.9	79.5	30.1	36.1	30.4	5.7
BWT-12-361	425.2	267.7	42.5	15.9	36.0	30.4	5.6
BWT-12-362	420.9	257.3	36.4	14.1	36.4	30.3	6.1
BWT-12-363	392.6	199.2	50.8	25.5	36.1	30.8	5.3
BWT-12-364	459.2	199.6	57.3	28.7	35.9	30.4	5.5
BWT-12-369	454.7	198.5	44.6	22.5	35.6	30.3	5.3
BWT-12-370	514.6	149.2	38.0	25.5	38.0	30.1	7.9
BWT-12-371	610.8	398.1	48.0	12.1	36.8	31.4	5.4
BWT-12-374	424.2	199.5	43.0	21.6	35.3	30.1	5.2
BWT-12-376	498.0	299.4	46.6	15.6	36.1	30.1	6.0
BWT-12-381	395.7	148.9	47.6	32.0	36.4	30.7	5.7
BWT-12-389	435.1	435.1	37.9	8.7	29.7	24.5	5.2
BWT-12-391	351.0	149.2	70.9	47.5	36.2	30.1	6.1
BWT-12-392	436.7	214.3	35.5	16.6	35.5	30.1	5.4
BWT-12-393	507.2	247.9	37.4	15.1	32.2	26.8	5.4
BWT-12-343	415.1	199.5	37.1	18.6	37.1	30.0	7.1
BWT-12-344	487.6	199.5	36.4	18.2	36.4	30.7	5.7
BWT-12-345	416.2	208.1	42.7	20.5	35.4	30.1	5.3
BWT-12-346	383.3	200.1	40.1	20.0	35.2	30.0	5.2
BWT-12-347	486.7	307.1	35.1	11.4	35.1	30.1	5.0
BWT-12-348	397.6	197.7	37.4	18.9	37.4	30.1	7.3
BWT-12-354	544.5	296.4	35.7	12.0	35.7	30.0	5.7
BWT-12-355	414.7	249.9	35.1	14.0	30.4	25.4	5.0
BWT-12-365	378.3	252.8	38.6	15.3	29.8	24.8	5.0
BWT-12-366	467.0	369.7	35.1	9.5	31.8	26.7	5.1
BWT-12-367	539.1	200.5	50.4	25.1	35.0	30.0	5.0
BWT-12-368	404.6	200.8	40.3	20.1	35.2	30.0	5.2

	Weight of Archived Split (g)			%	Analyzed Wt. of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-372	487.6	199.6	37.8	18.9	37.8	30.0	7.8
BWT-12-373	381.7	154.1	35.4	23.0	35.4	30.2	5.2
BWT-12-375	430.8	201.3	40.5	20.1	32.9	27.9	5.0
BWT-12-377	353.2	200.0	35.1	17.6	35.1	30.1	5.0
BWT-12-378	394.7	200.5	43.4	21.6	35.1	30.0	5.1
BWT-12-379	446.0	199.6	35.1	17.6	35.1	30.1	5.0
BWT-12-380	439.9	199.1	36.3	18.2	36.3	30.0	6.3
BWT-12-382	372.4	199.5	37.0	18.5	37.0	31.8	5.2
BWT-12-383	366.0	149.3	43.5	29.1	35.1	30.0	5.1
BWT-12-384	472.0	198.8	111.5	56.1	35.6	30.4	5.2
BWT-12-385	446.6	198.9	49.0	24.6	36.4	30.9	5.5
BWT-12-386	472.3	198.9	37.1	18.7	37.1	30.0	7.1
BWT-12-387	486.0	199.2	37.5	18.8	37.5	30.2	7.3
BWT-12-388	392.0	149.7	55.2	36.9	37.5	32.0	5.5
BWT-12-390	512.9	199.7	77.0	38.6	36.9	31.7	5.2
BWT-12-394	466.2	247.9	35.5	14.3	35.5	30.1	5.4
BWT-12-395	288.8	149.1	42.6	28.6	36.3	30.8	5.5
BWT-12-396	355.4	197.6	36.5	18.5	36.5	28.7	7.8
BWT-12-397	443.0	198.7	57.4	28.9	35.6	30.3	5.3
BWT-12-398	405.3	199.0	39.4	19.8	35.2	30.0	5.2
BWT-12-399	383.8	199.1	39.4	19.8	36.2	31.0	5.2
BWT-12-400	434.1	199.3	39.7	19.9	35.5	30.2	5.3
BWT-12-401	399.2	199.1	54.3	27.3	35.8	30.2	5.6
BWT-12-402	456.5	198.1	36.3	18.3	36.3	30.0	6.3
BWT-12-403	349.1	149.9	35.2	23.5	35.2	30.1	5.1
BWT-12-404	280.1	150.5	40.5	26.9	33.0	28.0	5.0
BWT-12-405	475.6	199.9	35.3	17.7	35.3	30.1	5.2
BWT-12-406	471.3	223.1	35.1	15.7	35.1	30.0	5.1
BWT-12-407	409.1	200.1	65.9	32.9	35.1	30.0	5.1
BWT-12-408	436.1	149.3	54.7	36.6	35.1	30.0	5.1
BWT-12-409	452.5	149.7	45.4	30.3	35.0	30.0	5.0
BWT-12-410	346.2	149.7	78.3	52.3	31.5	26.2	5.3
BWT-12-411	387.4	210.5	35.0	16.6	35.0	30.0	5.0
BWT-12-412	386.3	386.3	23.3	6.0	23.3	18.7	4.6
BWT-12-413	482.8	482.8	36.4	7.5	36.4	30.1	6.3
BWT-12-414	608.2	608.2	33.1	5.4	33.1	28.1	5.0
BWT-12-415	422.1	422.1	19.9	4.7	19.9	14.6	5.3
BWT-12-416	378.1	378.1	23.5	6.2	23.5	18.6	4.9
BWT-12-417	360.4	360.4	37.1	10.3	37.1	30.0	7.1
BWT-12-418	346.8	346.8	21.1	6.1	21.1	16.3	4.8
BWT-12-419	452.6	349.8	33.0	9.4	27.8	22.6	5.2
BWT-12-420	350.7	350.7	25.5	7.3	25.5	20.5	5.0
BWT-12-421	417.4	312.1	36.5	11.7	36.5	29.0	7.5
BWT-12-422	486.3	380.1	36.8	9.7	31.9	25.1	6.8
BWT-12-423	412.4	197.7	50.0	25.3	36.1	30.2	5.9
BWT-12-424	390.4	199.1	44.5	22.4	35.1	30.0	5.1
BWT-12-425	365.8	365.8	38.5	10.5	29.1	24.1	5.0
BWT-12-426	342.5	200.0	52.8	26.4	36.6	30.9	5.7
BWT-12-427	475.8	248.2	40.7	16.4	30.8	25.3	5.5
BWT-12-428	486.4	249.0	37.2	14.9	37.2	31.0	6.2
BWT-12-429	329.8	224.5	36.0	16.0	36.0	29.0	7.0
BWT-12-430	522.5	522.5	20.5	3.9	20.5	15.3	5.2

	Weight of Archived Split (g)			%	Analyzed Wt. of -0.063 mm		
Sample No.	Total	Sieved	-0.063 mm	-0.063 mm	Total	INA	ICP
BWT-12-431	442.4	339.3	34.6	10.2	34.6	29.2	5.4
BWT-12-432	351.8	259.4	37.5	14.5	37.5	31.0	6.5
BWT-12-433	514.3	378.6	40.7	10.8	36.4	30.0	6.4
BWT-12-434	367.1	250.5	41.9	16.7	36.5	30.0	6.5
BWT-12-435	465.4	269.6	45.2	16.8	34.3	29.0	5.3
BWT-12-436	319.4	319.4	29.7	9.3	29.7	24.4	5.3
BWT-12-437	350.3	350.3	44.2	12.6	34.3	29.1	5.2
BWT-12-438	398.4	398.4	21.4	5.4	21.4	18.4	3.0
BWT-12-439	526.9	298.9	52.5	17.6	34.5	29.0	5.5
BWT-12-440	463.6	249.1	32.6	13.1	32.6	23.9	8.7
BWT-12-441	463.9	199.3	32.8	16.5	32.8	30.2	2.6
BWT-12-442	389.9	199.3	53.5	26.8	34.7	29.4	5.3
BWT-12-443	466.1	466.1	34.1	7.3	29.0	24.0	5.0
BWT-12-444	477.8	198.5	32.6	16.4	32.6	28.7	3.9
BWT-12-445	379.3	198.8	58.5	29.4	34.0	28.8	5.2
BWT-12-446	371.6	198.8	32.6	16.4	32.6	25.2	7.4
BWT-12-447	391.3	199.1	44.2	22.2	33.3	28.2	5.1
BWT-12-448	407.1	199.0	49.8	25.0	34.6	29.5	5.1
BWT-12-449	403.1	403.1	40.3	10.0	30.8	25.6	5.2
BWT-12-450	403.5	199.1	37.1	18.6	31.3	26.2	5.1
BWT-12-451	276.2	199.2	46.5	23.3	28.6	23.5	5.1
BWT-12-452	396.4	199.2	43.4	21.8	32.7	27.5	5.2
BWT-12-453	359.6	198.1	69.0	34.8	34.3	30.0	4.3
BWT-12-454	473.6	240.6	35.0	14.5	35.0	30.0	5.0
BWT-12-455	457.7	201.5	35.1	17.4	35.1	30.0	5.1
BWT-12-456	462.1	195.1	35.5	18.2	31.8	26.7	5.1
BWT-12-457	392.1	227.9	35.0	15.4	35.0	30.1	4.9
BWT-12-458	429.3	204.5	66.9	32.7	35.1	30.1	5.0
BWT-12-459	468.6	200.6	60.5	30.2	35.9	30.5	5.4
BWT-12-460	396.6	200.5	34.1	17.0	34.1	30.0	4.1
BWT-12-461	386.5	201.1	40.8	20.3	35.2	30.0	5.2
BWT-12-462	335.6	146.6	44.2	30.2	35.6	30.4	5.2
BWT-12-463	393.1	151.0	42.6	28.2	35.4	30.0	5.4
BWT-12-464	452.8	200.4	51.4	25.6	35.3	30.0	5.3
BWT-12-465	490.8	200.9	35.6	17.7	35.6	30.0	5.6
BWT-12-466	462.0	206.5	35.1	17.0	35.1	30.0	5.1
BWT-12-497	363.2	363.2	28.2	7.8	28.2	23.0	5.2
BWT-12-498	501.0	468.9	36.5	7.8	36.5	30.0	6.5
BWT-12-499	457.2	352.2	40.5	11.5	34.3	28.8	5.5
BWT-12-500	439.2	294.4	41.9	14.2	36.4	30.3	6.1
BWT-12-501	412.3	323.6	42.8	13.2	35.6	29.9	5.7
BWT-12-502	419.4	301.9	46.0	15.2	36.8	30.4	6.4
BWT-12-503	428.4	302.3	42.9	14.2	36.6	30.3	6.3
BWT-12-504	508.3	308.9	53.9	17.4	37.8	31.8	6.0

Appendix Q

Capoose –0.063 Geochemical Analyses, Till

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-102	12	< 5	7	650	3.8	< 1	20	110	2	4.96	5	< 1	< 5	4	1.84	< 20	82	1	12.9	< 3	< 0.02	< 0.05	< 0.5	12.2	4.8
BTW-12-104	< 2	< 5	5.6	540	6.2	< 1	9	61	3	3.19	6	< 1	< 5	6	2.17	< 20	87	0.9	12.6	< 3	< 0.02	< 0.05	< 0.5	9.3	6.6
BTW-12-105	< 2	< 5	4.6	540	6.3	< 1	9	58	< 1	2.92	5	< 1	< 5	< 1	2.27	< 20	70	0.9	10.8	< 3	< 0.02	< 0.05	1.9	9.4	4
BTW-12-106	< 2	< 5	7	470	< 0.5	< 1	13	65	4	3.58	13	< 1	< 5	< 1	2.22	< 20	111	8.9	13.9	< 3	< 0.02	0.17	< 0.5	29.5	48.8
BTW-12-107	< 2	< 5	4.8	650	< 0.5	3	17	116	< 1	4.74	5	< 1	< 5	< 1	2.43	< 20	85	0.9	11.9	< 3	< 0.02	< 0.05	1.7	6.7	3
BTW-12-108	22	< 5	15.9	670	3.7	< 1	14	111	2	4.54	5	< 1	< 5	9	1.47	< 20	126	1.6	10.7	< 3	< 0.02	< 0.05	2.1	10.2	8.9
BTW-12-110	< 2	< 5	5.8	720	< 0.5	< 1	17	118	2	4.75	7	< 1	< 5	4	1.95	< 20	73	1.2	12.3	< 3	< 0.02	< 0.05	< 0.5	9.1	5.2
BTW-12-111	< 2	< 5	2.7	700	< 0.5	2	13	106	2	3.77	5	< 1	< 5	4	3.13	< 20	111	0.8	8.4	< 3	< 0.02	< 0.05	< 0.5	16.3	3.9
BTW-12-112	< 2	< 5	9	500	4	2	16	152	3	4.39	6	< 1	< 5	16	2.24	< 20	109	1	10.5	< 3	< 0.02	< 0.05	< 0.5	16.7	9.3
BTW-12-113	< 2	< 5	6	590	< 0.5	3	14	76	4	3.93	6	< 1	< 5	< 1	2.06	< 20	83	1.1	12.4	< 3	< 0.02	< 0.05	< 0.5	15.3	7.5
BTW-12-114	< 2	< 5	9.9	510	2.7	< 1	12	68	3	3.79	6	< 1	< 5	< 1	2.29	< 20	100	0.8	12.1	< 3	< 0.02	< 0.05	< 0.5	18.7	6.5
BTW-12-115	< 2	6	21.3	410	5.7	< 1	11	58	4	3.89	6	< 1	< 5	8	1.98	< 20	107	0.7	10.2	< 3	< 0.02	< 0.05	1.8	22.1	8.9
BTW-12-155	< 2	< 5	7.1	740	< 0.5	< 1	15	83	3	3.99	5	< 1	< 5	< 1	2.25	< 20	65	0.9	13	< 3	< 0.02	< 0.05	< 0.5	12.2	4.9
BTW-12-156	< 2	< 5	4.3	750	5.5	2	14	89	< 1	3.95	5	< 1	< 5	4	2.55	< 20	85	0.8	11.7	< 3	< 0.02	< 0.05	1.7	11.1	4.7
BTW-12-157	16	< 5	4.6	510	< 0.5	< 1	11	101	2	2.92	4	< 1	< 5	< 1	2.39	< 20	80	0.6	11.4	< 3	< 0.02	< 0.05	1.8	6.8	4.6
BTW-12-158	< 2	< 5	6.3	640	< 0.5	< 1	14	58	< 1	3.82	4	< 1	< 5	< 1	2.23	120	65	1	14	< 3	< 0.02	< 0.05	< 0.5	5.4	1.9
BTW-12-159	< 2	< 5	6.3	630	3.3	< 1	8	67	2	3.39	4	< 1	< 5	< 1	2.55	< 20	< 15	1	13.1	< 3	< 0.02	< 0.05	< 0.5	5.5	< 0.5
BTW-12-160	8	< 5	9.3	560	3.9	< 1	8	55	2	3.44	4	< 1	< 5	< 1	2.53	130	< 15	1.2	14.2	< 3	< 0.02	< 0.05	< 0.5	8.5	4.3
BTW-12-174	< 2	< 5	6	560	< 0.5	2	11	77	2	2.89	5	< 1	< 5	< 1	2.28	< 20	55	1	11.3	< 3	< 0.02	< 0.05	< 0.5	6.1	2.1
BTW-12-175	11	< 5	4.3	560	< 0.5	< 1	8	56	2	2.82	4	< 1	< 5	< 1	2.44	< 20	63	0.7	10.4	< 3	< 0.02	< 0.05	< 0.5	5	< 0.5
BTW-12-176	< 2	< 5	3.9	480	< 0.5	2	8	61	< 1	2.54	3	< 1	< 5	< 1	2.6	< 20	< 15	0.4	10.3	< 3	< 0.02	< 0.05	< 0.5	6.5	4
BTW-12-177	< 2	< 5	3.9	650	< 0.5	3	11	74	2	2.82	5	< 1	< 5	< 1	2.47	< 20	80	0.9	11.8	< 3	< 0.02	< 0.05	1.6	8.6	3.7
BTW-12-178	< 2	< 5	5	610	< 0.5	< 1	11	48	2	3.36	5	< 1	< 5	< 1	2.35	< 20	83	0.7	11.9	< 3	< 0.02	< 0.05	< 0.5	10.1	2.9
BTW-12-179	< 2	< 5	8.1	420	< 0.5	< 1	7	64	< 1	3.34	6	< 1	< 5	< 1	2.35	< 20	63	0.9	11.9	< 3	< 0.02	0.05	< 0.5	8.6	3.9
BTW-12-180	15	< 5	6	550	< 0.5	< 1	9	60	3	3.45	9	< 1	< 5	< 1	2.88	< 20	90	1	12.3	< 3	< 0.02	< 0.05	< 0.5	20.2	< 0.5
BTW-12-181	< 2	< 5	4.4	640	< 0.5	< 1	9	51	2	3.05	4	< 1	< 5	< 1	2.2	< 20	79	1	11	< 3	< 0.02	< 0.05	< 0.5	8.6	4.2
BTW-12-182	< 2	< 5	6.5	510	< 0.5	< 1	9	50	3	3.46	5	< 1	< 5	< 1	2.21	< 20	53	1	13.5	< 3	< 0.02	< 0.05	< 0.5	4.1	3.7
BTW-12-183	< 2	< 5	8.7	590	< 0.5	< 1	9	40	3	3.21	4	< 1	< 5	< 1	2.06	< 20	< 15	1.4	12.6	< 3	< 0.02	< 0.05	< 0.5	4.2	2.4
BTW-12-184	< 2	< 5	11.9	630	< 0.5	< 1	18	63	4	4.78	5	< 1	< 5	< 1	2.38	< 20	< 15	1.9	16.6	< 3	< 0.02	< 0.05	< 0.5	5.5	< 0.5
BTW-12-185	< 2	< 5	8.8	510	12.4	< 1	12	43	2	3.95	3	< 1	< 5	< 1	1.67	< 20	60	0.6	14.3	< 3	< 0.02	< 0.05	< 0.5	3.7	2.3
BTW-12-186	33	< 5	22.2	540	3.8	< 1	18	46	4	4.8	4	< 1	< 5	< 1	1.84	< 20	< 15	2.8	16.9	< 3	< 0.02	< 0.05	< 0.5	4.4	2.9
BTW-12-187	< 2	< 5	8.6	490	< 0.5	2	9	40	3	3.19	4	< 1	< 5	< 1	1.95	120	77	1.3	11.9	< 3	< 0.02	< 0.05	< 0.5	4.5	< 0.5
BTW-12-188	5	< 5	9.4	540	< 0.5	< 1	18	38	5	4.91	4	< 1	< 5	< 1	1.54	< 20	< 15	1.5	14.8	< 3	< 0.02	< 0.05	< 0.5	3.8	< 0.5
BTW-12-189	< 2	< 5	7.4	710	< 0.5	3	11	58	2	3.56	5	< 1	< 5	< 1	2.21	< 20	< 15	1.1	13.2	< 3	< 0.02	< 0.05	2.2	7.6	< 0.5
BTW-12-190	23	< 5	6	580	4.5	2	8	56	3	2.86	4	< 1	< 5	< 1	2	< 20	< 15	1.1	11.6	< 3	< 0.02	< 0.05	< 0.5	5.1	3
BTW-12-191	< 2	< 5	4.5	640	4.4	< 1	14	69	< 1	3.6	5	< 1	< 5	< 1	2.41	130	< 15	0.9	13	< 3	< 0.02	< 0.05	< 0.5	6.4	3.8
BTW-12-192	< 2	< 5	7.2	370	< 0.5	3	12	79	< 1	3.67	6	< 1	< 5	14	2.35	150	< 15	1	13.7	< 3	< 0.02	< 0.05	< 0.5	6.4	1.7
BTW-12-193	< 2	< 5	6	800	6.6	3	28	282	< 1	10.3	7	< 1	< 5	< 1	2	220	< 15	0.8	20.6	< 3	< 0.02	< 0.05	< 0.5	4.8	4.5
BTW-12-194	< 2	< 5	5.2	580	< 0.5	3	7	29	2	2.2	4	< 1	< 5	< 1	2.15	< 20	36	0.9	12.1	< 3	< 0.02	< 0.05	< 0.5	3.6	1.8
BTW-12-195	< 2	< 5	32.6	540	6	< 1	13	38	4	3.77	4	< 1	< 5	< 1	1.92	< 20	< 15	1.5	14.7	< 3	< 0.02	< 0.05	< 0.5	3.7	< 0.5
BTW-12-196	39	< 5	67.9	380	9.1	< 1	21	30	4	4.99	4	< 1	< 5	< 1	1.97	< 20	< 15	2.5	17.7	< 3	< 0.02	< 0.05	< 0.5	3.1	< 0.5
BTW-12-197	< 2	< 5	20.2	600	2.7	2	15	29	5	4.52	3	< 1	< 5	< 1	1.51	< 20	56	1.6	16.3	< 3	< 0.02	< 0.05	< 0.5	3.4	< 0.5
BTW-12-198	< 2	< 5	13.3	710	< 0.5	4	13	46	3	4.61	4	< 1	< 5	< 1	2.3	< 20	< 15	2.4	17.8	< 3	< 0.02	< 0.05	< 0.5	5	< 0.5
BTW-12-202	< 2	< 5	15.6	430	< 0.5	< 1	11	28	2	3.88	4	< 1	< 5	< 1	2.44	< 20	< 15	1.5	17.5	< 3	< 0.02	< 0.05	< 0.5	3.2	1.9
BTW-12-204	< 2	< 5	13.7	770	< 0.5	3	12	60	2	4.32	6	< 1	< 5	< 1	2.57	< 20	< 15	1.5	17.1	< 3	< 0.02	< 0.05	2.7	4.6	3.2
BTW-12-205	< 2	< 5	22.3	610	< 0.5	< 1	12	64	3	4.59	5	< 1	< 5	< 1	2.33	< 20	< 15	1.9	19.4	< 3	< 0.02	< 0.05	< 0.5	5.3	< 0.5
BTW-12-206	< 2	< 5	55.4	720	3.6	< 1	11	50	5	4.18	6	< 1	< 5	< 1	2.22	< 20	< 15	2.5	20.7	< 3	< 0.02	< 0.05	< 0.5	5	< 0.5
BTW-12-207	< 2	< 5	9.7	650	4.8	2	8	46	< 1	3.32	4	< 1	< 5	< 1	2.39	< 20	61	1.3	13.7	< 3	< 0.02	< 0.05	< 0.5	3.9	3
BTW-12-208	9	< 5	10.3	600	4.9	< 1	9	42	3	3.43	5	< 1	< 5	< 1	2.08	< 20	53	1.4	13.6	< 3	< 0.02	< 0.05	< 0.5	3.8	2
BTW-12-209	< 2	< 5	17.3	810	5.6	< 1	11	48	4	4.18	6	< 1	< 5	< 1	2.56	< 20	111	1.7	16.8	< 3	< 0.02	< 0.05	< 0.5	6.3	< 0.5
BTW-12-210	< 2	< 5	371	960	14.9	< 1	12	38	9	4.84	4	< 1	< 5	< 1	2.29	< 20	124	7.1	20.2	< 3	< 0.02	< 0.05	< 0.5	5	< 0.5

Analyte Symbol	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-102	< 1	70	31	74	18	4.9	1	< 0.5	1.5	0.33	30	< 0.2	0.6	51	906	< 2	49	6	129	0.006
BTW-12-104	4	90	30.7	63	12	4.8	0.9	< 0.5	2.2	0.37	30.1	0.3	< 0.5	38	557	7	9	9	77	0.014
BTW-12-105	< 1	< 50	28	65	11	4.7	1	< 0.5	2.1	0.38	30.5	< 0.2	< 0.5	21	376	3	11	6	48	0.009
BTW-12-106	12	240	59.2	110	22	5.8	1.3	< 0.5	1.8	0.49	20	0.4	6.7	36	331	< 2	12	31	300	0.006
BTW-12-107	< 1	< 50	28.1	60	17	4.9	1.2	< 0.5	1.8	0.31	30.4	< 0.2	< 0.5	18	655	3	22	6	80	0.004
BTW-12-108	5	300	34.5	68	25	5.7	1.3	< 0.5	2.1	0.35	30.2	0.9	0.7	36	929	7	20	38	265	0.005
BTW-12-110	< 1	70	29.9	69	13	5.3	1.2	< 0.5	2	0.38	30.2	< 0.2	0.6	44	810	2	28	8	94	0.003
BTW-12-111	< 1	110	37	75	19	5	0.9	< 0.5	1.7	0.28	30.9	< 0.2	< 0.5	15	433	6	22	2	59	0.014
BTW-12-112	6	< 50	31.1	62	11	3.9	0.9	< 0.5	1.2	0.22	28	< 0.2	< 0.5	22	455	6	28	7	81	0.012
BTW-12-113	< 1	60	35	72	13	4.9	1	< 0.5	1.8	0.35	30	< 0.2	< 0.5	27	669	< 2	25	8	80	0.004
BTW-12-114	6	90	38	71	13	5.3	1	< 0.5	1.7	0.24	29.3	< 0.2	< 0.5	31	537	< 2	21	7	80	0.005
BTW-12-115	< 1	80	31.7	63	< 5	3.8	0.7	< 0.5	1.3	0.24	29.9	< 0.2	< 0.5	26	623	8	15	9	54	0.012
BTW-12-155	< 1	100	36.1	58	27	5.7	0.9	< 0.5	2.2	0.38	30.5	< 0.2	< 0.5	22	793	< 2	22	9	76	0.004
BTW-12-156	< 1	70	33.7	59	18	5.3	1	< 0.5	1.8	0.3	33.2	< 0.2	< 0.5	17	551	< 2	23	7	59	0.005
BTW-12-157	< 1	110	23.7	37	23	4.1	1	< 0.5	1.7	0.34	30.2	< 0.2	< 0.5	9	346	2	15	4	53	0.008
BTW-12-158	< 1	< 50	23.1	38	19	4.5	1	< 0.5	2.1	0.4	30.3	< 0.2	< 0.5	22	662	< 2	18	6	70	0.004
BTW-12-159	< 1	90	25.6	44	27	5.1	1	< 0.5	2.2	0.45	30.6	< 0.2	< 0.5	15	432	2	13	5	44	0.003
BTW-12-160	< 1	110	27.6	35	22	5.4	1.2	< 0.5	2.4	0.42	30.2	< 0.2	< 0.5	17	458	2	11	6	48	0.004
BTW-12-174	< 1	110	21.8	34	11	4.2	1	0.7	2	0.3	32.7	< 0.2	< 0.5	12	325	< 2	17	4	40	0.006
BTW-12-175	< 1	< 50	20.6	32	16	4.2	0.9	< 0.5	1.7	0.33	26.5	< 0.2	< 0.5	13	339	< 2	12	5	40	0.005
BTW-12-176	< 1	< 50	21.8	36	14	4.3	0.9	< 0.5	1.7	0.28	28.1	< 0.2	< 0.5	9	325	< 2	11	5	41	0.003
BTW-12-177	< 1	170	27.5	40	18	4.6	0.9	< 0.5	1.9	0.35	27.7	< 0.2	< 0.5	9	354	< 2	11	5	43	0.01
BTW-12-178	< 1	90	35	49	23	5.8	1.3	0.8	1.9	0.36	29.1	< 0.2	< 0.5	18	652	< 2	15	5	57	0.005
BTW-12-179	< 1	80	31.6	46	23	5.5	0.9	0.8	2.3	0.39	34.3	< 0.2	< 0.5	16	420	5	13	3	43	0.016
BTW-12-180	7	< 50	55.5	87	36	8.4	1.3	< 0.5	3	0.56	23.8	< 0.2	< 0.5	16	612	< 2	11	12	57	0.002
BTW-12-181	< 1	< 50	22.9	39	15	4.6	0.9	< 0.5	1.6	0.26	32.6	< 0.2	< 0.5	20	523	< 2	14	4	49	0.003
BTW-12-182	< 1	140	23.2	46	83	4.7	1.1	< 0.5	2.4	0.33	24.5	< 0.2	< 0.5	17	617	< 2	11	6	53	0.003
BTW-12-183	< 1	160	20.7	35	30	5.2	1.1	0.8	2.1	0.34	29.6	< 0.2	< 0.5	18	673	< 2	10	6	59	0.003
BTW-12-184	< 1	< 50	23.6	33	8	6.7	1.3	1.3	2.7	0.5	10.7	< 0.2	0.6	33	1080	< 2	14	7	85	0.005
BTW-12-185	< 1	< 50	21.3	41	21	6.7	1.4	< 0.5	2.6	0.43	26	0.5	0.5	36	753	3	12	9	82	0.018
BTW-12-186	< 1	< 50	22.3	46	35	5.9	1.2	2.1	2.4	0.34	19.6	< 0.2	< 0.5	45	1040	< 2	9	14	90	0.007
BTW-12-187	< 1	< 50	19.1	36	33	5.5	1	< 0.5	2.1	0.35	31.7	< 0.2	< 0.5	23	745	< 2	10	7	60	0.004
BTW-12-188	< 1	170	18.7	40	< 5	5	1	< 0.5	2.4	0.4	17.2	0.4	1.1	80	925	< 2	8	23	244	0.011
BTW-12-189	< 1	< 50	27.6	53	33	6.8	1.1	< 0.5	2.5	0.43	20.6	< 0.2	< 0.5	21	531	< 2	16	5	55	0.004
BTW-12-190	< 1	< 50	20.3	37	16	4.3	0.8	< 0.5	2	0.26	31.7	< 0.2	< 0.5	16	392	< 2	13	5	41	0.005
BTW-12-191	< 1	< 50	26.5	70	33	6.1	1.4	< 0.5	2.4	0.32	30	< 0.2	< 0.5	19	710	< 2	16	6	44	0.005
BTW-12-192	< 1	< 50	22.1	45	32	4.7	1	< 0.5	2.2	0.3	25.8	< 0.2	< 0.5	18	353	< 2	15	4	47	0.005
BTW-12-193	< 1	< 50	42.3	78	89	9.6	2.8	< 0.5	3.1	0.25	11.6	< 0.2	0.8	32	710	< 2	61	< 2	109	0.004
BTW-12-194	< 1	< 50	17	33	21	4.3	1.1	< 0.5	2	0.28	28.7	< 0.2	< 0.5	8	277	< 2	5	5	46	0.007
BTW-12-195	< 1	< 50	16.2	41	23	4.2	1	< 0.5	2.4	0.34	25	< 0.2	0.6	28	400	< 2	11	8	68	0.011
BTW-12-196	< 1	110	14.3	31	27	4.6	1	< 0.5	2.5	0.47	20.5	< 0.2	0.8	33	406	< 2	12	6	85	0.016
BTW-12-197	4	110	18.3	32	24	4.7	1	0.6	2.3	0.25	28.1	< 0.2	0.8	36	846	< 2	15	7	87	0.005
BTW-12-198	< 1	260	22.2	52	28	6.9	1	< 0.5	2.8	0.43	15.3	< 0.2	< 0.5	37	785	< 2	15	8	92	0.003
BTW-12-202	< 1	100	19.1	37	16	5.8	1.4	< 0.5	2.9	0.37	28.7	< 0.2	< 0.5	24	596	< 2	9	5	61	0.003
BTW-12-204	< 1	250	25.4	52	28	5.4	1.5	0.9	2.8	0.27	16.6	< 0.2	< 0.5	24	795	< 2	13	8	72	0.003
BTW-12-205	< 1	< 50	22.7	45	< 5	6.8	1.6	< 0.5	3.2	0.5	16.5	< 0.2	< 0.5	34	746	< 2	12	8	80	0.004
BTW-12-206	< 1	180	28	53	40	8.1	1.7	1.8	3.1	0.56	9.7	< 0.2	0.5	23	561	9	13	10	72	0.005
BTW-12-207	< 1	< 50	20.5	36	10	5.4	1.3	< 0.5	2.8	0.35	30.4	< 0.2	< 0.5	18	782	< 2	8	6	58	0.003
BTW-12-208	< 1	< 50	18.2	39	29	5.2	1.1	< 0.5	2.2	0.35	30	< 0.2	< 0.5	16	355	< 2	9	7	60	0.006
BTW-12-209	< 1	< 50	25.4	56	38	6.5	1.5	< 0.5	2.5	0.53	10.4	< 0.2	< 0.5	28	689	< 2	11	8	62	0.003
BTW-12-210	< 1	250	25.9	41	26	6.8	1.8	1.3	4	0.62	13.4	0.3	0.7	45	896	2	9	34	105	0.014

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-211	< 2	< 5	69.8	640	14	2	11	49	5	4.34	7	< 1	< 5	< 1	2.14	< 20	< 15	2.1	19	< 3	< 0.02	< 0.05	< 0.5	5.9	3.7
BTW-12-212	< 2	< 5	14.8	650	6.5	< 1	10	58	4	3.8	6	< 1	< 5	< 1	2.4	< 20	70	2.2	15.9	< 3	< 0.02	< 0.05	< 0.5	3.6	< 0.5
BTW-12-213	< 2	< 5	24	560	7.9	< 1	9	34	2	2.94	5	< 1	< 5	< 1	2.06	< 20	< 15	1.7	12.4	< 3	< 0.02	< 0.05	< 0.5	3.9	3.3
BTW-12-214	< 2	< 5	8.5	640	4	< 1	11	44	3	3.71	5	< 1	< 5	< 1	2.23	< 20	61	1.2	14.5	< 3	< 0.02	< 0.05	1	5.4	2.5
BTW-12-215	< 2	< 5	9.1	550	5	< 1	9	40	3	3.46	4	< 1	< 5	< 1	1.55	< 20	73	1.6	14.2	< 3	< 0.02	< 0.05	< 0.5	5.3	3.3
BTW-12-216	< 2	< 5	22.7	520	4.4	< 1	9	40	4	3.59	6	< 1	< 5	4	2.18	< 20	< 15	1.7	13.9	< 3	< 0.02	< 0.05	< 0.5	4.8	< 0.5
BTW-12-217	< 2	< 5	15.7	680	8.3	< 1	14	62	3	4.59	5	< 1	< 5	< 1	2.7	< 20	< 15	1.9	16.3	< 3	< 0.02	< 0.05	< 0.5	4.2	< 0.5
BTW-12-218	16	< 5	15.7	490	3.3	< 1	10	40	3	3.47	6	< 1	< 5	< 1	2.11	< 20	< 15	1.4	13.2	< 3	< 0.02	0.08	< 0.5	5.1	2.3
BTW-12-219	< 2	< 5	22.9	710	6.2	< 1	14	51	3	4.22	5	< 1	< 5	19	2.27	< 20	< 15	1.4	15.6	< 3	< 0.02	< 0.05	< 0.5	4.3	2.1
BTW-12-220	< 2	< 5	4.6	460	< 0.5	3	6	52	1	2.44	5	< 1	< 5	< 1	2.39	< 20	< 15	0.9	13.1	< 3	< 0.02	< 0.05	1.5	3.6	2.6
BTW-12-221	< 2	< 5	13.6	880	5	2	7	30	5	3.33	5	< 1	< 5	< 1	2.43	< 20	82	3.4	14.2	< 3	< 0.02	< 0.05	< 0.5	4.4	2.7
BTW-12-222	< 2	< 5	11.2	450	< 0.5	< 1	12	45	2	4.26	5	< 1	< 5	7	2.23	180	54	1.8	16.3	< 3	< 0.02	0.1	1.5	5.6	2.2
BTW-12-243	< 2	< 5	11.3	410	< 0.5	< 1	7	48	3	2.73	5	< 1	< 5	< 1	2.17	< 20	44	1.5	11.2	< 3	< 0.02	< 0.05	< 0.5	4.5	2
BTW-12-248	9	< 5	11.5	570	2	2	6	35	2	2.74	5	< 1	< 5	< 1	2.7	< 20	53	1.6	10.2	< 3	< 0.02	< 0.05	< 0.5	3.6	1.7
BTW-12-249	6	< 5	5.6	470	3.2	< 1	10	37	2	2.73	4	< 1	< 5	7	2.34	< 20	42	1.2	13.4	< 3	< 0.02	< 0.05	< 0.5	2.9	1.7
BTW-12-251	< 2	< 5	9.8	480	6	< 1	10	47	2	3.05	4	< 1	< 5	12	1.98	< 20	< 15	1.2	12.2	< 3	< 0.02	< 0.05	< 0.5	3.6	2.6
BTW-12-252	< 2	< 5	6.2	530	2.5	1	7	41	1	2.22	5	< 1	< 5	< 1	2.69	< 20	89	1.1	13.2	< 3	< 0.02	< 0.05	< 0.5	3.7	2.2
BWT-12-264	4	< 5	6.2	610	4	3	17	79	6	4.09	3	< 1	< 5	< 1	1.64	< 20	74	1.5	15.4	< 3	< 0.02	< 0.05	< 0.5	3.7	< 0.5
BWT-12-265	13	< 5	9	630	< 0.5	< 1	11	48	2	3.28	4	< 1	< 5	< 1	1.91	< 20	69	1.7	11.7	< 3	< 0.02	< 0.05	< 0.5	3.7	2.6
BWT-12-266	< 2	< 5	6.4	650	2.4	< 1	9	49	2	2.66	5	< 1	< 5	< 1	2.2	< 20	57	1.6	12	< 3	< 0.02	< 0.05	< 0.5	4.7	2.9
BWT-12-272	< 2	< 5	35.4	400	< 0.5	< 1	13	38	5	4.84	6	< 1	< 5	8	1.78	< 20	110	2.8	13.4	< 3	< 0.02	< 0.05	1.4	6.9	< 0.5
BWT-12-273	13	< 5	11.6	620	3.5	2	11	48	3	3.6	6	< 1	< 5	15	1.93	140	57	1.7	12.4	< 3	< 0.02	< 0.05	< 0.5	5.3	4.6
BWT-12-274	7	< 5	19.3	590	4	< 1	8	37	2	3.06	5	< 1	< 5	< 1	1.92	< 20	< 15	2.7	11.2	< 3	< 0.02	< 0.05	< 0.5	3.6	4.1
BWT-12-275	< 2	< 5	19.4	580	4.6	3	11	45	2	3.33	5	< 1	< 5	8	1.98	< 20	57	4	12.6	< 3	< 0.02	< 0.05	< 0.5	4	2.4
BWT-12-301	< 2	< 5	3.4	650	< 0.5	< 1	10	111	3	3.37	6	< 1	< 5	< 1	2.13	< 20	< 15	0.4	11	< 3	< 0.02	< 0.05	< 0.5	5.5	< 0.5
BWT-12-302	20	< 5	6.7	430	3.3	< 1	14	93	< 1	3.92	6	< 1	< 5	< 1	2.31	< 20	< 15	1.2	12	< 3	< 0.02	< 0.05	< 0.5	5.5	3.5
BWT-12-303	< 2	< 5	20	510	19.3	< 1	8	47	3	3.31	4	< 1	< 5	< 1	1.52	< 20	< 15	1.5	10.6	< 3	< 0.02	< 0.05	< 0.5	6.1	5.1
BWT-12-304	< 2	15	39.9	760	13.2	< 1	7	42	6	2.63	4	< 1	< 5	< 1	1.64	< 20	< 15	4.5	6.5	< 3	< 0.02	< 0.05	< 0.5	12.5	5.6
BWT-12-305	< 2	< 5	41.8	530	16.5	< 1	18	58	12	4.23	3	< 1	< 5	< 1	1.09	< 20	81	1.7	15.4	< 3	< 0.02	< 0.05	2.5	7.3	5.7
BWT-12-306	< 2	< 5	14.6	720	6.1	< 1	12	38	< 1	2.89	5	< 1	< 5	< 1	1.67	< 20	126	2	7.7	< 3	< 0.02	< 0.05	< 0.5	9.3	3.4
BWT-12-307	34	< 5	37.9	830	11.2	< 1	6	37	2	2.05	4	< 1	< 5	< 1	1.63	< 20	101	1.3	4.6	< 3	< 0.02	< 0.05	< 0.5	12	5.8
BWT-12-308	40	< 5	34.6	750	< 0.5	< 1	8	< 5	2	2.27	4	< 1	< 5	< 1	1.86	< 20	104	1.8	5.5	< 3	< 0.02	< 0.05	< 0.5	10.3	< 0.5
BWT-12-309	< 2	< 5	6.9	700	6	< 1	39	127	19	5.94	2	< 1	< 5	< 1	1.15	< 20	< 15	1.7	34.8	< 3	< 0.02	< 0.05	< 0.5	4.5	4.1
BWT-12-310	11	< 5	9.5	770	10.2	3	9	27	3	2.57	3	< 1	< 5	< 1	1.88	< 20	< 15	1.5	8.9	< 3	< 0.02	< 0.05	< 0.5	7.5	3.3
BWT-12-311	< 2	< 5	15.2	690	9.3	< 1	13	57	7	3.72	4	< 1	< 5	< 1	1.85	< 20	116	1.4	11.3	< 3	< 0.02	< 0.05	< 0.5	6.7	< 0.5
BWT-12-312	10	< 5	10.6	570	15.8	< 1	6	42	4	2.72	4	< 1	< 5	< 1	1.72	< 20	93	1.5	7.2	< 3	< 0.02	< 0.05	< 0.5	7.4	3.2
BWT-12-313	180	< 5	233	670	3.9	< 1	6	38	< 1	2.85	5	< 1	< 5	7	1.2	< 20	135	5.1	6.6	< 3	< 0.02	< 0.05	< 0.5	12.2	5.6
BWT-12-314	84	< 5	281	780	8	< 1	6	33	3	3.06	5	< 1	< 5	< 1	1.23	< 20	121	4	7.3	< 3	< 0.02	< 0.05	< 0.5	9	2.7
BWT-12-315	21	< 5	17.8	590	15.7	< 1	9	35	4	2.67	4	< 1	< 5	< 1	1.73	< 20	116	1.9	7.9	< 3	< 0.02	< 0.05	< 0.5	8.8	3.9
BWT-12-316	< 2	< 5	11.7	530	11.7	< 1	7	32	6	2.45	2	< 1	< 5	< 1	1.55	< 20	< 15	2.2	8.2	< 3	< 0.02	< 0.05	< 0.5	9.2	5.2
BWT-12-317	5	< 5	10.8	510	9.1	< 1	10	47	5	3.01	4	< 1	< 5	< 1	1.8	< 20	< 15	1.5	9.5	< 3	0.04	< 0.05	< 0.5	7.3	4.2
BWT-12-318	28	< 5	11.3	< 50	10.4	< 1	2	26	4	4.47	4	< 1	< 5	8	0.45	< 20	147	0.8	15.3	< 3	< 0.02	< 0.05	< 0.5	7.9	4
BWT-12-319	< 2	< 5	12.5	720	21.9	< 1	11	80	2	4.05	5	< 1	< 5	22	1.21	< 20	77	1.1	11	< 3	< 0.02	< 0.05	< 0.5	7.7	< 0.5
BWT-12-320	29	< 5	30.7	720	17.1	< 1	8	69	2	3.37	5	< 1	< 5	< 1	1.8	< 20	78	1.2	7.8	< 3	< 0.02	< 0.05	< 0.5	9.7	2.6
BWT-12-321	21	< 5	11	650	9.9	< 1	7	40	2	2.45	4	< 1	< 5	< 1	1.86	< 20	112	1	6.3	< 3	< 0.02	< 0.05	< 0.5	11.6	5.2
BWT-12-322	97	< 5	286	820	8.1	< 1	6	38	6	4	4	< 1	< 5	12	0.74	< 20	137	6.1	9.8	< 3	< 0.02	< 0.05	< 0.5	9.1	3.9
BWT-12-323	43	< 5	75.9	720	9	< 1	6	41	5	4.42	6	< 1	< 5	< 1	0.86	< 20	118	3.9	10.5	< 3	< 0.02	0.1	< 0.5	7	< 0.5
BWT-12-324	148	< 5	317	690	12.6	< 1	6	46	3	3.13	5	< 1	< 5	10	1.19	< 20	113	4.3	6.9	< 3	< 0.02	< 0.05	< 0.5	8.5	3.8
BWT-12-325	12	< 5	9.2	780	9.8	2	23	132	< 1	5.62	5	< 1	< 5	< 1	1.48	< 20	< 15	0.7	12.2	< 3	< 0.02	< 0.05	< 0.5	5.3	2.1
BWT-12-326	< 2	< 5	12.2	540	< 0.5	< 1	18	60	3	4.55	5	< 1	< 5	< 1	1.28	< 20	92	1	15.4	< 3	< 0.02	< 0.05	1.7	7.3	4.4
BWT-12-327	13	< 5	6.4	570	4.3	< 1	13	78	2	3.45	6	< 1	< 5	< 1	1.95	< 20	125	0.9	11.1	< 3	< 0.02	< 0.05	< 0.5	9.2	4

Analyte Symbol	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-211	7	190	30.7	65	47	9.1	2.3	1.6	4.8	0.76	16.2	< 0.2	0.6	32	543	< 2	12	16	77	0.01
BTW-12-212	< 1	< 50	26.2	54	38	7.6	1.6	1.2	3.2	0.44	14.9	< 0.2	< 0.5	12	524	< 2	8	6	49	0.006
BTW-12-213	< 1	< 50	18.3	45	18	4.1	0.9	< 0.5	2.1	0.32	29.8	< 0.2	0.5	21	521	< 2	6	10	50	0.012
BTW-12-214	< 1	< 50	21.8	50	24	4.8	1	< 0.5	2.3	0.32	24.4	< 0.2	< 0.5	23	644	< 2	10	6	57	0.006
BTW-12-215	< 1	< 50	20.6	38	25	5	1	< 0.5	2.4	0.38	28.6	< 0.2	< 0.5	27	549	< 2	9	9	66	0.019
BTW-12-216	< 1	140	19.8	43	35	5.3	1.1	< 0.5	2.9	0.5	15.1	< 0.2	< 0.5	14	602	< 2	8	11	80	0.011
BTW-12-217	< 1	< 50	18.3	40	< 5	4.8	1.2	< 0.5	2.2	0.22	8.5	< 0.2	< 0.5	27	431	< 2	12	6	54	0.005
BTW-12-218	< 1	< 50	22.5	41	32	4.9	1.1	< 0.5	2.6	0.38	26.1	< 0.2	< 0.5	24	680	< 2	12	9	61	0.005
BTW-12-219	< 1	210	20.4	47	16	5.5	0.9	< 0.5	2.6	0.4	16.3	< 0.2	0.7	30	569	6	24	8	137	0.007
BTW-12-220	< 1	< 50	19.5	34	26	4.2	1	< 0.5	2	0.32	31.1	< 0.2	< 0.5	9	294	< 2	10	7	43	0.005
BTW-12-221	< 1	< 50	25.8	51	58	6.5	1.5	0.8	3.5	0.53	25	< 0.2	< 0.5	12	466	< 2	6	5	43	0.004
BTW-12-222	< 1	< 50	24.2	46	38	5.8	1.1	< 0.5	2.4	0.37	27.2	< 0.2	< 0.5	40	520	< 2	7	5	42	0.005
BTW-12-243	< 1	< 50	20.8	34	22	3.7	1	< 0.5	1.7	0.36	30	< 0.2	< 0.5	14	342	< 2	11	13	56	0.005
BTW-12-248	< 1	< 50	18.4	37	28	3.7	0.8	< 0.5	1.8	0.32	30.3	< 0.2	< 0.5	13	301	< 2	8	6	39	0.002
BTW-12-249	< 1	80	16.4	29	12	3.8	0.9	0.7	1.9	0.33	31.1	< 0.2	< 0.5	10	448	3	7	6	55	0.009
BTW-12-251	< 1	< 50	15.5	32	18	4	1.1	< 0.5	1.9	0.3	28	< 0.2	< 0.5	25	459	< 2	10	7	64	0.013
BTW-12-252	< 1	< 50	20.9	36	21	4.4	1	< 0.5	2.5	0.39	30.2	< 0.2	< 0.5	7	381	< 2	7	8	44	0.007
BWT-12-264	< 1	140	16.1	54	17	3.7	1.2	0.5	1.8	0.37	30.2	< 0.2	0.7	87	800	< 2	29	9	66	0.007
BWT-12-265	< 1	80	16.7	40	< 5	4.3	0.8	< 0.5	2.1	0.4	28.8	< 0.2	0.5	24	490	< 2	13	14	56	0.007
BWT-12-266	< 1	< 50	20.4	35	25	4.3	0.9	0.6	2.3	0.36	30	< 0.2	< 0.5	13	424	< 2	10	10	56	0.008
BWT-12-272	< 1	110	23.3	48	22	5.8	1.3	< 0.5	2.9	0.6	17.7	< 0.2	0.7	33	705	< 2	11	19	88	0.016
BWT-12-273	< 1	< 50	22.6	42	26	5.7	1	0.7	2.9	0.51	30.4	< 0.2	0.5	20	816	< 2	11	15	71	0.007
BWT-12-274	< 1	< 50	17.2	37	21	4	0.9	< 0.5	2.4	0.42	30	< 0.2	0.7	12	546	< 2	9	11	67	0.009
BWT-12-275	< 1	140	20.2	46	23	4.8	1	< 0.5	2.7	0.43	30.9	< 0.2	0.6	30	646	< 2	12	16	85	0.007
BWT-12-301	< 1	< 50	17.4	35	18	3.8	< 0.2	< 0.5	1.6	0.36	30.2	< 0.2	< 0.5	14	358	< 2	22	6	58	0.006
BWT-12-302	< 1	< 50	21	43	< 5	4.4	0.9	0.6	1.8	0.34	31.4	< 0.2	< 0.5	18	344	< 2	23	3	48	0.007
BWT-12-303	< 1	480	17.5	36	< 5	3.9	1	< 0.5	2.1	0.36	29.9	0.8	1.8	21	449	< 2	8	13	387	0.073
BWT-12-304	< 1	420	32.1	84	< 5	6.3	< 0.2	< 0.5	1.8	0.35	30.1	15.3	1.1	20	535	< 2	9	216	521	0.024
BWT-12-305	< 1	120	22.2	37	26	5.4	1.4	< 0.5	2.1	0.41	27.6	0.8	< 0.5	58	823	< 2	18	16	137	0.081
BWT-12-306	< 1	< 50	26.6	42	34	4.3	0.6	< 0.5	1.5	0.26	30.7	0.5	< 0.5	27	774	< 2	9	57	193	0.028
BWT-12-307	< 1	300	30.3	45	< 5	4	0.7	< 0.5	1.2	0.26	34.9	0.3	< 0.5	24	781	4	5	61	243	0.022
BWT-12-308	< 1	< 50	30.1	52	49	4.5	0.7	< 0.5	1.4	0.11	32.1	0.6	0.8	19	1060	2	5	51	230	0.012
BWT-12-309	< 1	190	18.8	34	< 5	4.6	1	< 0.5	1.5	0.28	30.2	0.5	0.9	168	2030	< 2	72	6	134	0.011
BWT-12-310	< 1	< 50	18.8	37	17	3.7	0.9	< 0.5	1.2	0.24	30.7	< 0.2	< 0.5	30	533	< 2	9	13	64	0.013
BWT-12-311	< 1	100	25.8	58	21	4.6	1.1	< 0.5	1.5	0.29	30.6	< 0.2	< 0.5	27	928	< 2	15	14	87	0.01
BWT-12-312	< 1	< 50	22.7	41	36	4.1	1	< 0.5	1.3	0.28	30.8	< 0.2	< 0.5	13	418	< 2	9	7	58	0.019
BWT-12-313	6	210	28.2	49	38	5.6	< 0.2	< 0.5	1.5	0.3	31.2	7	1.4	86	1290	7	6	839	227	0.065
BWT-12-314	5	560	28.9	49	46	5.5	0.5	< 0.5	1.2	0.29	32.5	5.6	1.6	53	1070	6	10	355	589	0.06
BWT-12-315	< 1	280	27.4	47	45	4.8	0.8	< 0.5	1.7	0.27	31.3	1.2	0.9	65	1200	< 2	8	44	461	0.023
BWT-12-316	< 1	160	18.7	31	< 5	3.7	0.8	< 0.5	1.1	0.21	26.9	0.7	< 0.5	22	674	< 2	10	34	151	0.016
BWT-12-317	< 1	160	22	43	29	4.1	1	< 0.5	1.6	0.24	33.6	< 0.2	< 0.5	15	589	< 2	10	17	91	0.011
BWT-12-318	7	< 50	25.1	46	26	5.9	1.2	< 0.5	3	0.6	30.1	1.2	< 0.5	29	252	13	1	17	48	0.265
BWT-12-319	< 1	220	25.8	49	37	5	1.2	< 0.5	2	0.31	30.3	0.5	< 0.5	27	525	5	14	18	167	0.038
BWT-12-320	< 1	260	25.2	43	30	4.1	0.6	< 0.5	1.6	0.32	30.1	2.1	1.4	115	2330	9	11	16	312	0.04
BWT-12-321	< 1	170	25.2	45	< 5	3.7	< 0.2	< 0.5	0.8	0.19	31.2	1.2	0.8	18	543	< 2	8	9	267	0.021
BWT-12-322	7	670	28.1	49	46	5.7	1	< 0.5	1.4	0.28	30.9	3.1	1.2	68	2090	5	8	1270	605	0.055
BWT-12-323	< 1	370	31.6	62	27	6.9	1.4	0.7	3	0.46	30.2	1	0.9	28	695	9	3	137	333	0.283
BWT-12-324	8	220	27.1	47	49	4.7	0.7	< 0.5	1.3	0.24	30.9	8.9	1.2	84	946	7	6	591	176	0.059
BWT-12-325	< 1	< 50	18.4	33	< 5	3.7	1	< 0.5	1.4	0.19	29.9	0.5	< 0.5	29	482	< 2	39	7	219	0.017
BWT-12-326	< 1	190	28.4	41	75	4.9	1.3	< 0.5	1.8	0.41	32.8	< 0.2	0.6	56	1430	8	22	19	205	0.006
BWT-12-327	< 1	< 50	23.8	44	< 5	4.6	1	< 0.5	1.9	0.34	30.9	< 0.2	< 0.5	230	829	2	20	8	62	0.01

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWT-12-328	13	< 5	14.6	580	2.9	< 1	14	84	1	4.62	6	< 1	< 5	19	2.15	< 20	< 15	1.5	11.5	< 3	< 0.02	< 0.05	< 0.5	7.7	5.3
BWT-12-374	44	< 5	51	680	5.1	< 1	5	24	2	2.47	4	< 1	< 5	< 1	1.54	< 20	89	1.9	5.9	< 3	< 0.02	< 0.05	< 0.5	11.4	3.7
BWT-12-330	< 2	< 5	30.5	650	10.9	< 1	9	52	4	3.43	5	< 1	< 5	< 1	1.8	< 20	112	1.6	10.9	< 3	< 0.02	< 0.05	< 0.5	6.9	4
BWT-12-332	< 2	< 5	7.9	440	5	< 1	9	65	3	3.26	4	< 1	< 5	< 1	2.1	< 20	< 15	0.5	11.4	< 3	< 0.02	< 0.05	< 0.5	5.4	< 0.5
BWT-12-333	< 2	< 5	6.2	690	< 0.5	< 1	21	130	< 1	5.89	5	< 1	< 5	17	1.83	< 20	< 15	0.8	14.3	< 3	< 0.02	< 0.05	< 0.5	6.3	2.7
BWT-12-334	< 2	< 5	6.1	710	5.6	< 1	11	110	3	3.73	6	< 1	< 5	7	1.85	< 20	< 15	1	10.9	< 3	< 0.02	< 0.05	2.3	10	6.3
BWT-12-335	< 2	< 5	6.1	570	< 0.5	< 1	12	91	< 1	3.02	4	< 1	< 5	< 1	2.2	< 20	< 15	1	10.2	< 3	< 0.02	< 0.05	< 0.5	8.2	5.4
BWT-12-298	< 2	< 5	3.4	< 50	< 0.5	< 1	18	152	< 1	5.29	5	< 1	< 5	< 1	1.81	< 20	72	0.7	11.9	< 3	< 0.02	< 0.05	< 0.5	3.7	< 0.5
BWT-12-299	< 2	< 5	5.1	350	8.9	< 1	8	67	< 1	2.63	4	< 1	< 5	< 1	2	< 20	< 15	1	10.9	< 3	< 0.02	< 0.05	< 0.5	4	2.3
BWT-12-300	< 2	< 5	6.3	460	5.8	< 1	28	139	< 1	5.29	6	< 1	< 5	< 1	2	< 20	87	0.7	14.3	< 3	< 0.02	< 0.05	< 0.5	6.1	3.7
BWT-12-329	20	< 5	17.4	470	17.2	< 1	6	40	3	3.67	4	< 1	< 5	8	0.88	< 20	58	2.1	10.7	< 3	< 0.02	< 0.05	< 0.5	6.7	3.4
BWT-12-331	< 2	< 5	6.6	590	16.9	< 1	6	42	4	3.22	5	< 1	< 5	12	1.38	< 20	99	1.4	8.2	< 3	< 0.02	< 0.05	< 0.5	7.8	3
BWT-12-336	< 2	< 5	9.7	640	19.1	< 1	13	76	3	3.63	5	< 1	< 5	13	1.47	< 20	< 15	1.2	10.2	< 3	< 0.02	< 0.05	< 0.5	6.8	3.2
BWT-12-337	70	< 5	279	700	9	< 1	7	32	4	3.21	4	< 1	< 5	12	0.74	< 20	130	6.5	8.6	< 3	< 0.02	< 0.05	< 0.5	9.4	3.7
BWT-12-338	28	< 5	127	470	27.7	< 1	5	39	3	3.83	4	< 1	< 5	< 1	0.65	< 20	80	3	11.1	< 3	< 0.02	< 0.05	< 0.5	8.2	4.2
BWT-12-339	16	< 5	9.9	720	8.2	< 1	7	32	5	3.74	5	< 1	< 5	< 1	1.12	< 20	66	2.1	13.8	< 3	< 0.02	< 0.05	< 0.5	10.7	< 0.5
BWT-12-340	< 2	< 5	12.2	660	15.5	< 1	12	50	4	4.56	6	< 1	< 5	25	1.32	< 20	107	1.7	11.6	< 3	< 0.02	0.15	< 0.5	8.3	< 0.5
BWT-12-341	33	< 5	32.3	750	20.8	< 1	7	50	4	4.34	5	< 1	< 5	< 1	1.07	< 20	< 15	1.6	11.2	< 3	< 0.02	< 0.05	< 0.5	5.6	2.8
BWT-12-342	11	< 5	15.6	570	18.4	< 1	7	50	4	3.82	4	< 1	< 5	< 1	0.99	< 20	71	1.7	10.9	< 3	< 0.02	< 0.05	< 0.5	5.7	11.9
BWT-12-349	49	< 5	131	670	12.8	< 1	7	43	4	3.69	5	< 1	< 5	< 1	1.66	< 20	80	3.2	10.1	< 3	< 0.02	< 0.05	< 0.5	6.4	< 0.5
BWT-12-350	< 2	< 5	18.9	560	8.2	3	8	27	5	2.35	3	< 1	< 5	< 1	1.54	< 20	133	2.4	9.1	< 3	< 0.02	< 0.05	< 0.5	8.8	8.3
BWT-12-351	< 2	< 5	14.3	800	10.5	< 1	11	44	5	3.46	3	< 1	< 5	16	1.45	< 20	75	2.1	11.7	< 3	< 0.02	< 0.05	< 0.5	7	< 0.5
BWT-12-352	< 2	< 5	14.3	760	19.6	< 1	13	60	5	3.53	4	< 1	< 5	< 1	1.71	< 20	< 15	1.7	12.6	< 3	< 0.02	< 0.05	< 0.5	6.5	2.5
BWT-12-353	< 2	< 5	12.7	570	14.9	< 1	8	49	5	2.61	4	< 1	< 5	< 1	1.91	< 20	< 15	1.9	10	< 3	< 0.02	< 0.05	0.7	6.8	< 0.5
BWT-12-356	29	< 5	17.5	790	12.4	< 1	14	44	3	4.25	5	< 1	< 5	< 1	1.2	< 20	< 15	1.2	12.4	< 3	< 0.02	0.16	< 0.5	6.3	< 0.5
BWT-12-357	90	< 5	205	840	12.5	< 1	11	33	< 1	3.75	4	< 1	< 5	< 1	1.33	< 20	146	4.9	9.7	< 3	< 0.02	< 0.05	< 0.5	10.9	< 0.5
BWT-12-358	31	< 5	44.5	840	13	< 1	6	29	< 1	2.5	4	< 1	< 5	< 1	1.68	< 20	122	1.5	5.9	< 3	< 0.02	< 0.05	< 0.5	11.2	4.5
BWT-12-359	< 2	< 5	5.2	420	5.8	3	17	133	< 1	4.2	6	< 1	< 5	21	1.84	< 20	92	0.8	12.3	< 3	< 0.02	< 0.05	3.4	6.1	< 0.5
BWT-12-360	< 2	< 5	5.3	760	< 0.5	< 1	18	110	< 1	4.44	4	< 1	< 5	< 1	2.11	< 20	< 15	1	12.4	< 3	< 0.02	< 0.05	< 0.5	5.8	< 0.5
BWT-12-361	< 2	< 5	7.8	620	7.5	< 1	11	63	< 1	3.95	6	< 1	< 5	< 1	1.89	< 20	< 15	1	11.2	< 3	< 0.02	< 0.05	< 0.5	4.9	< 0.5
BWT-12-362	< 2	< 5	6.7	470	< 0.5	2	15	109	2	4.41	6	< 1	< 5	11	2.2	< 20	< 15	1	11.7	< 3	< 0.02	< 0.05	< 0.5	6.6	3.3
BWT-12-363	< 2	< 5	13.3	700	4.9	< 1	10	40	6	3.46	3	< 1	< 5	< 1	1.17	< 20	84	1.4	13.1	< 3	< 0.02	< 0.05	< 0.5	5.6	3.4
BWT-12-364	12	< 5	66.7	670	3.8	< 1	8	41	2	3.27	4	< 1	< 5	< 1	1.35	< 20	122	2.2	10.9	< 3	< 0.02	< 0.05	< 0.5	6.5	3.1
BWT-12-369	32	< 5	28.9	470	5.4	2	14	42	2	3.64	4	< 1	< 5	< 1	1.4	< 20	< 15	1.6	10.9	< 3	< 0.02	< 0.05	< 0.5	6.7	2.6
BWT-12-370	48	< 5	19.7	780	10.4	< 1	10	34	3	3.88	4	< 1	< 5	< 1	1.42	< 20	< 15	1.8	14.9	< 3	< 0.02	< 0.05	< 0.5	7.5	4.7
BWT-12-371	25	< 5	13.6	500	11.2	< 1	8	28	< 1	3.81	7	< 1	< 5	10	1.47	< 20	< 15	1.5	11.2	< 3	< 0.02	< 0.05	< 0.5	6.2	3.8
BWT-12-376	103	< 5	212	730	10.7	< 1	3	34	3	2.59	3	< 1	< 5	< 1	0.71	< 20	125	4.8	7.9	< 3	< 0.02	< 0.05	< 0.5	7.5	2.6
BWT-12-381	< 2	< 5	10.7	570	9.2	< 1	10	40	4	2.68	6	< 1	< 5	< 1	1.94	< 20	88	2	10.3	< 3	< 0.02	< 0.05	< 0.5	12.1	14.5
BWT-12-389	< 2	< 5	29.3	< 50	21.6	< 1	22	75	4	4.95	2	< 1	< 5	< 1	0.99	< 20	< 15	1.1	15.4	< 3	< 0.02	< 0.05	< 0.5	5.2	< 0.5
BWT-12-391	< 2	< 5	4.8	940	< 0.5	< 1	3	36	3	1.44	4	< 1	< 5	< 1	1.79	< 20	74	1.1	6.2	< 3	< 0.02	< 0.05	< 0.5	5.5	< 0.5
BWT-12-392	< 2	< 5	9.9	730	4.9	< 1	8	68	2	3.92	7	< 1	< 5	< 1	2	< 20	< 15	1.5	9.7	< 3	< 0.02	< 0.05	< 0.5	8.8	2.9
BWT-12-393	< 2	< 5	8.1	900	< 0.5	< 1	< 1	19	4	0.84	3	< 1	< 5	< 1	0.95	< 20	130	2.3	3.4	< 3	< 0.02	< 0.05	< 0.5	10	4.9
BWT-12-343	26	< 5	9.6	390	15.9	< 1	15	80	< 1	3.88	4	< 1	< 5	< 1	1.41	< 20	< 15	1	10.1	< 3	< 0.02	< 0.05	< 0.5	5.4	2.4
BWT-12-344	19	< 5	8.5	730	8.9	< 1	15	81	3	4.54	6	< 1	< 5	< 1	1.66	< 20	< 15	0.9	11.6	< 3	< 0.02	< 0.05	< 0.5	5.4	3.7
BWT-12-345	< 2	< 5	9.7	870	18.6	< 1	8	46	6	5.03	6	< 1	< 5	< 1	0.98	< 20	< 15	1.3	12	< 3	< 0.02	< 0.05	< 0.5	5.8	< 0.5
BWT-12-346	6	< 5	7.4	660	4.2	< 1	9	72	2	4.69	6	< 1	< 5	< 1	1.24	< 20	89	1.8	15.2	< 3	< 0.02	< 0.05	< 0.5	6.5	< 0.5
BWT-12-347	97	< 5	11.8	730	11.3	< 1	9	48	6	4.83	6	< 1	< 5	12	1.53	< 20	106	2.1	11.9	< 3	< 0.02	< 0.05	< 0.5	7.9	4.7
BWT-12-348	39	< 5	14.6	660	7.3	< 1	18	26	12	7.13	2	< 1	< 5	< 1	0.23	< 20	99	1.5	19.8	< 3	< 0.02	< 0.05	< 0.5	4	2
BWT-12-354	21	< 5	47.7	760	11	< 1	12	37	6	4.06	4	< 1	< 5	< 1	1.12	< 20	68	1.6	14.1	< 3	< 0.02	< 0.05	2.4	5.4	3.8
BTW-12-355	< 2	< 5	10	550	18.1	< 1	9	38	4	4.59	3	< 1	< 5	3	0.89	< 20	58	1.4	10.4	< 3	< 0.02	< 0.05	< 0.5	5.4	1.4
BTW-12-365	15	< 5	12.5	610	16.5	< 1	14	29	13	4.63	3	< 1	< 5	7	1.41	< 20	58	1.6	18.3	< 3	< 0.02	< 0.05	0.8	5.9	5.1

Analyte Symbol	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BWT-12-328	< 1	< 50	27.5	51	< 5	4.7	1	< 0.5	2.1	0.35	32.7	< 0.2	< 0.5	22	695	< 2	22	15	90	0.003
BWT-12-374	5	290	30.2	47	37	4.3	0.5	< 0.5	1.1	0.26	30.1	5.3	0.6	37	748	5	6	126	354	0.026
BWT-12-330	< 1	< 50	24.8	41	19	4.5	0.9	< 0.5	1.8	0.32	30.8	0.2	< 0.5	20	711	< 2	17	14	102	0.029
BWT-12-332	< 1	< 50	22.2	39	42	5.3	0.8	< 0.5	1.7	0.34	30	< 0.2	< 0.5	17	496	3	15	8	66	0.007
BWT-12-333	< 1	< 50	29	51	35	5	1.6	< 0.5	1.8	0.34	31.8	< 0.2	< 0.5	31	713	< 2	42	6	112	0.003
BWT-12-334	< 1	120	25.1	50	< 5	4.5	0.9	< 0.5	1.7	0.31	30.1	< 0.2	< 0.5	22	465	4	18	9	125	0.011
BWT-12-335	< 1	170	28.8	42	27	6.1	1.2	< 0.5	1.6	0.34	31	< 0.2	< 0.5	13	471	< 2	17	7	59	0.002
BWT-12-298	< 1	190	16.4	26	16	3.6	0.7	< 0.5	1.3	0.26	30	< 0.2	< 0.5	19	619	3	44	2	190	0.014
BWT-12-299	< 1	< 50	16.7	29	< 5	3.2	0.7	< 0.5	1.7	0.27	28.2	< 0.2	< 0.5	12	242	< 2	19	5	49	0.018
BWT-12-300	< 1	< 50	27.9	50	28	6.1	1.3	< 0.5	2.1	0.33	30.3	< 0.2	< 0.5	26	684	< 2	43	3	82	0.006
BWT-12-329	< 1	80	25.7	45	22	5.5	1	< 0.5	2.6	0.41	30.2	0.5	< 0.5	16	383	6	8	15	80	0.057
BWT-12-331	6	< 50	23.9	39	< 5	4.6	0.8	< 0.5	1.8	0.36	30	0.8	< 0.5	25	615	3	5	52	96	0.058
BWT-12-336	7	140	21.8	44	35	4.2	1	< 0.5	1.9	0.3	27.8	0.3	< 0.5	17	434	< 2	8	7	60	0.041
BWT-12-337	7	530	23.9	42	< 5	4.5	0.9	< 0.5	1.9	0.36	30.2	4.5	1.6	71	1460	7	9	524	692	0.05
BWT-12-338	7	460	21.2	36	30	4.2	0.8	< 0.5	1.8	0.38	25	2.7	0.6	33	1000	4	6	193	410	0.082
BWT-12-339	15	< 50	28.2	55	48	6.9	1.4	< 0.5	3	0.67	30.4	0.4	< 0.5	26	413	4	6	23	73	0.076
BWT-12-340	15	< 50	29.1	53	41	6.1	1.4	< 0.5	2.6	0.51	29.9	0.3	< 0.5	26	441	3	10	11	73	0.131
BWT-12-341	< 1	290	23.1	39	27	5.5	0.9	< 0.5	2.4	0.46	30.2	0.3	0.9	23	826	5	5	30	301	0.072
BWT-12-342	< 1	550	23.3	38	< 5	5.6	1.2	< 0.5	2.4	0.42	28.2	0.6	1.5	30	960	4	8	51	533	0.079
BWT-12-349	< 1	600	23.7	44	36	4.9	0.7	< 0.5	2	0.33	30.1	1.4	1.3	37	1130	< 2	8	152	484	0.028
BWT-12-350	4	370	25.1	39	28	5.1	0.8	< 0.5	1.8	0.28	29.1	1.8	1.4	20	755	< 2	10	50	416	0.018
BWT-12-351	< 1	< 50	23.1	51	< 5	4.8	0.9	< 0.5	1.6	0.24	30.1	< 0.2	< 0.5	26	855	< 2	15	43	140	0.012
BWT-12-352	< 1	110	22	48	28	4.8	1	< 0.5	2	0.28	27.8	< 0.2	< 0.5	25	542	< 2	15	13	100	0.018
BWT-12-353	< 1	< 50	24.1	38	< 5	4.6	0.7	< 0.5	1.6	0.26	30.1	< 0.2	< 0.5	21	387	< 2	12	14	89	0.013
BWT-12-356	6	410	22.5	45	27	4.9	1.4	< 0.5	2	0.39	28.4	0.4	1.2	29	1220	3	11	71	431	0.037
BWT-12-357	7	450	29.1	51	< 5	5.3	< 0.2	< 0.5	1.6	0.29	20.9	4.9	1.2	60	2280	6	10	320	491	0.045
BWT-12-358	< 1	330	32.3	51	14	4.8	< 0.2	< 0.5	1.4	0.33	29.8	0.8	< 0.5	21	730	< 2	5	80	283	0.017
BWT-12-359	< 1	< 50	24.1	41	88	4.3	1.1	< 0.5	1.4	0.38	30.2	< 0.2	< 0.5	19	545	< 2	38	6	102	0.014
BWT-12-360	< 1	< 50	24	50	9	5.5	1.2	< 0.5	1.9	0.38	30.4	< 0.2	< 0.5	24	543	< 2	33	4	65	0.003
BWT-12-361	< 1	110	17	32	36	4.1	0.8	< 0.5	1.6	0.24	30.4	< 0.2	< 0.5	16	261	4	16	8	69	0.013
BWT-12-362	< 1	< 50	22.2	50	40	4.5	1.1	< 0.5	2	0.36	30.3	< 0.2	< 0.5	17	428	< 2	23	3	63	0.005
BWT-12-363	< 1	340	20.8	41	46	4.7	0.9	< 0.5	2.1	0.33	30.8	0.6	1	29	1190	3	9	46	369	0.016
BWT-12-364	< 1	390	23.9	48	50	5.3	1.1	< 0.5	2.1	0.36	30.4	1	1.4	29	1200	4	7	109	446	0.014
BWT-12-369	< 1	240	23.4	48	36	5.2	1	< 0.5	2	0.37	30.3	0.3	0.7	23	990	3	7	44	238	0.013
BWT-12-370	< 1	< 50	24	57	< 5	6.6	1.4	1.1	3.1	0.7	30.1	0.4	< 0.5	52	860	2	7	27	142	0.025
BWT-12-371	< 1	< 50	22.4	44	40	4.7	1	< 0.5	2.8	0.4	30.4	< 0.2	< 0.5	24	454	11	3	16	76	0.036
BWT-12-376	4	300	22.7	37	< 5	3.1	< 0.2	< 0.5	1.4	0.24	30.1	5.6	0.8	39	1590	6	5	410	256	0.037
BWT-12-381	< 1	400	29.8	45	22	4.6	0.7	< 0.5	1.6	0.28	30.7	0.6	1.8	13	479	3	7	12	408	0.032
BWT-12-389	< 1	80	16.5	37	31	5.2	1	< 0.5	1.8	0.36	24.5	0.3	< 0.5	44	623	< 2	40	6	72	0.065
BWT-12-391	< 1	< 50	21	36	45	2.9	< 0.2	< 0.5	1.2	0.22	30.1	< 0.2	< 0.5	5	207	3	2	9	35	0.013
BWT-12-392	< 1	< 50	26.8	46	74	4.1	1.1	< 0.5	2.2	0.35	30.1	< 0.2	< 0.5	9	336	< 2	9	4	52	0.021
BWT-12-393	11	440	33	56	28	4.1	< 0.2	< 0.5	1.1	0.22	26.8	0.5	< 0.5	12	139	4	1	17	102	0.005
BWT-12-343	< 1	160	20.5	40	25	4.9	1.3	< 0.5	1.9	0.29	30.3	1.4	< 0.5	25	653	3	9	11	131	0.041
BWT-12-344	10	130	23.1	36	43	4.8	1.1	< 0.5	2.3	0.47	30.7	< 0.2	< 0.5	28	710	3	13	7	98	0.029
BWT-12-345	6	140	21.5	42	35	5.5	1.1	< 0.5	2.3	0.44	30.1	< 0.2	< 0.5	21	449	2	5	22	88	0.099
BWT-12-346	10	< 50	24.9	43	< 5	5.8	1.1	< 0.5	2.5	0.52	30	< 0.2	< 0.5	27	486	< 2	10	9	71	0.031
BWT-12-347	< 1	100	27.6	46	30	4.8	0.7	< 0.5	2	0.36	30.1	1.6	< 0.5	68	545	7	8	62	111	0.267
BWT-12-348	6	450	17.5	34	43	5.9	1.5	0.8	1.5	0.25	30.1	1	1.7	115	2550	2	6	120	432	0.474
BWT-12-354	< 1	170	23.3	47	41	6.4	1.1	< 0.5	2.3	0.47	30	0.4	< 0.5	25	956	2	8	41	168	0.042
BTW-12-355	4	< 50	20.5	42	21	3.6	0.9	< 0.5	2.1	0.36	25.4	0.2	0.7	26	464	2	9	20	106	0.081
BTW-12-365	< 1	130	28.8	47	28	6.8	2.1	1	4.2	0.64	24.8	1.8	1.2	145	1700	3	9	61	226	0.073

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-366	7	< 5	8.4	550	12.1	< 1	8	26	4	4.61	3	< 1	< 5	4	1.23	< 20	72	1.4	11.8	< 3	< 0.02	< 0.05	< 0.5	4.7	2.4
BTW-12-367	21	< 5	15.8	550	4.1	< 1	10	24	4	3.3	4	< 1	< 5	< 1	1.3	< 20	78	1.8	11.2	< 3	< 0.02	< 0.05	< 0.5	5.4	2.6
BTW-12-368	30	< 5	90.8	720	2.8	< 1	10	23	8	3.31	3	< 1	< 5	4	0.79	< 20	87	3	12.2	< 3	< 0.02	< 0.05	< 0.5	4.8	2.2
BTW-12-372	< 2	< 5	10.8	880	6.9	< 1	7	25	4	2.16	4	< 1	< 5	< 1	2.17	< 20	75	1.3	4	< 3	< 0.02	< 0.05	< 0.5	7.4	2.4
BTW-12-373	28	< 5	31.6	510	4.7	< 1	7	41	4	2.39	3	< 1	< 5	6	1.39	170	73	1.7	9	< 3	< 0.02	< 0.05	< 0.5	6.1	2.1
BTW-12-375	28	< 5	25.7	540	6.9	< 1	8	28	6	2.46	3	< 1	< 5	8	1.17	< 20	71	1.8	9.6	< 3	< 0.02	< 0.05	< 0.5	6.2	2.4
BTW-12-377	21	< 5	22.3	550	4.9	< 1	6	35	4	2.47	3	< 1	< 5	2	1.38	< 20	< 15	1.5	10.5	< 3	< 0.02	< 0.05	< 0.5	5.3	2
BTW-12-378	< 2	< 5	9.1	540	7	< 1	8	38	3	2.8	3	< 1	< 5	< 1	1.85	< 20	41	1.3	11.2	< 3	< 0.02	< 0.05	< 0.5	4.5	1.5
BTW-12-379	< 2	< 5	12	510	12.4	2	7	36	3	3.27	3	< 1	< 5	4	1.35	< 20	81	1.5	9.6	< 3	0.05	< 0.05	< 0.5	4.2	1.6
BTW-12-380	< 2	< 5	14.8	510	13.9	1	9	39	6	3.56	3	< 1	< 5	< 1	1.33	< 20	< 15	1.5	9.7	< 3	0.04	< 0.05	< 0.5	4.6	1.8
BTW-12-382	< 2	< 5	4.9	660	7.8	2	9	46	3	2.62	4	< 1	< 5	2	2.01	< 20	48	1	5.2	< 3	< 0.02	< 0.05	< 0.5	7.5	2.6
BTW-12-383	< 2	< 5	54.2	770	3.4	< 1	5	16	10	2.21	2	< 1	< 5	8	0.84	< 20	97	3.3	4.8	< 3	< 0.02	< 0.05	< 0.5	8.8	3.9
BTW-12-384	6	< 5	5.4	550	4.3	< 1	10	51	2	3.48	4	< 1	< 5	< 1	2.11	< 20	< 15	0.9	10.3	< 3	< 0.02	< 0.05	1.9	5.2	3.9
BTW-12-385	< 2	< 5	4.6	550	9.6	< 1	12	56	4	3.22	3	< 1	< 5	< 1	1.82	< 20	54	1.1	8.4	< 3	< 0.02	< 0.05	1.8	6.3	3.3
BTW-12-386	5	< 5	25.7	610	16.4	< 1	10	36	3	2.88	3	< 1	< 5	3	1.46	< 20	67	1.2	8.3	< 3	< 0.02	< 0.05	< 0.5	5.8	1.5
BTW-12-387	< 2	< 5	18.3	660	9.2	< 1	14	57	6	3.78	3	< 1	< 5	3	1.78	< 20	65	1	11.2	< 3	< 0.02	< 0.05	< 0.5	6.5	2.6
BTW-12-388	< 2	< 5	8.1	830	2.7	< 1	9	58	3	3.12	4	< 1	< 5	< 1	2.06	< 20	61	1.2	9.2	< 3	< 0.02	< 0.05	< 0.5	6.2	2
BTW-12-390	3	< 5	15.7	610	2.4	< 1	10	49	4	3.2	3	< 1	< 5	< 1	1.71	< 20	57	1.9	10.7	< 3	< 0.02	< 0.05	1.5	5.7	2
BTW-12-394	< 2	< 5	263	410	7	< 1	20	55	7	5.23	2	< 1	< 5	11	1.29	< 20	40	3	12.7	< 3	< 0.02	< 0.05	1.4	4.2	2.1
BTW-12-395	< 2	< 5	9.7	550	11.1	< 1	14	64	4	4.01	3	< 1	< 5	< 1	1.79	< 20	< 15	1	12.7	< 3	< 0.02	< 0.05	< 0.5	4.8	1.9
BTW-12-396	< 2	< 5	12.2	410	13.6	2	11	58	3	3.93	3	< 1	< 5	4	1.5	< 20	< 15	0.8	12.2	< 3	< 0.02	< 0.05	< 0.5	4.6	1.6
BTW-12-397	< 2	< 5	23.9	660	9.5	2	20	100	7	5.04	2	< 1	< 5	4	1.83	< 20	38	1.1	16.4	< 3	< 0.02	< 0.05	< 0.5	3.4	2.4
BTW-12-398	< 2	< 5	35.2	570	10.1	< 1	21	71	7	5.54	3	< 1	< 5	4	1.06	< 20	53	1.4	19.2	< 3	< 0.02	< 0.05	1.3	4.1	1.8
BTW-12-399	< 2	< 5	14.9	660	4	2	18	51	7	4.7	3	< 1	< 5	< 1	1.45	< 20	68	1	18.2	< 3	< 0.02	< 0.05	1.3	3.8	1.2
BTW-12-400	< 2	< 5	10.3	580	17	< 1	11	72	2	3.96	5	< 1	< 5	4	1.6	< 20	31	1.1	13.3	< 3	< 0.02	< 0.05	< 0.5	4.9	2.1
BTW-12-401	< 2	< 5	8.9	530	13.1	2	12	73	4	4.17	4	< 1	< 5	5	1.86	< 20	< 15	1	14.3	< 3	< 0.02	< 0.05	1.5	4.7	1.9
BTW-12-402	< 2	< 5	17	660	5.1	< 1	14	60	4	4.22	4	< 1	< 5	3	1.88	< 20	61	1.1	12.4	< 3	< 0.02	< 0.05	< 0.5	6.1	2.9
BTW-12-403	3	< 5	16.6	720	9.8	1	9	61	4	3.94	4	< 1	< 5	< 1	2.14	< 20	63	1.4	9.9	< 3	< 0.02	< 0.05	< 0.5	5.9	2
BTW-12-404	4	< 5	28.9	720	14.5	< 1	14	57	11	3.83	3	< 1	< 5	4	1.48	< 20	84	1.7	13.6	< 3	< 0.02	< 0.05	< 0.5	6.4	2.5
BTW-12-405	4	< 5	12.9	610	6.5	2	8	39	5	3.29	3	< 1	< 5	< 1	1.53	< 20	54	1.5	10.1	< 3	< 0.02	< 0.05	< 0.5	4.8	1.9
BTW-12-406	< 2	< 5	14	610	8.6	< 1	11	58	5	3.35	3	< 1	< 5	3	1.71	< 20	59	1.5	9.9	< 3	< 0.02	< 0.05	< 0.5	5.6	1.8
BTW-12-407	< 2	< 5	10	720	1.3	1	10	62	3	3.45	4	< 1	< 5	3	2.05	< 20	56	1.4	10.3	< 3	< 0.02	< 0.05	< 0.5	5.1	1.9
BTW-12-408	29	< 5	5.4	610	10	2	7	38	4	2.81	3	< 1	< 5	4	1.75	< 20	61	0.8	7.6	< 3	< 0.02	< 0.05	< 0.5	5.4	2
BTW-12-409	< 2	< 5	13.2	720	7	< 1	6	31	3	2.29	3	< 1	< 5	4	1.62	< 20	76	1.8	6	< 3	< 0.02	< 0.05	< 0.5	7.8	4.8
BTW-12-410	< 2	< 5	10	610	29	1	6	32	3	2.44	3	< 1	< 5	4	1.63	< 20	51	1.3	5.8	< 3	< 0.02	< 0.05	< 0.5	7.9	2.8
BTW-12-411	7	< 5	11.9	610	11.8	1	7	36	4	2.96	3	< 1	< 5	4	1.58	< 20	53	1	6.9	< 3	< 0.02	< 0.05	< 0.5	5.7	2.3
BTW-12-412	< 2	< 5	16.1	510	13.7	< 1	16	102	13	3.77	2	< 1	< 5	4	1.14	< 20	53	1.5	14.4	< 3	< 0.02	< 0.05	< 0.5	7.1	2.1
BTW-12-413	15	< 5	61.6	500	13.6	< 1	13	82	6	3.8	8	< 1	< 5	< 1	1.56	80	58	2.2	9.6	< 3	< 0.02	< 0.05	< 0.5	11.1	4.2
BTW-12-414	< 2	< 5	16.1	540	4.5	< 1	15	59	4	4.24	3	< 1	< 5	3	1.74	< 20	50	1.3	10.5	< 3	< 0.02	< 0.05	1.8	6	2.9
BTW-12-415	< 2	< 5	344	510	13.1	2	25	75	8	5.55	3	< 1	< 5	4	1.38	< 20	< 15	2.2	19.8	< 3	< 0.02	< 0.05	< 0.5	5.7	3.4
BTW-12-416	< 2	< 5	15.2	440	17.9	< 1	8	45	5	3.65	4	< 1	< 5	3	1.35	< 20	42	1.4	7.9	< 3	< 0.02	< 0.05	1.7	7.3	3
BTW-12-417	< 2	< 5	9.9	700	11.9	< 1	9	39	4	2.75	3	< 1	< 5	< 1	1.74	< 20	67	1.5	8	< 3	< 0.02	< 0.05	< 0.5	6.4	1.8
BTW-12-418	< 2	< 5	6.8	470	17.8	< 1	12	81	4	3.71	3	< 1	< 5	< 1	1.41	< 20	< 15	1.3	10.9	< 3	< 0.02	< 0.05	1.7	4.6	1.7
BTW-12-419	< 2	< 5	4.1	250	27.6	< 1	11	61	3	3.8	3	< 1	< 5	4	1.04	< 20	< 15	0.6	10.8	< 3	< 0.02	< 0.05	< 0.5	3.7	1.3
BTW-12-420	< 2	< 5	38	440	15.3	< 1	17	46	5	4.32	3	< 1	< 5	4	1.41	< 20	< 15	1.3	13.8	< 3	< 0.02	< 0.05	< 0.5	4	3.8
BTW-12-421	< 2	< 5	10.4	600	10.1	< 1	15	48	6	3.55	3	< 1	< 5	3	1.55	< 20	67	1.2	9.3	< 3	< 0.02	< 0.05	1.8	5.2	1.5
BTW-12-422	< 2	< 5	8.6	440	18	< 1	7	41	3	2.79	3	< 1	< 5	2	1.15	< 20	51	1.2	8.2	< 3	< 0.02	< 0.05	< 0.5	4.6	2.2
BTW-12-423	< 2	< 5	12	700	9.2	1	10	45	7	3.13	3	< 1	< 5	< 1	1.57	< 20	65	1.6	10.9	< 3	< 0.02	< 0.05	< 0.5	4.8	3.2
BTW-12-424	< 2	< 5	10.9	600	9.4	1	11	48	5	3.51	4	< 1	< 5	4	1.57	< 20	52	1.1	10.1	< 3	0.05	< 0.05	< 0.5	5.1	2.1
BTW-12-425	< 2	< 5	59.5	600	23	< 1	20	71	9	4.81	2	< 1	< 5	< 1	0.87	< 20	33	1.5	14.6	< 3	< 0.02	< 0.05	< 0.5	6.9	9.3
BTW-12-426	< 2	< 5	16.3	480	13.7	2	16	69	4	4.4	4	< 1	< 5	< 1	1.83	< 20	37	1	15.1	< 3	< 0.02	< 0.05	< 0.5	4.1	1.7

Analyte Symbol	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-366	< 1	110	20.6	37	17	3.2	0.8	< 0.5	1.8	0.31	26.7	0.3	0.8	57	676	3	7	23	133	0.105
BTW-12-367	3	160	19.8	41	15	3.7	0.9	0.6	2.6	0.44	30	0.3	0.8	50	825	< 2	7	30	180	0.019
BTW-12-368	2	550	18.5	33	14	3	0.8	< 0.5	1.9	0.26	30	1.3	1.2	42	2750	3	12	137	769	0.01
BTW-12-372	< 1	< 50	21.1	37	9	2.3	0.6	< 0.5	1	0.18	30	< 0.2	< 0.5	9	407	< 2	6	10	69	0.011
BTW-12-373	< 1	320	21	38	12	2.9	0.8	< 0.5	1.6	0.26	30.2	2.6	0.9	21	923	2	11	99	390	0.018
BTW-12-375	< 1	270	19.3	36	9	2.9	0.7	< 0.5	1.3	0.23	27.9	5.5	1.2	27	970	< 2	16	114	346	0.031
BTW-12-377	< 1	140	20.9	38	14	3.2	0.8	< 0.5	1.9	0.31	30.1	3.1	0.7	22	722	< 2	8	62	170	0.029
BTW-12-378	< 1	< 50	17.8	32	14	3.1	0.9	< 0.5	1.9	0.32	30	1.8	0.6	16	469	< 2	9	20	110	0.019
BTW-12-379	< 1	80	18.8	34	14	3.1	0.9	< 0.5	1.7	0.24	30.1	0.4	0.6	17	536	< 2	7	23	89	0.025
BTW-12-380	2	100	16.8	31	13	2.5	0.7	< 0.5	1.3	0.2	30	0.3	0.7	18	804	< 2	13	25	156	0.023
BTW-12-382	< 1	120	21.1	36	15	2.5	0.7	< 0.5	0.9	0.18	31.8	< 0.2	0.8	9	309	< 2	11	6	102	0.017
BTW-12-383	< 1	60	23.6	41	14	2.5	0.6	< 0.5	1.3	0.18	30	< 0.2	0.5	12	624	2	9	19	121	0.013
BTW-12-384	< 1	70	22.6	42	14	3.8	1	< 0.5	2	0.3	30.4	< 0.2	< 0.5	14	479	< 2	11	6	73	0.008
BTW-12-385	< 1	< 50	19.4	45	15	3	0.9	< 0.5	1.5	0.24	30.9	< 0.2	< 0.5	49	461	< 2	15	3	45	0.021
BTW-12-386	2	80	17.9	33	13	2.6	0.7	< 0.5	1.2	0.16	30	< 0.2	0.7	23	416	< 2	16	14	89	0.025
BTW-12-387	< 1	60	23.4	42	19	3.7	0.8	< 0.5	1.8	0.3	30.2	< 0.2	0.5	26	969	< 2	21	12	83	0.018
BTW-12-388	< 1	< 50	24.6	42	17	3.5	1.1	< 0.5	1.5	0.24	32	< 0.2	< 0.5	15	633	< 2	15	8	64	0.004
BTW-12-390	< 1	80	24	41	16	3.7	1	< 0.5	1.8	0.28	31.7	0.2	0.6	24	784	< 2	15	27	104	0.005
BTW-12-394	< 1	< 50	17	40	10	3.2	0.9	< 0.5	1.5	0.25	30.1	0.3	1	66	787	16	35	14	127	0.026
BTW-12-395	< 1	< 50	19	36	12	3.2	0.9	< 0.5	1.6	0.24	30.8	< 0.2	< 0.5	22	381	< 2	17	4	62	0.018
BTW-12-396	< 1	70	15.6	32	12	2.8	0.8	< 0.5	1.5	0.26	28.7	< 0.2	< 0.5	17	416	< 2	11	7	59	0.03
BTW-12-397	< 1	140	20.2	38	18	4.3	1.2	0.7	2.3	0.38	30.3	0.8	0.8	52	806	< 2	37	5	191	0.017
BTW-12-398	< 1	80	18.8	39	16	3.9	1.1	< 0.5	2.1	0.31	30	< 0.2	0.6	54	626	< 2	32	5	96	0.016
BTW-12-399	< 1	80	18.7	31	14	3.5	1	0.6	2	0.31	31	< 0.2	< 0.5	28	553	< 2	18	5	71	0.017
BTW-12-400	< 1	70	22.6	43	15	3.9	1.1	0.6	2.1	0.35	30.2	< 0.2	< 0.5	12	334	< 2	9	7	50	0.023
BTW-12-401	3	80	21.6	46	14	4.1	1.1	< 0.5	2	0.32	30.2	< 0.2	0.5	26	375	< 2	14	4	55	0.022
BTW-12-402	< 1	90	23.9	40	15	3.5	1	< 0.5	1.5	0.26	30	< 0.2	0.7	22	550	< 2	19	9	93	0.031
BTW-12-403	< 1	90	22.9	40	16	3.2	0.8	< 0.5	1.5	0.24	30.1	< 0.2	0.5	13	327	< 2	13	11	91	0.015
BTW-12-404	< 1	200	21	38	18	3.8	1.1	< 0.5	1.9	0.32	28	0.7	0.8	25	959	< 2	24	19	210	0.034
BTW-12-405	< 1	< 50	21.1	38	18	3.4	1	< 0.5	1.6	0.23	30.1	0.4	0.5	13	381	< 2	10	15	80	0.026
BTW-12-406	< 1	60	20.1	40	16	3.1	0.9	0.6	1.3	0.22	30	< 0.2	0.6	20	495	< 2	19	13	86	0.015
BTW-12-407	< 1	< 50	24.9	41	17	3.9	1	< 0.5	1.7	0.3	30	< 0.2	0.6	20	550	< 2	14	8	65	0.005
BTW-12-408	< 1	50	19.1	31	14	2.9	0.8	< 0.5	1.4	0.2	30.2	< 0.2	< 0.5	12	373	< 2	7	4	44	0.027
BTW-12-409	< 1	< 50	22.7	38	14	3	0.8	< 0.5	1.5	0.23	30	< 0.2	< 0.5	12	476	< 2	7	17	66	0.015
BTW-12-410	< 1	70	19	40	12	2.6	0.7	< 0.5	1	0.19	26.2	< 0.2	< 0.5	12	485	< 2	9	20	76	0.04
BTW-12-411	< 1	80	19.5	34	11	2.7	0.7	< 0.5	1.3	0.21	30	< 0.2	0.6	14	406	< 2	10	16	80	0.027
BTW-12-412	< 1	90	17.3	40	12	3.4	0.9	< 0.5	1.4	0.25	18.7	< 0.2	0.6	70	652	< 2	34	14	75	0.033
BTW-12-413	< 1	240	38.7	74	25	5	1.1	< 0.5	2.5	0.4	30.1	0.2	2.2	25	1200	< 2	17	91	329	0.031
BTW-12-414	< 1	70	19.6	37	14	3	0.8	< 0.5	1.6	0.25	28.1	< 0.2	0.7	19	620	< 2	19	8	94	0.017
BTW-12-415	< 1	< 50	24.5	50	24	5.5	1.6	0.9	3.4	0.52	14.6	0.5	0.6	65	806	< 2	48	10	86	0.052
BTW-12-416	< 1	110	18.6	35	14	2.7	0.6	< 0.5	1.3	0.22	18.6	< 0.2	0.6	17	319	< 2	11	20	92	0.033
BTW-12-417	< 1	80	19.9	36	13	2.9	0.7	< 0.5	1.3	0.22	30	< 0.2	< 0.5	14	407	< 2	9	9	57	0.02
BTW-12-418	3	110	17.1	33	15	3.2	0.9	0.6	1.5	0.22	16.3	< 0.2	0.5	36	288	< 2	21	3	38	0.033
BTW-12-419	< 1	< 50	12.7	26	13	2.5	0.6	< 0.5	1.4	0.17	22.6	< 0.2	< 0.5	17	367	< 2	15	4	56	0.051
BTW-12-420	< 1	90	17	40	18	3.7	1	< 0.5	1.8	0.29	20.5	0.3	0.8	43	502	< 2	19	4	83	0.041
BTW-12-421	< 1	< 50	17.8	39	12	3.1	0.9	< 0.5	1.4	0.23	29	< 0.2	0.5	34	566	< 2	20	4	53	0.025
BTW-12-422	< 1	70	15.4	28	12	2.4	0.8	< 0.5	1.1	0.19	25.1	0.2	< 0.5	13	333	< 2	8	11	59	0.04
BTW-12-423	< 1	90	23.1	51	18	4.9	1.4	0.8	2.5	0.35	30.2	0.6	0.6	40	591	< 2	13	15	91	0.023
BTW-12-424	< 1	70	17.7	33	17	2.8	0.9	< 0.5	1.5	0.23	30	< 0.2	0.5	24	420	< 2	13	11	87	0.019
BTW-12-425	< 1	130	17.7	40	13	4.3	1	< 0.5	1.9	0.28	24.1	< 0.2	0.7	87	724	< 2	44	7	92	0.039
BTW-12-426	< 1	< 50	20.9	37	20	4	1.1	0.5	2.1	0.31	30.9	< 0.2	< 0.5	32	549	< 2	16	< 2	52	0.027

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th	U
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-427	< 2	< 5	22.5	550	21.5	1	22	53	6	4.63	2	< 1	< 5	< 1	1	< 20	32	0.9	16.9	< 3	< 0.02	< 0.05	0.5	4.2	1.4
BTW-12-428	3	< 5	56	600	8.8	< 1	19	53	6	4.79	4	< 1	< 5	3	1.41	< 20	41	1.8	15.2	< 3	< 0.02	< 0.05	< 0.5	4.4	1.7
BTW-12-429	< 2	< 5	11.5	750	6.8	2	10	53	5	3.22	4	< 1	< 5	3	1.81	< 20	63	1.8	11.1	< 3	< 0.02	< 0.05	0.9	4.8	2
BTW-12-430	< 2	< 5	15.1	800	7.3	< 1	13	58	6	4.51	5	< 1	< 5	4	1.91	< 20	70	1.9	15.1	< 3	< 0.02	< 0.05	< 0.5	5.4	2.4
BTW-12-431	8	< 5	12.8	550	14.4	1	10	45	5	3.69	3	< 1	< 5	3	1.59	< 20	61	1.5	12.4	< 3	< 0.02	< 0.05	1	4.8	1.8
BTW-12-432	< 2	< 5	10.7	500	8.9	< 1	10	58	3	3.48	4	< 1	< 5	< 1	1.71	< 20	48	1.3	10.3	< 3	< 0.02	< 0.05	< 0.5	5	1.6
BTW-12-433	6	< 5	13.4	600	5.4	1	11	57	3	3.54	4	< 1	< 5	4	2.02	< 20	32	1.5	10.6	< 3	< 0.02	< 0.05	< 0.5	4.3	1.5
BTW-12-434	6	< 5	19.8	650	5.8	< 1	15	82	4	4.36	4	< 1	< 5	3	2.1	< 20	55	1.3	13.8	< 3	< 0.02	< 0.05	0.9	5.3	2.3
BTW-12-435	3	< 5	17.7	600	9.3	< 1	14	58	5	4.14	4	< 1	< 5	< 1	1.78	< 20	49	1.4	13.2	< 3	< 0.02	< 0.05	0.9	4.9	1.6
BTW-12-436	< 2	< 5	11.6	500	10.9	2	23	126	6	5.15	3	< 1	< 5	< 1	1.72	< 20	54	1.3	15.2	< 3	< 0.02	0.05	< 0.5	4.8	2
BWT-12-437	< 2	< 5	10.9	460	25.4	3	15	66	3	3.73	5	< 1	< 5	< 1	1.56	< 20	< 15	0.8	10.5	< 3	< 0.02	< 0.05	3.1	5.5	1.9
BWT-12-438	< 2	< 5	16.7	< 50	19.8	< 1	13	52	7	4.63	4	< 1	< 5	7	1.3	< 20	< 15	1.2	12.3	< 3	< 0.02	< 0.05	2.6	5.5	< 0.5
BWT-12-439	< 2	< 5	12.5	650	12.3	< 1	11	56	5	4.1	5	< 1	< 5	4	1.6	< 20	90	1	12.4	< 3	< 0.02	< 0.05	< 0.5	5	2.2
BWT-12-440	< 2	< 5	10.4	570	21.2	< 1	9	71	3	4.71	5	< 1	< 5	< 1	1.22	< 20	< 15	1	10.9	< 3	< 0.02	< 0.05	2.1	4.8	< 0.5
BWT-12-441	< 2	< 5	14.3	500	15.5	< 1	14	88	3	4.6	7	< 1	< 5	< 1	1.64	< 20	< 15	1.5	11.1	< 3	< 0.02	< 0.05	< 0.5	6.9	4.7
BWT-12-442	< 2	< 5	8.9	410	17.6	< 1	11	60	2	3.93	5	< 1	< 5	< 1	1.55	< 20	< 15	1	11	< 3	< 0.02	< 0.05	< 0.5	4.8	2.9
BWT-12-443	< 2	< 5	18.2	330	24.6	< 1	16	63	5	4.42	4	< 1	< 5	< 1	1.18	< 20	< 15	1	12.7	< 3	< 0.02	< 0.05	2.6	4.4	< 0.5
BWT-12-444	< 2	< 5	2.6	860	2.5	3	8	61	16	3.36	6	< 1	< 5	< 1	1.61	< 20	93	2	7.4	< 3	< 0.02	< 0.05	1.7	7.7	3.3
BWT-12-445	< 2	< 5	4.5	700	6.8	< 1	13	80	5	4.4	6	< 1	< 5	4	1.94	< 20	74	1.3	11.6	< 3	< 0.02	< 0.05	< 0.5	7	4.5
BWT-12-446	< 2	< 5	16.6	480	25	< 1	16	47	4	4.34	4	< 1	< 5	< 1	1.25	< 20	87	0.9	14	< 3	< 0.02	< 0.05	< 0.5	4.8	< 0.5
BWT-12-447	< 2	< 5	42.8	640	10.9	< 1	20	58	8	5.1	3	< 1	< 5	5	1.21	< 20	62	2.2	19	< 3	< 0.02	< 0.05	< 0.5	4.5	2.7
BWT-12-448	< 2	< 5	12.2	500	12.6	3	19	48	3	4.58	4	< 1	< 5	5	1.59	< 20	75	1	17.2	< 3	< 0.02	< 0.05	< 0.5	4.8	1.9
BWT-12-449	< 2	< 5	21.2	470	23.3	3	18	42	4	4.41	3	< 1	< 5	< 1	1.06	< 20	< 15	0.8	15.7	< 3	< 0.02	< 0.05	< 0.5	5.2	< 0.5
BWT-12-450	< 2	< 5	78.2	460	13.4	< 1	20	48	5	4.69	3	< 1	< 5	< 1	1.26	< 20	91	1.1	16.1	< 3	< 0.02	< 0.05	< 0.5	4.1	2.6
BWT-12-451	< 2	< 5	59.6	630	31.8	< 1	18	62	6	5.19	3	< 1	< 5	6	1.32	< 20	64	1.4	15.3	< 3	< 0.02	< 0.05	< 0.5	5.5	5.6
BWT-12-452	< 2	< 5	59.9	500	18.7	3	17	49	8	3.98	3	< 1	< 5	< 1	1.5	< 20	< 15	1.3	14.6	< 3	< 0.02	< 0.05	< 0.5	5.3	2.3
BWT-12-453	< 2	< 5	21.1	570	13.2	< 1	14	41	4	3.89	3	< 1	< 5	< 1	1.31	< 20	< 15	0.6	12.7	< 3	< 0.02	< 0.05	< 0.5	4.5	2
BWT-12-454	7	< 5	94.8	440	8.4	3	17	42	5	4.87	4	< 1	< 5	7	1.21	< 20	72	1.3	14.9	< 3	< 0.02	< 0.05	< 0.5	4.8	< 0.5
BWT-12-455	< 2	< 5	30.7	470	20.7	< 1	17	43	6	4.3	3	< 1	< 5	< 1	1.27	< 20	61	0.9	15.6	< 3	< 0.02	< 0.05	< 0.5	4	2.3
BWT-12-456	< 2	< 5	16.3	470	37.1	< 1	14	33	3	4.07	3	< 1	< 5	< 1	1.06	< 20	< 15	0.7	13.9	< 3	< 0.02	< 0.05	< 0.5	3.7	< 0.5
BWT-12-457	< 2	< 5	4.5	400	3.2	< 1	7	33	7	2.81	8	< 1	< 5	< 1	2.71	< 20	60	1.1	9.5	< 3	< 0.02	< 0.05	2.3	20.8	5.4
BWT-12-458	< 2	< 5	5.2	660	2.4	< 1	16	98	< 1	4.88	7	< 1	< 5	< 1	2.42	< 20	69	0.7	11.7	< 3	< 0.02	< 0.05	< 0.5	10	4.8
BWT-12-459	< 2	< 5	4.2	710	< 0.5	< 1	32	180	< 1	7.65	6	< 1	< 5	< 1	2.16	< 20	72	0.7	14.9	< 3	< 0.02	< 0.05	3.1	6.6	2.5
BWT-12-460	< 2	< 5	3.6	620	4.2	2	11	69	3	3.15	6	< 1	< 5	< 1	1.99	< 20	84	0.7	9.6	< 3	< 0.02	< 0.05	2.2	8.8	5.4
BWT-12-461	< 2	< 5	4.4	700	< 0.5	2	15	98	< 1	5.71	5	< 1	< 5	3	1.57	< 20	72	0.8	13.6	< 3	< 0.02	< 0.05	< 0.5	6.7	2.8
BWT-12-462	< 2	< 5	3.3	490	18.4	< 1	11	74	< 1	3.59	6	< 1	< 5	< 1	2.1	< 20	84	0.7	10.1	< 3	< 0.02	< 0.05	< 0.5	8.5	2.3
BWT-12-463	< 2	< 5	4.1	540	3.3	< 1	16	119	3	4.14	5	< 1	< 5	< 1	1.98	< 20	73	0.9	14.3	< 3	< 0.02	< 0.05	2.9	6.6	3.4
BWT-12-464	< 2	< 5	3.4	550	3.3	< 1	15	104	2	5	5	< 1	< 5	< 1	1.92	< 20	44	0.7	13.2	< 3	< 0.02	< 0.05	< 0.5	4.7	2.2
BWT-12-465	< 2	< 5	4.1	660	6.2	< 1	16	94	2	4.45	5	< 1	< 5	< 1	2.11	< 20	< 15	1	12	< 3	< 0.02	< 0.05	< 0.5	5.9	2.4
BWT-12-466	< 2	< 5	8.6	650	5.1	< 1	16	80	4	3.75	7	< 1	< 5	< 1	2.06	< 20	114	1.2	9.4	< 3	< 0.02	< 0.05	< 0.5	15.4	3.7
BWT-12-497	< 2	< 5	9.5	670	11.5	< 1	15	132	3	4.32	7	< 1	< 5	4	1.68	< 20	81	0.9	14.1	< 3	< 0.02	< 0.05	< 0.5	9.6	4
BWT-12-498	24	< 5	25.6	670	2.2	< 1	9	70	3	3.32	6	< 1	< 5	12	1.09	< 20	110	1.5	9	< 3	< 0.02	< 0.05	2	11	5.8
BWT-12-499	30	< 5	11.4	660	6.1	2	9	108	2	3.08	7	< 1	< 5	4	1.15	< 20	46	1.1	10.2	< 3	< 0.02	< 0.05	< 0.5	9.1	4.9
BWT-12-500	37	< 5	17.4	640	4.2	< 1	9	49	2	2.74	7	< 1	< 5	8	0.79	< 20	128	1.6	8.3	< 3	< 0.02	< 0.05	< 0.5	14.6	8.8
BWT-12-501	37	< 5	19.3	730	4	< 1	7	60	3	2.69	8	< 1	< 5	< 1	0.77	< 20	135	1.4	7.7	< 3	< 0.02	< 0.05	2.1	14.4	9
BWT-12-502	56	< 5	27.1	630	2.1	< 1	12	77	< 1	3.52	5	< 1	< 5	9	0.81	< 20	100	2.2	7.7	< 3	< 0.02	< 0.05	2.8	9.6	4
BWT-12-503	< 2	< 5	12.4	620	5.3	< 1	23	148	< 1	5.62	6	< 1	< 5	< 1	1.29	< 20	66	1.1	12.8	< 3	< 0.02	0.07	2.3	8.5	5.9
BWT-12-504	15	< 5	16.4	820	4.6	< 1	10	80	< 1	3.41	6	< 1	< 5	7	1.38	< 20	116	1.3	9.4	< 3	< 0.02	< 0.05	2.1	10.4	6.1

Analyte Symbol	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-427	< 1	130	13.1	26	11	2.8	0.8	< 0.5	1.5	0.23	25.3	< 0.2	0.7	50	577	< 2	23	5	91	0.035
BTW-12-428	3	80	20.3	51	17	4	1.1	0.6	2.2	0.32	31	< 0.2	0.6	42	726	2	46	5	82	0.02
BTW-12-429	< 1	110	24.3	43	18	4.1	1	< 0.5	1.9	0.34	29	0.4	0.7	17	952	< 2	13	24	179	0.021
BTW-12-430	< 1	210	22.4	50	19	4.2	1.1	< 0.5	2.6	0.43	15.3	0.2	1.1	32	869	< 2	13	13	236	0.021
BTW-12-431	< 1	170	19	39	13	3.3	0.9	< 0.5	1.6	0.28	29.2	0.2	0.8	27	733	< 2	13	51	192	0.022
BTW-12-432	< 1	110	19.4	41	13	3	0.9	< 0.5	1.6	0.27	31	0.3	0.9	17	424	< 2	13	13	95	0.016
BTW-12-433	< 1	70	19.3	37	15	3.2	0.9	< 0.5	1.7	0.28	30	< 0.2	0.6	16	445	< 2	8	20	80	0.008
BTW-12-434	< 1	< 50	25.5	45	21	4.7	1.2	0.6	2.4	0.37	30	< 0.2	< 0.5	22	643	< 2	15	7	63	0.009
BTW-12-435	< 1	70	20.8	41	15	3.4	0.9	0.6	1.8	0.28	29	< 0.2	0.5	32	459	< 2	18	10	67	0.012
BTW-12-436	< 1	100	19.6	38	18	3.5	1	< 0.5	1.5	0.25	24.4	< 0.2	0.9	85	565	< 2	54	5	80	0.015
BWT-12-437	< 1	130	23	44	15	3.8	1.2	< 0.5	1.9	0.24	29.1	< 0.2	0.5	48	424	< 2	13	3	43	0.03
BWT-12-438	< 1	160	17.4	31	15	3	0.9	< 0.5	1.4	0.29	18.4	0.6	0.9	16	340	< 2	12	13	133	0.038
BWT-12-439	< 1	< 50	24.8	36	18	4.8	1.4	< 0.5	2.4	0.34	29	0.3	0.8	26	818	< 2	16	15	100	0.031
BWT-12-440	< 1	< 50	18.3	32	< 5	3	0.9	< 0.5	1.5	0.2	23.9	< 0.2	0.7	14	275	< 2	12	6	63	0.033
BWT-12-441	< 1	< 50	24	35	15	3.3	1.2	< 0.5	1.9	0.28	30.2	< 0.2	0.6	17	377	< 2	16	6	78	0.021
BWT-12-442	< 1	< 50	21.5	34	14	3.3	1.2	< 0.5	1.7	0.25	29.4	< 0.2	0.5	15	322	< 2	12	3	60	0.022
BWT-12-443	< 1	< 50	16.1	30	< 5	3.1	1.1	< 0.5	1.6	0.22	24	< 0.2	0.6	23	753	< 2	19	5	82	0.032
BWT-12-444	< 1	170	29.5	43	13	3.2	0.8	< 0.5	1.7	0.29	28.7	< 0.2	< 0.5	10	408	< 2	7	6	74	0.005
BWT-12-445	< 1	< 50	28.9	49	15	4.6	1.6	< 0.5	2.1	0.3	28.8	< 0.2	< 0.5	18	420	< 2	19	6	57	0.012
BWT-12-446	< 1	< 50	18	31	< 5	3.7	0.9	< 0.5	1.9	0.37	25.2	< 0.2	< 0.5	31	408	< 2	17	4	52	0.049
BWT-12-447	< 1	130	22.1	38	10	4.2	1.4	< 0.5	2.3	0.37	28.2	< 0.2	0.6	49	746	< 2	17	3	64	0.016
BWT-12-448	< 1	< 50	21.5	37	11	3.7	1.4	< 0.5	2	0.34	29.5	< 0.2	< 0.5	40	535	< 2	11	4	55	0.01
BWT-12-449	< 1	< 50	19.5	41	< 5	3.9	1	< 0.5	2.3	0.34	25.6	< 0.2	0.5	41	505	< 2	9	2	49	0.026
BWT-12-450	< 1	< 50	19.1	35	17	3.7	1.2	< 0.5	2.1	0.36	26.2	< 0.2	0.6	50	791	< 2	12	4	62	0.028
BWT-12-451	< 1	< 50	23.2	34	14	4.7	1.5	< 0.5	2.2	0.27	23.5	0.3	0.6	46	506	3	17	4	76	0.047
BWT-12-452	< 1	< 50	23	34	18	4.3	1.2	< 0.5	2.2	0.34	27	0.2	0.5	38	521	2	17	4	55	0.032
BWT-12-453	< 1	140	22.7	41	15	3.8	1.6	< 0.5	2	0.33	30	< 0.2	< 0.5	35	424	< 2	9	4	48	0.016
BWT-12-454	< 1	< 50	22.1	43	12	4.1	1.2	0.6	2.4	0.33	30	< 0.2	0.5	84	359	< 2	11	4	52	0.015
BWT-12-455	< 1	< 50	17.9	38	14	3.3	1.1	< 0.5	1.9	0.32	30	0.3	0.6	71	447	< 2	12	2	49	0.018
BWT-12-456	< 1	< 50	18.7	37	16	3.9	1.3	< 0.5	2	0.31	26.7	< 0.2	0.6	33	417	< 2	10	2	51	0.03
BWT-12-457	5	< 50	50.7	68	19	5.5	0.8	< 0.5	3	0.4	30.1	< 0.2	< 0.5	26	526	< 2	11	< 2	62	0.007
BWT-12-458	< 1	170	43.7	60	19	6.3	1.8	< 0.5	2.8	0.37	30.1	< 0.2	0.5	21	548	< 2	26	3	74	0.003
BWT-12-459	< 1	< 50	36.3	64	32	6.2	1.8	0.9	2.2	0.36	30.5	< 0.2	0.7	36	793	< 2	51	< 2	88	0.004
BWT-12-460	< 1	170	27.1	36	18	3.3	1	< 0.5	1.5	0.2	30	< 0.2	< 0.5	12	249	< 2	13	6	57	0.01
BWT-12-461	< 1	210	20	30	< 5	3	1.1	< 0.5	1.6	0.23	30	< 0.2	0.6	25	403	< 2	25	6	109	0.018
BWT-12-462	< 1	90	26.5	40	13	3.9	1	< 0.5	1.8	0.3	30.4	< 0.2	< 0.5	9	181	< 2	16	< 2	46	0.018
BWT-12-463	< 1	190	30.4	47	25	5	1.5	< 0.5	2	0.32	30	< 0.2	< 0.5	16	503	< 2	34	4	68	0.01
BWT-12-464	< 1	< 50	21.4	31	11	3.1	1.2	< 0.5	1.8	0.29	30	< 0.2	0.7	20	320	< 2	35	3	68	0.007
BWT-12-465	< 1	< 50	22.4	35	18	3.3	1	< 0.5	1.9	0.26	30	< 0.2	< 0.5	16	287	< 2	23	3	60	0.01
BWT-12-466	< 1	< 50	39.2	56	14	4.5	0.9	< 0.5	2	0.32	30	< 0.2	< 0.5	18	291	< 2	21	4	63	0.006
BWT-12-497	5	250	31.6	73	30	7	1.4	< 0.5	2.4	0.47	23	0.2	0.6	28	609	< 2	20	19	143	0.014
BWT-12-498	< 1	290	32.8	66	19	4.9	0.9	< 0.5	1.9	0.38	30	0.6	0.6	39	1230	4	15	52	161	0.004
BWT-12-499	8	230	34.4	74	18	5.3	1	< 0.5	1.7	0.35	28.8	0.9	0.8	29	904	3	15	51	213	0.028
BWT-12-500	8	230	35.2	69	23	5.1	0.9	0.7	2	0.35	30.3	0.4	0.6	38	855	4	10	48	180	0.005
BWT-12-501	8	250	30.9	84	14	4.5	0.8	< 0.5	1.8	0.31	29.9	0.7	0.6	44	755	3	15	40	216	0.005
BWT-12-502	8	270	37.3	78	19	5.6	0.9	< 0.5	2.2	0.4	30.4	0.4	0.9	31	1800	4	17	79	180	0.004
BWT-12-503	< 1	250	30.7	71	19	5.7	1.2	< 0.5	1.9	0.38	30.3	< 0.2	0.8	37	890	2	35	23	171	0.007
BWT-12-504	< 1	190	27.5	59	13	4.8	1	< 0.5	1.9	0.32	31.8	0.2	0.6	31	888	3	15	34	101	0.004

Appendix R

Geochemical Analyses

Quality Analysis ... *Innovative Technologies*

Date Submitted: 30-Jul-12
Invoice No.: A12-08150
Invoice Date: 20-Aug-12
Your Reference: BWT-12

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker

CERTIFICATE OF ANALYSIS

95 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D Enh INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-08150**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

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LAB 266
LAB 266
Accrédité CCN

Quality Analysis ... *Innovative Technologies*

Date Submitted: 03-Aug-12
Invoice No.: A12-08357
Invoice Date: 24-Aug-12
Your Reference: BWT-12

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker

CERTIFICATE OF ANALYSIS

97 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D Enh INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-08357**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

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Quality Analysis ... *Innovative Technologies*

Date Submitted: 27-Aug-12
Invoice No.: A12-09251
Invoice Date: 19-Sep-12
Your Reference: BWT-12

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker

CERTIFICATE OF ANALYSIS

88 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D Enh INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-09251**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

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Quality Analysis ... *Innovative Technologies*

Date Submitted: 29-Aug-12
Invoice No.: A12-09376
Invoice Date: 18-Sep-12
Your Reference: BWT-12

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker

CERTIFICATE OF ANALYSIS

36 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D Enh INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-09376**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

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LAB 266
LAB 266
Accrédité CCN

Quality Analysis ... *Innovative Technologies*

Date Submitted: 07-Sep-12
Invoice No.: A12-09774
Invoice Date: 24-Sep-12
Your Reference: BWT-12-CAPOOSE

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker

CERTIFICATE OF ANALYSIS

80 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-09774**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
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Quality Analysis ... *Innovative Technologies*

Date Submitted: 24-Sep-12
Invoice No.: A12-10468
Invoice Date: 09-Oct-12
Your Reference: BWT-12

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

66 Pulp samples were submitted for analysis.

The following analytical packages were requested: Code 1D Enh INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)

REPORT **A12-10468**

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Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-001	74	< 5	26.1	700	3.5	< 1	9	48	4	3.14	4	< 1	< 5	14	2.27	< 20	71	3.3	10.8	< 3	< 0.02	< 0.05	< 0.5	6.4
BTW-12-002	42	< 5	31.4	720	< 0.5	< 1	8	56	2	2.86	4	< 1	< 5	12	2.26	< 20	117	4.3	9.8	< 3	< 0.02	< 0.05	< 0.5	6.7
BTW-12-003	11	< 5	21.6	910	5.2	< 1	6	50	4	2.4	4	< 1	< 5	< 1	2.06	< 20	< 15	2.9	8.5	< 3	< 0.02	< 0.05	< 0.5	6
BTW-12-004	< 2	< 5	18	850	< 0.5	< 1	9	41	8	2.67	3	< 1	< 5	< 1	1.91	< 20	129	3.1	8.8	< 3	< 0.02	< 0.05	< 0.5	8.1
BTW-12-005	< 2	< 5	7.7	520	< 0.5	< 1	5	41	3	2.13	4	< 1	< 5	< 1	2.29	< 20	< 15	2.3	8.8	< 3	< 0.02	< 0.05	< 0.5	6.4
BTW-12-006	37	< 5	32	450	< 0.5	< 1	12	62	8	3.52	5	< 1	< 5	< 1	2.1	< 20	112	4.5	10.7	< 3	< 0.02	< 0.05	< 0.5	6.6
BTW-12-007	< 2	< 5	132	570	5.1	< 1	5	34	6	1.92	3	< 1	< 5	< 1	2.47	< 20	159	5.3	8.1	< 3	< 0.02	< 0.05	< 0.5	6.8
BTW-12-008	11	< 5	11.8	410	5.6	< 1	6	38	3	2.07	5	< 1	< 5	< 1	2.5	< 20	< 15	2.2	8.3	< 3	< 0.02	< 0.05	< 0.5	9.2
BTW-12-009	< 2	< 5	7.9	460	< 0.5	< 1	5	51	5	1.83	5	< 1	< 5	< 1	2.23	< 20	85	2.6	7.9	< 3	< 0.02	< 0.05	< 0.5	7.2
BWT-12-010	< 2	< 5	12.1	580	2	< 1	5	32	5	1.46	3	< 1	< 5	< 1	2.16	< 20	79	2.8	7.4	< 3	< 0.02	< 0.05	< 0.5	5.6
BWT-12-011	14	< 5	24.9	600	< 0.5	< 1	11	45	5	3.15	5	< 1	< 5	6	2.12	< 20	< 15	3.2	10.2	< 3	< 0.02	< 0.05	< 0.5	6.6
BWT-12-012	20	< 5	8.6	630	< 0.5	< 1	7	34	5	2.36	4	< 1	< 5	< 1	1.82	< 20	95	1.9	8.2	< 3	< 0.02	< 0.05	2.3	5.4
BWT-12-013	< 2	< 5	9.3	420	8.6	< 1	9	48	< 1	2.85	4	< 1	< 5	< 1	1.86	< 20	126	1	9.1	< 3	< 0.02	< 0.05	3.1	8.5
BWT-12-014	19	< 5	11.7	410	5.5	2	8	54	4	2.68	5	< 1	< 5	< 1	2.05	< 20	138	1.7	9.8	< 3	< 0.02	< 0.05	< 0.5	6.3
BWT-12-015	< 2	< 5	12.8	750	< 0.5	< 1	11	58	5	3.58	5	< 1	< 5	< 1	2.07	< 20	< 15	1.9	12	< 3	< 0.02	< 0.05	2.3	7.9
BWT-12-016	34	< 5	57.8	560	3.7	3	5	43	6	2.28	5	< 1	< 5	< 1	1.78	< 20	118	5	8.3	< 3	< 0.02	< 0.05	< 0.5	5.9
BWT-12-017	< 2	< 5	9.5	810	< 0.5	< 1	4	47	8	1.5	4	< 1	< 5	< 1	1.86	< 20	< 15	3.5	7.9	< 3	< 0.02	< 0.05	2.1	6.1
BWT-12-018	36	< 5	7.5	690	< 0.5	3	6	49	4	2.28	5	< 1	< 5	< 1	1.98	< 20	99	1.4	9.8	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-019	< 2	< 5	19.8	550	11.7	< 1	9	44	5	3.15	4	< 1	< 5	< 1	1.56	< 20	66	1.5	8.5	< 3	< 0.02	< 0.05	< 0.5	7.6
BWT-12-020	< 2	< 5	8.1	440	3.4	2	5	41	4	2.41	4	< 1	< 5	12	1.93	< 20	75	1.5	8.5	< 3	< 0.02	< 0.05	< 0.5	6.4
BWT-12-021	13	< 5	8.8	470	< 0.5	< 1	7	56	3	2.49	5	< 1	< 5	< 1	2.04	< 20	< 15	1.5	9.3	< 3	< 0.02	< 0.05	2.7	6.5
BWT-12-022	15	< 5	14.3	520	7.2	< 1	6	46	4	2.57	5	< 1	< 5	< 1	1.91	< 20	< 15	3.6	8.3	< 3	< 0.02	< 0.05	< 0.5	5.6
BWT-12-023	< 2	< 5	16.7	470	< 0.5	< 1	7	48	4	3.15	4	< 1	< 5	< 1	2.05	< 20	103	2.2	9.2	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-024	9	< 5	9.4	530	5.2	< 1	7	61	27	2.7	5	< 1	< 5	8	1.85	< 20	120	4.6	12.8	< 3	< 0.02	< 0.05	< 0.5	7.4
BWT-12-025	< 2	< 5	15.7	780	< 0.5	< 1	7	52	6	2.61	5	< 1	< 5	3	1.95	< 20	104	3.3	8.8	< 3	< 0.02	< 0.05	< 0.5	6.7
BWT-12-026	19	< 5	28.3	820	9.9	< 1	7	66	7	2.57	6	< 1	< 5	11	1.86	< 20	105	5.8	9.7	< 3	< 0.02	< 0.05	< 0.5	8.8
BWT-12-027	< 2	< 5	13.3	590	< 0.5	< 1	7	39	4	2.38	4	< 1	< 5	13	2.29	< 20	110	1.6	9.6	< 3	< 0.02	< 0.05	< 0.5	8.8
BWT-12-028	< 2	< 5	12.2	620	< 0.5	< 1	5	35	4	1.93	4	< 1	< 5	< 1	2.29	< 20	96	1.5	7.8	< 3	< 0.02	< 0.05	< 0.5	6.9
BWT-12-029	< 2	< 5	16.5	650	< 0.5	< 1	10	38	4	2.94	4	< 1	< 5	6	1.9	< 20	64	2	8.9	< 3	< 0.02	< 0.05	< 0.5	5.8
BWT-12-030	< 2	< 5	12.8	550	< 0.5	< 1	9	43	4	2.76	5	< 1	< 5	8	1.96	< 20	77	1.7	9.7	< 3	< 0.02	< 0.05	< 0.5	6.2
BWT-12-031	12	< 5	12.4	660	< 0.5	< 1	8	42	6	2.76	4	< 1	< 5	< 1	1.99	< 20	103	1.8	10	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-032	< 2	< 5	18.5	630	< 0.5	< 1	6	42	7	2.72	4	< 1	< 5	< 1	1.87	< 20	< 15	1.5	11	< 3	< 0.02	< 0.05	< 0.5	5.9
BWT-12-033	< 2	< 5	10.5	690	3.7	< 1	5	39	7	1.83	4	< 1	< 5	2	1.76	< 20	70	2	9.6	< 3	< 0.02	< 0.05	2.7	5.9
BWT-12-034	< 2	< 5	15.3	630	1.9	< 1	< 1	30	5	1.37	4	< 1	< 5	< 1	1.49	< 20	78	2.2	6.3	< 3	< 0.02	< 0.05	1.6	6.4
BWT-12-035	< 2	< 5	9.3	480	3.3	< 1	9	48	4	2.83	4	< 1	< 5	< 1	1.96	< 20	79	1.9	10.4	< 3	< 0.02	< 0.05	< 0.5	6.8
BWT-12-036	< 2	< 5	9.7	660	< 0.5	< 1	5	37	5	2.33	3	< 1	< 5	< 1	2.04	< 20	48	1.8	7.5	< 3	< 0.02	< 0.05	< 0.5	5.3
BWT-12-037	< 2	< 5	15.1	820	8.1	< 1	11	73	10	3.15	5	< 1	< 5	37	2.27	< 20	133	1.7	13.6	< 3	< 0.02	< 0.05	< 0.5	9.6
BWT-12-038	< 2	< 5	7.4	640	< 0.5	< 1	12	70	11	3.49	4	< 1	< 5	13	1.72	< 20	55	1.4	10.6	< 3	< 0.02	< 0.05	< 0.5	5
BWT-12-039	< 2	< 5	8.9	580	4.9	3	9	49	6	2.91	4	< 1	< 5	15	2.1	< 20	82	1.6	8.4	< 3	< 0.02	< 0.05	< 0.5	5.1
BWT-12-040	10	< 5	10	940	< 0.5	< 1	6	44	3	2.71	5	< 1	< 5	< 1	2.05	< 20	58	2	8.4	< 3	< 0.02	< 0.05	< 0.5	5.5
BWT-12-041	< 2	< 5	16.1	640	5.6	< 1	12	52	5	3.39	5	< 1	< 5	< 1	1.97	< 20	89	1.9	9.4	< 3	< 0.02	< 0.05	< 0.5	7.5
BWT-12-042	10	< 5	10.6	730	< 0.5	< 1	7	51	3	2.69	5	< 1	< 5	< 1	2.07	< 20	< 15	2	8.1	< 3	< 0.02	< 0.05	< 0.5	6.7
BWT-12-043	< 2	< 5	20.3	620	< 0.5	< 1	7	39	5	2.75	4	< 1	< 5	< 1	2	< 20	59	2.3	9.2	< 3	< 0.02	< 0.05	< 0.5	5.8
BWT-12-044	< 2	< 5	14.2	600	< 0.5	< 1	9	48	6	3.13	4	< 1	< 5	< 1	1.91	< 20	66	2.1	10	< 3	< 0.02	< 0.05	< 0.5	7.1
BWT-12-045	17	< 5	12.8	550	4.9	2	9	55	3	3.51	5	< 1	< 5	< 1	1.95	< 20	55	2.2	8.6	< 3	< 0.02	< 0.05	< 0.5	8.4
BWT-12-046	< 2	< 5	10.3	700	< 0.5	< 1	5	27	14	1.92	4	< 1	< 5	9	1.49	< 20	85	1.7	5.6	< 3	< 0.02	< 0.05	< 0.5	7
BWT-12-047	< 2	< 5	12.9	930	< 0.5	< 1	5	29	10	2.4	4	< 1	< 5	< 1	1.88	< 20	102	1.6	6.5	< 3	< 0.02	< 0.05	< 0.5	5.6
BWT-12-048	< 2	< 5	9.7	560	4.9	< 1	5	27	9	2.21	4	< 1	< 5	< 1	1.8	< 20	79	2	6.2	< 3	< 0.02	< 0.05	< 0.5	8.2
BWT-12-049	< 2	< 5	11.2	630	4.2	< 1	7	40	4	2.24	4	< 1	< 5	< 1	2.31	< 20	84	1.8	8.7	< 3	0.11	< 0.05	3	6.2
BWT-12-050	< 2	< 5	17.3	800	3.5	< 1	6	30	6	2.18	4	< 1	< 5	< 1	1.8	< 20	98	2.2	7.1	< 3	< 0.02	< 0.05	< 0.5	6.9
BWT-12-051	< 2	< 5	15.1	660	3.2	< 1	6	36	3	2.11	3	< 1	< 5	7	2.12	< 20	98	2.1	7.3	< 3	< 0.02	< 0.05	< 0.5	5.9

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-001	< 0.5	< 1	330	25.4	48	17	5.3	1	< 0.5	1.9	0.36	30.4	< 0.2	1.4	25	676	< 2	10	71	266	0.007
BTW-12-002	4.6	< 1	210	24.9	45	19	4.5	1.1	< 0.5	1.5	0.27	30.2	< 0.2	1	18	506	< 2	9	47	118	0.005
BTW-12-003	< 0.5	< 1	190	22.3	40	20	4.3	0.9	< 0.5	1.7	0.23	30.3	< 0.2	0.6	11	547	< 2	8	10	95	0.008
BTW-12-004	2.7	< 1	230	21.1	29	< 5	3.7	< 0.2	< 0.5	1.4	0.23	30.1	< 0.2	0.6	20	768	< 2	16	18	91	0.005
BTW-12-005	< 0.5	< 1	< 50	16.9	27	< 5	3.2	0.6	0.6	1.7	0.29	30.1	< 0.2	< 0.5	6	234	< 2	6	13	52	0.005
BTW-12-006	< 0.5	< 1	1420	27.1	47	< 5	5.3	1.3	< 0.5	2.3	0.34	30.3	< 0.2	8.5	39	1210	< 2	12	49	1620	0.005
BTW-12-007	5.7	< 1	350	19.1	30	< 5	3.8	0.9	< 0.5	1.8	0.33	30.3	3.9	< 0.5	7	299	< 2	6	28	284	0.005
BTW-12-008	5.2	6	< 50	20	37	< 5	4.2	0.4	< 0.5	1.6	0.34	30.5	< 0.2	< 0.5	7	497	< 2	6	6	42	0.004
BTW-12-009	5.2	< 1	< 50	21.8	31	19	3.8	0.8	< 0.5	1.6	0.23	30	< 0.2	< 0.5	5	319	< 2	6	15	54	0.008
BWT-12-010	< 0.5	< 1	160	17.2	27	16	3.1	< 0.2	< 0.5	1.4	0.22	30	< 0.2	< 0.5	3	247	< 2	7	20	125	0.008
BWT-12-011	5.3	< 1	220	25.2	37	12	4.6	0.9	< 0.5	1.5	0.31	30.8	< 0.2	2.7	18	1020	< 2	12	66	208	0.003
BWT-12-012	< 0.5	< 1	< 50	20.6	35	14	3.4	0.7	< 0.5	1.1	0.28	29.9	< 0.2	< 0.5	9	390	< 2	10	15	95	0.006
BWT-12-013	4.8	< 1	< 50	19.7	37	< 5	3.6	0.8	< 0.5	1.5	0.23	29.9	< 0.2	0.5	13	315	< 2	11	8	71	0.012
BWT-12-014	3.8	< 1	150	22.7	32	17	4.1	0.7	< 0.5	1.6	0.32	30.3	< 0.2	0.6	10	475	< 2	10	26	120	0.006
BWT-12-015	3.4	< 1	250	26.2	39	16	5.2	1.1	< 0.5	2.2	0.38	29.1	< 0.2	0.6	24	1140	< 2	19	17	125	0.003
BWT-12-016	3.6	< 1	660	22.1	34	13	3.6	0.7	< 0.5	1.7	0.3	30.8	1.5	0.9	7	612	< 2	9	70	761	0.011
BWT-12-017	4.5	< 1	260	18.6	31	< 5	2.9	0.6	< 0.5	1.6	0.23	26.1	0.6	0.5	5	195	2	4	79	158	0.013
BWT-12-018	< 0.5	< 1	120	22.3	32	8	3.8	0.9	< 0.5	1.6	0.29	27.8	0.3	0.6	8	325	< 2	8	45	101	0.01
BWT-12-019	3.9	< 1	140	21.4	32	23	4	< 0.2	< 0.5	1.6	0.34	24	0.2	0.6	11	272	< 2	10	11	94	0.022
BWT-12-020	< 0.5	< 1	< 50	19.9	31	6	3.4	0.7	< 0.5	1.5	0.22	30	< 0.2	< 0.5	7	240	< 2	6	11	54	0.007
BWT-12-021	4.4	< 1	120	20.6	32	17	3.6	0.7	< 0.5	1.4	0.3	30.6	0.2	0.6	9	326	< 2	9	20	133	0.012
BWT-12-022	3.1	< 1	180	19	31	9	3.4	0.8	< 0.5	1.3	0.28	31.6	0.7	< 0.5	8	395	< 2	7	32	123	0.018
BWT-12-023	3.3	< 1	140	18.2	28	< 5	3.3	0.5	< 0.5	1.4	0.24	31.1	< 0.2	< 0.5	8	309	< 2	9	12	77	0.006
BWT-12-024	3.5	< 1	210	23.5	43	16	5.7	1.4	< 0.5	2.2	0.37	30.1	< 0.2	0.6	43	568	< 2	13	13	82	0.018
BWT-12-025	3.9	< 1	< 50	22.2	34	15	4	0.6	< 0.5	1.4	0.3	31.1	< 0.2	0.5	16	615	< 2	12	18	88	0.003
BWT-12-026	6.1	< 1	680	23.2	38	18	4.2	0.8	< 0.5	1.8	0.42	20	1.7	0.8	10	986	< 2	13	48	772	0.018
BWT-12-027	5.2	< 1	< 50	23.2	37	10	4.8	0.8	< 0.5	1.8	0.34	30.1	< 0.2	< 0.5	10	550	< 2	9	12	69	0.003
BWT-12-028	4	< 1	< 50	19.2	30	19	3.5	0.7	< 0.5	1.5	0.27	30	< 0.2	< 0.5	5	316	< 2	6	10	49	0.006
BWT-12-029	2.8	< 1	< 50	23.5	36	21	4.3	1.1	< 0.5	1.7	0.26	30.4	< 0.2	0.5	14	944	< 2	12	19	74	0.003
BWT-12-030	< 0.5	< 1	110	23.8	39	15	4.8	1	0.6	1.8	0.28	30.8	< 0.2	0.5	14	636	< 2	13	15	69	0.003
BWT-12-031	2.7	< 1	< 50	24.4	39	14	4.4	1	0.7	1.8	0.28	30.2	< 0.2	< 0.5	16	682	< 2	12	15	81	0.002
BWT-12-032	3.4	< 1	120	22.6	32	20	4.2	0.7	0.7	1.6	0.34	30.1	< 0.2	< 0.5	15	488	3	12	13	89	0.004
BWT-12-033	3.6	< 1	190	22.6	34	12	4.5	0.9	< 0.5	1.4	0.3	30.1	0.4	1.6	16	681	4	12	28	169	0.011
BWT-12-034	4.1	< 1	420	22	34	20	3	0.6	< 0.5	1.4	0.23	25	1.2	0.9	5	490	< 2	4	92	447	0.016
BWT-12-035	4.4	< 1	170	23.8	37	22	4.2	1	0.8	1.5	0.31	30.3	< 0.2	0.6	15	538	< 2	13	32	130	0.007
BWT-12-036	3.1	< 1	80	17.3	29	< 5	2.8	0.5	< 0.5	1.3	0.2	30.2	< 0.2	< 0.5	8	402	< 2	8	14	68	0.004
BWT-12-037	< 0.5	< 1	240	30.7	81	44	6.6	1.2	< 0.5	1.9	0.26	7	< 0.2	< 0.5	15	475	< 2	11	13	64	0.016
BWT-12-038	2.8	< 1	< 50	17	29	14	2.9	0.6	< 0.5	1.2	0.22	25.2	< 0.2	< 0.5	39	620	< 2	17	4	60	0.009
BWT-12-039	< 0.5	< 1	100	17.1	28	8	2.9	0.7	< 0.5	1.3	0.29	26.4	< 0.2	< 0.5	12	203	< 2	11	4	49	0.01
BWT-12-040	3.5	< 1	< 50	23.8	31	28	4.1	0.9	< 0.5	1.5	0.32	30.2	< 0.2	< 0.5	10	365	< 2	8	10	45	0.002
BWT-12-041	2.7	< 1	120	18.9	31	12	3.5	0.6	< 0.5	1.5	0.29	30	< 0.2	< 0.5	8	233	< 2	10	15	102	0.01
BWT-12-042	3	< 1	< 50	19.7	31	9	3.2	0.7	< 0.5	1.4	0.31	30.5	< 0.2	< 0.5	8	243	< 2	12	13	49	0.003
BWT-12-043	4.9	< 1	< 50	23.9	34	< 5	4.6	1	< 0.5	1.7	0.3	30.3	< 0.2	< 0.5	15	531	< 2	13	16	66	0.002
BWT-12-044	3.3	< 1	120	23.8	41	15	3.6	0.8	0.7	1.4	0.26	31.8	< 0.2	< 0.5	14	307	< 2	14	13	69	0.002
BWT-12-045	3.8	< 1	210	19.9	30	15	3.5	0.6	< 0.5	1.5	0.31	30.9	< 0.2	0.5	7	278	< 2	9	16	82	0.008
BWT-12-046	3	< 1	130	21.4	31	12	2.9	0.7	< 0.5	1.1	0.22	30	< 0.2	< 0.5	7	218	< 2	6	18	104	0.006
BWT-12-047	2.8	< 1	130	20.6	27	< 5	3.3	0.7	< 0.5	1.1	0.2	30.2	< 0.2	< 0.5	12	296	< 2	8	21	143	0.007
BWT-12-048	2.7	< 1	100	23.4	33	9	3.3	0.7	< 0.5	1.2	0.23	30.2	< 0.2	< 0.5	7	184	< 2	7	16	76	0.007
BWT-12-049	2.3	< 1	140	23.1	37	15	4.1	0.8	< 0.5	1.5	0.25	30.7	< 0.2	< 0.5	8	397	< 2	8	18	51	0.004
BWT-12-050	4.1	< 1	120	20.4	33	13	3.1	0.6	< 0.5	1.3	0.29	30.1	< 0.2	< 0.5	10	280	< 2	8	26	90	0.004
BWT-12-051	3	< 1	100	23.1	34	8	4.2	1	< 0.5	1.4	0.26	37.8	0.2	< 0.5	11	577	< 2	6	31	82	0.005

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWT-12-052	< 2	< 5	12.9	620	4.1	< 1	6	41	4	2.77	4	< 1	< 5	7	1.78	< 20	54	2.2	7.8	< 3	< 0.02	< 0.05	< 0.5	6.8
BWT-12-053	< 2	< 5	5.7	730	< 0.5	< 1	8	50	6	3.2	4	< 1	< 5	< 1	1.87	< 20	84	1.6	9.1	< 3	< 0.02	< 0.05	< 0.5	6.2
BWT-12-054	< 2	< 5	12.4	620	4.7	< 1	10	43	4	2.89	3	< 1	< 5	13	2.07	< 20	73	2.2	9.7	< 3	< 0.02	< 0.05	< 0.5	6.6
BWT-12-055	24	< 5	14.7	640	3.6	< 1	10	63	2	3.03	6	< 1	< 5	< 1	2.09	< 20	< 15	2.2	9	< 3	< 0.02	< 0.05	< 0.5	5.9
BWT-12-056	< 2	< 5	9.8	700	3.3	< 1	7	39	3	2.52	4	< 1	< 5	< 1	2.05	< 20	54	3.1	7.6	< 3	< 0.02	< 0.05	1.9	7.2
BWT-12-057	< 2	< 5	6.9	760	< 0.5	< 1	6	36	3	1.96	3	< 1	< 5	7	2.18	< 20	106	2.1	7.5	< 3	0.07	< 0.05	< 0.5	5.6
BWT-12-058	< 2	< 5	5.7	640	< 0.5	2	6	41	3	1.8	3	< 1	< 5	< 1	2.18	< 20	90	1.4	7.9	< 3	< 0.02	< 0.05	< 0.5	5.2
BWT-12-059	< 2	< 5	13	840	8.4	< 1	17	65	7	3.84	6	< 1	< 5	< 1	2.13	< 20	< 15	1.4	13.5	< 3	< 0.02	< 0.05	3	8.6
BWT-12-060	< 2	< 5	9.2	770	3.8	< 1	6	42	4	2.41	3	< 1	< 5	< 1	1.8	< 20	< 15	1.8	7.8	< 3	< 0.02	< 0.05	< 0.5	5.1
BWT-12-061	10	< 5	9.8	500	5.5	2	7	43	3	1.91	4	< 1	< 5	< 1	2.28	< 20	114	1.8	8.5	< 3	< 0.02	< 0.05	< 0.5	7.5
BWT-12-062	6	< 5	17.5	550	< 0.5	< 1	7	50	4	2.65	4	< 1	< 5	< 1	2.32	< 20	102	2.5	8.4	< 3	< 0.02	< 0.05	< 0.5	8.1
BWT-12-063	< 2	< 5	12.6	590	< 0.5	< 1	8	54	8	3.48	4	< 1	< 5	4	1.82	< 20	107	2.4	9.7	< 3	< 0.02	< 0.05	< 0.5	9.1
BWT-12-064	< 2	< 5	17.5	580	< 0.5	< 1	8	55	3	2.74	4	< 1	< 5	< 1	1.98	< 20	< 15	2.6	9	< 3	< 0.02	< 0.05	< 0.5	6.3
BWT-12-065	< 2	< 5	12.4	690	< 0.5	< 1	8	51	8	2.73	4	< 1	< 5	8	1.99	< 20	< 15	1.8	7.9	< 3	< 0.02	< 0.05	< 0.5	6.6
BWT-12-066	43	< 5	70.1	750	< 0.5	< 1	6	40	8	2.26	4	< 1	< 5	13	1.51	< 20	< 15	7.8	7.2	< 3	< 0.02	< 0.05	< 0.5	7.7
BWT-12-067	< 2	< 5	23.3	610	3.7	< 1	4	44	6	1.86	3	< 1	< 5	4	1.97	< 20	74	2.8	8.6	< 3	< 0.02	< 0.05	< 0.5	6.1
BWT-12-068	44	< 5	34.7	620	< 0.5	< 1	8	40	12	1.88	3	< 1	< 5	< 1	1.55	< 20	95	3.3	10.9	< 3	< 0.02	< 0.05	< 0.5	6.3
BWT-12-069	< 2	< 5	14.3	630	< 0.5	< 1	8	42	4	2.61	4	< 1	< 5	7	2.17	< 20	83	2.3	7.5	< 3	< 0.02	< 0.05	< 0.5	8.6
BWT-12-070	< 2	< 5	7.7	590	4.4	2	6	54	4	2.52	6	< 1	< 5	< 1	2.26	< 20	76	1.6	9	< 3	< 0.02	< 0.05	2	7.4
BWT-12-071	9	< 5	13.6	690	< 0.5	< 1	7	42	3	2.5	3	< 1	< 5	< 1	1.98	< 20	78	2.2	7.9	< 3	< 0.02	< 0.05	< 0.5	6.5
BWT-12-072	< 2	< 5	11	700	< 0.5	< 1	8	46	3	2.79	4	< 1	< 5	< 1	2.19	< 20	84	2	9.4	< 3	< 0.02	< 0.05	< 0.5	6.4
BWT-12-073	3	< 5	9.1	580	4.1	< 1	6	42	3	2.13	3	< 1	< 5	< 1	2.22	< 20	< 15	1.6	7.8	< 3	< 0.02	< 0.05	< 0.5	6.4
BWT-12-074	< 2	< 5	10.4	650	2.9	< 1	7	42	3	2.2	4	< 1	< 5	< 1	2.07	< 20	96	1.8	7.3	< 3	< 0.02	< 0.05	< 0.5	5.7
BWT-12-075	10	< 5	8.4	640	3	< 1	7	44	3	2.33	4	< 1	< 5	< 1	1.92	120	56	1.5	7.4	< 3	< 0.02	< 0.05	< 0.5	4.4
BWT-12-076	< 2	< 5	8.4	590	3.7	2	8	62	4	2.65	3	< 1	< 5	< 1	2.04	< 20	54	1.5	10.3	< 3	< 0.02	< 0.05	1.5	6.3
BWT-12-077	< 2	< 5	12.4	590	< 0.5	< 1	9	54	7	2.96	4	< 1	< 5	3	1.76	< 20	100	2.1	8.8	< 3	< 0.02	< 0.05	< 0.5	6.8
BWT-12-078	3	< 5	10.4	620	2	2	8	46	3	2.61	6	< 1	< 5	< 1	1.96	< 20	< 15	1.9	8	< 3	< 0.02	< 0.05	2.2	5.4
BWT-12-079	< 2	< 5	14.6	690	< 0.5	< 1	8	50	4	2.78	4	< 1	< 5	< 1	2.19	< 20	< 15	2.2	9.4	< 3	< 0.02	< 0.05	< 0.5	6.5
BWT-12-080	12	< 5	11.1	730	3.6	< 1	12	57	3	4.52	6	< 1	< 5	10	2.02	< 20	76	1.3	13.9	< 3	< 0.02	< 0.05	< 0.5	6.4
BWT-12-081	15	< 5	74.5	1090	6.2	< 1	11	47	19	4.58	6	< 1	< 5	22	1.87	< 20	97	4	15.3	< 3	< 0.02	< 0.05	< 0.5	7.9
BWT-12-082	< 2	< 5	10.5	620	3.4	< 1	6	43	3	2.24	6	< 1	< 5	< 1	2.36	< 20	< 15	2.1	9.4	< 3	< 0.02	< 0.05	< 0.5	4.6
BWT-12-083	< 2	< 5	10.8	480	3	< 1	7	37	3	2.25	4	< 1	< 5	< 1	2.36	< 20	69	1.9	9.7	< 3	< 0.02	< 0.05	1.9	4.6
BWT-12-084	< 2	< 5	8.2	480	3.2	< 1	7	32	< 1	2.04	3	< 1	< 5	< 1	2.35	< 20	55	1.9	8.4	< 3	< 0.02	< 0.05	< 0.5	4.6
BWT-12-085	< 2	< 5	12.6	620	2.9	< 1	9	47	3	2.99	5	< 1	< 5	< 1	2.19	< 20	65	2	8.8	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-086	3	< 5	17.9	450	5.3	2	7	51	5	2.79	3	< 1	< 5	3	1.69	< 20	< 15	1.6	9.2	< 3	< 0.02	< 0.05	2	5.9
BWT-12-087	< 2	< 5	38.2	430	8.6	< 1	12	55	7	4.43	7	< 1	< 5	< 1	2.1	< 20	< 15	3.7	11.5	< 3	< 0.02	< 0.05	< 0.5	14.8
BWT-12-088	< 2	< 5	13.6	480	2.7	< 1	9	37	3	2.08	5	< 1	< 5	< 1	1.93	< 20	73	1.5	7.9	< 3	< 0.02	< 0.05	1.8	6.1
BTW-12-089	< 2	< 5	25.8	580	4.2	< 1	7	46	3	2.6	4	< 1	< 5	< 1	2.32	< 20	79	1.7	9.2	< 3	< 0.02	< 0.05	< 0.5	7.2
BTW-12-090	< 2	< 5	13.8	560	7.8	< 1	8	43	3	2.97	4	< 1	< 5	< 1	2.16	< 20	125	1.6	9.6	< 3	< 0.02	< 0.05	< 0.5	6.9
BTW-12-091	6	< 5	10.2	710	< 0.5	< 1	7	59	3	2.99	5	< 1	< 5	< 1	2.24	< 20	71	2	9.9	< 3	< 0.02	< 0.05	< 0.5	6.9
BTW-12-092	< 2	< 5	8.5	750	1.5	< 1	7	49	3	2.59	4	< 1	< 5	< 1	2.2	< 20	66	1.7	8.6	< 3	< 0.02	< 0.05	< 0.5	5.9
BTW-12-093	< 2	< 5	10.5	580	2.7	< 1	8	42	3	2.78	4	< 1	< 5	< 1	2.2	< 20	< 15	1.7	8.8	< 3	< 0.02	< 0.05	< 0.5	6.3
BTW-12-094	< 2	< 5	7.5	570	4.7	1	8	46	3	2.85	4	< 1	< 5	< 1	2.25	< 20	75	1.6	9.4	< 3	< 0.02	< 0.05	1.6	5.6
BTW-12-095	< 2	< 5	6.6	620	5.4	< 1	5	55	2	2.34	5	< 1	< 5	< 1	2.22	< 20	71	2.5	9	< 3	< 0.02	< 0.05	< 0.5	6.1
BTW-12-096	< 2	< 5	9.4	380	3.2	< 1	5	42	5	2.15	4	< 1	< 5	< 1	2.15	< 20	57	1.9	8.4	< 3	< 0.02	< 0.05	< 0.5	6.2
BTW-12-097	7	< 5	9	710	< 0.5	< 1	7	46	3	2.81	4	< 1	< 5	< 1	2.14	< 20	98	1.8	9.7	< 3	< 0.02	< 0.05	< 0.5	4.5
BTW-12-098	9	< 5	6.8	700	< 0.5	< 1	5	42	3	2.25	4	< 1	< 5	< 1	2.28	110	< 15	2.1	9.4	< 3	< 0.02	< 0.05	< 0.5	5.3
BTW-12-099	7	< 5	5.6	660	< 0.5	< 1	12	50	2	3.93	5	< 1	< 5	< 1	2.12	< 20	45	1.2	11.8	< 3	< 0.02	< 0.05	< 0.5	5.6
BTW-12-100	< 2	< 5	9.6	490	3.4	2	6	42	3	2.7	4	< 1	< 5	< 1	2.17	< 20	113	1.7	9.7	< 3	< 0.02	< 0.05	< 0.5	8.1
BTW-12-101	6	< 5	10.8	490	20.2	2	5	36	3	2.41	4	< 1	< 5	3	1.75	< 20	60	1.3	8	< 3	< 0.02	< 0.05	< 0.5	7.8
BTW-12-103	< 2	< 5	18.2	510	30.7	< 1	9	60	4	4.18	6	< 1	< 5	5	2	< 20	< 15	1.9	10.9	< 3	< 0.02	< 0.05	< 0.5	10.6

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BWT-12-052	3.6	< 1	170	18.9	30	< 5	2.8	0.7	< 0.5	1.3	0.2	30	0.3	< 0.5	7	276	< 2	8	24	147	0.01
BWT-12-053	2.8	< 1	130	18.1	26	9	2.6	0.8	< 0.5	1.2	0.24	30	< 0.2	< 0.5	10	350	< 2	10	8	106	0.012
BWT-12-054	3.5	< 1	150	23.1	47	10	3.8	0.9	< 0.5	1.6	0.23	31.7	< 0.2	0.6	16	882	< 2	10	23	88	0.006
BWT-12-055	< 0.5	< 1	120	23.1	35	18	4.2	0.8	< 0.5	1.5	0.31	31.8	< 0.2	0.5	12	772	< 2	14	47	79	0.005
BWT-12-056	3.4	< 1	110	19.6	30	10	2.9	0.6	< 0.5	1.2	0.26	30.1	< 0.2	< 0.5	11	265	< 2	8	18	75	0.005
BWT-12-057	3.6	< 1	160	18.4	32	10	2.6	0.7	< 0.5	1.3	0.22	30.2	< 0.2	< 0.5	5	225	< 2	6	12	40	0.005
BWT-12-058	3	< 1	< 50	17.4	25	18	2.9	0.7	< 0.5	1.4	0.24	31	< 0.2	< 0.5	7	188	< 2	7	11	43	0.008
BWT-12-059	4.3	< 1	< 50	31.7	72	20	6.3	1.4	< 0.5	2.1	0.37	17.6	< 0.2	< 0.5	20	647	< 2	14	13	61	0.015
BWT-12-060	4.1	< 1	140	17.3	24	8	2.5	0.7	< 0.5	1.2	0.22	30.1	< 0.2	< 0.5	10	230	< 2	11	17	121	0.009
BWT-12-061	4.5	< 1	< 50	19.5	29	15	3.6	0.6	< 0.5	1.6	0.34	30.1	< 0.2	< 0.5	7	257	< 2	10	10	46	0.007
BWT-12-062	4.3	< 1	140	23.9	61	< 5	4.2	0.8	< 0.5	1.8	0.32	30.1	< 0.2	0.5	10	522	< 2	11	13	56	0.004
BWT-12-063	4.5	< 1	< 50	22.1	41	11	3.3	0.7	< 0.5	1.3	0.24	30.2	< 0.2	< 0.5	16	352	< 2	14	16	83	0.004
BWT-12-064	3.3	< 1	100	22.2	36	< 5	4.1	0.8	< 0.5	1.8	0.35	30.1	< 0.2	< 0.5	14	456	< 2	8	12	63	0.002
BWT-12-065	2.9	< 1	< 50	21.7	32	< 5	3.3	0.8	< 0.5	1.4	0.33	25	< 0.2	< 0.5	9	396	< 2	12	12	60	0.005
BWT-12-066	2.9	< 1	260	25.4	44	23	4.1	0.8	< 0.5	1.8	0.34	30	< 0.2	1.3	13	446	< 2	14	62	188	0.004
BWT-12-067	3	< 1	200	19.4	26	< 5	3.3	0.8	< 0.5	1.3	0.21	29	0.5	< 0.5	12	214	< 2	11	43	101	0.006
BWT-12-068	3.7	< 1	390	27.2	39	17	4.8	1	< 0.5	1.5	0.33	25.5	1.2	2.1	19	526	< 2	9	340	396	0.01
BWT-12-069	3.5	4	< 50	21.3	34	9	3.2	0.7	< 0.5	1.3	0.26	30.1	< 0.2	0.5	7	299	< 2	9	25	66	0.004
BWT-12-070	3.5	< 1	100	22.4	33	15	3.8	0.8	< 0.5	1.6	0.23	30.3	< 0.2	< 0.5	6	311	< 2	6	19	88	0.012
BWT-12-071	1.3	< 1	120	22.5	41	14	4.1	0.9	< 0.5	1.2	0.25	30.1	< 0.2	< 0.5	12	484	< 2	7	21	75	0.003
BWT-12-072	2	< 1	130	22.9	40	14	3.8	0.8	< 0.5	1.6	0.28	30.4	< 0.2	< 0.5	11	449	< 2	10	11	50	0.002
BWT-12-073	3	< 1	120	20.1	42	12	3.7	0.8	< 0.5	1.5	0.28	30.6	< 0.2	< 0.5	7	253	< 2	6	12	37	0.003
BWT-12-074	2.4	< 1	< 50	17.9	31	14	2.8	0.7	< 0.5	1.3	0.26	30	< 0.2	< 0.5	6	224	< 2	6	11	42	0.005
BWT-12-075	3.2	< 1	150	17.7	26	10	2.5	< 0.2	< 0.5	1.3	0.25	30.6	< 0.2	< 0.5	6	358	< 2	9	9	60	0.005
BWT-12-076	3.6	< 1	< 50	22.7	36	14	3.8	0.9	< 0.5	1.5	0.29	30.1	< 0.2	< 0.5	16	351	< 2	17	14	58	0.004
BWT-12-077	4.3	< 1	140	22.3	33	17	3.3	0.7	< 0.5	1.2	0.22	30.1	< 0.2	< 0.5	13	315	< 2	11	14	64	0.005
BWT-12-078	4.8	< 1	< 50	18.5	26	14	2.5	0.6	< 0.5	1.4	0.29	30	< 0.2	< 0.5	8	308	< 2	11	8	46	0.003
BWT-12-079	4.2	2	< 50	23.3	35	< 5	3.7	0.8	< 0.5	1.4	0.34	30.5	< 0.2	< 0.5	10	338	< 2	9	17	45	0.002
BWT-12-080	3.3	< 1	180	24.6	48	18	4.8	1.1	< 0.5	2.1	0.34	30.1	< 0.2	0.6	23	588	< 2	13	9	94	0.004
BWT-12-081	< 0.5	< 1	410	20.5	34	< 5	4.1	< 0.2	< 0.5	2.5	0.43	12.1	< 0.2	0.6	26	741	12	17	23	176	0.011
BWT-12-082	3.2	< 1	140	20.5	35	14	3.4	1.1	< 0.5	2	0.28	30.4	< 0.2	< 0.5	11	233	< 2	8	8	43	0.006
BWT-12-083	2	< 1	110	19.5	32	11	3.2	1	< 0.5	2	0.3	30.4	< 0.2	< 0.5	18	272	< 2	10	11	50	0.005
BWT-12-084	1.9	< 1	100	17.3	28	12	2.8	0.9	0.5	1.5	0.25	30	< 0.2	< 0.5	15	226	< 2	11	7	43	0.007
BWT-12-085	< 0.5	< 1	120	20.9	39	9	3.4	1	< 0.5	1.7	0.3	30.2	< 0.2	< 0.5	13	586	< 2	11	10	59	0.007
BWT-12-086	2.3	< 1	130	15.7	24	13	2.5	0.8	< 0.5	1.6	0.25	30.1	< 0.2	< 0.5	14	287	< 2	27	12	98	0.016
BWT-12-087	6.9	< 1	230	20.9	39	< 5	4.3	1	< 0.5	2	0.35	9.5	0.3	0.6	15	426	< 2	13	9	86	0.016
BWT-12-088	3.1	3	< 50	17.5	28	9	2.5	0.7	< 0.5	1.6	0.24	30	0.2	< 0.5	5	808	3	5	18	55	0.01
BTW-12-089	5.3	< 1	< 50	19.1	44	7	3.6	0.7	< 0.5	1.7	0.19	30	< 0.2	< 0.5	19	346	6	11	14	75	0.016
BTW-12-090	2.9	< 1	< 50	19.6	44	14	4	0.5	< 0.5	1.7	0.27	30	< 0.2	< 0.5	17	377	4	12	14	87	0.017
BTW-12-091	5	< 1	< 50	25.3	69	12	4.6	0.9	< 0.5	1.8	0.29	30	< 0.2	< 0.5	14	378	2	9	16	48	0.004
BTW-12-092	2.7	< 1	< 50	20	49	12	3.2	0.6	< 0.5	1.4	0.24	30.4	< 0.2	< 0.5	15	289	3	8	14	54	0.007
BTW-12-093	2.6	< 1	< 50	18.8	43	14	3.2	0.7	< 0.5	1.4	0.27	30	< 0.2	< 0.5	14	275	< 2	12	11	58	0.006
BTW-12-094	4.4	2	120	19.5	39	< 5	3.3	0.7	< 0.5	1.4	0.24	31.4	0.2	< 0.5	14	333	3	11	13	85	0.011
BTW-12-095	4	< 1	80	20.1	46	15	3.5	0.7	0.9	1.6	0.33	30.1	0.3	< 0.5	11	194	< 2	10	20	51	0.008
BTW-12-096	3.7	< 1	< 50	20.4	39	13	3.6	0.7	< 0.5	1.6	0.25	30.1	0.3	< 0.5	12	266	< 2	8	21	70	0.008
BTW-12-097	3.5	< 1	90	18.4	35	11	3	0.6	< 0.5	1.5	0.29	30.2	0.3	< 0.5	12	270	3	10	25	115	0.008
BTW-12-098	2.7	< 1	80	20.6	47	9	3.4	0.8	< 0.5	1.6	0.29	30.2	0.3	< 0.5	12	300	2	8	45	100	0.007
BTW-12-099	4.1	< 1	< 50	17.4	44	11	3.3	0.7	< 0.5	1.7	0.28	30.5	0.4	0.5	18	373	3	14	8	72	0.009
BTW-12-100	4	< 1	< 50	25.5	72	21	4.6	0.8	< 0.5	1.6	0.3	30.5	< 0.2	< 0.5	19	482	< 2	10	9	61	0.005
BTW-12-101	4.3	< 1	< 50	20.6	50	11	3.8	0.7	< 0.5	1.3	0.25	26	0.4	< 0.5	12	275	3	7	11	65	0.024
BTW-12-103	5.8	< 1	< 50	23.7	65	19	4.6	0.8	1.3	1.7	0.27	9.1	< 0.2	0.5	17	306	4	12	11	73	0.031

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-109	< 2	< 5	13.1	610	3	2	9	41	3	3.29	4	< 1	< 5	< 1	2.18	< 20	< 15	1.4	11.6	< 3	< 0.02	< 0.05	2	4.3
BTW-12-116	7	< 5	27.9	430	11.4	< 1	7	41	5	2.64	4	< 1	< 5	6	1.9	< 20	152	1.5	10.1	< 3	< 0.02	< 0.05	< 0.5	8.1
BTW-12-117	18	< 5	99.8	510	9.2	2	11	57	5	3.31	5	< 1	< 5	4	1.95	< 20	89	4.2	10.8	< 3	< 0.02	< 0.05	< 0.5	9.8
BTW-12-118	< 2	< 5	42.4	460	5.1	< 1	9	42	8	2.83	4	< 1	< 5	7	1.91	< 20	120	2.6	9	< 3	< 0.02	< 0.05	2	7.5
BTW-12-119	< 2	< 5	14.8	380	13.7	< 1	6	37	3	2.44	4	< 1	< 5	< 1	1.9	< 20	54	1.1	7.8	< 3	< 0.02	< 0.05	< 0.5	9.3
BTW-12-120	< 2	< 5	10.5	480	10.8	< 1	7	45	3	2.95	4	< 1	< 5	< 1	2.22	< 20	80	1.2	9.7	< 3	< 0.02	< 0.05	1.4	6.2
BTW-12-121	< 2	< 5	14.7	570	3.2	< 1	7	38	5	2.9	4	< 1	< 5	< 1	2.09	< 20	93	1.5	9	< 3	< 0.02	< 0.05	2.3	8
BTW-12-122	8	< 5	12	470	10.5	< 1	7	43	4	2.93	4	< 1	< 5	5	2.07	< 20	83	1.7	9.9	< 3	< 0.02	< 0.05	< 0.5	7
BTW-12-123	< 2	< 5	9.6	620	4.1	2	7	47	2	2.48	5	< 1	< 5	< 1	2.29	< 20	69	1.4	10.3	< 3	< 0.02	< 0.05	< 0.5	4.3
BTW-12-124	11	< 5	10.7	550	3.6	2	7	45	3	3.05	4	< 1	< 5	4	2.08	< 20	56	1.5	10.4	< 3	< 0.02	< 0.05	< 0.5	4.4
BTW-12-125	5	< 5	10	560	2.8	1	7	49	2	2.34	4	< 1	< 5	6	2.31	< 20	69	1.4	10.5	< 3	< 0.02	< 0.05	< 0.5	4.6
BTW-12-126	< 2	< 5	19.6	390	16	< 1	9	41	3	3.11	4	< 1	< 5	< 1	1.78	< 20	63	1.2	9	< 3	< 0.02	< 0.05	< 0.5	8
BTW-12-127	< 2	< 5	12.9	460	12.1	2	7	60	5	3.08	6	< 1	< 5	< 1	2.17	< 20	134	1.7	10.5	< 3	< 0.02	< 0.05	2.6	9.8
BTW-12-128	8	< 5	10.5	390	33	< 1	5	26	2	2.07	3	< 1	< 5	6	1.6	< 20	66	1	6.7	< 3	< 0.02	< 0.05	< 0.5	8.7
BTW-12-129	< 2	< 5	7.5	610	5.4	< 1	5	37	4	1.9	5	< 1	< 5	< 1	2.08	< 20	119	1.2	8.5	< 3	< 0.02	< 0.05	< 0.5	8
BTW-12-130	< 2	< 5	15.5	570	3	< 1	6	46	4	2.18	4	< 1	< 5	6	2.13	< 20	107	1.5	10.4	< 3	< 0.02	< 0.05	< 0.5	6.3
BTW-12-131	< 2	< 5	47.1	420	4.8	1	7	45	4	3.32	4	< 1	< 5	< 1	1.74	< 20	88	1.3	9.1	< 3	< 0.02	< 0.05	< 0.5	6.6
BTW-12-132	6	< 5	9	470	16.3	1	6	43	4	2.95	4	< 1	< 5	4	1.9	< 20	70	1.4	8.6	< 3	< 0.02	< 0.05	2.1	8
BTW-12-133	9	< 5	9	420	7.1	2	7	44	3	2.6	4	< 1	< 5	< 1	2.02	< 20	102	1	9.1	< 3	< 0.02	< 0.05	1.7	7.9
BTW-12-134	< 2	< 5	10.1	490	9.4	< 1	6	42	3	2.6	3	< 1	< 5	< 1	2.03	< 20	81	1.4	8.4	< 3	< 0.02	< 0.05	< 0.5	7.6
BTW-12-135	< 2	< 5	10.8	460	7.5	< 1	7	37	2	2.55	4	< 1	< 5	< 1	2.18	< 20	86	1.5	9.2	< 3	< 0.02	< 0.05	< 0.5	6.9
BTW-12-136	< 2	< 5	14	500	4.2	< 1	9	40	4	3.12	4	< 1	< 5	< 1	2.16	< 20	68	1.6	10.3	< 3	< 0.02	< 0.05	< 0.5	5.5
BTW-12-137	< 2	< 5	12.9	480	3.2	< 1	7	44	3	2.72	4	< 1	< 5	< 1	2.01	100	92	1.5	9.8	< 3	< 0.02	< 0.05	< 0.5	6.1
BTW-12-138	< 2	< 5	13.9	650	3.2	< 1	8	43	4	3.31	4	< 1	< 5	< 1	2.15	< 20	67	1.5	11	< 3	< 0.02	< 0.05	< 0.5	4.7
BTW-12-139	13	< 5	27.6	750	< 0.5	< 1	12	50	8	4.6	4	< 1	< 5	5	1.72	< 20	107	2.2	16.6	< 3	< 0.02	< 0.05	< 0.5	6.9
BTW-12-140	< 2	< 5	17.4	670	8.3	< 1	14	50	3	3.71	4	< 1	< 5	< 1	1.83	< 20	< 15	1.5	10.5	< 3	< 0.02	< 0.05	< 0.5	5.4
BTW-12-141	12	< 5	12.3	560	5.1	< 1	8	46	2	2.85	4	< 1	< 5	< 1	2.29	< 20	< 15	1.6	10.2	< 3	< 0.02	< 0.05	< 0.5	5.1
BTW-12-142	< 2	5	13.7	390	4.4	< 1	7	46	2	2.83	5	< 1	< 5	< 1	2.35	< 20	75	1.3	9.6	< 3	0.1	< 0.05	< 0.5	6
BTW-12-143	12	< 5	14.8	530	4.1	< 1	7	48	2	2.75	5	< 1	< 5	4	2.34	< 20	82	1.8	10.6	< 3	< 0.02	< 0.05	< 0.5	7.1
BTW-12-144	< 2	< 5	11.1	570	3.4	< 1	11	70	2	3.54	5	< 1	< 5	< 1	2.09	< 20	< 15	1.4	12.2	< 3	< 0.02	< 0.05	< 0.5	6.2
BTW-12-145	10	< 5	14.2	470	2.7	< 1	8	44	3	2.93	5	< 1	< 5	11	2.34	< 20	98	1.6	10	< 3	< 0.02	< 0.05	2.6	6.7
BTW-12-146	< 2	< 5	11.9	650	10.9	3	7	56	3	2.67	4	< 1	< 5	< 1	2.27	< 20	< 15	1.6	9.2	< 3	< 0.02	< 0.05	< 0.5	7.6
BTW-12-147	15	< 5	12.6	300	6	< 1	8	43	3	2.55	4	< 1	< 5	< 1	2.18	< 20	86	1.8	9.4	< 3	< 0.02	< 0.05	< 0.5	6.1
BTW-12-148	9	< 5	10.2	490	4.1	< 1	8	40	3	2.53	4	< 1	< 5	4	2.16	< 20	67	1.5	9.1	< 3	< 0.02	< 0.05	< 0.5	6.8
BTW-12-149	< 2	< 5	9.5	670	< 0.5	< 1	7	47	4	2.43	4	< 1	< 5	< 1	2.17	< 20	73	1.2	9	< 3	0.15	< 0.05	2.8	6.4
BTW-12-150	< 2	< 5	9.6	790	4.1	< 1	13	52	4	3.62	5	< 1	< 5	< 1	2.35	< 20	91	1.3	11.9	< 3	< 0.02	< 0.05	1.9	7.7
BTW-12-151	< 2	< 5	18.8	610	< 0.5	< 1	9	58	6	3.36	4	< 1	< 5	< 1	1.79	< 20	95	1.4	9.6	< 3	< 0.02	< 0.05	< 0.5	7.6
BTW-12-152	< 2	< 5	7	850	6.1	< 1	6	42	3	2.6	5	< 1	< 5	7	2.31	< 20	74	1.2	10.3	< 3	< 0.02	< 0.05	2.3	7.6
BTW-12-153	< 2	< 5	10.9	380	< 0.5	< 1	8	67	3	3.12	6	< 1	< 5	< 1	2.25	< 20	112	1.6	9.3	< 3	< 0.02	< 0.05	< 0.5	7.8
BTW-12-154	39	< 5	12.3	550	10.2	< 1	6	34	3	2.31	4	< 1	< 5	< 1	2.01	< 20	117	1.6	6.8	< 3	< 0.02	< 0.05	< 0.5	8
BTW-12-161	< 2	< 5	15.2	600	2.1	2	9	53	3	3.1	5	< 1	< 5	< 1	2.32	< 20	74	1.9	10.4	< 3	< 0.02	< 0.05	1.5	6.1
BTW-12-162	< 2	< 5	6.9	540	3.4	2	5	39	2	2.02	3	< 1	< 5	< 1	2.33	< 20	106	1.2	8.7	< 3	< 0.02	< 0.05	2.3	4.6
BTW-12-163	< 2	< 5	15.1	580	8.1	< 1	8	50	4	3.31	4	< 1	< 5	< 1	2.01	< 20	77	1.4	10.1	< 3	< 0.02	< 0.05	< 0.5	5.5
BTW-12-164	< 2	< 5	11.3	540	11.1	< 1	5	40	4	2.4	3	< 1	< 5	< 1	2.05	< 20	97	1.4	7.5	< 3	< 0.02	< 0.05	< 0.5	6.9
BTW-12-165	< 2	< 5	24.1	620	5.3	< 1	7	41	5	2.5	5	< 1	< 5	< 1	2.27	< 20	89	2.8	7.5	< 3	0.02	< 0.05	2.9	8.2
BTW-12-166	< 2	< 5	31.5	530	6.7	< 1	6	42	12	2.39	4	< 1	< 5	< 1	2.09	< 20	117	2.8	10.4	< 3	< 0.02	< 0.05	2.2	7.9
BTW-12-167	< 2	< 5	18.9	900	4.5	< 1	6	50	8	2.59	5	< 1	< 5	< 1	2.35	< 20	111	2.9	10.5	< 3	< 0.02	0.08	1.6	7.7
BTW-12-168	23	< 5	8.6	800	< 0.5	< 1	6	27	11	2.38	3	< 1	< 5	< 1	2.06	< 20	91	2.1	7.5	< 3	< 0.02	< 0.05	< 0.5	8.1
BTW-12-169	13	< 5	19.1	460	6.5	< 1	7	50	9	3.15	5	< 1	< 5	< 1	1.76	< 20	46	1.6	9.7	< 3	< 0.02	< 0.05	1.4	7.5
BTW-12-170	< 2	< 5	16.7	510	< 0.5	< 1	8	53	5	2.92	4	< 1	< 5	< 1	2.28	< 20	100	2.6	9.6	< 3	< 0.02	< 0.05	1.9	7.8
BTW-12-171	7	< 5	15.8	780	7	< 1	7	41	5	2.64	5	< 1	< 5	< 1	2.29	< 20	88	2.5	9.1	< 3	< 0.02	< 0.05	< 0.5	7.5

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-109	2.1	< 1	90	19.4	43	15	3.9	0.9	< 0.5	1.7	0.31	27	< 0.2	< 0.5	21	312	< 2	13	11	74	0.009
BTW-12-116	6	< 1	200	19.2	42	10	3.9	0.6	< 0.5	1.8	0.28	24.7	0.7	< 0.5	18	423	5	18	25	148	0.027
BTW-12-117	6.1	< 1	140	20.8	53	9	4	0.7	< 0.5	1.6	0.29	22.9	< 0.2	< 0.5	45	558	4	18	20	81	0.009
BTW-12-118	4.9	2	< 50	17.9	54	7	3.5	< 0.2	< 0.5	1.5	0.32	28.3	0.4	< 0.5	22	521	4	15	14	95	0.02
BTW-12-119	5.1	< 1	< 50	16.9	50	7	3.1	0.6	< 0.5	1.3	0.27	31	1.1	< 0.5	45	315	6	8	14	64	0.043
BTW-12-120	3	< 1	70	22	32	12	3.8	0.6	< 0.5	1.4	0.31	30.4	< 0.2	< 0.5	13	474	3	7	7	56	0.014
BTW-12-121	4.3	< 1	< 50	22.8	39	8	4	0.8	< 0.5	1.5	0.31	30.1	0.2	< 0.5	17	584	3	9	9	81	0.013
BTW-12-122	4.9	< 1	220	23.4	35	13	4.5	1	< 0.5	1.6	0.35	27.1	0.8	1	18	393	4	13	31	207	0.022
BTW-12-123	2.3	< 1	< 50	19.7	30	12	3.9	0.8	< 0.5	1.7	0.33	25	0.3	< 0.5	19	223	3	11	8	44	0.011
BTW-12-124	3.4	< 1	80	18.8	28	12	3.4	0.7	< 0.5	1.8	0.29	30.2	< 0.2	< 0.5	22	277	3	15	8	77	0.009
BTW-12-125	2.3	2	< 50	20.6	32	16	3.8	0.7	< 0.5	1.8	0.31	31.1	< 0.2	< 0.5	14	266	< 2	11	9	51	0.009
BTW-12-126	5.1	< 1	< 50	18.8	32	11	3.5	0.7	< 0.5	1.4	0.24	28.3	< 0.2	< 0.5	24	676	2	11	9	78	0.027
BTW-12-127	7.1	< 1	< 50	23.6	37	16	4.2	0.5	< 0.5	2	0.34	10.7	< 0.2	< 0.5	13	383	< 2	8	9	66	0.036
BTW-12-128	3.5	< 1	70	18.9	26	9	3.6	0.5	< 0.5	1.2	0.27	23.9	< 0.2	< 0.5	11	185	< 2	6	6	51	0.046
BTW-12-129	3.8	< 1	< 50	21.3	32	< 5	3.7	0.7	< 0.5	1.7	0.27	27	0.2	< 0.5	11	447	< 2	9	12	82	0.045
BTW-12-130	5.4	< 1	80	24.4	38	18	4.9	1	0.6	1.9	0.41	29.1	< 0.2	< 0.5	13	427	4	9	14	62	0.01
BTW-12-131	4.2	< 1	90	17.6	39	11	3	0.5	< 0.5	1.6	0.28	30	< 0.2	< 0.5	13	372	3	12	9	61	0.048
BTW-12-132	4	2	130	19.7	50	9	3.6	0.6	< 0.5	1.3	0.25	26.4	< 0.2	< 0.5	15	368	3	10	9	86	0.027
BTW-12-133	3	< 1	60	19.5	50	17	3.5	0.6	< 0.5	1.4	0.24	29	0.2	< 0.5	10	253	< 2	7	10	71	0.01
BTW-12-134	3.8	< 1	< 50	18.5	39	9	3.4	0.6	< 0.5	1.4	0.25	30.6	< 0.2	< 0.5	10	283	2	9	13	103	0.015
BTW-12-135	5.5	< 1	90	18.9	49	9	3.6	0.6	< 0.5	1.6	0.26	30	0.5	< 0.5	10	278	< 2	9	12	73	0.01
BTW-12-136	2.3	< 1	100	22.5	63	20	4.3	0.8	1	2	0.3	30.4	< 0.2	< 0.5	23	498	3	13	12	71	0.008
BTW-12-137	3.7	< 1	< 50	17.9	41	17	3.5	0.7	< 0.5	1.7	0.29	29	< 0.2	< 0.5	12	385	2	11	10	91	0.01
BTW-12-138	3.2	< 1	90	20.8	43	12	3.9	0.8	< 0.5	1.8	0.31	29.6	< 0.2	< 0.5	28	365	3	15	9	67	0.007
BTW-12-139	2.9	< 1	< 50	26.9	58	21	6.1	1.2	< 0.5	2.5	0.43	22.8	< 0.2	< 0.5	64	701	< 2	24	14	128	0.006
BTW-12-140	2.2	< 1	140	17.5	43	13	3.7	0.7	< 0.5	1.8	0.31	22.9	0.4	0.5	25	417	4	15	12	143	0.025
BTW-12-141	3.3	< 1	< 50	20.9	34	19	3.8	0.9	< 0.5	1.8	0.35	30.9	< 0.2	< 0.5	17	297	2	11	9	54	0.008
BTW-12-142	2.7	< 1	< 50	19.9	42	16	3.7	0.8	< 0.5	1.8	0.32	30	< 0.2	< 0.5	12	272	< 2	8	9	45	0.006
BTW-12-143	3.3	< 1	< 50	23	38	13	4.1	0.9	< 0.5	1.7	0.31	30.6	< 0.2	< 0.5	21	360	< 2	13	13	55	0.005
BTW-12-144	3.7	< 1	< 50	25.6	48	17	4.7	1	< 0.5	1.7	0.35	30.5	< 0.2	< 0.5	24	444	< 2	17	9	70	0.006
BTW-12-145	< 0.5	3	< 50	20.6	44	8	4	0.8	< 0.5	1.6	0.32	30	< 0.2	< 0.5	15	415	3	11	12	63	0.004
BTW-12-146	3.2	< 1	110	18.8	31	13	3.5	0.8	< 0.5	1.7	0.32	26.7	< 0.2	< 0.5	11	248	3	8	14	59	0.012
BTW-12-147	4.6	< 1	< 50	20.2	31	11	3.7	0.7	< 0.5	1.5	0.35	28.7	< 0.2	< 0.5	11	292	< 2	10	16	59	0.007
BTW-12-148	2.7	< 1	< 50	20.3	32	11	3.9	0.7	< 0.5	1.6	0.3	30	< 0.2	< 0.5	13	327	< 2	10	14	61	0.005
BTW-12-149	4	< 1	110	22.3	34	15	4	0.7	< 0.5	1.6	0.27	29.7	< 0.2	< 0.5	12	336	5	10	11	67	0.015
BTW-12-150	4.1	< 1	< 50	25.4	41	27	4.4	0.9	< 0.5	1.9	0.33	22.2	0.3	< 0.5	21	386	3	14	13	70	0.009
BTW-12-151	5.5	< 1	150	21.4	36	12	3.8	0.7	< 0.5	1.6	0.29	28	< 0.2	< 0.5	23	437	3	18	10	116	0.007
BTW-12-152	2.6	< 1	< 50	22.4	34	17	4.3	0.9	< 0.5	2	0.29	31.4	< 0.2	< 0.5	8	317	3	7	11	50	0.016
BTW-12-153	5.5	< 1	< 50	22	35	14	3.9	0.7	< 0.5	1.9	0.37	32	< 0.2	< 0.5	12	507	3	12	7	54	0.007
BTW-12-154	4.7	< 1	120	17.4	27	13	3.4	0.6	< 0.5	1.5	0.27	28.9	0.4	< 0.5	6	288	< 2	5	10	53	0.022
BTW-12-161	3	< 1	< 50	20.2	39	< 5	3.8	0.7	< 0.5	1.6	0.33	29.2	0.2	< 0.5	15	309	2	12	19	76	0.007
BTW-12-162	< 0.5	< 1	90	17.7	23	8	3.4	0.7	< 0.5	1.6	0.22	29	< 0.2	< 0.5	9	208	< 2	9	10	40	0.008
BTW-12-163	4	< 1	80	18.8	28	9	3.3	0.8	< 0.5	1.4	0.27	25	< 0.2	< 0.5	15	272	3	12	12	92	0.015
BTW-12-164	5.1	< 1	120	18	25	< 5	3.5	0.7	< 0.5	1.5	0.31	26	< 0.2	< 0.5	6	200	< 2	5	10	53	0.019
BTW-12-165	4.3	< 1	110	20.6	36	16	3.5	0.6	< 0.5	1.4	0.25	28.1	< 0.2	< 0.5	11	250	3	10	13	65	0.009
BTW-12-166	4.7	< 1	180	24.3	37	26	5	0.9	< 0.5	2.3	0.4	26	0.5	< 0.5	19	449	2	28	14	110	0.022
BTW-12-167	4.2	< 1	< 50	29.6	44	19	5.5	1.2	< 0.5	1.9	0.37	26.8	< 0.2	< 0.5	19	359	2	20	26	66	0.005
BTW-12-168	3.2	< 1	80	25.8	41	18	3.7	0.7	< 0.5	1.3	0.24	23.3	< 0.2	0.6	7	366	< 2	7	33	83	0.004
BTW-12-169	3.3	< 1	140	20.2	36	11	3.4	0.7	< 0.5	1.5	0.33	27.7	0.2	< 0.5	13	334	4	11	27	128	0.015
BTW-12-170	4.2	< 1	100	23.7	49	9	4	0.7	< 0.5	1.7	0.28	31.3	< 0.2	< 0.5	9	277	2	9	25	89	0.008
BTW-12-171	6.1	< 1	150	22.4	43	16	3.8	0.9	< 0.5	1.5	0.39	21.9	< 0.2	< 0.5	6	219	< 2	6	19	76	0.008

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BTW-12-172	< 2	< 5	8.3	680	3	2	9	53	3	3	5	< 1	< 5	< 1	2.19	< 20	75	1.5	10.6	< 3	< 0.02	< 0.05	< 0.5	5.9
BTW-12-173	< 2	< 5	24.5	820	< 0.5	< 1	11	57	18	3.82	7	< 1	< 5	< 1	2.12	< 20	< 15	2.1	9.4	< 3	< 0.02	< 0.05	2.1	9.3
BTW-12-199	27	< 5	15	540	< 0.5	< 1	8	45	3	2.97	6	< 1	< 5	< 1	2.22	< 20	69	2.4	10.5	< 3	< 0.02	< 0.05	2.4	7
BTW-12-200	< 2	< 5	6.4	670	2.1	< 1	7	43	3	2.82	5	< 1	< 5	< 1	2.32	< 20	60	1.3	9.7	< 3	< 0.02	< 0.05	< 0.5	4.5
BTW-12-201	< 2	< 5	9.6	890	3.6	< 1	7	53	3	3.04	6	< 1	< 5	< 1	2.37	< 20	< 15	1.7	10.2	< 3	< 0.02	< 0.05	< 0.5	7.3
BTW-12-203	< 2	< 5	23.8	680	3.4	< 1	8	59	4	3.34	4	< 1	< 5	< 1	2.44	< 20	90	1.9	13.4	< 3	< 0.02	< 0.05	< 0.5	3.9
BTW-12-223	4	< 5	10.1	570	< 0.5	2	8	85	2	3.17	4	< 1	< 5	< 1	2.05	< 20	57	1.5	13	< 3	0.09	< 0.05	< 0.5	3.9
BTW-12-224	< 2	< 5	7.4	630	< 0.5	2	9	68	3	3.07	4	< 1	< 5	< 1	2.16	< 20	74	1.3	11.6	< 3	< 0.02	< 0.05	< 0.5	4.3
BTW-12-225	< 2	< 5	13.1	920	< 0.5	2	16	134	9	3.84	5	< 1	< 5	< 1	2.09	< 20	73	2.9	14.1	< 3	< 0.02	< 0.05	1.4	4.6
BTW-12-226	< 2	< 5	9.6	620	< 0.5	< 1	8	57	3	2.93	4	< 1	< 5	10	2.25	< 20	72	1.4	10.8	< 3	< 0.02	< 0.05	< 0.5	4.7
BTW-12-227	7	< 5	11.4	570	4.7	3	15	98	< 1	4.8	5	< 1	< 5	8	2.34	< 20	110	1.7	13.6	< 3	< 0.02	< 0.05	< 0.5	3.8
BTW-12-228	< 2	< 5	8	700	2.9	< 1	9	54	2	2.87	5	< 1	< 5	< 1	2.3	< 20	111	1.5	11.8	< 3	< 0.02	< 0.05	< 0.5	4.4
BTW-12-229	23	< 5	6.2	650	< 0.5	3	8	50	2	2.46	4	< 1	< 5	< 1	2.15	< 20	51	1.1	10.9	< 3	< 0.02	< 0.05	< 0.5	4.7
BTW-12-230	< 2	< 5	8.8	800	< 0.5	2	8	43	3	2.58	5	< 1	< 5	< 1	2.29	< 20	51	1.2	11.4	< 3	< 0.02	< 0.05	< 0.5	4.4
BTW-12-231	< 2	< 5	4.5	680	3.1	< 1	7	71	2	2.73	5	< 1	< 5	< 1	2.34	< 20	53	1.3	13.1	< 3	< 0.02	< 0.05	2.2	5.1
BTW-12-232	34	< 5	10.1	830	6.2	< 1	10	89	2	3.75	5	< 1	< 5	15	2.15	< 20	< 15	1.3	16.6	< 3	< 0.02	< 0.05	< 0.5	7
BTW-12-233	< 2	< 5	8	690	< 0.5	< 1	11	67	3	3.1	5	< 1	< 5	< 1	2.21	< 20	< 15	1.6	12.3	< 3	< 0.02	< 0.05	2.6	5.2
BTW-12-234	< 2	< 5	4.1	440	< 0.5	< 1	7	95	2	2.94	4	< 1	< 5	< 1	2.25	< 20	65	1.1	12.4	< 3	< 0.02	< 0.05	2.1	4.1
BTW-12-235	< 2	< 5	7.2	560	< 0.5	< 1	6	65	2	2.74	5	< 1	< 5	< 1	2.24	< 20	< 15	1.4	11.5	< 3	< 0.02	< 0.05	< 0.5	4.4
BTW-12-236	< 2	< 5	4.9	590	< 0.5	2	9	48	2	3.08	6	< 1	< 5	< 1	2.28	< 20	73	1.3	11.9	< 3	0.05	< 0.05	< 0.5	4.6
BTW-12-237	< 2	< 5	6.8	710	< 0.5	< 1	6	50	2	2.35	4	< 1	< 5	< 1	2.21	< 20	47	1.3	10.3	< 3	< 0.02	< 0.05	1.3	4.7
BTW-12-238	< 2	< 5	6.1	510	< 0.5	< 1	9	76	2	3.04	5	< 1	< 5	< 1	2.28	< 20	66	1.4	12	< 3	< 0.02	< 0.05	1.9	4.2
BTW-12-239	9	< 5	5.4	700	< 0.5	2	8	71	3	2.76	4	< 1	< 5	< 1	1.93	< 20	66	1.3	11.7	< 3	< 0.02	< 0.05	< 0.5	4.7
BTW-12-240	< 2	< 5	8.5	630	< 0.5	2	13	69	2	4.21	4	< 1	< 5	< 1	1.85	< 20	40	1.4	14.2	< 3	< 0.02	< 0.05	< 0.5	5.2
BTW-12-241	< 2	< 5	8.2	590	3.3	< 1	11	79	2	3.63	5	< 1	< 5	< 1	2.02	120	76	1.5	12.3	< 3	< 0.02	< 0.05	< 0.5	4.5
BTW-12-242	< 2	< 5	8.5	470	< 0.5	3	18	76	2	4.82	5	< 1	< 5	< 1	1.62	< 20	< 15	1.2	15	< 3	< 0.02	< 0.05	< 0.5	4.6
BTW-12-244	< 2	< 5	6.6	610	< 0.5	2	7	46	2	2.47	5	< 1	< 5	11	2.49	< 20	52	1.4	10.6	< 3	< 0.02	< 0.05	< 0.5	4.3
BTW-12-245	< 2	< 5	6.2	700	< 0.5	< 1	5	49	< 1	2.48	5	< 1	< 5	< 1	2.6	< 20	64	1	9.6	< 3	< 0.02	< 0.05	< 0.5	3.9
BTW-12-246	7	< 5	7.2	560	< 0.5	< 1	5	49	3	2.65	5	< 1	< 5	< 1	2.67	< 20	56	1.3	10.8	< 3	< 0.02	< 0.05	1.4	3.8
BTW-12-247	< 2	< 5	9.1	560	3.1	2	9	34	3	3.4	4	< 1	< 5	< 1	2.63	< 20	69	1.9	12.2	< 3	< 0.02	< 0.05	< 0.5	4.2
BTW-12-250	< 2	< 5	15	670	< 0.5	< 1	4	36	3	1.87	4	< 1	< 5	< 1	2.31	< 20	54	1.6	6.6	< 3	< 0.02	< 0.05	< 0.5	5.8
BTW-12-253	< 2	< 5	3.9	690	< 0.5	< 1	7	45	7	2.07	5	< 1	< 5	3	2.5	< 20	86	1.3	11.8	< 3	< 0.02	< 0.05	< 0.5	6.2
BTW-12-254	< 2	< 5	5.8	590	4.2	2	6	53	2	2.71	5	< 1	< 5	< 1	2.58	< 20	54	1.2	11.3	< 3	< 0.02	< 0.05	1	5.3
BTW-12-255	3	< 5	5.1	590	2.3	2	5	39	3	1.98	4	< 1	< 5	< 1	2.46	< 20	42	1.7	8.6	< 3	< 0.02	< 0.05	< 0.5	4.7
BTW-12-256	< 2	< 5	6.1	580	3.1	2	7	45	2	2.33	6	< 1	< 5	< 1	2.32	< 20	60	1.1	8.5	< 3	< 0.02	< 0.05	< 0.5	5.1
BTW-12-257	< 2	< 5	20	800	6	< 1	7	49	9	2.69	7	< 1	< 5	< 1	2.68	< 20	< 15	2	9	< 3	< 0.02	< 0.05	< 0.5	7.1
BTW-12-258	< 2	< 5	15.4	780	6.3	< 1	4	28	10	2.19	6	< 1	< 5	< 1	2.08	< 20	103	2.1	6.1	< 3	< 0.02	< 0.05	1.2	7.3
BTW-12-259	< 2	< 5	5.6	690	3.3	< 1	5	31	8	2.25	5	< 1	< 5	3	2.13	< 20	59	1.5	7.2	< 3	< 0.02	< 0.05	< 0.5	6.7
BWT-12-260	17	< 5	23.3	600	< 0.5	2	8	36	5	3.07	4	< 1	< 5	< 1	1.73	< 20	82	2.3	9.4	< 3	< 0.02	< 0.05	< 0.5	7.7
BTW-12-261	< 2	< 5	8.4	580	< 0.5	< 1	11	58	2	3.74	6	< 1	< 5	< 1	2.74	< 20	76	1.4	12	< 3	< 0.02	< 0.05	< 0.5	4.6
BTW-12-262	< 2	< 5	7.6	640	< 0.5	< 1	7	44	2	3.08	5	< 1	< 5	13	2.75	< 20	61	1.3	11.4	< 3	< 0.02	< 0.05	< 0.5	4.4
BTW-12-263	< 2	< 5	12.4	710	22.3	< 1	6	18	< 1	2.4	5	< 1	< 5	< 1	2.12	< 20	99	1.3	7.3	< 3	< 0.02	0.1	< 0.5	9.7
BWT-12-267	< 2	< 5	8.5	610	3.2	2	8	49	2	2.85	4	< 1	< 5	< 1	2.25	< 20	78	1.5	9.9	< 3	< 0.02	< 0.05	< 0.5	4
BWT-12-268	< 2	< 5	8.2	630	< 0.5	2	6	43	2	2.28	4	< 1	< 5	< 1	2.15	< 20	51	1.6	9.8	< 3	< 0.02	< 0.05	< 0.5	4.1
BWT-12-269	< 2	< 5	8.4	630	< 0.5	< 1	8	39	2	2.53	4	< 1	< 5	< 1	2.07	< 20	75	1.4	9.3	< 3	< 0.02	< 0.05	< 0.5	3.5
BTW-12-270	17	< 5	12.1	590	6	< 1	8	56	3	2.85	8	< 1	< 5	12	2.45	< 20	51	1.2	9.4	< 3	< 0.02	< 0.05	< 0.5	6.4
BTW-12-271	< 2	< 5	8.4	780	< 0.5	< 1	9	57	3	3.9	8	< 1	< 5	< 1	2.56	< 20	78	1.4	12.3	< 3	< 0.02	< 0.05	< 0.5	5.8
BWT-12-276	< 2	< 5	36	530	7.9	< 1	11	51	7	3.37	5	< 1	< 5	3	2.02	< 20	80	2.3	9	< 3	< 0.02	< 0.05	< 0.5	7.9
BWT-12-277	< 2	< 5	7.6	610	6.5	< 1	7	47	4	3.37	5	< 1	< 5	< 1	2.05	< 20	64	1.3	8.6	< 3	< 0.02	< 0.05	< 0.5	8
BWT-12-278	< 2	< 5	7.7	410	4.6	< 1	7	46	2	2.56	5	< 1	< 5	< 1	2.27	< 20	75	1.3	8.3	< 3	< 0.02	< 0.05	< 0.5	7.3
BWT-12-279	< 2	< 5	41.3	620	< 0.5	< 1	7	29	6	2.09	3	< 1	< 5	< 1	2	< 20	90	2.9	7.3	< 3	< 0.02	< 0.05	< 0.5	6.2

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BTW-12-172	3.5	< 1	< 50	20.4	41	9	3.9	0.9	< 0.5	1.7	0.33	30.1	< 0.2	< 0.5	10	302	3	11	13	55	0.004
BTW-12-173	< 0.5	< 1	< 50	25.8	38	< 5	4.2	0.5	< 0.5	1.7	0.25	9	0.2	< 0.5	9	306	4	10	17	117	0.015
BTW-12-199	4.8	< 1	300	25.9	43	30	5.5	0.9	0.9	2	0.26	26.1	< 0.2	0.6	15	1150	< 2	11	26	370	0.004
BTW-12-200	2.8	< 1	< 50	22.1	39	40	4.5	1	< 0.5	2	0.21	32.2	< 0.2	< 0.5	9	416	< 2	6	6	35	0.001
BTW-12-201	3.5	< 1	< 50	23.7	52	19	4.7	1.1	< 0.5	2	0.33	20	< 0.2	< 0.5	13	365	< 2	8	7	46	0.002
BTW-12-203	< 0.5	< 1	200	21	42	29	4.9	1.1	< 0.5	2.1	0.26	23.5	< 0.2	0.7	16	473	< 2	18	23	145	0.004
BTW-12-223	2.6	< 1	< 50	21.1	34	31	5.3	1.1	< 0.5	2.2	0.3	32	< 0.2	< 0.5	21	482	< 2	19	5	49	0.003
BTW-12-224	< 0.5	< 1	< 50	16.6	34	15	4	0.7	< 0.5	1.8	0.33	30.5	< 0.2	< 0.5	16	378	< 2	16	6	45	0.003
BTW-12-225	< 0.5	< 1	< 50	18	35	29	4.1	0.7	< 0.5	1.9	0.38	17.2	< 0.2	< 0.5	23	280	< 2	36	5	72	0.004
BTW-12-226	1.9	< 1	90	20.5	39	11	4.3	1	< 0.5	1.8	0.23	25.2	< 0.2	< 0.5	15	351	< 2	11	9	46	0.003
BTW-12-227	< 0.5	< 1	< 50	19.5	44	12	4.5	0.7	< 0.5	1.8	0.34	14.8	< 0.2	< 0.5	20	518	< 2	24	6	73	0.005
BTW-12-228	< 0.5	< 1	100	19.3	32	29	4.5	1.1	1.3	2	0.28	21.9	< 0.2	< 0.5	15	380	< 2	13	9	62	0.005
BTW-12-229	2.1	< 1	< 50	17.8	34	31	4	0.8	< 0.5	1.8	0.27	24.3	< 0.2	< 0.5	13	274	< 2	11	9	48	0.005
BTW-12-230	1.8	< 1	70	19	33	14	4.3	0.9	< 0.5	2	0.26	27.6	< 0.2	< 0.5	13	277	< 2	9	10	45	0.004
BTW-12-231	3.5	< 1	110	23.8	36	23	5.4	1	< 0.5	2.3	0.37	26	< 0.2	< 0.5	10	317	< 2	12	5	42	0.003
BTW-12-232	4.6	4	110	26.4	48	39	6.3	1.1	< 0.5	3	0.44	12.5	< 0.2	< 0.5	21	466	< 2	20	6	54	0.006
BTW-12-233	4.3	< 1	140	19.8	42	21	4.2	0.9	< 0.5	2.1	0.37	21	< 0.2	< 0.5	16	316	< 2	15	9	71	0.004
BTW-12-234	2.8	< 1	< 50	19.3	30	25	4.6	0.9	0.8	1.8	0.35	27.2	< 0.2	< 0.5	17	260	< 2	19	7	43	0.004
BTW-12-235	< 0.5	< 1	110	19.4	33	23	3.9	0.9	< 0.5	1.8	0.38	29.1	< 0.2	< 0.5	13	291	< 2	12	9	45	0.003
BTW-12-236	2	< 1	< 50	18.7	32	27	4.1	0.9	0.6	1.8	0.23	29.7	< 0.2	< 0.5	16	323	< 2	10	6	40	0.003
BTW-12-237	2.2	< 1	< 50	19.7	31	31	4.3	0.9	0.8	1.9	0.25	28.4	< 0.2	< 0.5	12	283	< 2	12	10	41	0.002
BTW-12-238	< 0.5	< 1	130	19.2	41	< 5	4	0.9	0.8	2	0.42	31.1	< 0.2	< 0.5	12	328	< 2	13	6	52	0.003
BTW-12-239	< 0.5	< 1	< 50	18.9	32	23	4.6	0.9	0.5	1.9	0.32	30.2	< 0.2	< 0.5	16	336	< 2	17	5	41	0.003
BTW-12-240	2.3	< 1	< 50	23.6	36	25	5.5	1.1	< 0.5	2.3	0.3	31	< 0.2	< 0.5	31	737	< 2	27	7	71	0.004
BTW-12-241	3.1	< 1	< 50	19.6	35	21	4	0.9	< 0.5	2	0.24	30.8	< 0.2	< 0.5	18	321	< 2	19	9	61	0.005
BTW-12-242	2.8	< 1	130	23.1	37	67	4.6	1.1	< 0.5	2.4	0.43	30.2	< 0.2	< 0.5	32	614	< 2	32	6	74	0.004
BTW-12-244	< 0.5	< 1	100	18.1	34	38	4	0.7	< 0.5	1.9	0.31	30.7	< 0.2	< 0.5	13	299	< 2	13	11	69	0.004
BTW-12-245	1.8	< 1	< 50	16.8	29	30	4.3	1	< 0.5	1.6	0.3	32.2	< 0.2	< 0.5	9	238	< 2	9	7	36	0.003
BTW-12-246	2.1	< 1	< 50	21.9	35	24	4.9	1.1	< 0.5	2	0.27	30	< 0.2	< 0.5	16	328	< 2	13	9	51	0.003
BTW-12-247	< 0.5	< 1	< 50	18.7	33	23	4	1	< 0.5	1.9	0.33	28.2	< 0.2	< 0.5	22	406	< 2	11	9	58	0.004
BTW-12-250	5.4	< 1	< 50	18.1	41	24	2.7	0.7	< 0.5	1.3	0.22	30	0.4	< 0.5	5	234	< 2	6	15	31	0.005
BTW-12-253	3.4	< 1	< 50	19.6	32	26	4.1	0.8	< 0.5	1.9	0.3	28	< 0.2	< 0.5	10	209	< 2	19	17	59	0.016
BTW-12-254	3.4	< 1	< 50	19.9	35	25	4.9	0.8	< 0.5	1.7	0.21	31.3	< 0.2	< 0.5	13	392	< 2	10	9	43	0.005
BTW-12-255	3.7	< 1	80	16.5	29	14	3.1	0.7	< 0.5	1.5	0.22	30.5	< 0.2	< 0.5	8	208	< 2	10	8	41	0.004
BTW-12-256	3.7	< 1	< 50	21.4	40	28	4.7	0.9	< 0.5	1.8	0.27	30.3	< 0.2	< 0.5	6	557	< 2	6	8	38	0.003
BTW-12-257	5.3	< 1	130	25.7	53	35	5.8	1.1	< 0.5	2.2	0.4	21.1	< 0.2	< 0.5	5	488	< 2	6	19	52	0.005
BTW-12-258	3.4	< 1	< 50	22.6	43	47	3.7	0.8	< 0.5	1.5	0.24	19.1	< 0.2	0.6	4	214	< 2	4	19	66	0.006
BTW-12-259	3.1	< 1	80	18.9	37	28	3.5	0.8	< 0.5	1.4	0.2	28.4	< 0.2	< 0.5	6	261	2	6	15	37	0.004
BWT-12-260	3.7	< 1	170	23.5	38	37	5.3	0.8	< 0.5	1.7	0.27	30.3	< 0.2	1	19	563	< 2	13	89	225	0.003
BTW-12-261	2.4	< 1	< 50	21.1	38	36	4.6	0.8	< 0.5	2.2	0.28	29.8	< 0.2	< 0.5	15	315	< 2	10	6	47	0.003
BTW-12-262	2.6	< 1	90	22.4	42	26	4.4	1.1	< 0.5	1.9	0.23	30.7	< 0.2	< 0.5	13	349	< 2	8	6	43	0.002
BTW-12-263	6	< 1	< 50	18	50	65	3.7	0.8	< 0.5	1.4	0.23	10.6	< 0.2	< 0.5	14	381	< 2	8	9	68	0.023
BWT-12-267	1.5	< 1	70	18.5	36	30	4.7	0.9	< 0.5	1.9	0.31	30.1	< 0.2	< 0.5	20	302	< 2	11	10	53	0.004
BWT-12-268	2.3	< 1	< 50	16.9	28	24	3.2	0.8	< 0.5	1.9	0.31	29.7	< 0.2	< 0.5	17	294	< 2	11	10	58	0.007
BWT-12-269	2.6	< 1	< 50	15.5	25	11	3.2	0.8	< 0.5	1.5	0.28	30.3	< 0.2	< 0.5	23	275	< 2	11	8	44	0.005
BTW-12-270	4.2	< 1	< 50	19.6	39	25	3.8	0.8	< 0.5	1.7	0.26	31.2	< 0.2	< 0.5	8	223	< 2	7	12	34	0.009
BTW-12-271	< 0.5	< 1	< 50	24.8	41	24	5.3	1.4	< 0.5	2.3	0.31	32.9	< 0.2	< 0.5	19	599	< 2	10	7	57	0.003
BWT-12-276	3.3	< 1	< 50	23.1	43	35	4.2	0.8	< 0.5	1.4	0.26	30.1	< 0.2	< 0.5	21	746	< 2	12	23	82	0.011
BWT-12-277	3.8	< 1	140	21.5	38	40	4.5	0.9	< 0.5	1.7	0.29	28.3	0.3	< 0.5	8	254	< 2	8	11	101	0.011
BWT-12-278	6.2	< 1	80	21.7	49	29	5.7	0.9	< 0.5	2.1	0.35	30.7	< 0.2	< 0.5	8	493	< 2	7	8	39	0.008
BWT-12-279	2.8	< 1	490	21.1	35	17	4.5	0.9	0.8	1.9	0.3	31.1	0.6	4.1	20	1620	< 2	19	115	686	0.004

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1	0.01	20	15	0.1	0.1	3	0.02	0.05	0.5	0.2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWT-12-280	< 2	< 5	18.7	600	12.2	2	8	45	2	2.53	4	< 1	< 5	3	1.74	< 20	54	1.4	9.2	< 3	< 0.02	< 0.05	< 0.5	4.3
BWT-12-281	< 2	< 5	16.1	640	4.3	2	9	46	2	2.92	4	< 1	< 5	< 1	1.97	< 20	72	1.6	9.5	< 3	< 0.02	0.08	< 0.5	4.4
BWT-12-282	< 2	< 5	50.7	850	< 0.5	< 1	19	81	5	4.9	6	< 1	< 5	< 1	2.27	< 20	< 15	2.9	16.1	< 3	< 0.02	< 0.05	< 0.5	6.2
BWT-12-283	< 2	< 5	8.8	540	3.7	< 1	8	47	3	2.67	4	< 1	< 5	< 1	2.39	< 20	61	1.9	11.2	< 3	< 0.02	< 0.05	< 0.5	4.6
BWT-12-284	< 2	< 5	35.4	670	< 0.5	< 1	9	47	8	3	5	< 1	< 5	< 1	1.84	< 20	81	2.7	10.2	< 3	< 0.02	< 0.05	< 0.5	8.2
BWT-12-285	< 2	< 5	62.8	620	5.4	< 1	6	53	12	2.18	3	< 1	< 5	< 1	1.58	< 20	61	3.2	9.4	< 3	< 0.02	< 0.05	1.6	5.6
BWT-12-286	18	< 5	66.2	660	4.3	< 1	11	60	12	3.26	4	< 1	< 5	14	1.72	< 20	92	5.3	11.6	< 3	< 0.02	< 0.05	< 0.5	7.8
BWT-12-287	9	< 5	10.3	900	< 0.5	< 1	11	80	4	3.15	5	< 1	< 5	< 1	1.92	< 20	< 15	2.5	10.4	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-288	< 2	< 5	15.2	990	5.1	< 1	9	64	8	3.33	6	< 1	< 5	< 1	2.17	< 20	65	2.4	10.8	< 3	< 0.02	< 0.05	2.9	8.4
BWT-12-289	3	< 5	6.7	550	< 0.5	< 1	6	46	4	2.48	5	< 1	< 5	< 1	2.06	< 20	48	1.8	9.1	< 3	< 0.02	< 0.05	< 0.5	5.5
BWT-12-290	< 2	< 5	8.3	650	2.7	< 1	6	42	4	2.19	5	< 1	< 5	< 1	2.11	< 20	97	1.9	8.6	< 3	< 0.02	< 0.05	< 0.5	5.9
BWT-12-291	9	< 5	10.1	630	2.6	2	7	48	7	2.45	5	< 1	< 5	< 1	2.11	< 20	95	2	8.7	< 3	< 0.02	0.06	< 0.5	6.5
BWT-12-292	< 2	< 5	13	840	3.6	< 1	8	75	7	2.57	4	< 1	< 5	7	1.74	< 20	72	2.5	8.6	< 3	< 0.02	< 0.05	< 0.5	5.5
BWT-12-293	12	< 5	17.1	810	3.9	2	6	66	7	2.77	4	< 1	< 5	< 1	1.86	< 20	70	2.6	9.2	< 3	< 0.02	< 0.05	< 0.5	7.3
BWT-12-294	< 2	< 5	19.6	870	5.6	< 1	16	77	18	3.66	5	< 1	< 5	< 1	1.89	< 20	64	3	12.9	< 3	< 0.02	< 0.05	2.1	6.8
BWT-12-295	< 2	< 5	8.2	590	< 0.5	< 1	6	46	4	2.01	4	< 1	< 5	< 1	1.91	< 20	77	1.6	7.8	< 3	< 0.02	< 0.05	2.2	4.7
BWT-12-296	< 2	< 5	7.8	490	< 0.5	2	5	39	4	2.01	5	< 1	< 5	18	2.29	< 20	106	1.8	8	< 3	< 0.02	< 0.05	< 0.5	7.2
BWT-12-297	95	< 5	104	670	5.7	< 1	8	60	13	2.91	5	< 1	< 5	< 1	1.82	< 20	84	4.4	12.3	< 3	< 0.02	< 0.05	2.5	8.1
BWT-12-467	< 2	< 5	7.6	610	4.7	< 1	10	61	4	3.3	5	< 1	< 5	< 1	2.18	< 20	69	1.4	11.3	< 3	< 0.02	< 0.05	< 0.5	5
BWT-12-468	< 2	< 5	9.4	740	4.4	< 1	11	77	7	3.91	7	< 1	< 5	< 1	2.23	< 20	81	1.8	12.1	< 3	< 0.02	< 0.05	< 0.5	6.7
BWT-12-469	< 2	< 5	5.1	470	2.9	< 1	9	56	6	2.94	5	< 1	< 5	< 1	2.32	< 20	89	1.6	10.3	< 3	< 0.02	< 0.05	< 0.5	5.7
BWT-12-470	< 2	< 5	9.2	740	< 0.5	< 1	6	45	3	2.94	5	< 1	< 5	< 1	2.14	< 20	< 15	1.6	8.8	< 3	< 0.02	< 0.05	2.3	5.2
BWT-12-471	< 2	< 5	4.8	780	< 0.5	3	5	36	3	2.62	6	< 1	< 5	< 1	2.27	< 20	48	1.4	9.4	< 3	< 0.02	< 0.05	< 0.5	5.1
BWT-12-472	< 2	< 5	5.1	720	6.4	< 1	8	41	3	2.61	5	< 1	< 5	< 1	2.27	< 20	< 15	0.9	10.7	< 3	< 0.02	< 0.05	< 0.5	6.1
BWT-12-473	< 2	< 5	9.3	660	6.7	3	10	54	3	3.4	8	< 1	< 5	< 1	2.19	< 20	< 15	1.5	11.6	< 3	< 0.02	< 0.05	< 0.5	6
BWT-12-474	< 2	< 5	6.9	530	6.1	< 1	8	53	3	2.67	5	< 1	< 5	6	2.15	< 20	80	1.1	10.3	< 3	< 0.02	< 0.05	< 0.5	6.5
BWT-12-475	4	< 5	5.5	560	4.5	< 1	8	51	< 1	2.35	5	< 1	< 5	< 1	2.26	< 20	63	1.1	10.2	< 3	< 0.02	< 0.05	< 0.5	5.4
BWT-12-476	< 2	< 5	5.4	570	2.9	< 1	6	44	3	1.75	5	< 1	< 5	< 1	2.27	< 20	63	1.2	8.9	< 3	< 0.02	< 0.05	< 0.5	4.8
BWT-12-477	< 2	< 5	6	690	3.7	< 1	6	47	3	2.35	5	< 1	< 5	< 1	2.29	< 20	< 15	1.3	8.9	< 3	< 0.02	< 0.05	< 0.5	4.6
BWT-12-478	< 2	< 5	6.5	770	< 0.5	< 1	7	60	2	2.97	5	< 1	< 5	< 1	2.3	< 20	97	1.1	9.6	< 3	< 0.02	< 0.05	< 0.5	5.5
BWT-12-479	< 2	< 5	5.1	800	< 0.5	< 1	9	53	5	2.68	5	< 1	< 5	< 1	2.41	< 20	91	1.3	11.3	< 3	< 0.02	< 0.05	2	5.5
BWT-12-480	< 2	< 5	6.2	860	< 0.5	2	6	43	5	2.79	5	< 1	< 5	< 1	2.06	< 20	89	1.3	8.6	< 3	< 0.02	< 0.05	< 0.5	5.8
BWT-12-481	< 2	< 5	6.1	720	5.1	2	7	42	8	2.64	4	< 1	< 5	< 1	2.13	< 20	70	1.3	8.1	< 3	< 0.02	< 0.05	< 0.5	6.1
BWT-12-482	< 2	< 5	6	660	4.7	< 1	9	47	5	2.63	5	< 1	< 5	< 1	2.19	< 20	87	1.6	8.6	< 3	< 0.02	< 0.05	< 0.5	6.2
BWT-12-483	< 2	< 5	7.1	750	5.7	< 1	7	43	6	2.91	5	< 1	< 5	< 1	1.98	< 20	119	1.5	10.7	< 3	< 0.02	< 0.05	2.1	6
BWT-12-484	< 2	< 5	5.7	620	< 0.5	3	7	42	4	2.46	4	< 1	< 5	< 1	2.26	< 20	136	1.2	9.5	< 3	< 0.02	< 0.05	< 0.5	5
BWT-12-485	< 2	< 5	8.3	900	9.5	< 1	10	72	8	3.17	6	< 1	< 5	< 1	2.48	< 20	< 15	2.1	14.8	< 3	< 0.02	< 0.05	< 0.5	7.1
BWT-12-486	< 2	< 5	7.3	690	< 0.5	< 1	8	46	5	2.9	4	< 1	< 5	< 1	2.29	< 20	97	1.5	9.3	< 3	< 0.02	< 0.05	< 0.5	6.5
BWT-12-487	< 2	< 5	8.4	740	< 0.5	4	9	53	4	3.03	5	< 1	< 5	< 1	2.25	< 20	67	1.4	9.9	< 3	< 0.02	< 0.05	< 0.5	6.2
BWT-12-488	< 2	< 5	6.5	520	< 0.5	2	7	43	6	2.85	5	< 1	< 5	< 1	2.24	< 20	94	1.3	9.5	< 3	< 0.02	< 0.05	< 0.5	7.7
BWT-12-489	< 2	< 5	5.3	630	4.8	< 1	5	47	5	2.57	4	< 1	< 5	< 1	2.08	< 20	133	1.3	8.1	< 3	< 0.02	< 0.05	< 0.5	8.1
BWT-12-490	< 2	< 5	6.1	780	< 0.5	2	7	59	6	3.07	5	< 1	< 5	< 1	2.21	< 20	48	1.5	9.3	< 3	< 0.02	< 0.05	< 0.5	7.6
BWT-12-491	< 2	< 5	3.7	670	< 0.5	< 1	7	56	5	2.8	5	< 1	< 5	< 1	2.24	< 20	99	1.1	8.6	< 3	< 0.02	< 0.05	< 0.5	5.8
BWT-12-492	< 2	< 5	4.6	520	< 0.5	2	8	40	2	2.89	4	< 1	< 5	< 1	2.39	< 20	< 15	0.8	8.4	< 3	< 0.02	< 0.05	< 0.5	7.3
BWT-12-493	< 2	< 5	9.5	510	3.9	< 1	8	54	2	2.94	5	< 1	< 5	10	2.24	< 20	75	1.4	8.7	< 3	< 0.02	< 0.05	2.4	7
BWT-12-494	< 2	< 5	14.2	480	4.3	< 1	6	37	14	2.53	4	< 1	< 5	< 1	1.78	< 20	61	1.6	7	< 3	< 0.02	< 0.05	< 0.5	9.9
BWT-12-495	< 2	< 5	3.7	360	6.9	2	6	35	5	2.15	5	< 1	< 5	< 1	2.07	< 20	80	1	7.5	< 3	< 0.02	0.11	< 0.5	7.5
BWT-12-496	< 2	< 5	19.6	450	5.9	< 1	9	47	6	3.33	5	< 1	< 5	< 1	2.12	< 20	63	1.3	9.6	< 3	< 0.02	< 0.05	< 0.5	5.8

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.5	1	50	0.5	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BWT-12-280	1.9	< 1	110	17.1	30	22	4	0.9	< 0.5	1.5	0.3	30	< 0.2	< 0.5	32	274	< 2	16	10	83	0.019
BWT-12-281	2.2	< 1	90	18.7	36	28	4	0.8	< 0.5	1.7	0.33	30.6	< 0.2	< 0.5	24	331	< 2	16	8	57	0.006
BWT-12-282	< 0.5	< 1	210	32.7	61	43	8	1.5	0.8	3.2	0.42	9.9	< 0.2	0.6	89	643	2	22	9	80	0.007
BWT-12-283	4.9	< 1	110	21.1	38	20	5.3	1	< 0.5	2.1	0.39	30.1	< 0.2	< 0.5	19	328	< 2	8	7	44	0.006
BWT-12-284	2.6	< 1	140	25.4	47	29	6	1	< 0.5	1.6	0.27	26.3	< 0.2	0.6	26	681	< 2	17	33	98	0.003
BWT-12-285	2.6	< 1	290	25.6	43	41	4.7	0.9	< 0.5	2	0.34	22.6	0.7	0.9	22	584	< 2	20	60	270	0.008
BWT-12-286	3.3	6	160	25	47	34	5.1	1	< 0.5	2	0.36	20.3	0.5	0.7	31	870	2	25	30	141	0.004
BWT-12-287	< 0.5	< 1	150	23.6	41	42	6.7	1	< 0.5	2.2	0.37	14.8	< 0.2	0.5	25	435	< 2	30	13	78	0.004
BWT-12-288	4.5	< 1	140	22.6	43	20	4.5	1.2	< 0.5	2.1	0.38	12.1	< 0.2	0.6	23	378	< 2	24	14	77	0.005
BWT-12-289	1.6	< 1	130	20.6	38	21	4.3	0.7	< 0.5	1.8	0.31	30.9	< 0.2	< 0.5	7	317	< 2	8	21	63	0.006
BWT-12-290	2.6	< 1	< 50	20.9	40	33	4.4	0.8	< 0.5	1.9	0.34	30	< 0.2	< 0.5	7	323	< 2	10	17	56	0.006
BWT-12-291	2.7	< 1	180	22.3	41	30	4.8	0.7	< 0.5	1.8	0.31	29.7	< 0.2	< 0.5	12	408	< 2	16	21	60	0.006
BWT-12-292	4	< 1	90	18.8	34	21	3.8	0.8	< 0.5	1.8	0.27	20.1	< 0.2	< 0.5	18	306	< 2	31	14	104	0.005
BWT-12-293	2.8	< 1	200	25.8	49	41	5.1	0.8	< 0.5	1.8	0.29	26.6	< 0.2	0.5	23	385	< 2	30	14	92	0.004
BWT-12-294	3.4	< 1	< 50	23.1	51	39	5.5	1.3	< 0.5	2.2	0.39	21.7	< 0.2	0.8	30	893	< 2	46	16	97	0.009
BWT-12-295	4.3	< 1	50	19.2	32	32	3.5	0.7	< 0.5	1.7	0.29	30	< 0.2	< 0.5	8	239	< 2	13	20	71	0.005
BWT-12-296	< 0.5	< 1	< 50	22.5	40	17	4.3	0.9	< 0.5	1.7	0.29	30.2	< 0.2	< 0.5	6	250	< 2	8	19	41	0.004
BWT-12-297	4.8	< 1	560	31.1	54	53	8.1	1.4	< 0.5	2.3	0.45	25.5	2.3	3.7	64	958	2	21	502	603	0.006
BWT-12-467	2.4	< 1	< 50	23.4	64	13	4	0.9	< 0.5	1.7	0.32	30.2	< 0.2	< 0.5	16	391	< 2	12	6	50	0.003
BWT-12-468	2.2	< 1	< 50	28.6	87	22	4.9	1.1	< 0.5	2	0.42	30.2	< 0.2	< 0.5	17	754	< 2	12	10	50	0.005
BWT-12-469	2.8	< 1	150	23.8	62	10	4.1	0.9	< 0.5	1.6	0.32	30.8	< 0.2	< 0.5	15	461	< 2	9	9	42	0.004
BWT-12-470	2.9	< 1	< 50	20.2	50	12	3.2	0.7	< 0.5	1.4	0.29	30	< 0.2	< 0.5	10	295	< 2	7	4	39	0.003
BWT-12-471	3.5	< 1	< 50	22.9	57	< 5	3.7	0.9	0.9	1.6	0.31	30.6	< 0.2	< 0.5	8	263	< 2	6	6	28	0.003
BWT-12-472	4.9	< 1	150	23.9	56	12	4.3	1	< 0.5	1.8	0.3	30.1	< 0.2	< 0.5	9	324	< 2	8	7	46	0.007
BWT-12-473	3.2	< 1	< 50	26	70	20	5	0.9	< 0.5	2.2	0.42	24.9	< 0.2	< 0.5	12	540	< 2	8	8	43	0.006
BWT-12-474	8.6	< 1	< 50	25.5	55	21	4.8	1.1	< 0.5	1.9	0.28	25	< 0.2	< 0.5	10	354	< 2	8	9	45	0.009
BWT-12-475	4.6	< 1	< 50	24.9	52	18	4.6	1	< 0.5	1.9	0.35	30.6	< 0.2	< 0.5	11	333	< 2	6	6	33	0.008
BWT-12-476	3	< 1	< 50	20.5	43	17	3.4	0.9	< 0.5	1.5	0.31	31.6	< 0.2	< 0.5	4	245	< 2	4	9	28	0.005
BWT-12-477	2.8	< 1	< 50	20.5	56	18	3.5	0.8	< 0.5	1.5	0.27	31.6	< 0.2	< 0.5	8	251	< 2	5	8	28	0.005
BWT-12-478	3.9	< 1	< 50	21.8	60	11	3.6	0.9	< 0.5	1.6	0.26	30.3	< 0.2	< 0.5	9	320	< 2	6	6	35	0.003
BWT-12-479	3.9	< 1	< 50	26	57	< 5	4.6	1.1	< 0.5	1.6	0.37	30.2	< 0.2	< 0.5	9	365	< 2	9	11	47	0.006
BWT-12-480	3.2	< 1	< 50	19.6	45	10	3.3	0.7	< 0.5	1.4	0.21	30.5	< 0.2	< 0.5	11	301	< 2	8	8	46	0.004
BWT-12-481	6.3	< 1	120	19.5	39	16	2.9	< 0.2	< 0.5	1.5	0.26	30.1	< 0.2	< 0.5	7	230	< 2	6	11	40	0.007
BWT-12-482	3.1	< 1	< 50	22.8	64	15	4	0.9	< 0.5	1.7	0.3	29.7	< 0.2	< 0.5	10	348	< 2	9	9	41	0.004
BWT-12-483	5.4	< 1	< 50	28.6	59	15	5.9	1.2	< 0.5	2	0.39	30.2	< 0.2	< 0.5	24	460	< 2	9	8	47	0.012
BWT-12-484	2.8	< 1	< 50	19.7	48	13	3.8	0.7	< 0.5	1.5	0.35	30.1	< 0.2	< 0.5	10	370	< 2	8	9	41	0.005
BWT-12-485	5	< 1	< 50	26.7	55	< 5	5.8	1.1	< 0.5	2.4	0.33	16.7	< 0.2	< 0.5	14	376	< 2	13	11	61	0.009
BWT-12-486	5.4	< 1	< 50	22.2	43	13	4	0.9	< 0.5	1.7	0.29	29.8	< 0.2	< 0.5	8	443	< 2	8	9	55	0.006
BWT-12-487	3.7	< 1	170	21.3	62	9	3.8	0.9	< 0.5	1.5	0.35	31.3	< 0.2	< 0.5	11	543	< 2	8	9	60	0.004
BWT-12-488	4.5	< 1	< 50	21.2	41	14	4	0.7	< 0.5	1.6	0.29	30.3	< 0.2	< 0.5	11	560	< 2	10	9	50	0.004
BWT-12-489	2.2	< 1	170	19.8	39	17	3.3	0.6	1	1.2	0.23	30	< 0.2	< 0.5	9	383	< 2	8	9	55	0.004
BWT-12-490	3.1	< 1	< 50	22.3	64	15	3.7	0.9	< 0.5	1.6	0.27	30.6	< 0.2	< 0.5	12	465	< 2	8	19	57	0.003
BWT-12-491	2.3	< 1	160	20.1	55	15	3.3	0.6	< 0.5	1.5	0.23	30.2	< 0.2	< 0.5	9	336	< 2	8	7	39	0.003
BWT-12-492	2.2	< 1	< 50	22.6	52	16	3.4	0.7	< 0.5	1.4	0.23	30.1	< 0.2	< 0.5	8	307	< 2	7	9	44	0.002
BWT-12-493	2.9	< 1	90	23.2	56	19	3.8	0.7	< 0.5	1.6	0.28	31.4	< 0.2	< 0.5	8	513	< 2	8	11	47	0.007
BWT-12-494	4	< 1	180	20.7	49	9	2.9	0.5	< 0.5	1.1	0.24	29	< 0.2	< 0.5	11	337	< 2	7	14	61	0.005
BWT-12-495	2.1	< 1	< 50	21.1	50	13	3.3	0.6	< 0.5	1.2	0.26	30.8	< 0.2	< 0.5	7	309	< 2	7	9	44	0.01
BWT-12-496	3.3	< 1	< 50	20.2	43	8	3.4	0.8	< 0.5	1.4	0.28	31.2	< 0.2	< 0.5	12	332	< 2	10	9	58	0.01

Quality Analysis ... *Innovative Technologies*

Date Submitted: 15-Jul-13
Invoice No.: A13-08055
Invoice Date: 30-Jul-13
Your Reference: CPRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

73 Crushed Rock samples were submitted for analysis.

The following analytical packages were requested: Code 1D INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)
Code 4C (11+) Whole Rock Analysis-XRF

REPORT **A13-08055**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB 266 LAB 266 Accrédité CCN

ACTIVATION LABORATORIES LTD.

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Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-01-11	< 5	< 5	20	< 100	< 1	< 1	13	< 10	10	3.59	< 1	< 1	< 5	< 5	2.18	< 50	< 30	< 0.2	18.8	< 5	< 0.05	< 0.1	< 1	3.3
CPRC-13-02-13	< 5	< 5	63	< 100	< 1	< 1	< 5	50	< 2	1.83	< 1	< 1	< 5	< 5	2.01	< 50	< 30	1.8	11.3	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-03-23	< 5	< 5	55	< 100	< 1	< 1	9	< 10	< 2	2.45	3	< 1	< 5	< 5	1.56	< 50	< 30	1.6	14.3	< 5	< 0.05	< 0.1	< 1	3.4
CPRC-13-04-20	< 5	< 5	54	< 100	< 1	< 1	30	130	< 2	13.5	< 1	< 1	< 5	< 5	0.15	< 50	< 30	2.5	23.9	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-05-31	< 5	< 5	6	300	< 1	< 1	< 5	< 10	5	1.46	3	< 1	< 5	< 5	1.26	< 50	< 30	1.4	11.6	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-06-18	< 5	< 5	64	< 100	< 1	< 1	24	< 10	7	4.32	3	< 1	< 5	< 5	1.76	< 50	< 30	2.3	15.8	< 5	< 0.05	< 0.1	< 1	3.5
CPRC-13-07-22	< 5	< 5	38	800	< 1	< 1	9	< 10	5	4.14	5	< 1	< 5	< 5	2.04	< 50	< 30	2.3	13.3	< 5	< 0.05	< 0.1	< 1	1.8
CPRC-13-08-16	< 5	< 5	44	300	< 1	< 1	10	< 10	< 2	4.00	4	< 1	< 5	< 5	0.15	< 50	< 30	< 0.2	22.1	< 5	< 0.05	< 0.1	< 1	1.9
CPRC-13-09-18	< 5	< 5	10	< 100	< 1	< 1	< 5	< 10	< 2	1.37	3	< 1	< 5	< 5	3.53	< 50	150	< 0.2	9.4	< 5	< 0.05	< 0.1	< 1	4.2
CPRC-13-10-04	< 5	< 5	< 2	< 100	< 1	4	49	220	< 2	8.91	3	< 1	< 5	< 5	2.02	< 50	< 30	< 0.2	18.7	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-11-11	< 5	< 5	11	800	< 1	< 1	< 5	< 10	< 2	1.74	3	< 1	< 5	< 5	2.63	< 50	100	1.1	4.5	< 5	< 0.05	< 0.1	< 1	16.6
CPRC-13-12-03	< 5	< 5	11	< 100	< 1	5	20	< 10	< 2	4.36	3	< 1	< 5	< 5	2.57	< 50	< 30	1.5	15.1	< 5	< 0.05	< 0.1	< 1	1.2
CPRC-13-13-02	55	< 5	7	800	< 1	< 1	8	20	13	3.62	3	< 1	< 5	< 5	2.02	< 50	< 30	1.2	16.8	< 5	< 0.05	< 0.1	< 1	9.4
CPRC-13-13-03	< 5	< 5	16	1200	< 1	< 1	11	< 10	< 2	3.26	4	< 1	< 5	< 5	2.92	< 50	< 30	2.0	18.9	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-14-03	< 5	< 5	< 2	< 100	< 1	< 1	< 5	20	12	4.07	2	< 1	< 5	< 5	1.90	< 50	< 30	0.9	17.0	< 5	< 0.05	< 0.1	< 1	8.1
CPRC-13-14-04	< 5	< 5	27	4500	< 1	10	6	< 10	< 2	2.48	2	< 1	< 5	< 5	0.14	< 50	< 30	11.2	9.7	< 5	< 0.05	< 0.1	< 1	1.2
CPRC-13-15-03	< 5	< 5	7	< 100	< 1	< 1	< 5	40	< 2	1.90	< 1	< 1	< 5	< 5	3.21	< 50	< 30	2.4	5.2	< 5	< 0.05	< 0.1	< 1	4.0
CPRC-13-16-07	34	< 5	23	900	< 1	< 1	< 5	10	< 2	1.33	3	< 1	< 5	< 5	1.24	< 50	120	3.9	2.8	< 5	< 0.05	< 0.1	< 1	5.1
CPRC-13-17-06	< 5	< 5	7	1200	< 1	< 1	< 5	20	13	1.70	3	< 1	< 5	< 5	1.96	< 50	290	3.4	3.7	< 5	< 0.05	< 0.1	< 1	5.4
CPRC-13-18-07	< 5	< 5	< 2	900	< 1	< 1	< 5	20	< 2	0.62	< 1	< 1	< 5	< 5	2.63	< 50	190	< 0.2	1.6	< 5	< 0.05	< 0.1	< 1	5.2
CPRC-13-19-04	< 5	< 5	5	400	< 1	1	< 5	40	< 2	1.10	< 1	< 1	< 5	< 5	2.78	< 50	< 30	1.4	1.5	< 5	< 0.05	< 0.1	< 1	5.8
CPRC-13-20-12	< 5	< 5	< 2	900	< 1	< 1	< 5	30	6	1.68	< 1	< 1	< 5	< 5	2.71	< 50	280	0.6	4.8	< 5	< 0.05	0.2	< 1	10.1
CPRC-13-21-08	< 5	< 5	< 2	1100	< 1	< 1	< 5	20	< 2	2.05	5	< 1	< 5	< 5	0.78	< 50	150	< 0.2	4.3	< 5	< 0.05	< 0.1	< 1	15.5
CPRC-13-22-02	< 5	< 5	< 2	500	< 1	5	45	240	< 2	9.29	5	< 1	< 5	< 5	2.16	< 50	< 30	< 0.2	21.0	< 5	< 0.05	< 0.1	< 1	3.9
CPRC-13-23-03	< 5	< 5	< 2	800	< 1	< 1	< 5	20	3	1.14	4	< 1	< 5	< 5	1.40	< 50	150	< 0.2	2.3	< 5	< 0.05	< 0.1	< 1	8.1
CPRC-13-24-10	< 5	< 5	7	200	< 1	< 1	< 5	10	9	2.21	5	< 1	< 5	< 5	0.12	< 50	< 30	2.8	5.0	< 5	< 0.05	< 0.1	< 1	15.2
CPRC-13-25-02	< 5	< 5	< 2	1100	< 1	< 1	< 5	10	< 2	0.71	< 1	< 1	< 5	14	2.33	< 50	60	0.6	1.2	< 5	< 0.05	< 0.1	< 1	9.4
CPRC-13-26-02	< 5	< 5	< 2	< 100	< 1	5	44	230	< 2	9.22	5	< 1	< 5	< 5	2.20	< 50	< 30	< 0.2	20.3	< 5	< 0.05	< 0.1	4	1.2
CPRC-13-27-03	< 5	< 5	< 2	< 100	< 1	4	44	210	< 2	8.07	6	< 1	< 5	< 5	2.08	< 50	< 30	< 0.2	18.5	< 5	< 0.05	< 0.1	< 1	< 0.5
CPRC-13-28-03	< 5	< 5	< 2	700	< 1	< 1	< 5	10	7	1.31	4	< 1	< 5	< 5	1.56	< 50	180	0.7	3.4	< 5	< 0.05	< 0.1	< 1	14.7
CPRC-13-29-02	< 5	< 5	< 2	1000	< 1	< 1	< 5	20	< 2	0.72	4	< 1	< 5	< 5	2.93	< 50	110	< 0.2	2.3	< 5	< 0.05	< 0.1	< 1	12.5
CPRC-13-30-02	< 5	< 5	< 2	700	< 1	< 1	< 5	20	< 2	0.83	< 1	< 1	< 5	< 5	2.29	< 50	170	< 0.2	1.0	< 5	< 0.05	0.2	< 1	8.6
CPRC-13-31-14	< 5	< 5	< 2	700	< 1	< 1	< 5	30	< 2	2.44	3	< 1	< 5	< 5	2.39	< 50	110	< 0.2	7.9	< 5	< 0.05	< 0.1	< 1	11.3
CPRC-13-32-23	< 5	< 5	9	700	< 1	5	29	70	< 2	5.89	2	< 1	< 5	< 5	2.36	< 50	< 30	1.0	21.8	< 5	< 0.05	0.2	< 1	2.5
CPRC-13-32-24	< 5	< 5	< 2	600	< 1	< 1	17	30	< 2	4.08	3	< 1	< 5	< 5	2.64	< 50	210	1.2	10.8	< 5	< 0.05	0.1	< 1	8.4
CPRC-13-33-22	< 5	< 5	< 2	900	< 1	< 1	16	40	< 2	3.98	4	< 1	< 5	< 5	2.63	< 50	130	0.6	12.8	< 5	< 0.05	< 0.1	< 1	7.6
CPRC-13-34-14	< 5	< 5	3	600	< 1	4	8	< 10	13	2.89	4	< 1	< 5	< 5	2.41	< 50	150	1.7	7.8	< 5	< 0.05	< 0.1	< 1	10.0
CPRC-13-35-09	< 5	< 5	43	< 100	< 1	2	5	30	19	2.28	4	< 1	< 5	< 5	0.10	< 50	120	65.2	10.2	< 5	< 0.05	< 0.1	< 1	6.2
CPRC-13-36-07	< 5	< 5	6	< 100	< 1	< 1	15	10	< 2	3.73	5	< 1	< 5	< 5	2.50	< 50	70	1.5	11.7	< 5	< 0.05	< 0.1	< 1	9.1
CPRC-13-37-07	< 5	< 5	9	600	< 1	3	26	50	6	6.78	2	< 1	< 5	< 5	1.94	< 50	< 30	1.9	28.2	< 5	< 0.05	< 0.1	< 1	2.4
CPRC-13-38-08	< 5	< 5	15	800	< 1	< 1	< 5	< 10	4	1.85	5	< 1	< 5	5	0.81	< 50	130	1.6	6.6	< 5	< 0.05	< 0.1	< 1	12.4
CPRC-13-39-06	< 5	< 5	11	1000	< 1	< 1	6	< 10	< 2	5.21	4	< 1	< 5	< 5	3.79	< 50	< 30	0.8	16.7	< 5	< 0.05	< 0.1	< 1	5.9
CPRC-13-40-07	< 5	< 5	< 2	700	< 1	< 1	< 5	< 10	< 2	1.14	3	< 1	< 5	< 5	2.94	< 50	< 30	< 0.2	2.5	< 5	< 0.05	< 0.1	< 1	4.6
CPRC-13-41-02	< 5	< 5	< 2	500	< 1	< 1	< 5	< 10	< 2	0.83	3	< 1	< 5	< 5	2.81	< 50	110	< 0.2	1.8	< 5	< 0.05	< 0.1	< 1	8.8
CPRC-13-42-02	< 5	< 5	< 2	800	< 1	< 1	< 5	< 10	< 2	0.83	< 1	< 1	< 5	< 5	2.30	< 50	120	0.8	1.5	< 5	< 0.05	< 0.1	< 1	10.3
CPRC-13-43-02	< 5	< 5	< 2	1000	< 1	< 1	< 5	< 10	< 2	0.65	< 1	< 1	< 5	< 5	2.47	< 50	150	< 0.2	1.3	< 5	< 0.05	< 0.1	< 1	9.2
CPRC-13-44-06	< 5	< 5	< 2	300	< 1	< 1	< 5	< 10	5	0.81	2	< 1	< 5	< 5	2.32	< 50	100	< 0.2	1.7	< 5	< 0.05	< 0.1	< 1	7.6
CPRC-13-45-02	< 5	< 5	< 2	1000	< 1	< 1	< 5	< 10	6	1.09	2	1	< 5	< 5	2.49	< 50	110	< 0.2	1.9	< 5	< 0.05	< 0.1	< 1	7.7
CPRC-13-46-02	< 5	< 5	< 2	1000	< 1	< 1	< 5	30	< 2	1.05	3	< 1	< 5	9	2.57	< 50	160	< 0.2	2.1	< 5	< 0.05	< 0.1	< 1	9.0
CPRC-13-47-01	< 5	< 5	< 2	1700	< 1	< 1	< 5	10	< 2	1.23	2	< 1	< 5	< 5	2.58	< 50	150	< 0.2	1.7	< 5	< 0.05	< 0.1	< 1	12.9
CPRC-13-48-05	< 5	< 5	< 2	1600	< 1	< 1	< 5	< 10	< 2	1.08	3	< 1	< 5	< 5	2.00	< 50	280	< 0.2	1.5	< 5	< 0.05	< 0.1	< 1	8.7
CPRC-13-49-08	< 5	< 5	< 2	300	< 1	< 1	< 5	< 10	6	0.53	< 1	< 1	< 5	< 5	1.94	< 50	110	0.7	1.5	< 5	< 0.05	< 0.1	< 1	6.7

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Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-50-02	< 5	< 5	< 2	1000	< 1	< 1	5	20	3	1.76	3	< 1	< 5	< 5	0.67	< 50	210	< 0.2	1.9	< 5	< 0.05	< 0.1	< 1	12.8
CPRC-13-51-10	< 5	< 5	< 2	600	< 1	< 1	< 5	< 10	< 2	1.85	4	< 1	< 5	< 5	1.95	< 50	80	0.7	4.0	< 5	< 0.05	< 0.1	< 1	7.6
CPRC-13-52-06	< 5	< 5	5	800	< 1	< 1	< 5	< 10	< 2	1.12	< 1	< 1	< 5	< 5	2.94	< 50	90	< 0.2	2.1	< 5	< 0.05	< 0.1	< 1	3.4
CPRC-13-53-06	< 5	< 5	12	700	< 1	< 1	< 5	< 10	14	2.54	5	< 1	< 5	< 5	1.87	< 50	70	2.0	7.9	< 5	< 0.05	< 0.1	< 1	8.4
CPRC-13-54-04	< 5	< 5	< 2	500	< 1	< 1	25	90	13	6.19	3	< 1	< 5	< 5	4.01	< 50	120	< 0.2	25.2	< 5	< 0.05	< 0.1	< 1	5.6
CPRC-13-55-11	< 5	< 5	11	500	< 1	< 1	9	140	12	3.86	< 1	< 1	< 5	< 5	2.23	< 50	< 30	2.5	23.6	< 5	< 0.05	< 0.1	< 1	3.0
CPRC-13-57-06	< 5	< 5	< 2	1400	< 1	< 1	7	30	< 2	1.55	2	< 1	< 5	< 5	3.15	< 50	110	< 0.2	2.9	< 5	< 0.05	0.1	< 1	7.1
CPRC-13-58-04	< 5	< 5	< 2	1200	< 1	< 1	< 5	20	3	1.54	2	< 1	< 5	< 5	2.91	< 50	70	< 0.2	2.8	< 5	< 0.05	< 0.1	< 1	10.8
CPRC-13-59-06	< 5	< 5	< 2	1400	< 1	< 1	< 5	10	< 2	1.17	3	< 1	< 5	< 5	2.63	< 50	200	0.3	2.0	< 5	< 0.05	< 0.1	< 1	8.4
CPRC-13-60-02	< 5	< 5	< 2	1700	< 1	< 1	< 5	< 10	< 2	0.89	1	< 1	< 5	< 5	2.27	< 50	130	< 0.2	1.1	< 5	< 0.05	< 0.1	< 1	4.7
CPRC-13-61-05	< 5	< 5	5	900	< 1	< 1	< 5	< 10	7	1.41	5	< 1	< 5	< 5	0.28	< 50	210	< 0.2	4.4	< 5	< 0.05	< 0.1	< 1	20.0
CPRC-13-61-06	< 5	< 5	4	900	< 1	< 1	8	< 10	3	1.76	< 1	< 1	< 5	< 5	0.28	< 50	210	< 0.2	4.6	< 5	< 0.05	< 0.1	< 1	19.7
CPRC-13-62-02	< 5	< 5	2	1400	< 1	< 1	6	20	5	1.04	3	< 1	< 5	< 5	0.53	< 50	180	< 0.2	3.6	< 5	< 0.05	< 0.1	< 1	18.7
CPRC-13-63-06	< 5	< 5	3	900	< 1	< 1	6	< 10	7	2.53	5	< 1	< 5	< 5	0.48	< 50	150	< 0.2	4.3	< 5	< 0.05	< 0.1	< 1	16.4
CPRC-13-64-01	< 5	< 5	< 2	1100	< 1	< 1	< 5	30	3	1.68	2	< 1	< 5	< 5	1.02	< 50	160	< 0.2	1.8	< 5	< 0.05	< 0.1	< 1	14.0
CPRC-13-65-15	< 5	< 5	9	400	< 1	< 1	< 5	10	24	1.38	2	< 1	< 5	< 5	0.15	< 50	310	11.7	3.7	< 5	< 0.05	< 0.1	< 1	16.5
CPRC-13-66-02	< 5	< 5	< 2	500	< 1	7	56	270	< 2	9.23	6	< 1	< 5	< 5	2.53	< 50	< 30	< 0.2	16.5	< 5	< 0.05	0.2	< 1	4.2
CPRC-13-67-02	< 5	< 5	< 2	< 100	< 1	2	44	190	< 2	8.51	4	< 1	< 5	< 5	2.50	< 50	< 30	< 0.2	15.7	< 5	< 0.05	< 0.1	< 1	5.7
CPRC-13-68-04	< 5	< 5	< 2	< 100	< 1	4	40	200	< 2	8.93	4	< 1	< 5	< 5	2.76	< 50	< 30	< 0.2	16.8	< 5	< 0.05	0.2	< 1	5.3
CPRC-13-68-05	< 5	< 5	128	< 100	< 1	< 1	15	60	2	5.50	14	< 1	< 5	< 5	0.10	< 50	< 30	2.4	10.8	< 5	< 0.05	< 0.1	< 1	13.6
CPRC-13-69-15	< 5	< 5	< 2	1200	< 1	< 1	< 5	< 10	2	1.20	< 1	< 1	< 5	< 5	2.34	< 50	< 30	< 0.2	2.2	< 5	< 0.05	< 0.1	< 1	7.6

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
CPRC-13-01-11	< 0.5	< 4	< 50	14	34	26	5.0	1.1	< 0.5	3.0	0.36	19.8	< 0.2	< 0.5	63	305	2	5	< 2	70	0.336	63.29	17.63	4.87
CPRC-13-02-13	< 0.5	< 4	< 50	12	36	< 5	3.6	< 0.2	< 0.5	1.4	0.14	23.3	0.3	< 0.5	55	435	5	10	5	38	0.153	64.67	14.89	3.30
CPRC-13-03-23	4.0	< 4	< 50	13	37	< 5	4.0	0.4	< 0.5	2.7	0.20	21.2	< 0.2	< 0.5	45	693	< 2	6	< 2	71	0.005	60.80	16.10	4.04
CPRC-13-04-20	< 0.5	< 4	< 50	30	82	48	9.2	2.3	< 0.5	2.1	0.08	22.7	< 0.2	< 0.5	145	1260	3	70	< 2	88	0.003	41.17	16.36	22.00
CPRC-13-05-31	< 0.5	< 4	< 50	8	29	< 5	3.2	0.7	< 0.5	3.0	0.22	24.9	< 0.2	< 0.5	6	212	< 2	1	3	37	0.115	74.46	13.11	2.33
CPRC-13-06-18	3.9	< 4	< 50	12	27	< 5	3.0	0.2	< 0.5	1.9	0.17	22.4	< 0.2	< 0.5	55	315	7	8	20	61	3.997	57.09	16.00	6.70
CPRC-13-07-22	< 0.5	< 4	< 50	11	30	< 5	3.6	< 0.2	< 0.5	2.7	0.26	22.2	< 0.2	< 0.5	39	207	< 2	6	< 2	87	0.403	60.61	19.22	6.26
CPRC-13-08-16	< 0.5	< 4	< 50	15	35	22	5.0	1.6	< 0.5	4.6	0.35	24.6	< 0.2	< 0.5	27	418	< 2	6	< 2	132	0.003	59.70	15.61	6.58
CPRC-13-09-18	< 0.5	< 4	< 50	6	14	< 5	2.7	< 0.2	< 0.5	2.7	0.19	22.1	0.2	< 0.5	18	175	< 2	3	3	36	0.004	68.73	16.57	1.94
CPRC-13-10-04	< 0.5	< 4	< 50	28	83	< 5	8.1	2.4	< 0.5	2.2	< 0.05	26.7	< 0.2	< 0.5	47	1040	< 2	159	< 2	120	0.003	46.44	13.76	13.39
CPRC-13-11-11	3.1	< 4	< 50	31	57	36	4.1	< 0.2	< 0.5	1.4	0.14	22.8	< 0.2	< 0.5	7	605	< 2	< 1	12	149	0.002	69.12	16.16	2.32
CPRC-13-12-03	< 0.5	< 4	< 50	7	< 3	< 5	2.0	0.4	< 0.5	1.8	0.07	27.8	0.3	< 0.5	34	336	< 2	3	10	34	0.201	54.14	18.20	6.16
CPRC-13-13-02	3.1	< 4	< 50	9	22	< 5	2.0	< 0.2	< 0.5	2.4	0.15	24.6	< 0.2	< 0.5	59	309	< 2	5	< 2	34	0.007	64.26	16.12	5.12
CPRC-13-13-03	< 0.5	< 4	< 50	9	27	29	3.4	< 0.2	< 0.5	3.8	0.19	24.8	< 0.2	< 0.5	48	367	< 2	6	5	50	0.156	59.40	18.05	4.50
CPRC-13-14-03	< 0.5	< 4	< 50	15	39	< 5	3.3	0.5	< 0.5	3.0	0.15	22.6	< 0.2	< 0.5	10	478	< 2	6	< 2	56	0.009	62.89	16.12	5.87
CPRC-13-14-04	< 0.5	< 4	230	7	20	< 5	2.1	< 0.2	< 0.5	1.7	< 0.05	25.9	0.3	1.3	16	1110	< 2	1	14	229	0.075	43.32	10.36	3.54
CPRC-13-15-03	< 0.5	< 4	< 50	18	33	26	4.1	< 0.2	< 0.5	2.7	0.21	21.0	0.3	< 0.5	10	569	< 2	3	9	105	0.013	73.63	13.96	2.63
CPRC-13-16-07	< 0.5	< 4	< 50	16	28	29	2.8	< 0.2	< 0.5	2.1	0.13	22.2	< 0.2	< 0.5	11	360	3	1	5	17	0.001	74.49	12.47	2.01
CPRC-13-17-06	3.5	< 4	< 50	25	68	< 5	3.4	0.8	< 0.5	2.1	0.10	24.5	< 0.2	< 0.5	< 1	364	< 2	2	6	43	0.011	68.75	15.41	2.64
CPRC-13-18-07	< 0.5	< 4	< 50	38	78	30	4.9	< 0.2	< 0.5	2.8	0.19	21.6	< 0.2	< 0.5	1	177	< 2	1	< 2	8	< 0.001	73.53	13.89	1.22
CPRC-13-19-04	< 0.5	< 4	< 50	21	47	28	2.6	< 0.2	< 0.5	1.7	0.16	21.6	< 0.2	< 0.5	2	196	< 2	2	< 2	11	< 0.001	74.41	14.11	1.31
CPRC-13-20-12	2.5	< 4	< 50	24	54	26	2.8	0.9	< 0.5	1.5	0.11	24.4	< 0.2	< 0.5	11	279	< 2	3	2	20	< 0.001	65.49	17.46	2.71
CPRC-13-21-08	7.4	9	< 50	28	57	10	3.2	0.8	< 0.5	0.7	0.07	28.0	< 0.2	< 0.5	2	530	< 2	6	3	60	0.001	67.46	16.56	2.83
CPRC-13-22-02	< 0.5	< 4	< 50	34	85	22	9.6	2.5	< 0.5	2.2	< 0.05	25.1	< 0.2	< 0.5	37	931	< 2	115	< 2	102	0.001	46.44	14.70	13.37
CPRC-13-23-03	< 0.5	< 4	< 50	11	20	< 5	0.8	0.5	< 0.5	< 0.2	< 0.05	24.5	< 0.2	< 0.5	2	119	< 2	5	< 2	19	< 0.001	71.17	13.68	1.54
CPRC-13-24-10	6.1	< 4	< 50	24	55	36	3.2	< 0.2	< 0.5	1.8	0.17	22.8	< 0.2	< 0.5	3	293	3	11	19	67	< 0.001	69.11	17.06	2.90
CPRC-13-25-02	< 0.5	< 4	< 50	24	39	10	2.8	< 0.2	< 0.5	< 0.2	< 0.05	19.2	< 0.2	< 0.5	1	84	< 2	1	< 2	7	< 0.001	76.88	12.39	0.91
CPRC-13-26-02	< 0.5	< 4	< 50	32	69	38	9.1	3.5	< 0.5	2.0	< 0.05	28.6	< 0.2	< 0.5	38	911	< 2	117	< 2	114	0.002	46.73	14.06	13.38
CPRC-13-27-03	< 0.5	< 4	< 50	30	67	29	8.2	1.4	< 0.5	1.7	< 0.05	30.6	< 0.2	< 0.5	35	974	< 2	111	< 2	118	0.002	46.81	14.29	12.95
CPRC-13-28-03	6.7	< 4	< 50	32	57	11	4.6	0.5	< 0.5	< 0.2	0.16	22.1	< 0.2	< 0.5	< 1	585	< 2	2	6	36	< 0.001	69.66	14.72	1.62
CPRC-13-29-02	4.6	< 4	< 50	29	48	< 5	3.0	< 0.2	< 0.5	< 0.2	< 0.05	21.5	< 0.2	< 0.5	7	203	< 2	1	< 2	10	< 0.001	74.20	13.95	1.08
CPRC-13-30-02	2.8	< 4	< 50	16	29	24	1.9	< 0.2	< 0.5	< 0.2	< 0.05	19.9	< 0.2	< 0.5	33	52	< 2	< 1	2	7	< 0.001	78.39	12.06	0.82
CPRC-13-31-14	< 0.5	< 4	< 50	34	61	22	4.6	1.3	< 0.5	2.6	0.13	21.1	< 0.2	< 0.5	14	312	< 2	3	2	18	< 0.001	64.52	17.08	3.55
CPRC-13-32-23	3.2	< 4	< 50	18	55	< 5	4.4	1.3	< 0.5	2.6	0.09	24.5	< 0.2	< 0.5	47	807	< 2	19	< 2	84	0.002	53.42	17.02	7.96
CPRC-13-32-24	2.6	< 4	< 50	25	55	29	4.3	1.2	< 0.5	2.1	0.12	24.5	< 0.2	< 0.5	35	541	< 2	8	2	38	0.003	59.16	17.29	5.14
CPRC-13-33-22	< 0.5	< 4	< 50	26	66	21	5.6	0.6	< 0.5	2.2	0.12	23.5	< 0.2	< 0.5	23	424	< 2	6	< 2	25	0.002	59.83	17.55	5.62
CPRC-13-34-14	3.9	< 4	< 50	28	57	23	4.4	0.8	< 0.5	2.3	0.12	24.3	< 0.2	< 0.5	29	402	< 2	3	< 2	27	0.001	62.75	17.35	4.26
CPRC-13-35-09	10.6	< 4	< 50	21	44	21	4.4	0.9	< 0.5	2.5	0.23	23.1	0.7	2.2	67	101	6	9	130	114	0.081	74.64	12.73	3.24
CPRC-13-36-07	< 0.5	< 4	< 50	30	65	29	5.8	0.9	< 0.5	3.0	0.18	25.3	< 0.2	< 0.5	25	484	< 2	6	4	36	0.012	60.65	17.47	5.73
CPRC-13-37-07	< 0.5	< 4	< 50	13	36	< 5	4.4	0.5	< 0.5	2.9	0.12	23.7	< 0.2	< 0.5	56	685	< 2	17	3	56	0.275	52.05	17.65	9.58
CPRC-13-38-08	4.0	< 4	< 50	16	47	21	3.9	< 0.2	< 0.5	3.6	0.26	23.9	< 0.2	< 0.5	34	282	< 2	2	6	30	0.006	73.79	13.45	2.58
CPRC-13-39-06	< 0.5	< 4	< 50	27	65	33	8.3	2.2	< 0.5	5.2	0.34	23.3	< 0.2	< 0.5	19	973	< 2	2	< 2	62	0.010	62.66	15.98	7.15
CPRC-13-40-07	< 0.5	< 4	< 50	13	51	14	2.0	< 0.2	< 0.5	1.4	0.08	22.4	< 0.2	< 0.5	4	348	< 2	< 1	2	16	0.001	72.79	14.24	1.67
CPRC-13-41-02	3.8	< 4	< 50	21	56	13	2.1	< 0.2	< 0.5	< 0.2	0.05	23.7	< 0.2	< 0.5	< 1	129	< 2	< 1	< 2	6	< 0.001	75.41	13.73	0.98
CPRC-13-42-02	2.4	< 4	< 50	24	40	12	2.2	< 0.2	< 0.5	1.0	< 0.05	22.5	< 0.2	< 0.5	5	144	< 2	< 1	< 2	7	< 0.001	76.85	13.00	0.92
CPRC-13-43-02	< 0.5	< 4	< 50	18	33	< 5	1.9	< 0.2	< 0.5	< 0.2	0.07	23.0	< 0.2	< 0.5	1	65	< 2	< 1	< 2	6	< 0.001	76.27	12.79	0.81
CPRC-13-44-06	< 0.5	< 4	< 50	12	21	< 5	1.5	< 0.2	< 0.5	1.0	< 0.05	24.2	< 0.2	< 0.5	4	110	< 2	1	< 2	6	< 0.001	78.18	12.32	0.85
CPRC-13-45-02	< 0.5	< 4	< 50	16	27	< 5	1.6	0.2	< 0.5	< 0.2	0.07	22.6	< 0.2	< 0.5	4	130	< 2	2	< 2	10	0.001	70.52	15.82	1.45
CPRC-13-46-02	3.4	< 4	< 50	14	20	< 5	1.0	< 0.2	< 0.5	< 0.2	< 0.05	23.3	< 0.2	< 0.5	4	148	< 2	4	< 2	14	0.001	71.87	15.02	1.52
CPRC-13-47-01	2.3	< 4	< 50	16	19	< 5	1.2	< 0.2	< 0.5	< 0.2	< 0.05	22.2	< 0.2	< 0.5	9	176	< 2	4	< 2	19	0.001	70.37	15.61	1.62
CPRC-13-48-05	6.8	< 4	< 50	16	30	< 5	1.2	< 0.2	< 0.5	< 0.2	< 0.05	21.3	< 0.2	< 0.5	48	166	< 2	3	< 2	16	0.002	70.73	14.54	1.43
CPRC-13-49-08	< 0.5	< 4	< 50	11	19	< 5	1.4	< 0.2	< 0.5	< 0.2	< 0.05	26.3	< 0.2	< 0.5	5	89	< 2	1	< 2	17	0.001	77.50	12.17	0.81

Activation Laboratories Ltd. Report: A13-08055

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
CPRC-13-50-02	3.7	< 4	< 50	15	28	< 5	1.1	0.2	< 0.5	< 0.2	< 0.05	23.6	< 0.2	< 0.5	24	326	< 2	5	2	52	0.001	78.01	10.45	2.58
CPRC-13-51-10	< 0.5	< 4	< 50	20	34	17	2.9	< 0.2	< 0.5	2.2	0.15	22.9	< 0.2	< 0.5	3	478	< 2	1	< 2	24	< 0.001	76.40	11.71	2.40
CPRC-13-52-06	< 0.5	< 4	< 50	21	40	27	2.7	0.3	0.8	1.6	0.13	21.6	< 0.2	< 0.5	2	278	< 2	1	< 2	11	0.001	73.56	15.12	1.46
CPRC-13-53-06	10.5	< 4	170	18	35	20	3.6	0.6	< 0.5	2.8	0.18	22.2	< 0.2	< 0.5	4	577	< 2	4	< 2	53	0.010	70.15	13.82	3.55
CPRC-13-54-04	< 0.5	< 4	< 50	17	30	< 5	5.6	0.7	< 0.5	3.2	0.29	23.3	< 0.2	1.0	182	1060	4	28	< 2	93	0.014	58.40	17.04	9.07
CPRC-13-55-11	< 0.5	< 4	< 50	17	28	22	5.6	1.1	< 0.5	3.5	0.14	24.2	< 0.2	< 0.5	45	1170	6	28	< 2	74	0.440	58.46	17.51	5.92
CPRC-13-57-06	< 0.5	< 4	< 50	16	26	< 5	2.0	< 0.2	< 0.5	< 0.2	< 0.05	22.6	< 0.2	< 0.5	4	285	< 2	9	< 2	37	0.004	64.47	17.99	2.26
CPRC-13-58-04	< 0.5	< 4	< 50	19	31	< 5	2.1	0.3	< 0.5	< 0.2	< 0.05	20.7	< 0.2	< 0.5	12	218	< 2	6	< 2	22	0.002	69.24	16.01	2.07
CPRC-13-59-06	< 0.5	< 4	< 50	18	32	13	2.1	< 0.2	< 0.5	< 0.2	< 0.05	23.5	< 0.2	< 0.5	3	160	< 2	3	< 2	16	0.002	70.29	14.89	1.67
CPRC-13-60-02	< 0.5	< 4	< 50	12	24	< 5	1.3	< 0.2	< 0.5	< 0.2	< 0.05	21.4	< 0.2	< 0.5	4	126	< 2	4	< 2	11	0.002	72.64	14.50	1.29
CPRC-13-61-05	7.4	< 4	< 50	25	38	< 5	3.5	1.0	< 0.5	1.1	0.10	20.7	< 0.2	< 0.5	7	254	< 2	6	4	92	0.002	70.08	16.68	2.17
CPRC-13-61-06	7.6	< 4	100	24	40	< 5	2.5	< 0.2	< 0.5	1.0	0.06	18.9	< 0.2	< 0.5	7	294	< 2	8	4	95	0.001	69.76	16.78	2.82
CPRC-13-62-02	13.0	< 4	80	28	54	10	3.5	1.1	< 0.5	1.7	0.08	25.2	0.8	< 0.5	46	132	< 2	5	4	100	0.002	71.17	15.10	1.35
CPRC-13-63-06	12.9	< 4	100	36	89	17	5.9	1.3	< 0.5	1.0	0.13	22.0	0.2	< 0.5	5	466	< 2	5	4	69	0.001	67.71	16.03	3.42
CPRC-13-64-01	5.9	< 4	< 50	16	29	< 5	1.3	< 0.2	< 0.5	< 0.2	< 0.05	22.9	< 0.2	< 0.5	5	186	< 2	5	< 2	41	0.001	75.81	11.63	2.55
CPRC-13-65-15	9.0	32	100	34	50	15	2.6	0.7	< 0.5	< 0.2	0.11	21.0	0.2	< 0.5	29	309	< 2	4	104	132	0.001	73.71	14.15	2.05
CPRC-13-66-02	< 0.5	< 4	220	46	107	32	9.2	1.4	< 0.5	1.9	< 0.05	24.8	< 0.2	< 0.5	25	983	< 2	56	< 2	117	0.002	46.46	13.74	13.52
CPRC-13-67-02	< 0.5	< 4	< 50	46	94	46	8.9	2.3	< 0.5	1.3	< 0.05	25.5	< 0.2	< 0.5	26	1010	2	53	< 2	121	0.004	46.69	13.93	13.48
CPRC-13-68-04	< 0.5	< 4	< 50	47	81	46	9.1	2.3	< 0.5	1.4	< 0.05	25.6	< 0.2	< 0.5	24	1010	< 2	52	< 2	178	0.003	47.03	13.86	13.60
CPRC-13-68-05	8.1	< 4	300	39	72	31	4.7	1.5	< 0.5	2.6	0.10	22.2	0.3	< 0.5	28	602	9	14	39	255	0.004	57.32	21.21	8.15
CPRC-13-69-15	< 0.5	< 4	< 50	14	25	< 5	1.5	< 0.2	< 0.5	< 0.2	< 0.05	20.8	< 0.2	< 0.5	6	173	< 2	4	< 2	20	0.001	72.06	14.43	1.75

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
CPRC-13-01-11	0.041	2.46	1.34	2.99	3.13	0.66	0.08	0.01	0.015	2.53	99.05
CPRC-13-02-13	0.091	3.58	2.76	2.95	5.29	0.51	0.05	0.01	0.015	2.17	100.3
CPRC-13-03-23	0.079	5.44	1.53	2.18	0.73	0.50	0.07	< 0.01	0.018	8.55	100.0
CPRC-13-04-20	0.176	1.93	1.44	0.20	0.81	3.05	0.35	0.02	0.058	12.14	99.71
CPRC-13-05-31	0.024	1.63	1.24	1.79	2.35	0.39	0.09	< 0.01	< 0.003	2.42	99.83
CPRC-13-06-18	0.034	4.79	0.91	2.39	1.69	0.77	0.28	< 0.01	0.038	7.94	98.63
CPRC-13-07-22	0.022	1.21	0.76	3.05	1.38	0.45	0.18	< 0.01	0.007	7.28	100.4
CPRC-13-08-16	0.049	3.19	1.34	0.18	0.75	0.72	0.21	< 0.01	0.018	10.73	99.07
CPRC-13-09-18	0.019	1.32	2.19	4.84	2.06	0.40	0.10	< 0.01	0.009	2.04	100.2
CPRC-13-10-04	0.173	7.07	8.31	2.82	1.31	2.91	0.61	0.04	0.047	1.98	98.86
CPRC-13-11-11	0.069	0.83	1.06	3.78	3.89	0.44	0.18	< 0.01	< 0.003	2.28	100.1
CPRC-13-12-03	0.157	3.53	9.88	3.83	0.50	0.47	0.09	< 0.01	0.018	2.35	99.32
CPRC-13-13-02	0.038	2.85	1.62	3.01	3.09	0.62	0.04	0.01	0.085	2.66	99.52
CPRC-13-13-03	0.065	2.83	5.35	4.20	2.36	0.58	0.17	< 0.01	0.006	2.57	100.1
CPRC-13-14-03	0.060	3.36	2.38	2.82	2.50	0.66	0.08	< 0.01	0.053	2.56	99.36
CPRC-13-14-04	0.308	1.11	25.23	0.17	1.53	0.35	0.09	< 0.01	< 0.003	13.99	100.00
CPRC-13-15-03	0.066	1.19	1.99	4.52	1.23	0.24	0.06	< 0.01	0.004	1.19	100.7
CPRC-13-16-07	0.044	0.23	1.42	1.90	4.57	0.22	0.06	< 0.01	< 0.003	1.39	98.80
CPRC-13-17-06	0.046	1.28	1.63	3.02	4.18	0.27	0.09	< 0.01	< 0.003	2.20	99.52
CPRC-13-18-07	0.023	0.10	1.35	3.73	4.09	0.11	0.04	< 0.01	< 0.003	0.77	98.84
CPRC-13-19-04	0.022	0.09	1.40	3.97	3.85	0.10	0.05	< 0.01	< 0.003	0.72	100.0
CPRC-13-20-12	0.051	0.73	2.89	3.91	4.69	0.24	0.09	0.01	< 0.003	1.44	99.71
CPRC-13-21-08	0.060	0.79	0.42	1.07	4.71	0.38	0.01	< 0.01	< 0.003	4.66	98.95
CPRC-13-22-02	0.161	6.19	8.16	3.05	1.28	2.86	0.73	0.04	0.050	3.16	100.2
CPRC-13-23-03	0.014	0.67	0.77	1.97	4.22	0.21	0.02	< 0.01	< 0.003	4.65	98.93
CPRC-13-24-10	0.048	0.25	0.13	0.17	2.42	0.44	0.03	< 0.01	< 0.003	6.47	99.03
CPRC-13-25-02	0.008	0.08	0.52	3.17	4.84	0.09	0.02	< 0.01	< 0.003	0.59	99.50
CPRC-13-26-02	0.171	7.67	8.88	3.14	1.21	2.78	0.72	0.04	0.050	1.25	100.1
CPRC-13-27-03	0.167	7.74	8.89	3.18	1.23	2.72	0.71	0.04	0.048	1.08	99.86
CPRC-13-28-03	0.059	0.58	0.65	2.11	3.97	0.14	0.07	< 0.01	< 0.003	5.19	98.77
CPRC-13-29-02	0.023	0.12	0.75	4.10	5.20	0.13	0.04	< 0.01	< 0.003	0.38	99.97
CPRC-13-30-02	0.005	0.02	0.43	3.14	5.15	0.08	0.02	< 0.01	< 0.003	0.51	100.6
CPRC-13-31-14	0.072	1.10	3.44	3.47	5.23	0.30	0.12	0.01	0.003	1.17	100.1
CPRC-13-32-23	0.116	4.69	6.23	3.20	1.08	1.08	0.29	0.01	0.032	5.16	100.3
CPRC-13-32-24	0.095	2.18	4.45	3.57	3.89	0.54	0.21	< 0.01	0.014	2.46	99.00
CPRC-13-33-22	0.106	1.95	5.20	3.55	4.12	0.49	0.21	0.01	0.012	1.00	99.64
CPRC-13-34-14	0.078	1.16	3.73	3.52	4.72	0.39	0.15	0.01	0.008	2.07	100.2
CPRC-13-35-09	0.016	0.19	0.24	0.14	2.50	0.53	0.20	0.01	0.016	4.80	99.25
CPRC-13-36-07	0.112	2.09	4.93	3.58	3.97	0.52	0.22	0.01	0.013	1.43	100.7
CPRC-13-37-07	0.169	3.58	10.17	2.64	1.42	0.91	0.23	0.01	0.038	1.65	100.1
CPRC-13-38-08	0.033	0.51	0.85	1.14	5.47	0.44	0.07	< 0.01	< 0.003	1.86	100.2
CPRC-13-39-06	0.187	1.09	4.34	5.17	1.82	1.05	0.36	< 0.01	< 0.003	0.60	100.4
CPRC-13-40-07	0.039	0.26	1.59	3.93	3.93	0.15	0.05	< 0.01	< 0.003	0.75	99.39
CPRC-13-41-02	0.012	0.09	0.69	3.88	5.34	0.11	0.03	< 0.01	< 0.003	0.37	100.7
CPRC-13-42-02	0.016	0.09	0.52	3.26	5.20	0.10	0.03	< 0.01	< 0.003	0.65	100.6
CPRC-13-43-02	0.006	0.03	0.52	3.51	5.28	0.10	0.01	< 0.01	< 0.003	0.27	99.60
CPRC-13-44-06	0.012	0.04	0.43	3.36	5.04	0.09	0.02	0.01	< 0.003	0.37	100.7
CPRC-13-45-02	0.017	0.29	1.97	3.78	5.62	0.17	0.06	< 0.01	< 0.003	0.58	100.3
CPRC-13-46-02	0.017	0.41	1.81	3.70	5.09	0.18	0.06	< 0.01	< 0.003	0.34	100.0
CPRC-13-47-01	0.021	0.50	1.69	3.64	5.95	0.22	0.07	< 0.01	< 0.003	0.43	100.1
CPRC-13-48-05	0.019	0.31	1.21	2.85	6.59	0.18	0.05	< 0.01	< 0.003	0.94	98.85
CPRC-13-49-08	0.010	0.05	0.50	2.94	5.16	0.08	0.03	< 0.01	< 0.003	0.62	99.87

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
CPRC-13-50-02	0.031	0.38	0.21	0.93	5.60	0.23	0.02	0.01	< 0.003	1.30	99.75
CPRC-13-51-10	0.053	0.69	0.80	2.70	3.40	0.28	0.08	< 0.01	< 0.003	2.06	100.6
CPRC-13-52-06	0.034	0.20	1.29	4.23	4.06	0.13	0.05	< 0.01	< 0.003	0.74	100.9
CPRC-13-53-06	0.066	0.96	2.23	2.47	4.21	0.41	0.10	< 0.01	< 0.003	1.03	98.99
CPRC-13-54-04	0.164	2.25	1.88	5.35	1.62	1.01	0.39	0.02	0.036	1.74	98.97
CPRC-13-55-11	0.262	2.29	7.02	3.07	2.62	0.93	0.29	0.03	0.023	1.01	99.44
CPRC-13-57-06	0.035	0.89	3.06	4.47	4.59	0.32	0.11	< 0.01	< 0.003	1.16	99.36
CPRC-13-58-04	0.027	0.63	2.27	3.98	4.83	0.25	0.10	< 0.01	< 0.003	0.55	99.95
CPRC-13-59-06	0.018	0.42	1.74	3.56	5.22	0.20	0.07	< 0.01	< 0.003	0.48	98.56
CPRC-13-60-02	0.013	0.32	1.28	3.12	5.95	0.17	0.05	< 0.01	< 0.003	0.48	99.82
CPRC-13-61-05	0.027	0.66	0.10	0.35	4.32	0.40	0.03	< 0.01	< 0.003	5.20	100.0
CPRC-13-61-06	0.033	0.68	0.08	0.31	4.41	0.39	0.02	0.01	< 0.003	5.16	100.4
CPRC-13-62-02	0.015	0.51	0.19	0.70	5.46	0.30	0.02	< 0.01	< 0.003	4.06	98.88
CPRC-13-63-06	0.051	0.74	0.27	0.65	4.60	0.36	0.03	< 0.01	< 0.003	5.32	99.18
CPRC-13-64-01	0.020	0.32	0.35	1.43	5.87	0.21	0.02	< 0.01	< 0.003	1.25	99.46
CPRC-13-65-15	0.038	0.56	0.32	0.20	4.02	0.34	0.08	< 0.01	0.003	4.37	99.84
CPRC-13-66-02	0.179	6.90	9.06	3.55	1.50	2.62	0.99	0.03	0.041	0.52	99.11
CPRC-13-67-02	0.178	6.58	9.27	3.60	1.62	2.66	1.01	0.03	0.042	1.18	100.3
CPRC-13-68-04	0.188	6.96	9.30	4.01	1.55	2.70	1.00	0.03	0.043	0.20	100.5
CPRC-13-68-05	0.085	0.27	0.22	0.08	0.87	1.18	0.20	0.01	0.022	9.18	98.79
CPRC-13-69-15	0.021	0.42	1.62	3.38	5.27	0.24	0.07	< 0.01	< 0.003	0.55	99.80

Quality Control

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas																								
GXR-1 Cert																								
MICA-FE Meas																								
MICA-FE Cert																								
GXR-4 Meas																								
GXR-4 Cert																								
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GXR-4 Cert																								
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AC-E Meas																								
AC-E Cert																								
W-2a Meas																								
W-2a Cert																								
MICA-Mg Meas																								
MICA-Mg Cert																								
SAR-M (U.S.G.S.) Meas																								
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SAR-M (U.S.G.S.) Meas																								
SAR-M (U.S.G.S.) Cert																								
DMMAS 115 Meas	1790		524	1100			23	100		2.94					1.94			4.6	7.5					
DMMAS 115 Cert	1720		527	1210			21.0	100		2.64					1.92			5.50	7.30					
DMMAS 115 Meas	1720		511	1100			23	100		2.84					2.00			4.9	7.3					
DMMAS 115 Cert	1720		527	1210			21.0	100		2.64					1.92			5.50	7.30					
CPRC-13-02-13 Orig																								
CPRC-13-02-13 Dup																								
CPRC-13-28-03 Orig	< 5	< 5	< 2	700	< 1	< 1	< 5	10	7	1.31	4	< 1	< 5	< 5	1.56	< 50	180	0.7	3.4	< 5	< 0.05	< 0.1	< 1	14.7
CPRC-13-28-03 Split	< 5	< 5	< 2	700	< 1	< 1	< 5	10	9	1.20	3	< 1	< 5	< 5	1.52	< 50	220	0.7	3.2	< 5	< 0.05	< 0.1	< 1	13.2
CPRC-13-28-03 Orig																								
CPRC-13-28-03 Dup																								
CPRC-13-29-02 Orig																								
CPRC-13-29-02 Dup																								
CPRC-13-30-02 Orig																								
CPRC-13-30-02 Dup																								
CPRC-13-47-01 Orig	< 5	< 5	< 2	1700	< 1	< 1	< 5	10	< 2	1.23	2	< 1	< 5	< 5	2.58	< 50	150	< 0.2	1.7	< 5	< 0.05	< 0.1	< 1	12.9
CPRC-13-47-01 Split	< 5	< 5	< 2	1900	< 1	< 1	< 5	< 10	< 2	1.13	2	< 1	< 5	6	2.62	< 50	210	< 0.2	2.0	< 5	< 0.05	< 0.1	< 1	12.5
CPRC-13-47-01 Split																								
CPRC-13-51-10 Orig																								
CPRC-13-51-10 Dup																								
CPRC-13-57-06 Orig																								
CPRC-13-57-06 Dup																								
CPRC-13-58-04 Orig	< 5	< 5	< 2	1200	< 1	< 1	< 5	20	3	1.54	2	< 1	< 5	< 5	2.91	< 50	70	< 0.2	2.8	< 5	< 0.05	< 0.1	< 1	10.8
CPRC-13-58-04 Split	< 5	< 5	< 2	1000	< 1	< 1	< 5	40	4	1.51	2	< 1	< 5	< 5	2.82	< 50	130	< 0.2	2.9	< 5	< 0.05	< 0.1	< 1	10.2
CPRC-13-66-02 Orig																								
CPRC-13-66-02 Dup																								
CPRC-13-68-04 Orig																								
CPRC-13-68-04 Dup																								
CPRC-13-69-15 Orig																								
CPRC-13-69-15 Dup																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank	< 5	< 5	< 2	< 100	< 1	< 1	< 5	< 10	< 2	< 0.02	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	< 0.1	< 5	< 0.05	< 0.1	< 1	< 0.5

Quality Control

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA

Method Blank

Quality Control

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
GXR-1 Meas													27.7	1.9	1100	813	15	30	634	719	0.182			
GXR-1 Cert													31.0	3.30	1110	852	18.0	41.0	730	760	0.257			
MICA-FE Meas																						34.36	19.40	25.88
MICA-FE Cert																						34.4	19.5	25.6
GXR-4 Meas													3.5	< 0.5	6320	159	332	39	42	74	1.634			
GXR-4 Cert													4.00	0.860	6520	155	310	42.0	52.0	73.0	1.77			
GXR-4 Meas													3.5	< 0.5	6320	156	329	39	43	73	1.633			
GXR-4 Cert													4.00	0.860	6520	155	310	42.0	52.0	73.0	1.77			
AN-G Meas																						46.67	30.22	3.35
AN-G Cert																						46.30	29.8	3.36
GXR-6 Meas													0.3	< 0.5	63	1070	< 2	22	90	127	0.013			
GXR-6 Cert													1.30	1.00	66.0	1010	2.40	27.0	101	118	0.0160			
GXR-6 Meas													0.3	< 0.5	65	1080	< 2	22	90	128	0.012			
GXR-6 Cert													1.30	1.00	66.0	1010	2.40	27.0	101	118	0.0160			
AC-E Meas																						71.14	14.98	2.54
AC-E Cert																						70.35	14.70	2.56
W-2a Meas																						52.43	15.50	10.88
W-2a Cert																						52.4	15.4	10.7
MICA-Mg Meas																						38.40	15.17	9.49
MICA-Mg Cert																						38.30	15.20	9.46
SAR-M (U.S.G.S.) Meas													3.8	5.7	375	5390	14	45	1160	1150				
SAR-M (U.S.G.S.) Cert													3.64	5.27	331	5220	13.10	41.50	982	930.0				
SAR-M (U.S.G.S.) Meas													3.7	5.5	369	5380	14	46	1150	1160				
SAR-M (U.S.G.S.) Cert													3.64	5.27	331	5220	13.10	41.50	982	930.0				
DMMAS 115 Meas	97.2			22	42		3.0																	
DMMAS 115 Cert	101			21.9	40.0		3.10																	
DMMAS 115 Meas	98.0			22	40		2.8																	
DMMAS 115 Cert	101			21.9	40.0		3.10																	
CPRC-13-02-13 Orig													0.3	< 0.5	54	435	6	9	5	34	0.148			
CPRC-13-02-13 Dup													0.3	< 0.5	56	435	4	11	6	42	0.159			
CPRC-13-28-03 Orig	6.7	< 4	< 50	32	57	11	4.6	0.5	< 0.5	< 0.2	0.16	22.1	< 0.2	< 0.5	< 1	585	< 2	2	6	36	< 0.001	69.66	14.72	1.62
CPRC-13-28-03 Split	7.7	< 4	< 50	28	66	19	3.4	0.6	< 0.5	1.2	0.12	24.4	< 0.2	< 0.5	< 1	581	< 2	3	6	36	< 0.001	70.97	14.71	1.64
CPRC-13-28-03 Orig																						69.54	14.74	1.61
CPRC-13-28-03 Dup																						69.78	14.69	1.62
CPRC-13-29-02 Orig													< 0.2	< 0.5	7	206	2	1	< 2	10	0.001			
CPRC-13-29-02 Dup													< 0.2	< 0.5	7	200	< 2	1	< 2	9	< 0.001			
CPRC-13-30-02 Orig													< 0.2	< 0.5	33	52	< 2	< 1	2	7	< 0.001			
CPRC-13-30-02 Dup													0.3	< 0.5	33	53	< 2	< 1	3	7	< 0.001			
CPRC-13-47-01 Orig	2.3	< 4	< 50	16	19	< 5	1.2	< 0.2	< 0.5	< 0.2	< 0.05	22.2	< 0.2	< 0.5	9	176	< 2	4	< 2	19	0.001	70.37	15.61	1.62
CPRC-13-47-01 Split	3.6	< 4	< 50	16	21	< 5	1.1	< 0.2	< 0.5	< 0.2	< 0.05	22.1	< 0.2	< 0.5	10	182	< 2	5	< 2	19	0.001	69.62	15.54	1.63
CPRC-13-47-01 Split													< 0.2	< 0.5	10	182	< 2	5	< 2	19	0.001			
CPRC-13-51-10 Orig													< 0.2	< 0.5	3	469	< 2	1	< 2	24	< 0.001			
CPRC-13-51-10 Dup													< 0.2	< 0.5	3	486	< 2	1	< 2	25	< 0.001			
CPRC-13-57-06 Orig																						64.36	17.94	2.26
CPRC-13-57-06 Dup																						64.58	18.04	2.27
CPRC-13-58-04 Orig	< 0.5	< 4	< 50	19	31	< 5	2.1	0.3	< 0.5	< 0.2	< 0.05	20.7	< 0.2	< 0.5	12	218	< 2	6	< 2	22	0.002	69.24	16.01	2.07
CPRC-13-58-04 Split	< 0.5	< 4	< 50	18	26	< 5	1.9	< 0.2	< 0.5	< 0.2	< 0.05	23.6	< 0.2	< 0.5	12	206	< 2	6	< 2	21	0.002	69.03	15.96	2.05
CPRC-13-66-02 Orig													< 0.2	< 0.5	24	977	< 2	55	< 2	117	0.002			
CPRC-13-66-02 Dup													< 0.2	< 0.5	25	989	< 2	56	< 2	117	0.002			
CPRC-13-68-04 Orig													< 0.2	< 0.5	24	996	2	51	< 2	176	0.003			
CPRC-13-68-04 Dup													< 0.2	< 0.5	25	1020	< 2	52	< 2	180	0.003			
CPRC-13-69-15 Orig													< 0.2	< 0.5	6	171	< 2	4	< 2	20	0.001	72.03	14.40	1.74
CPRC-13-69-15 Dup													< 0.2	< 0.5	6	174	< 2	4	< 2	20	0.001	72.09	14.46	1.75
Method Blank													< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	1	< 0.001			
Method Blank													< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 1	< 0.001			
Method Blank													< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 1	< 0.001			
Method Blank	< 0.5	< 4	< 50	< 1	< 3	5	< 0.1	< 0.2	< 0.5	< 0.2	< 0.05	30.0												

Quality Control																							
Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
Method Blank																						< 0.01	< 0.01	< 0.01

Quality Control

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
GXR-1 Meas											
GXR-1 Cert											
MICA-FE Meas	0.351	4.64	0.42	0.28	8.68	2.52	0.41	0.01	0.023		
MICA-FE Cert	0.350	4.55	0.430	0.300	8.75	2.50	0.450	0.01	0.024		
GXR-4 Meas											
GXR-4 Cert											
GXR-4 Meas											
GXR-4 Cert											
AN-G Meas	0.041	1.89	15.89	1.67	0.15	0.22	0.02	0.01	0.016		
AN-G Cert	0.040	1.79	15.90	1.63	0.13	0.22	0.01	0.01	0.012		
GXR-6 Meas											
GXR-6 Cert											
GXR-6 Meas											
GXR-6 Cert											
AC-E Meas	0.056	0.02	0.35	6.59	4.55	0.11					
AC-E Cert	0.058	0.03	0.34	6.54	4.49	0.11					
W-2a Meas	0.165	6.39	10.90	2.19	0.65	1.07	0.14	0.01			
W-2a Cert	0.163	6.37	10.9	2.14	0.626	1.06	0.130	0.01			
MICA-Mg Meas	0.254	20.44	0.06	0.15	9.82	1.66	< 0.01				
MICA-Mg Cert	0.26	20.40	0.08	0.12	10.00	1.63	0.01				
SAR-M (U.S.G.S.) Meas											
SAR-M (U.S.G.S.) Cert											
SAR-M (U.S.G.S.) Meas											
SAR-M (U.S.G.S.) Cert											
DMMAS 115 Meas											
DMMAS 115 Cert											
DMMAS 115 Meas											
DMMAS 115 Cert											
CPRC-13-02-13 Orig											
CPRC-13-02-13 Dup											
CPRC-13-28-03 Orig	0.059	0.58	0.65	2.11	3.97	0.14	0.07	< 0.01	< 0.003	5.19	98.77
CPRC-13-28-03 Split	0.060	0.59	0.67	2.17	4.00	0.15	0.07	< 0.01	< 0.003	4.80	99.83
CPRC-13-28-03 Orig	0.059	0.58	0.65	2.12	3.98	0.14	0.07	< 0.01	< 0.003	5.19	98.68
CPRC-13-28-03 Dup	0.059	0.59	0.65	2.11	3.97	0.14	0.07	< 0.01	< 0.003	5.19	98.87
CPRC-13-29-02 Orig											
CPRC-13-29-02 Dup											
CPRC-13-30-02 Orig											
CPRC-13-30-02 Dup											
CPRC-13-47-01 Orig	0.021	0.50	1.69	3.64	5.95	0.22	0.07	< 0.01	< 0.003	0.43	100.1
CPRC-13-47-01 Split	0.019	0.53	1.66	3.62	5.92	0.22	0.07	< 0.01	< 0.003	0.37	99.20
CPRC-13-47-01 Split											
CPRC-13-51-10 Orig											
CPRC-13-51-10 Dup											
CPRC-13-57-06 Orig	0.036	0.88	3.06	4.45	4.58	0.32	0.11	< 0.01	< 0.003	1.16	99.16
CPRC-13-57-06 Dup	0.034	0.90	3.06	4.48	4.60	0.32	0.11	< 0.01	< 0.003	1.16	99.56
CPRC-13-58-04 Orig	0.027	0.63	2.27	3.98	4.83	0.25	0.10	< 0.01	< 0.003	0.55	99.95
CPRC-13-58-04 Split	0.027	0.62	2.26	3.94	4.87	0.25	0.10	< 0.01	< 0.003	0.52	99.63
CPRC-13-66-02 Orig											
CPRC-13-66-02 Dup											
CPRC-13-68-04 Orig											
CPRC-13-68-04 Dup											
CPRC-13-69-15 Orig	0.021	0.42	1.62	3.39	5.28	0.24	0.07	< 0.01	< 0.003	0.56	99.77
CPRC-13-69-15 Dup	0.022	0.42	1.62	3.36	5.26	0.24	0.07	< 0.01	< 0.003	0.55	99.84
Method Blank											
Method Blank											
Method Blank											
Method Blank											

Quality Control

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
Method Blank	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003		

Quality Analysis ... *Innovative Technologies*

Date Submitted: 30-Sep-13
Invoice No.: A13-11810-1E 1D 4C
Invoice Date: 01-Nov-13
Your Reference: BWRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

73 Heavy Mineral Concentrates samples and 10 Rock samples were submitted for analysis.

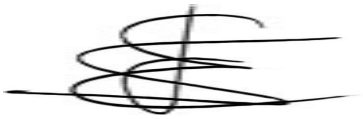
The following analytical packages were requested:
Code 1D INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)
Code 4C (1-10) Whole Rock Analysis-XRF

REPORT **A13-11810-1E 1D 4**

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Notes:
For values exceeding the upper limits we recommend assays.
Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :



Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWRC-13-02-36	< 5	< 5	7	700	< 1	< 1	20	70	10	5.14	5	< 1	< 5	< 5	2.16	< 50	140	5.5	11.6	< 5	< 0.05	< 0.1	< 1	6.3
BWRC-13-03-02	< 5	< 5	11	800	< 1	3	17	70	15	3.99	5	< 1	< 5	< 5	2.05	< 50	60	15.8	10.4	< 5	< 0.05	< 0.1	< 1	6.0
BWRC-13-04-21	< 5	< 5	14	800	< 1	< 1	16	80	33	4.15	7	< 1	< 5	< 5	2.02	< 50	120	21.0	10.6	< 5	< 0.05	< 0.1	< 1	6.4

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
BWRC-13-02-36	4.6	< 4	< 50	36	62	31	6.5	1.6	< 0.5	1.7	0.06	28.9	< 0.2	< 0.5	14	583	< 2	21	8	86	0.005	60.09	17.11	7.36
BWRC-13-03-02	4.5	< 4	150	30	57	30	4.9	0.8	< 0.5	1.6	0.10	25.6	0.7	< 0.5	29	1110	3	15	20	251	0.003	58.36	15.23	5.92
BWRC-13-04-21	4.6	< 4	< 50	36	77	33	6.1	0.8	< 0.5	1.7	0.14	24.9	< 0.2	< 0.5	18	647	< 2	12	17	100	0.002	63.76	16.77	5.88

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
BWRC-13-02-36	0.067	2.27	1.08	3.05	3.14	1.11	0.44	0.01	0.019	4.43	100.2
BWRC-13-03-02	0.136	1.44	5.51	2.91	3.05	0.78	0.32	0.02	0.016	6.87	100.6
BWRC-13-04-21	0.070	1.57	1.04	2.76	3.37	0.95	0.40	0.01	0.018	3.82	100.4

Quality Control

Analyte Symbol	Au	As	Ba	Co	Cr	Fe	Na	Sb	Sc	U	La	Ce	Sm	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	5	2	100	5	10	0.02	0.05	0.2	0.1	0.5	1	3	0.1	0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF
GXR-1 Meas														26.9	2.4	1080	843	14	25	664	691	0.186		
GXR-1 Cert														31.0	3.30	1110	852	18.0	41.0	730	760	0.257		
MICA-FE Meas																							34.60	19.71
MICA-FE Cert																							34.4	19.5
GXR-4 Meas														3.3	< 0.5	6220	151	343	30	48	77	1.712		
GXR-4 Cert														4.00	0.860	6520	155	310	42.0	52.0	73.0	1.77		
AN-G Meas																							45.58	29.29
AN-G Cert																							46.30	29.8
GXR-6 Meas														0.3	< 0.5	65	1130	< 2	16	102	128	0.015		
GXR-6 Cert														1.30	1.00	66.0	1010	2.40	27.0	101	118	0.0160		
BE-N Meas																							38.79	9.89
BE-N Cert																							38.2	10.1
AC-E Meas																							71.05	14.98
AC-E Cert																							70.35	14.70
BIR-1a Meas																							47.18	15.46
BIR-1a Cert																							47.96	15.50
SAR-M (U.S.G.S.) Meas														3.4	5.3	346	5310	15	35	1230	1100			
SAR-M (U.S.G.S.) Cert														3.64	5.27	331	5220	13.1	41.5	982	930.0			
OREAS 45d (Aqua Regia) Meas																345	457		177	13	37	0.060		
OREAS 45d (Aqua Regia) Cert																345.0	400.000		176.0	17.00	30.6	0.045		
OREAS 45e (Aqua Regia) Meas																718	448		336	7	33	0.035		
OREAS 45e (Aqua Regia) Cert																709.0	400.000		357.0	14.3	30.6	0.044		
DMMAS 115 Meas	1700	525	1300	23	100	2.97	1.96	5.2	7.0	103	23	40	2.9											
DMMAS 115 Cert	1720	527	1210	21.0	100	2.64	1.92	5.50	7.30	101	21.9	40.0	3.10											
Method Blank														< 0.2	< 0.5	1	< 2	< 2	< 1	< 2	< 1	< 0.001		
Method Blank																							< 0.01	< 0.01

Quality Control

Analyte Symbol	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5
Unit Symbol	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.01	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
GXR-1 Meas										
GXR-1 Cert										
MICA-FE Meas	25.65	0.346	4.64	0.44	0.28	8.72	2.51	0.41	0.02	0.023
MICA-FE Cert	25.6	0.350	4.55	0.430	0.300	8.75	2.50	0.450	0.01	0.024
GXR-4 Meas										
GXR-4 Cert										
AN-G Meas	3.28	0.041	1.78	15.82	1.66	0.14	0.23	0.02	0.01	0.012
AN-G Cert	3.36	0.040	1.79	15.90	1.63	0.13	0.22	0.01	0.01	0.012
GXR-6 Meas										
GXR-6 Cert										
BE-N Meas	13.04	0.197	13.32	14.11	3.28	1.38	2.72	1.08	0.05	0.043
BE-N Cert	12.8	0.200	13.1	13.9	3.18	1.39	2.61	1.05	0.0500	0.042
AC-E Meas	2.55	0.057	0.02	0.37	6.84	4.55	0.11			
AC-E Cert	2.56	0.058	0.03	0.34	6.54	4.49	0.11			
BIR-1a Meas	11.40	0.171	9.65	13.28	1.84	0.04	0.97			
BIR-1a Cert	11.30	0.175	9.700	13.30	1.82	0.030	0.96			
SAR-M (U.S.G.S.) Meas										
SAR-M (U.S.G.S.) Cert										
OREAS 45d (Aqua Regia) Meas										
OREAS 45d (Aqua Regia) Cert										
OREAS 45e (Aqua Regia) Meas										
OREAS 45e (Aqua Regia) Cert										
DMMAS 115 Meas										
DMMAS 115 Cert										
Method Blank										
Method Blank	< 0.01	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003

Date Submitted: 30-Sep-13
Invoice No.: A13-11810-3A 3C
Invoice Date: 01-Nov-13
Your Reference: BWRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

83 Rock samples were submitted for analysis.

The following analytical package was requested: Code 3A-Large/Medium HMC INAA(INAAGEO)
Code 3C Aqua Regia ICP(AQUAGEO)

REPORT **A13-11810-3A 3C**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Results

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWRC-13-01-01	411	< 5	101	< 200	< 5	< 1	416	74	740	< 2	5.9	29.7	135	< 5	< 50
BWRC-13-01-02	186	< 5	180	1500	< 5	< 1	304	76	620	< 2	4.3	25.6	88	< 5	< 50
BWRC-13-01-03	< 5	< 5	94	1100	< 5	10	262	52	380	< 2	5.0	22.1	100	< 5	< 50
BWRC-13-01-04	< 5	< 5	42	< 200	< 5	7	296	45	450	< 2	4.7	21.9	133	< 5	< 50
BWRC-13-01-05	143	< 5	61	700	< 5	< 1	193	53	370	< 2	2.4	19.6	50	< 5	< 50
BWRC-13-01-06	139	< 5	58	600	< 5	< 1	259	56	470	< 2	2.8	22.3	70	< 5	< 50
BWRC-13-01-07	55	< 5	71	< 200	< 5	< 1	326	55	450	< 2	3.6	25.8	60	< 5	< 50
BWRC-13-01-08	129	< 5	54	600	< 5	6	314	49	410	< 2	4.1	23.5	81	< 5	< 50
BWRC-13-01-09	< 5	< 5	59	< 200	< 5	< 1	288	44	340	< 2	4.4	22.7	63	< 5	< 50
BWRC-13-01-10	442	< 5	75	< 200	< 5	17	255	48	390	< 2	2.7	24.9	57	< 5	< 50
BWRC-13-01-11	< 5	< 5	48	< 200	< 5	< 1	216	59	310	< 2	2.2	19.4	37	< 5	< 50
BWRC-13-01-12	690	< 5	366	< 200	< 5	2	293	85	410	< 2	3.3	24.3	67	< 5	< 50
BWRC-13-01-13	1170	< 5	183	< 200	< 5	5	294	85	340	< 2	4.7	24.2	65	< 5	< 50
BWRC-13-01-14	120	< 5	66	< 200	< 5	< 1	217	72	410	< 2	3.9	22.6	58	< 5	< 50
BWRC-13-01-15	358	< 5	75	< 200	< 5	< 1	238	45	300	< 2	2.9	19.5	58	< 5	< 50
BWRC-13-02-01	953	< 5	115	< 200	< 5	8	358	74	430	25	5.1	26.3	121	< 5	< 50
BWRC-13-02-02	76	< 5	97	< 200	< 5	5	335	80	460	< 2	6.2	26.1	109	< 5	< 50
BWRC-13-02-03	850	< 5	140	< 200	< 5	10	330	50	350	< 2	3.8	23.6	95	< 5	< 50
BWRC-13-02-04	182	< 5	137	< 200	< 5	15	369	67	450	< 2	5.9	22.6	108	< 5	< 50
BWRC-13-02-05	1200	< 5	210	< 200	< 5	< 1	329	55	400	< 2	3.7	22.6	82	< 5	< 50
BWRC-13-02-06	49	< 5	85	< 200	< 5	12	277	46	290	< 2	3.0	19.8	103	< 5	< 50
BWRC-13-02-07	219	< 5	75	2000	< 5	< 1	302	81	420	< 2	5.3	22.2	98	< 5	< 50
BWRC-13-02-08	353	< 5	362	< 200	< 5	4	278	76	360	< 2	3.2	24.0	76	< 5	< 50
BWRC-13-02-09	492	< 5	676	< 200	< 5	< 1	328	75	330	< 2	5.0	25.9	85	< 5	< 50
BWRC-13-02-10	231	< 5	367	< 200	< 5	< 1	278	86	320	< 2	5.3	23.9	65	< 5	< 50
BWRC-13-02-11	461	< 5	417	< 200	< 5	9	277	94	330	< 2	4.7	25.8	57	< 5	< 50
BWRC-13-02-12	201	< 5	215	< 200	< 5	< 1	329	69	390	< 2	4.9	24.8	71	< 5	< 50
BWRC-13-02-13	224	< 5	95	< 200	< 5	11	337	67	570	< 2	4.6	26.7	101	< 5	< 50
BWRC-13-02-14	401	< 5	75	< 200	< 5	< 1	6	89	710	< 2	4.7	27.2	89	< 5	< 50
BWRC-13-02-15	243	< 5	59	< 200	< 5	3	348	77	980	< 2	4.3	29.3	104	< 5	< 50
BWRC-13-02-16	52	< 5	47	< 200	< 5	7	327	72	770	< 2	6.6	23.8	101	< 5	< 50
BWRC-13-02-17	79	< 5	59	< 200	< 5	< 1	303	78	830	< 2	4.7	25.9	80	< 5	< 50
BWRC-13-02-18	97	< 5	62	< 200	< 5	2	284	84	720	< 2	5.0	24.6	68	< 5	< 50
BWRC-13-02-19	149	< 5	57	< 200	< 5	< 1	338	96	1040	< 2	5.0	30.5	121	< 5	< 50
BWRC-13-02-20	127	< 5	51	< 200	< 5	< 1	240	99	500	< 2	3.4	26.8	47	< 5	< 50
BWRC-13-02-21	253	< 5	44	< 200	< 5	< 1	213	70	440	< 2	3.5	23.1	67	< 5	< 50
BWRC-13-02-22	996	< 5	78	700	< 5	< 1	372	66	1090	< 2	4.5	25.6	90	< 5	< 50
BWRC-13-02-23	95	< 5	53	< 200	< 5	7	365	108	1120	< 2	5.0	31.6	84	< 5	< 50
BWRC-13-02-24	973	< 5	44	< 200	< 5	< 1	444	77	1650	< 2	5.4	29.2	132	< 5	< 50
BWRC-13-02-25	198	< 5	53	< 200	< 5	< 1	353	71	1200	< 2	5.8	26.7	85	< 5	< 50
BWRC-13-02-26	162	< 5	61	< 200	< 5	< 1	428	72	1120	< 2	4.5	24.3	89	< 5	< 50
BWRC-13-02-27	642	< 5	54	< 200	< 5	< 1	356	91	1280	< 2	4.8	25.4	79	< 5	< 50
BWRC-13-02-28	< 5	< 5	39	< 200	< 5	10	249	54	710	< 2	3.4	17.9	86	< 5	< 50
BWRC-13-02-29	< 5	< 5	51	< 200	< 5	< 1	304	102	950	< 2	4.3	24.6	64	< 5	< 50
BWRC-13-02-30	2340	< 5	55	< 200	< 5	3	358	67	1180	< 2	5.0	25.1	91	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWRC-13-02-31	193	< 5	62	< 200	< 5	3	380	92	1460	< 2	4.9	26.5	76	< 5	< 50
BWRC-13-02-32	< 5	< 5	38	< 200	< 5	9	216	145	860	< 2	3.9	24.0	43	< 5	< 50
BWRC-13-02-33	< 5	< 5	45	< 200	< 5	< 1	258	141	580	< 2	3.6	22.9	25	< 5	< 50
BWRC-13-02-34	< 5	< 5	45	< 200	< 5	10	626	112	830	< 2	3.8	25.1	52	< 5	< 50
BWRC-13-02-35	< 5	< 5	101	< 200	< 5	< 1	327	78	1180	< 2	3.7	24.6	70	< 5	< 50
BWRC-13-03-01	2720	463	441	< 200	< 5	< 1	506	118	300	< 2	7.7	24.1	138	< 5	< 50
BWRC-13-04-01	2350	< 5	152	< 200	< 5	< 1	451	41	260	< 2	6.8	21.5	195	< 5	< 50
BWRC-13-04-02	11300	< 5	328	< 200	< 5	< 1	349	35	250	< 2	5.0	19.8	93	< 5	< 50
BWRC-13-04-03	1870	< 5	863	< 200	< 5	< 1	467	66	510	< 2	5.5	23.9	118	< 5	< 50
BWRC-13-04-04	725	< 5	856	< 200	< 5	< 1	276	42	200	< 2	4.3	15.0	34	< 5	< 50
BWRC-13-04-05	364	< 5	297	800	< 5	< 1	325	41	210	< 2	4.6	17.9	88	< 5	< 50
BWRC-13-04-06	1330	< 5	418	< 200	< 5	< 1	303	56	190	< 2	3.2	16.6	74	< 5	< 50
BWRC-13-04-07	420	< 5	614	1600	< 5	< 1	553	72	690	< 2	6.4	23.5	91	< 5	< 50
BWRC-13-04-08	613	< 5	311	< 200	< 5	< 1	283	45	200	< 2	2.9	14.6	51	< 5	< 50
BWRC-13-04-09	84	< 5	140	< 200	< 5	< 1	391	64	270	< 2	3.0	19.3	76	< 5	< 50
BWRC-13-04-10	207	< 5	536	800	< 5	< 1	243	53	210	< 2	3.3	16.7	54	< 5	< 50
BWRC-13-04-11	1040	< 5	668	1400	< 5	< 1	422	86	510	< 2	5.8	22.1	63	< 5	< 50
BWRC-13-04-12	221	< 5	126	1000	< 5	< 1	507	66	650	< 2	7.1	26.0	81	< 5	< 50
BWRC-13-04-13	288	< 5	119	700	< 5	< 1	382	70	310	< 2	4.5	19.3	68	< 5	< 50
BWRC-13-04-14	495	< 5	92	< 200	< 5	4	408	57	590	< 2	5.1	22.1	67	< 5	< 50
BWRC-13-04-15	90	< 5	98	900	< 5	< 1	377	125	1230	< 2	3.3	30.1	41	< 5	< 50
BWRC-13-04-16	< 5	< 5	53	1000	< 5	< 1	206	68	880	< 2	2.5	22.4	61	< 5	< 50
BWRC-13-04-17	105	< 5	83	2300	< 5	< 1	316	105	630	< 2	4.3	24.7	71	< 5	< 50
BWRC-13-04-18	478	< 5	125	3600	< 5	< 1	270	109	500	< 2	4.4	28.4	37	< 5	< 50
BWRC-13-04-19	56	< 5	72	2200	< 5	< 1	142	118	430	< 2	2.0	22.9	24	< 5	< 50
BWRC-13-04-20	144	< 5	114	1100	< 5	< 1	410	67	590	< 2	3.0	22.4	95	< 5	< 50

Results

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWRC-13-01-01	233	1.32	21.6	< 20	0.38	90	< 200	< 50	16.1	42.6	< 20	25.4	< 0.2	< 1	< 2
BWRC-13-01-02	177	0.96	22.0	< 20	0.47	80	< 200	< 50	10.2	50.1	< 20	21.6	< 0.2	< 1	< 2
BWRC-13-01-03	151	0.56	8.20	< 20	0.41	100	< 200	< 50	10.8	47.5	< 20	19.8	< 0.2	< 1	< 2
BWRC-13-01-04	167	0.61	13.2	< 20	0.37	60	< 200	< 50	8.3	40.8	< 20	19.6	< 0.2	< 1	< 2
BWRC-13-01-05	104	0.33	10.2	< 20	0.41	60	< 200	< 50	8.3	44.4	< 20	13.6	< 0.2	< 1	< 2
BWRC-13-01-06	136	0.44	9.00	< 20	0.39	110	< 200	< 50	8.8	46.4	< 20	17.7	< 0.2	< 1	< 2
BWRC-13-01-07	215	0.53	7.00	< 20	0.39	110	< 200	< 50	11.1	44.1	< 20	18.8	< 0.2	< 1	< 2
BWRC-13-01-08	165	0.52	9.50	< 20	0.30	90	< 200	< 50	11.1	38.8	< 20	20.3	< 0.2	< 1	< 2
BWRC-13-01-09	158	0.54	8.30	< 20	0.29	60	< 200	< 50	10.3	38.3	< 20	19.6	< 0.2	10	< 2
BWRC-13-01-10	137	0.43	7.00	< 20	0.33	110	< 200	< 50	12.0	40.0	< 20	18.0	< 0.2	< 1	< 2
BWRC-13-01-11	108	0.38	9.60	< 20	0.35	50	< 200	< 50	7.8	48.4	< 20	14.5	< 0.2	< 1	< 2
BWRC-13-01-12	154	0.45	28.5	< 20	0.34	90	< 200	< 50	32.6	32.8	< 20	17.6	< 0.2	< 1	< 2
BWRC-13-01-13	162	0.48	19.5	< 20	0.47	90	< 200	< 50	24.6	38.4	< 20	19.7	< 0.2	< 1	< 2
BWRC-13-01-14	129	0.37	26.3	< 20	0.57	60	< 200	< 50	11.7	40.2	< 20	15.9	< 0.2	< 1	< 2
BWRC-13-01-15	129	0.24	13.3	< 20	0.40	60	< 200	< 50	13.1	38.2	< 20	16.6	< 0.2	< 1	3
BWRC-13-02-01	193	0.76	20.6	< 20	0.46	70	< 200	< 50	15.1	37.4	< 20	23.3	< 0.2	< 1	< 2
BWRC-13-02-02	177	0.79	14.3	< 20	0.48	60	< 200	< 50	18.5	38.2	< 20	20.8	< 0.2	< 1	< 2
BWRC-13-02-03	176	0.48	7.90	< 20	0.41	50	< 200	< 50	23.1	36.7	< 20	22.1	< 0.2	< 1	7
BWRC-13-02-04	180	0.42	7.40	< 20	0.35	90	< 200	< 50	32.9	36.9	< 20	21.7	< 0.2	< 1	< 2
BWRC-13-02-05	170	0.45	6.40	< 20	0.33	110	< 200	< 50	46.7	34.8	< 20	22.1	< 0.2	< 1	< 2
BWRC-13-02-06	142	0.45	12.0	< 20	0.36	60	< 200	< 50	17.0	36.1	< 20	17.4	< 0.2	< 1	< 2
BWRC-13-02-07	166	0.71	18.1	< 20	0.52	80	< 200	< 50	14.3	42.3	< 20	20.0	< 0.2	< 1	< 2
BWRC-13-02-08	156	0.52	25.1	< 20	0.46	60	< 200	< 50	46.8	36.4	< 20	18.7	< 0.2	11	< 2
BWRC-13-02-09	183	1.15	21.5	< 20	0.33	120	< 200	< 50	48.6	38.5	< 20	20.9	< 0.2	< 1	< 2
BWRC-13-02-10	160	0.59	24.5	< 20	0.32	40	< 200	< 50	41.7	32.9	< 20	18.2	< 0.2	< 1	< 2
BWRC-13-02-11	163	0.71	14.1	< 20	0.40	60	< 200	< 50	45.3	38.4	< 20	21.4	< 0.2	9	< 2
BWRC-13-02-12	180	0.55	18.0	< 20	0.46	90	< 200	< 50	30.6	46.3	< 20	23.7	0.5	7	< 2
BWRC-13-02-13	185	0.80	17.4	< 20	0.36	80	< 200	< 50	17.7	44.3	< 20	23.4	< 0.2	17	< 2
BWRC-13-02-14	176	0.67	19.4	< 20	0.44	80	< 200	< 50	14.3	40.0	< 20	21.1	< 0.2	< 1	< 2
BWRC-13-02-15	194	1.29	18.5	< 20	0.46	60	< 200	< 50	10.0	45.8	< 20	23.6	< 0.2	< 1	< 2
BWRC-13-02-16	180	0.79	19.2	< 20	0.56	60	< 200	< 50	8.7	44.3	< 20	22.4	< 0.2	< 1	< 2
BWRC-13-02-17	170	0.58	19.0	< 20	0.44	90	< 200	< 50	9.9	41.2	< 20	20.9	< 0.2	< 1	< 2
BWRC-13-02-18	149	1.03	20.0	< 20	0.42	60	< 200	< 50	11.3	38.4	< 20	19.4	< 0.2	< 1	< 2
BWRC-13-02-19	195	1.12	19.5	< 20	0.40	80	< 200	< 50	10.4	45.5	< 20	22.6	< 0.2	< 1	< 2
BWRC-13-02-20	126	0.23	28.1	< 20	0.47	50	< 200	< 50	8.6	37.3	< 20	15.6	< 0.2	11	< 2
BWRC-13-02-21	127	0.28	42.5	< 20	0.37	40	< 200	< 50	9.0	35.6	< 20	14.2	< 0.2	< 1	< 2
BWRC-13-02-22	199	0.95	19.9	< 20	0.48	70	< 200	< 50	10.4	43.4	< 20	24.0	< 0.2	< 1	< 2
BWRC-13-02-23	209	0.73	16.7	< 20	0.34	100	< 200	< 50	12.9	41.2	< 20	22.0	< 0.2	< 1	< 2
BWRC-13-02-24	255	0.94	20.7	< 20	0.36	90	< 200	< 50	10.3	44.3	< 20	25.6	< 0.2	< 1	5
BWRC-13-02-25	204	0.34	19.6	< 20	0.30	70	< 200	< 50	11.3	42.1	< 20	21.8	< 0.2	< 1	< 2
BWRC-13-02-26	250	0.66	19.5	< 20	0.46	90	< 200	< 50	11.7	42.0	< 20	24.9	< 0.2	< 1	< 2
BWRC-13-02-27	203	0.54	20.5	< 20	0.55	90	< 200	130	10.8	45.2	< 20	22.0	< 0.2	< 1	< 2
BWRC-13-02-28	132	0.36	14.6	< 20	0.42	50	< 200	< 50	6.9	33.3	< 20	15.8	< 0.2	6	< 2
BWRC-13-02-29	177	0.65	19.9	< 20	0.43	150	< 200	< 50	9.2	40.1	< 20	21.5	< 0.2	< 1	< 2
BWRC-13-02-30	211	0.66	24.5	< 20	0.44	80	< 200	< 50	9.6	37.8	< 20	21.5	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
BWRC-13-02-31	213	0.80	17.1	< 20	0.46	130	< 200	< 50	15.5	42.6	< 20	24.0	< 0.2	< 1	< 2
BWRC-13-02-32	117	0.99	15.3	< 20	0.36	60	< 200	< 50	8.6	29.9	< 20	14.7	< 0.2	< 1	< 2
BWRC-13-02-33	151	0.52	25.7	< 20	0.49	70	< 200	< 50	8.6	25.6	< 20	16.1	< 0.2	< 1	< 2
BWRC-13-02-34	253	1.10	19.0	< 20	0.56	90	< 200	< 50	7.4	30.7	< 20	25.2	< 0.2	< 1	< 2
BWRC-13-02-35	159	0.64	9.60	< 20	0.44	130	< 200	< 50	22.0	28.7	< 20	21.5	< 0.2	< 1	< 2
BWRC-13-03-01	260	1.27	2.40	< 20	0.45	140	< 200	< 50	145	30.8	< 20	34.8	< 0.2	< 1	< 2
BWRC-13-04-01	246	0.81	6.20	30	0.45	300	< 200	< 50	22.4	40.9	< 20	32.9	< 0.2	< 1	< 2
BWRC-13-04-02	186	0.45	8.20	< 20	0.40	70	< 200	< 50	63.4	30.9	< 20	24.4	< 0.2	10	< 2
BWRC-13-04-03	222	0.42	4.30	80	0.30	200	< 200	< 50	92.8	27.8	< 20	30.5	< 0.2	< 1	< 2
BWRC-13-04-04	141	0.49	7.30	< 20	0.27	90	< 200	< 50	72.4	18.0	< 20	19.1	< 0.2	< 1	< 2
BWRC-13-04-05	174	0.50	13.3	< 20	0.56	100	< 200	< 50	39.8	32.1	< 20	20.7	< 0.2	< 1	< 2
BWRC-13-04-06	168	0.39	13.6	< 20	0.41	130	< 200	< 50	62.1	28.3	< 20	20.1	< 0.2	9	< 2
BWRC-13-04-07	211	0.62	16.4	< 20	0.54	210	< 200	< 50	73.7	35.8	< 20	25.0	< 0.2	25	3
BWRC-13-04-08	127	0.21	58.6	< 20	0.53	50	< 200	< 50	51.8	25.7	< 20	12.8	< 0.2	5	< 2
BWRC-13-04-09	163	0.20	30.2	< 20	0.48	60	< 200	< 50	32.7	32.7	< 20	17.9	< 0.2	< 1	< 2
BWRC-13-04-10	126	0.33	13.2	30	0.30	70	< 200	< 50	136	25.9	< 20	16.4	< 0.2	< 1	4
BWRC-13-04-11	162	0.40	18.0	< 20	0.42	60	< 200	< 50	87.2	33.2	< 20	20.8	< 0.2	< 1	< 2
BWRC-13-04-12	208	0.46	20.0	40	0.58	80	< 200	< 50	65.7	38.6	< 20	23.2	< 0.2	< 1	< 2
BWRC-13-04-13	160	0.22	29.3	< 20	0.41	110	< 200	< 50	64.8	30.1	< 20	18.3	< 0.2	< 1	< 2
BWRC-13-04-14	160	0.33	23.5	< 20	0.52	60	< 200	< 50	45.4	32.5	< 20	18.9	< 0.2	< 1	< 2
BWRC-13-04-15	137	0.62	16.5	50	0.59	70	< 200	< 50	41.3	24.8	< 20	21.9	< 0.2	< 1	< 2
BWRC-13-04-16	109	0.46	11.0	< 20	0.48	50	< 200	< 50	28.7	25.6	< 20	15.4	< 0.2	10	< 2
BWRC-13-04-17	161	0.60	5.70	< 20	0.47	90	< 200	< 50	95.6	25.8	< 20	22.2	< 0.2	< 1	< 2
BWRC-13-04-18	140	0.20	5.20	< 20	0.51	70	< 200	< 50	127	22.5	< 20	18.5	< 0.2	< 1	< 2
BWRC-13-04-19	66	0.20	11.3	< 20	0.35	40	800	< 50	60.7	16.4	< 20	9.5	< 0.2	< 1	< 2
BWRC-13-04-20	218	0.42	11.5	< 20	0.43	80	< 200	< 50	46.0	28.2	< 20	23.0	< 0.2	< 1	< 2

Results

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BWRC-13-01-01	49.0	25.2	< 4	15.3	400	1.1	1.0	33	2150	3	47	144	0.33	123
BWRC-13-01-02	53.5	18.5	< 4	13.4	< 200	0.7	< 0.5	36	1270	3	52	58	0.29	88
BWRC-13-01-03	32.9	18.4	< 4	9.5	400	0.3	0.6	40	1860	4	53	60	0.21	88
BWRC-13-01-04	46.7	20.2	19	10.5	< 200	0.2	0.6	30	1480	3	55	41	0.08	87
BWRC-13-01-05	22.5	13.0	< 4	6.5	< 200	0.4	0.7	74	1880	3	81	50	0.20	132
BWRC-13-01-06	35.2	17.0	< 4	9.7	< 200	2.3	< 0.5	54	3490	4	65	72	0.18	105
BWRC-13-01-07	39.4	15.9	< 4	10.5	600	0.7	2.0	64	3380	5	72	73	0.40	412
BWRC-13-01-08	37.7	14.1	< 4	10.1	< 200	0.7	0.6	44	1870	4	55	53	0.15	94
BWRC-13-01-09	30.4	18.1	< 4	10.1	< 200	0.9	0.9	57	2520	5	62	79	0.29	99
BWRC-13-01-10	31.1	15.6	< 4	7.4	< 200	0.8	0.9	53	2620	4	87	88	0.54	123
BWRC-13-01-11	31.4	12.1	< 4	6.2	< 200	0.6	0.8	152	1630	3	63	60	0.29	118
BWRC-13-01-12	30.0	16.0	< 4	10.1	900	13.7	6.8	76	12100	5	48	594	0.04	609
BWRC-13-01-13	29.0	9.7	< 4	9.9	500	6.3	4.1	46	7160	4	37	446	0.05	452
BWRC-13-01-14	26.1	10.6	< 4	8.4	200	1.0	1.0	31	1860	2	63	82	0.14	128
BWRC-13-01-15	19.4	7.2	< 4	7.5	300	1.1	1.0	37	1720	2	38	82	0.08	127
BWRC-13-02-01	50.0	26.0	175	13.4	500	2.1	1.4	92	3460	4	55	197	0.04	220
BWRC-13-02-02	40.4	27.7	95	10.8	500	0.6	1.3	52	2790	4	66	226	0.03	182
BWRC-13-02-03	35.7	20.6	< 4	10.8	< 200	1.2	1.1	43	2590	4	44	199	0.05	157
BWRC-13-02-04	40.8	19.8	45	11.0	200	2.2	2.1	107	5160	5	57	307	1.43	251
BWRC-13-02-05	42.8	22.3	< 4	10.9	500	4.1	2.4	60	6800	6	59	530	0.14	299
BWRC-13-02-06	33.0	14.4	< 4	9.2	< 200	2.5	2.1	37	4780	4	53	339	0.04	199
BWRC-13-02-07	37.3	20.3	< 4	11.2	200	1.1	1.3	35	2820	3	65	214	0.02	150
BWRC-13-02-08	30.1	15.2	< 4	10.0	600	18.2	5.8	59	12600	6	49	965	0.03	479
BWRC-13-02-09	35.7	25.7	< 4	12.1	700	17.4	6.8	56	10600	5	43	1220	0.05	427
BWRC-13-02-10	31.3	20.2	< 4	10.5	600	15.9	6.4	56	13600	5	74	882	0.09	513
BWRC-13-02-11	34.9	22.2	27	11.9	1400	20.2	5.6	62	12100	5	58	631	0.02	471
BWRC-13-02-12	30.4	13.5	< 4	12.0	600	6.5	2.6	44	6450	4	30	380	0.02	255
BWRC-13-02-13	43.7	21.6	< 4	11.3	< 200	4.3	1.3	34	3170	3	32	184	0.02	158
BWRC-13-02-14	37.4	19.1	< 4	12.5	< 200	1.8	1.0	37	2600	3	50	134	0.05	141
BWRC-13-02-15	47.8	17.2	< 4	15.3	< 200	< 0.2	< 0.5	30	1340	3	61	45	< 0.01	102
BWRC-13-02-16	47.0	16.4	< 4	12.5	600	0.3	< 0.5	81	1370	3	73	33	0.04	125
BWRC-13-02-17	34.8	18.1	< 4	11.3	300	0.2	1.0	51	1400	3	52	46	0.02	122
BWRC-13-02-18	40.6	25.4	< 4	10.3	< 200	0.3	< 0.5	27	1490	2	86	50	0.02	106
BWRC-13-02-19	48.7	25.3	< 4	14.4	< 200	0.2	0.6	36	1370	3	58	46	0.02	122
BWRC-13-02-20	25.2	7.3	54	8.1	400	1.6	1.1	35	1490	< 2	61	32	0.06	270
BWRC-13-02-21	20.7	9.0	< 4	9.4	200	0.2	0.7	32	1130	2	43	26	0.03	151
BWRC-13-02-22	40.9	23.3	< 4	13.3	300	< 0.2	0.7	42	1240	2	40	56	0.21	110
BWRC-13-02-23	56.8	14.6	< 4	12.5	< 200	0.3	0.6	31	1740	2	102	51	0.03	125
BWRC-13-02-24	61.0	23.9	< 4	18.0	< 200	0.2	0.5	49	1230	2	39	30	0.02	107
BWRC-13-02-25	43.2	18.8	< 4	13.0	< 200	0.2	0.7	33	1340	2	50	34	0.02	92
BWRC-13-02-26	50.0	14.5	< 4	13.3	< 200	0.2	0.5	67	1200	< 2	45	24	0.02	78
BWRC-13-02-27	40.9	14.9	< 4	12.5	< 200	< 0.2	0.6	37	1310	< 2	63	28	0.05	82
BWRC-13-02-28	25.4	13.9	41	8.0	200	< 0.2	0.5	36	1180	2	62	27	0.02	92
BWRC-13-02-29	39.8	8.6	< 4	9.8	< 200	< 0.2	0.5	40	1070	< 2	49	23	0.09	92
BWRC-13-02-30	52.2	28.9	< 4	12.5	< 200	< 0.2	< 0.5	48	1230	2	35	32	< 0.01	84

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BWRC-13-02-31	39.6	11.0	< 4	14.9	< 200	< 0.2	0.7	38	1310	2	43	53	0.01	95
BWRC-13-02-32	36.8	17.4	< 4	10.6	< 200	0.2	0.6	39	2090	< 2	338	46	< 0.01	136
BWRC-13-02-33	105	31.7	< 4	7.6	< 200	0.7	0.8	47	2590	< 2	295	48	< 0.01	178
BWRC-13-02-34	182	37.4	< 4	14.9	< 200	0.3	1.0	53	2190	< 2	223	49	0.02	148
BWRC-13-02-35	50.6	20.4	19	9.7	300	0.2	0.8	44	2360	3	146	168	0.01	138
BWRC-13-03-01	64.9	37.5	< 4	13.7	1900	> 100	13.9	252	20300	9	40	> 5000	0.13	1460
BWRC-13-04-01	54.4	23.9	< 4	16.9	< 200	2.6	1.4	34	896	3	19	212	0.02	128
BWRC-13-04-02	37.2	20.7	< 4	12.8	700	11.1	5.5	45	12000	4	28	1150	0.05	493
BWRC-13-04-03	45.0	30.0	< 4	10.9	3100	19.4	17.3	119	14200	6	44	2280	0.19	3530
BWRC-13-04-04	28.3	13.2	< 4	7.4	1600	17.2	15.5	122	20000	9	65	1980	0.05	1650
BWRC-13-04-05	30.0	18.4	< 4	9.2	900	9.9	5.1	44	9940	5	22	717	0.01	620
BWRC-13-04-06	36.5	17.4	< 4	8.4	800	40.7	11.9	86	19500	8	29	2200	0.02	915
BWRC-13-04-07	48.6	20.3	< 4	12.0	900	19.1	17.1	74	18700	7	37	1350	0.10	1110
BWRC-13-04-08	24.1	13.9	< 4	5.6	700	17.7	11.9	51	13700	5	26	863	0.01	879
BWRC-13-04-09	28.7	11.2	< 4	8.9	900	3.7	2.1	31	7640	3	42	262	0.14	448
BWRC-13-04-10	19.5	10.5	< 4	5.8	2100	69.5	13.6	120	34500	12	39	1810	0.01	2260
BWRC-13-04-11	37.0	14.0	< 4	9.3	3000	56.0	11.4	92	32000	7	34	1720	0.02	1920
BWRC-13-04-12	46.2	17.4	< 4	10.5	1300	8.5	2.8	56	12400	4	30	949	< 0.01	408
BWRC-13-04-13	33.0	19.3	< 4	6.7	1000	16.9	7.3	67	18200	5	33	974	0.03	985
BWRC-13-04-14	31.9	14.2	< 4	8.7	700	10.4	3.4	43	10500	6	32	494	< 0.01	427
BWRC-13-04-15	54.7	16.2	< 4	9.5	< 200	2.7	1.6	55	6000	9	207	303	< 0.01	197
BWRC-13-04-16	38.6	16.9	< 4	6.0	< 200	0.5	1.3	55	4580	7	118	121	< 0.01	140
BWRC-13-04-17	48.1	17.3	< 4	8.7	< 200	1.4	1.7	82	12300	9	100	247	< 0.01	147
BWRC-13-04-18	30.8	16.7	< 4	7.8	< 200	2.9	2.5	102	20000	11	91	285	0.06	197
BWRC-13-04-19	23.0	8.3	< 4	3.0	300	3.7	1.0	61	10900	5	218	112	< 0.01	180
BWRC-13-04-20	108	32.0	< 4	12.4	500	6.1	3.8	67	12400	7	133	326	< 0.01	306

Quality Analysis ... *Innovative Technologies*

Date Submitted: 22-Jul-13
Invoice No.: A13-08339
Invoice Date: 09-Aug-13
Your Reference: CPRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

100 Heavy Mineral Concentrates samples were submitted for analysis.

The following analytical package was requested: Code 3A-Large HMC INAA(INAAGEO)
Code 3C Aqua Regia ICP(AQUAGEO)

REPORT **A13-08339**

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Notes:

Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Results

Analyte Symbol	Ag	As	Au	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	2	5	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-01-01	< 5	48	225	< 200	< 5	10	391	45	310	< 2	5.2	17.6	89	< 5	< 50
CPRC-13-01-02	< 5	93	221	< 200	< 5	< 1	377	62	360	< 2	6.7	22.9	92	< 5	< 50
CPRC-13-01-03	< 5	105	44	< 200	< 5	< 1	410	55	510	< 2	5.2	23.5	93	< 5	< 50
CPRC-13-01-04	< 5	94	< 5	< 200	< 5	< 1	342	50	440	< 2	4.3	20.7	103	< 5	< 50
CPRC-13-01-05	< 5	31	62	< 200	< 5	2	287	38	370	< 2	3.7	16.9	85	< 5	< 50
CPRC-13-01-06	< 5	37	144	< 200	< 5	< 1	288	43	370	< 2	5.6	16.9	94	< 5	< 50
CPRC-13-01-07	< 5	59	143	< 200	< 5	< 1	352	50	380	< 2	4.1	20.4	84	< 5	< 50
CPRC-13-01-08	< 5	54	161	< 200	< 5	7	346	56	390	< 2	4.7	23.6	57	< 5	< 50
CPRC-13-01-09	< 5	65	77	< 200	< 5	< 1	471	76	430	< 2	6.9	27.2	90	< 5	< 50
CPRC-13-01-10	< 5	152	19400	< 200	< 5	< 1	581	36	290	< 2	3.8	24.1	111	< 5	< 50
CPRC-13-02-01	< 5	62	113	< 200	< 5	4	474	76	510	< 2	4.4	27.8	339	< 5	< 50
CPRC-13-02-02	< 5	107	129	< 200	< 5	5	520	50	450	< 2	5.8	23.1	153	< 5	< 50
CPRC-13-02-03	< 5	85	76	< 200	< 5	< 1	429	49	380	< 2	6.0	20.1	95	< 5	< 50
CPRC-13-02-04	< 5	75	57	< 200	< 5	5	275	46	360	< 2	4.1	18.6	72	< 5	< 50
CPRC-13-02-05	< 5	110	179	< 200	< 5	8	409	73	380	< 2	4.6	24.0	167	< 5	< 50
CPRC-13-02-06	< 5	81	337	< 200	< 5	< 1	396	64	510	< 2	6.8	24.5	89	< 5	< 50
CPRC-13-02-07	< 5	65	608	< 200	< 5	< 1	596	80	500	< 2	4.4	27.3	340	< 5	< 50
CPRC-13-02-08	< 5	44	294	< 200	< 5	< 1	447	60	400	< 2	5.6	22.2	149	< 5	< 50
CPRC-13-02-09	< 5	24	135	< 200	< 5	< 1	391	108	310	< 2	2.8	24.2	157	< 5	< 50
CPRC-13-02-10	< 5	40	150	< 200	< 5	5	352	115	320	< 2	4.2	25.5	99	< 5	< 50
CPRC-13-02-11	< 5	48	93	< 200	< 5	< 1	615	68	510	< 2	5.6	25.0	116	< 5	< 50
CPRC-13-02-12	< 5	554	704	4700	< 5	14	789	110	320	< 2	10.2	24.6	114	< 5	< 50
CPRC-13-03-01	< 5	113	< 5	1300	< 5	< 1	319	61	570	< 2	6.2	24.5	88	< 5	< 50
CPRC-13-03-02	< 5	1170	136	1400	< 5	< 1	153	111	540	< 2	3.0	29.2	45	< 5	< 50
CPRC-13-03-03	< 5	1120	212	< 200	< 5	< 1	188	117	570	< 2	2.3	28.5	48	< 5	< 50
CPRC-13-03-04	< 5	1650	88	1300	< 5	< 1	185	114	670	< 2	2.4	31.3	62	< 5	< 50
CPRC-13-03-05	< 5	582	189	1300	< 5	9	220	72	410	< 2	3.1	25.1	99	< 5	< 50
CPRC-13-03-06	< 5	294	64	< 200	< 5	13	290	61	430	< 2	2.4	22.2	171	< 5	< 50
CPRC-13-03-07	< 5	99	< 5	< 200	< 5	15	243	43	350	< 2	3.1	19.1	99	< 5	< 50
CPRC-13-03-08	< 5	71	< 5	< 200	< 5	4	308	78	490	< 2	5.3	26.9	62	< 5	< 50
CPRC-13-03-09	< 5	59	137	< 200	< 5	< 1	128	73	390	< 2	4.9	25.3	52	< 5	< 50
CPRC-13-03-10	< 5	68	79	< 200	< 5	< 1	322	60	410	< 2	5.5	25.5	53	< 5	< 50
CPRC-13-03-11	< 5	47	145	< 200	< 5	7	365	54	480	< 2	5.9	22.6	105	< 5	< 50
CPRC-13-03-12	< 5	62	2680	< 200	< 5	6	393	56	460	< 2	5.6	22.5	90	< 5	< 50
CPRC-13-03-13	< 5	49	538	< 200	< 5	7	350	66	420	< 2	4.3	23.3	64	< 5	< 50
CPRC-13-03-14	< 5	66	< 5	< 200	< 5	5	353	63	390	< 2	4.6	24.4	86	< 5	< 50
CPRC-13-03-15	< 5	55	1550	< 200	< 5	< 1	358	50	290	< 2	4.1	23.8	103	< 5	< 50
CPRC-13-03-16	< 5	37	122	< 200	< 5	9	459	48	470	< 2	5.4	21.9	86	< 5	< 50
CPRC-13-03-17	< 5	38	120	< 200	< 5	10	439	65	460	< 2	5.5	22.5	85	< 5	< 50
CPRC-13-03-18	< 5	43	181	< 200	< 5	< 1	407	41	340	< 2	4.2	18.0	93	< 5	< 50
CPRC-13-03-19	< 5	52	< 5	< 200	< 5	< 1	461	76	430	< 2	5.0	23.8	96	< 5	< 50
CPRC-13-03-20	< 5	48	150	< 200	< 5	< 1	392	45	370	< 2	4.1	18.1	91	< 5	< 50
CPRC-13-03-21	< 5	85	244	1800	< 5	< 1	1130	190	410	< 2	4.6	27.6	233	< 5	< 50
CPRC-13-03-22	< 5	135	94	20400	< 5	< 1	958	364	360	< 2	< 0.2	13.9	146	< 5	< 50
CPRC-13-04-01	< 5	50	84	< 200	< 5	< 1	339	40	360	< 2	4.9	18.7	73	< 5	< 50

Analyte Symbol	Ag	As	Au	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	2	5	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-04-02	< 5	169	279	< 200	< 5	6	276	76	460	< 2	4.2	23.7	57	< 5	< 50
CPRC-13-04-03	< 5	43	35	< 200	< 5	6	314	53	370	< 2	4.5	19.8	61	< 5	< 50
CPRC-13-04-04	< 5	42	741	< 200	< 5	6	333	63	380	< 2	5.2	20.2	67	< 5	< 50
CPRC-13-04-05	< 5	28	< 5	< 200	< 5	4	255	50	310	< 2	3.4	17.8	43	< 5	< 50
CPRC-13-04-06	< 5	38	68	< 200	< 5	7	263	57	420	< 2	4.7	18.0	64	< 5	< 50
CPRC-13-04-07	< 5	42	146	< 200	< 5	7	323	66	340	< 2	5.5	20.4	61	< 5	< 50
CPRC-13-04-08	< 5	38	50	< 200	< 5	6	530	37	310	< 2	4.0	18.5	83	< 5	< 50
CPRC-13-04-09	< 5	22	62	< 200	< 5	< 1	348	51	370	< 2	3.7	19.2	66	< 5	< 50
CPRC-13-04-10	< 5	28	68	< 200	< 5	8	252	50	460	< 2	5.2	18.3	59	< 5	< 50
CPRC-13-04-11	< 5	14	17	< 200	< 5	< 1	143	103	390	< 2	2.8	18.9	42	< 5	< 50
CPRC-13-04-12	< 5	86	402	< 200	< 5	< 1	279	129	410	< 2	4.2	22.8	67	< 5	< 50
CPRC-13-04-13	< 5	28	108	< 200	< 5	3	251	93	340	< 2	3.3	19.9	49	< 5	< 50
CPRC-13-04-14	< 5	33	1340	< 200	< 5	< 1	328	44	330	< 2	3.8	18.1	109	< 5	< 50
CPRC-13-04-15	< 5	50	1910	< 200	< 5	< 1	449	43	330	< 2	4.8	20.1	90	< 5	< 50
CPRC-13-04-16	< 5	90	314	< 200	< 5	6	579	59	370	< 2	5.6	22.1	81	< 5	< 50
CPRC-13-04-17	< 5	186	1870	1900	< 5	< 1	608	124	160	< 2	4.4	26.6	58	< 5	< 50
CPRC-13-04-18	< 5	111	10500	2600	< 5	14	543	51	140	< 2	7.3	21.8	41	< 5	< 50
CPRC-13-04-19	< 5	80	3230	3600	< 5	< 1	669	63	210	< 2	2.5	39.8	42	< 5	< 50
CPRC-13-05-01	< 5	50	84	< 200	< 5	< 1	255	53	350	< 2	4.2	18.4	49	< 5	< 50
CPRC-13-05-02	< 5	76	80	< 200	< 5	< 1	531	< 5	350	< 2	6.1	21.3	81	< 5	< 50
CPRC-13-05-03	< 5	52	228	< 200	< 5	8	285	42	300	< 2	3.7	17.0	53	< 5	< 50
CPRC-13-05-04	< 5	124	52	< 200	< 5	< 1	318	58	510	< 2	4.5	21.5	62	< 5	< 50
CPRC-13-05-05	< 5	63	244	1300	< 5	< 1	283	46	440	< 2	6.8	20.7	69	< 5	< 50
CPRC-13-05-06	< 5	53	< 5	< 200	< 5	< 1	294	55	380	< 2	5.1	19.0	61	< 5	< 50
CPRC-13-05-07	< 5	57	140	< 200	< 5	< 1	325	43	390	< 2	4.1	18.9	72	< 5	< 50
CPRC-13-05-08	< 5	34	196	< 200	< 5	< 1	195	69	250	< 2	2.9	17.2	47	< 5	< 50
CPRC-13-05-09	< 5	31	223	< 200	< 5	< 1	230	97	390	< 2	3.5	23.9	60	< 5	< 50
CPRC-13-05-10	< 5	12	104	< 200	< 5	9	238	62	290	< 2	3.5	17.8	54	< 5	< 50
CPRC-13-05-11	< 5	43	127	< 200	< 5	< 1	420	54	370	< 2	5.3	20.2	78	< 5	< 50
CPRC-13-05-12	< 5	32	133	< 200	< 5	< 1	346	39	320	< 2	4.9	13.4	71	< 5	< 50
CPRC-13-05-13	< 5	30	41	< 200	< 5	< 1	232	66	340	< 2	3.9	18.4	64	< 5	< 50
CPRC-13-05-14	< 5	36	91	< 200	< 5	3	252	39	290	< 2	3.8	15.7	64	< 5	< 50
CPRC-13-05-15	< 5	57	< 5	< 200	< 5	7	425	48	420	< 2	5.8	20.3	90	< 5	< 50
CPRC-13-05-16	< 5	42	184	< 200	< 5	< 1	274	33	300	< 2	3.8	15.0	104	< 5	< 50
CPRC-13-05-17	< 5	43	56	< 200	< 5	4	282	34	330	< 2	3.9	14.8	119	< 5	< 50
CPRC-13-05-18	< 5	92	2000	1200	< 5	< 1	378	91	250	< 2	3.6	22.4	94	< 5	< 50
CPRC-13-05-19	< 5	114	5200	< 200	< 5	< 1	369	65	380	< 2	3.4	24.6	123	< 5	< 50
CPRC-13-05-20	< 5	86	3540	< 200	< 5	8	281	49	260	< 2	2.9	16.5	74	< 5	< 50
CPRC-13-05-21	< 5	55	5650	1200	< 5	< 1	511	55	100	< 2	3.3	16.2	127	< 5	< 50
CPRC-13-05-22	< 5	112	3940	1400	< 5	< 1	631	112	150	< 2	2.9	21.2	110	< 5	< 50
CPRC-13-05-23	< 5	218	6400	4200	< 5	10	573	244	180	< 2	3.2	21.8	76	< 5	< 50
CPRC-13-05-24	< 5	41	2480	2800	< 5	8	396	113	350	< 2	3.9	20.6	45	< 5	< 50
CPRC-13-05-25	< 5	16	839	< 200	< 5	< 1	69	171	660	< 2	< 0.2	17.9	4	< 5	< 50
CPRC-13-05-26	< 5	52	306	< 200	< 5	< 1	465	45	90	< 2	1.8	31.7	48	< 5	< 50
CPRC-13-05-27	< 5	89	< 5	< 200	< 5	< 1	283	39	< 10	< 2	4.5	25.9	45	< 5	< 50
CPRC-13-05-28	< 5	43	2160	700	< 5	< 1	713	55	50	< 2	4.1	21.0	91	< 5	< 50

Analyte Symbol	Ag	As	Au	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	2	5	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-05-29	< 5	44	510	< 200	< 5	14	728	< 5	70	< 2	4.6	19.4	76	< 5	< 50
CPRC-13-05-30	< 5	1290	3510	< 200	< 5	< 1	979	157	< 10	< 2	24.5	22.3	< 1	< 5	< 50
CPRC-13-06-01	< 5	69	78	< 200	< 5	< 1	230	64	300	< 2	3.0	19.8	44	< 5	< 50
CPRC-13-06-02	< 5	63	< 5	< 200	< 5	5	294	70	400	< 2	5.6	23.9	110	< 5	< 50
CPRC-13-06-03	< 5	54	126	< 200	< 5	< 1	225	88	430	< 2	4.0	22.2	80	< 5	< 50
CPRC-13-06-04	< 5	39	28	< 200	< 5	< 1	202	63	360	< 2	3.5	17.5	66	< 5	< 50
CPRC-13-06-05	< 5	42	333	< 200	< 5	4	307	62	320	< 2	4.2	19.4	80	< 5	< 50
CPRC-13-06-06	< 5	34	< 5	< 200	< 5	3	220	40	300	< 2	3.3	14.8	89	< 5	< 50
CPRC-13-06-07	< 5	54	< 5	< 200	< 5	< 1	261	38	340	< 2	4.6	17.0	69	< 5	< 50

Results

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05		20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-01-01	216	1.36	28.9	< 20	0.41	80	< 200	< 50	6.7	48.2	< 20	22.0	< 0.2	< 1	< 2
CPRC-13-01-02	217	1.67	16.3	< 20	0.42	90	< 200	< 50	7.0	59.8	< 20	21.8	< 0.2	< 1	< 2
CPRC-13-01-03	203	1.04	15.9	< 20	0.38	90	< 200	< 50	8.6	51.0	< 20	23.3	< 0.2	< 1	< 2
CPRC-13-01-04	180	1.67	21.8	< 20	0.40	130	< 200	< 50	8.1	43.2	< 20	20.1	< 0.2	5	< 2
CPRC-13-01-05	154	0.90	45.2	< 20	0.47	40	< 200	< 50	4.5	36.9	< 20	16.4	< 0.2	< 1	< 2
CPRC-13-01-06	162	0.86	44.8	< 20	0.44	110	< 200	< 50	4.4	39.3	< 20	16.3	< 0.2	< 1	3
CPRC-13-01-07	188	0.96	34.4	< 20	0.29	70	< 200	< 50	6.8	36.4	< 20	17.0	< 0.2	< 1	3
CPRC-13-01-08	194	0.81	18.2	< 20	0.33	80	< 200	< 50	7.1	42.8	< 20	20.1	< 0.2	< 1	< 2
CPRC-13-01-09	241	1.35	13.2	< 20	0.41	110	< 200	< 50	8.6	49.1	< 20	25.7	< 0.2	< 1	< 2
CPRC-13-01-10	320	0.76	7.30	< 20	0.22	200	< 200	< 50	11.4	38.7	< 20	43.8	< 0.2	< 1	< 2
CPRC-13-02-01	253	1.26	9.70	< 20	0.41	180	< 200	< 50	7.4	44.6	< 20	34.0	< 0.2	< 1	< 2
CPRC-13-02-02	270	1.70	21.1	< 20	0.55	80	< 200	< 50	6.7	52.7	< 20	24.5	< 0.2	< 1	< 2
CPRC-13-02-03	222	1.25	17.5	< 20	0.58	100	< 200	< 50	6.9	51.7	< 20	23.1	< 0.2	< 1	< 2
CPRC-13-02-04	203	0.97	42.8	< 20	0.47	70	< 200	< 50	5.8	44.7	< 20	17.5	< 0.2	< 1	< 2
CPRC-13-02-05	199	0.86	12.3	< 20	0.37	110	< 200	< 50	11.3	42.1	< 20	29.3	< 0.2	< 1	3
CPRC-13-02-06	272	1.30	16.5	< 20	0.38	90	< 200	< 50	8.2	56.1	< 20	25.6	< 0.2	< 1	5
CPRC-13-02-07	341	1.89	10.2	< 20	0.36	250	< 200	< 50	7.6	43.5	< 20	43.7	< 0.2	< 1	< 2
CPRC-13-02-08	312	1.72	23.9	30	0.59	80	< 200	< 50	6.5	45.1	< 20	25.2	< 0.2	< 1	4
CPRC-13-02-09	208	0.71	13.1	20	0.34	130	< 200	60	4.4	31.9	< 20	27.0	< 0.2	< 1	< 2
CPRC-13-02-10	246	1.79	18.3	< 20	0.42	70	< 200	< 50	5.1	41.2	< 20	21.7	< 0.2	< 1	< 2
CPRC-13-02-11	433	1.30	25.7	40	0.46	170	< 200	< 50	5.9	43.0	< 20	35.6	< 0.2	< 1	4
CPRC-13-02-12	438	1.42	1.70	< 20	0.27	570	< 200	310	12.2	43.9	< 20	73.4	< 0.2	< 1	< 2
CPRC-13-03-01	223	1.37	17.8	< 20	0.47	60	< 200	< 50	9.1	57.5	< 20	21.1	0.5	< 1	6
CPRC-13-03-02	117	0.98	20.8	< 20	0.45	50	< 200	< 50	21.6	35.8	< 20	11.0	< 0.2	< 1	< 2
CPRC-13-03-03	126	0.77	21.4	< 20	0.42	60	< 200	< 50	21.3	37.9	< 20	11.4	< 0.2	< 1	< 2
CPRC-13-03-04	136	0.83	24.0	30	0.45	40	< 200	< 50	26.4	38.0	< 20	12.4	< 0.2	< 1	< 2
CPRC-13-03-05	116	0.67	11.2	< 20	0.40	30	< 200	< 50	13.0	35.2	< 20	18.1	< 0.2	< 1	3
CPRC-13-03-06	155	0.74	10.2	< 20	0.40	100	< 200	< 50	7.8	42.4	< 20	25.5	< 0.2	< 1	< 2
CPRC-13-03-07	136	0.53	14.2	< 20	0.37	80	< 200	70	6.9	39.0	< 20	21.4	< 0.2	< 1	< 2
CPRC-13-03-08	209	0.96	17.0	< 20	0.45	150	< 200	< 50	7.2	49.5	< 20	19.7	< 0.2	< 1	< 2
CPRC-13-03-09	170	0.68	23.4	< 20	0.54	70	< 200	< 50	7.3	43.0	< 20	16.1	< 0.2	< 1	< 2
CPRC-13-03-10	187	0.67	22.4	< 20	0.50	90	< 200	90	7.5	42.2	< 20	18.0	< 0.2	< 1	3
CPRC-13-03-11	208	1.09	37.3	< 20	0.46	70	< 200	< 50	5.9	43.0	< 20	18.0	< 0.2	< 1	< 2
CPRC-13-03-12	216	1.02	25.9	20	0.43	70	< 200	< 50	7.7	44.9	< 20	20.1	< 0.2	< 1	< 2
CPRC-13-03-13	189	0.92	15.2	< 20	0.46	110	< 200	< 50	6.7	49.8	< 20	20.6	< 0.2	< 1	4
CPRC-13-03-14	198	1.02	24.9	< 20	0.37	70	< 200	< 50	9.2	45.8	< 20	20.3	< 0.2	< 1	4
CPRC-13-03-15	209	0.55	10.0	< 20	0.47	240	< 200	< 50	7.3	44.1	< 20	30.2	< 0.2	< 1	< 2
CPRC-13-03-16	239	1.35	21.8	< 20	0.43	150	< 200	< 50	5.5	44.8	< 20	23.8	< 0.2	< 1	5
CPRC-13-03-17	226	1.57	19.3	< 20	0.48	90	< 200	< 50	6.6	42.8	< 20	22.0	< 0.2	< 1	< 2
CPRC-13-03-18	224	1.08	26.6	< 20	0.47	90	< 200	120	5.9	41.5	< 20	22.1	< 0.2	< 1	< 2
CPRC-13-03-19	243	1.24	20.7	< 20	0.52	160	< 200	< 50	4.5	48.4	< 20	26.3	< 0.2	< 1	< 2
CPRC-13-03-20	239	1.06	34.4	< 20	0.60	140	< 200	< 50	6.9	41.3	< 20	22.2	< 0.2	< 1	4
CPRC-13-03-21	227	1.45	5.10	< 20	0.37	180	< 200	220	10.7	49.4	< 20	40.5	< 0.2	< 1	< 2
CPRC-13-03-22	97	0.86	1.90	70	0.24	< 10	< 200	< 50	19.2	35.1	< 20	19.8	< 0.2	< 1	< 2
CPRC-13-04-01	194	0.94	34.0	< 20	0.49	60	< 200	< 50	5.6	45.8	< 20	18.7	< 0.2	5	4

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05		20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-04-02	149	0.58	26.2	< 20	0.44	70	< 200	< 50	8.0	47.1	< 20	16.8	< 0.2	< 1	< 2
CPRC-13-04-03	182	0.99	28.6	< 20	0.49	70	< 200	< 50	5.4	48.7	< 20	17.9	< 0.2	6	< 2
CPRC-13-04-04	180	0.91	29.1	< 20	0.45	70	< 200	< 50	5.3	48.0	< 20	17.9	< 0.2	< 1	< 2
CPRC-13-04-05	127	0.58	34.9	< 20	0.49	40	< 200	< 50	4.0	40.5	< 20	13.3	< 0.2	< 1	< 2
CPRC-13-04-06	152	0.87	28.4	< 20	0.53	50	< 200	< 50	4.0	50.0	< 20	15.7	< 0.2	< 1	2
CPRC-13-04-07	167	0.73	27.8	< 20	0.49	60	< 200	< 50	4.5	49.6	< 20	17.4	< 0.2	< 1	< 2
CPRC-13-04-08	197	1.71	22.4	< 20	0.52	120	< 200	< 50	6.5	42.6	< 20	28.5	< 0.2	8	2
CPRC-13-04-09	193	0.85	36.8	< 20	0.40	60	< 200	< 50	4.7	38.0	< 20	17.1	< 0.2	< 1	< 2
CPRC-13-04-10	153	0.67	24.3	< 20	0.44	90	< 200	110	4.0	48.2	< 20	16.3	< 0.2	< 1	< 2
CPRC-13-04-11	80	0.42	52.2	< 20	0.29	30	< 200	< 50	4.0	23.1	< 20	7.9	< 0.2	< 1	< 2
CPRC-13-04-12	134	0.90	22.8	< 20	0.46	60	< 200	< 50	4.3	52.6	< 20	17.2	< 0.2	< 1	< 2
CPRC-13-04-13	131	0.81	32.1	< 20	0.50	60	< 200	< 50	2.5	45.7	< 20	13.6	< 0.2	< 1	< 2
CPRC-13-04-14	177	0.56	59.3	< 20	0.26	30	< 200	< 50	4.4	30.9	< 20	14.0	< 0.2	11	2
CPRC-13-04-15	248	0.68	38.2	< 20	0.24	60	< 200	< 50	5.3	33.5	< 20	20.0	< 0.2	14	3
CPRC-13-04-16	320	1.46	19.4	< 20	0.42	150	< 200	< 50	5.7	35.6	< 20	29.3	< 0.2	13	4
CPRC-13-04-17	293	0.95	30.5	< 20	0.22	180	< 200	< 50	13.2	27.5	< 20	22.8	< 0.2	< 1	5
CPRC-13-04-18	291	0.88	24.6	30	0.21	100	< 200	< 50	11.0	37.2	< 20	32.8	< 0.2	< 1	4
CPRC-13-04-19	363	1.13	16.0	30	0.25	220	< 200	< 50	13.5	22.6	< 20	26.1	< 0.2	< 1	< 2
CPRC-13-05-01	153	0.57	28.9	< 20	0.45	100	< 200	< 50	6.0	45.8	< 20	14.4	< 0.2	< 1	< 2
CPRC-13-05-02	269	0.97	21.4	< 20	0.45	90	< 200	< 50	7.9	55.7	< 20	25.7	< 0.2	14	< 2
CPRC-13-05-03	153	0.94	34.2	< 20	0.57	40	< 200	< 50	5.6	48.7	< 20	15.0	< 0.2	< 1	3
CPRC-13-05-04	169	0.95	22.6	< 20	0.52	70	< 200	< 50	8.3	50.6	< 20	15.8	< 0.2	< 1	< 2
CPRC-13-05-05	181	0.84	29.3	< 20	0.57	240	< 200	< 50	6.8	49.7	< 20	17.4	< 0.2	< 1	5
CPRC-13-05-06	181	0.75	25.9	< 20	0.68	70	< 200	< 50	5.5	50.3	< 20	17.4	< 0.2	< 1	< 2
CPRC-13-05-07	197	1.41	24.1	< 20	0.58	70	< 200	< 50	7.2	50.6	< 20	19.8	< 0.2	< 1	< 2
CPRC-13-05-08	139	0.54	38.9	< 20	0.50	40	< 200	< 50	4.1	39.4	< 20	12.7	< 0.2	< 1	< 2
CPRC-13-05-09	170	1.18	25.6	20	0.42	80	< 200	< 50	5.4	40.1	< 20	15.2	< 0.2	< 1	< 2
CPRC-13-05-10	173	0.77	46.4	< 20	0.45	80	< 200	< 50	3.7	47.7	< 20	14.3	< 0.2	< 1	3
CPRC-13-05-11	259	1.92	25.4	< 20	0.41	140	< 200	< 50	6.8	41.5	< 20	23.4	< 0.2	< 1	< 2
CPRC-13-05-12	239	1.09	37.6	< 20	0.52	110	< 200	< 50	4.3	42.4	< 20	19.0	< 0.2	9	< 2
CPRC-13-05-13	167	0.77	48.6	< 20	0.47	40	< 200	< 50	4.1	34.8	< 20	14.3	< 0.2	< 1	< 2
CPRC-13-05-14	197	0.67	53.1	< 20	0.45	80	< 200	< 50	4.7	32.7	< 20	15.2	< 0.2	12	< 2
CPRC-13-05-15	287	1.62	26.3	< 20	0.41	140	< 200	< 50	5.4	38.3	< 20	22.9	< 0.2	< 1	< 2
CPRC-13-05-16	213	0.88	52.7	< 20	0.28	50	< 200	< 50	6.3	30.8	< 20	14.4	< 0.2	11	< 2
CPRC-13-05-17	221	0.81	62.5	< 20	0.18	70	< 200	< 50	4.8	29.6	< 20	14.6	< 0.2	18	< 2
CPRC-13-05-18	194	0.45	10.2	< 20	0.27	130	< 200	< 50	8.0	34.6	< 20	30.1	< 0.2	12	4
CPRC-13-05-19	245	1.29	24.7	50	0.23	60	< 200	< 50	6.6	36.6	< 20	17.5	< 0.2	24	< 2
CPRC-13-05-20	236	0.81	52.5	< 20	0.17	80	< 200	< 50	7.0	25.6	< 20	14.5	< 0.2	14	< 2
CPRC-13-05-21	254	0.98	11.7	< 20	0.29	180	< 200	< 50	8.8	28.9	< 20	37.7	< 0.2	9	< 2
CPRC-13-05-22	285	0.82	13.2	< 20	0.24	130	< 200	< 50	12.4	30.2	< 20	38.2	< 0.2	< 1	6
CPRC-13-05-23	204	0.76	11.2	90	0.24	140	< 200	< 50	15.9	29.9	< 20	28.1	< 0.2	8	< 2
CPRC-13-05-24	236	1.01	17.3	< 20	0.17	90	< 200	< 50	21.1	31.3	< 20	21.0	< 0.2	< 1	< 2
CPRC-13-05-25	36	0.22	22.0	< 20	0.50	< 10	< 200	< 50	0.6	14.9	< 20	3.7	< 0.2	< 1	< 2
CPRC-13-05-26	239	0.88	14.2	< 20	0.14	180	< 200	< 50	14.0	24.1	< 20	32.1	< 0.2	< 1	2
CPRC-13-05-27	236	1.51	15.3	< 20	0.12	90	< 200	< 50	12.9	28.0	< 20	19.7	< 0.2	< 1	< 2
CPRC-13-05-28	363	0.89	10.3	< 20	0.22	350	< 200	< 50	15.1	31.8	< 20	49.0	< 0.2	< 1	3

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05		20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-05-29	391	1.17	11.7	< 20	0.20	350	< 200	< 50	12.8	22.3	< 20	52.4	< 0.2	< 1	4
CPRC-13-05-30	524	1.47	2.30	< 20	0.16	660	< 200	< 50	29.4	26.4	< 20	168	< 0.2	< 1	14
CPRC-13-06-01	154	1.21	22.4	< 20	0.51	40	< 200	< 50	7.5	38.5	< 20	14.9	< 0.2	< 1	< 2
CPRC-13-06-02	215	1.71	18.1	< 20	0.51	170	< 200	< 50	7.6	44.6	< 20	18.6	< 0.2	< 1	< 2
CPRC-13-06-03	167	1.05	22.8	< 20	0.48	40	< 200	< 50	6.0	40.0	< 20	14.8	< 0.2	< 1	5
CPRC-13-06-04	153	0.66	37.4	< 20	0.59	40	< 200	< 50	4.9	38.1	< 20	12.7	< 0.2	< 1	< 2
CPRC-13-06-05	170	0.24	39.1	< 20	0.57	120	< 200	< 50	4.3	34.9	< 20	16.1	< 0.2	9	< 2
CPRC-13-06-06	133	0.66	60.7	20	0.30	30	< 200	< 50	3.3	29.5	< 20	13.2	< 0.2	15	2
CPRC-13-06-07	170	1.24	37.8	< 20	0.34	50	< 200	70	4.1	34.2	< 20	19.7	< 0.2	10	< 2

Results

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13-01-01	45.7	16.6	< 4	13.5	< 200	0.3	< 0.5	30	891	3	33	18	0.41	67
CPRC-13-01-02	37.1	16.2	< 4	16.2	< 200	0.3	< 0.5	45	899	6	23	19	1.66	69
CPRC-13-01-03	34.9	18.9	< 4	15.3	< 200	0.3	< 0.5	85	669	4	19	23	1.16	62
CPRC-13-01-04	35.1	7.6	< 4	15.7	< 200	< 0.2	0.6	39	656	4	22	18	0.51	123
CPRC-13-01-05	23.7	16.3	< 4	11.7	< 200	< 0.2	< 0.5	31	726	4	14	13	0.02	73
CPRC-13-01-06	25.1	13.8	< 4	12.6	< 200	< 0.2	< 0.5	34	751	5	14	16	0.02	70
CPRC-13-01-07	35.7	19.3	< 4	13.0	< 200	< 0.2	< 0.5	43	844	5	52	20	0.02	81
CPRC-13-01-08	38.6	16.2	< 4	12.6	< 200	< 0.2	< 0.5	46	882	4	58	20	0.09	92
CPRC-13-01-09	58.2	19.8	< 4	16.9	< 200	< 0.2	< 0.5	48	874	4	58	18	0.16	87
CPRC-13-01-10	28.8	8.8	< 4	17.4	< 200	< 0.2	< 0.5	48	1820	5	10	15	0.22	46
CPRC-13-02-01	46.6	19.3	< 4	23.4	< 200	0.2	< 0.5	30	968	3	41	17	0.18	75
CPRC-13-02-02	68.7	24.4	< 4	18.0	< 200	0.2	< 0.5	29	976	3	26	17	0.33	61
CPRC-13-02-03	55.9	17.4	< 4	14.6	< 200	< 0.2	< 0.5	45	809	3	22	18	1.12	62
CPRC-13-02-04	39.9	12.3	< 4	10.8	< 200	0.3	< 0.5	50	858	3	25	19	1.00	64
CPRC-13-02-05	30.9	9.9	< 4	15.8	< 200	2.0	< 0.5	108	1150	4	32	23	1.12	88
CPRC-13-02-06	34.5	15.0	< 4	16.1	< 200	0.3	< 0.5	52	1470	5	30	29	0.38	124
CPRC-13-02-07	83.7	28.6	< 4	30.4	< 200	< 0.2	< 0.5	46	836	4	21	21	0.11	66
CPRC-13-02-08	62.0	18.4	< 4	20.3	< 200	< 0.2	< 0.5	43	903	< 2	24	16	0.08	66
CPRC-13-02-09	48.3	13.2	< 4	15.3	< 200	< 0.2	< 0.5	22	1470	< 2	162	10	0.06	111
CPRC-13-02-10	67.4	20.7	< 4	17.1	< 200	0.2	< 0.5	27	2310	< 2	59	8	0.06	124
CPRC-13-02-11	43.9	14.6	< 4	16.4	< 200	< 0.2	< 0.5	30	1240	2	80	12	0.05	94
CPRC-13-02-12	46.2	< 0.5	< 4	20.6	< 200	0.5	2.3	268	13600	34	56	53	0.13	179
CPRC-13-03-01	27.5	25.3	< 4	11.8	< 200	0.5	< 0.5	45	935	4	29	28	0.93	84
CPRC-13-03-02	18.5	9.4	< 4	8.2	300	1.5	4.5	126	661	5	45	124	> 10.0	438
CPRC-13-03-03	19.0	13.8	< 4	9.2	500	1.5	3.4	108	649	5	102	153	> 10.0	354
CPRC-13-03-04	17.5	11.6	< 4	11.0	300	4.5	4.0	128	678	9	37	152	> 10.0	410
CPRC-13-03-05	20.7	17.2	< 4	11.6	< 200	0.8	0.8	79	715	5	23	46	8.16	121
CPRC-13-03-06	22.2	14.0	< 4	15.9	< 200	0.7	0.8	103	766	5	20	29	3.27	130
CPRC-13-03-07	19.8	9.4	< 4	11.2	< 200	< 0.2	< 0.5	30	651	5	18	17	0.84	72
CPRC-13-03-08	42.1	19.3	< 4	14.2	< 200	< 0.2	< 0.5	36	957	3	47	15	0.22	84
CPRC-13-03-09	25.5	8.5	< 4	10.9	300	< 0.2	< 0.5	33	690	3	55	14	0.04	101
CPRC-13-03-10	35.7	14.6	< 4	11.7	< 200	< 0.2	< 0.5	42	765	5	27	21	0.04	95
CPRC-13-03-11	36.7	21.7	< 4	16.1	300	< 0.2	< 0.5	42	723	6	21	19	0.02	86
CPRC-13-03-12	35.4	14.0	< 4	15.4	< 200	< 0.2	< 0.5	40	658	7	19	20	0.01	92
CPRC-13-03-13	39.3	25.3	< 4	13.3	< 200	0.2	< 0.5	59	907	3	34	23	0.16	104
CPRC-13-03-14	44.6	13.2	< 4	15.1	< 200	< 0.2	< 0.5	35	1040	2	38	23	0.05	78
CPRC-13-03-15	28.9	5.5	< 4	13.8	< 200	< 0.2	< 0.5	27	908	2	33	13	0.03	69
CPRC-13-03-16	40.5	16.0	< 4	15.1	< 200	< 0.2	< 0.5	23	1060	< 2	20	12	0.02	79
CPRC-13-03-17	32.7	24.5	< 4	14.8	< 200	< 0.2	< 0.5	23	906	3	18	13	0.02	75
CPRC-13-03-18	32.6	15.0	< 4	14.4	< 200	< 0.2	< 0.5	27	976	2	43	12	0.04	89
CPRC-13-03-19	36.2	11.9	< 4	17.3	< 200	< 0.2	< 0.5	31	1070	3	62	13	0.05	100
CPRC-13-03-20	29.9	12.1	< 4	13.1	< 200	< 0.2	< 0.5	25	932	4	20	18	0.03	78
CPRC-13-03-21	35.1	14.4	< 4	23.8	< 200	< 0.2	0.7	56	7910	9	48	114	0.25	93
CPRC-13-03-22	17.4	< 0.5	74	16.8	< 200	3.7	11.0	269	40100	58	52	944	0.50	115
CPRC-13-04-01	45.0	15.8	< 4	11.4	< 200	0.3	< 0.5	32	1190	3	44	16	0.26	75

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13-04-02	28.3	10.2	< 4	10.9	< 200	0.4	< 0.5	54	988	4	32	23	2.39	103
CPRC-13-04-03	41.5	18.3	< 4	10.7	< 200	< 0.2	< 0.5	25	955	< 2	37	11	0.16	78
CPRC-13-04-04	36.7	7.2	< 4	11.4	< 200	< 0.2	< 0.5	28	1030	< 2	38	12	0.22	72
CPRC-13-04-05	22.7	9.2	< 4	7.4	300	< 0.2	< 0.5	23	1050	< 2	58	12	0.15	69
CPRC-13-04-06	26.0	6.3	< 4	10.2	< 200	< 0.2	< 0.5	37	822	< 2	57	12	0.23	64
CPRC-13-04-07	30.6	10.0	< 4	11.6	< 200	< 0.2	< 0.5	42	718	< 2	22	12	0.32	60
CPRC-13-04-08	44.1	15.9	< 4	16.5	< 200	< 0.2	< 0.5	25	727	< 2	19	12	0.07	105
CPRC-13-04-09	42.8	12.9	< 4	11.8	< 200	< 0.2	< 0.5	17	845	< 2	39	9	0.03	85
CPRC-13-04-10	24.3	12.3	< 4	11.1	300	< 0.2	< 0.5	13	832	< 2	28	7	< 0.01	76
CPRC-13-04-11	13.0	6.5	< 4	6.3	< 200	0.3	< 0.5	10	1740	< 2	246	< 2	0.03	201
CPRC-13-04-12	25.4	13.5	< 4	13.3	< 200	< 0.2	< 0.5	24	1090	< 2	104	4	0.23	119
CPRC-13-04-13	41.5	13.1	< 4	10.9	300	0.3	< 0.5	28	1350	< 2	97	3	0.03	167
CPRC-13-04-14	40.4	15.0	< 4	10.0	< 200	< 0.2	< 0.5	18	508	< 2	9	12	< 0.01	69
CPRC-13-04-15	52.9	20.0	< 4	11.2	200	< 0.2	< 0.5	26	665	3	16	19	< 0.01	96
CPRC-13-04-16	79.5	16.1	< 4	16.3	< 200	< 0.2	< 0.5	38	615	4	17	22	0.01	84
CPRC-13-04-17	25.9	11.4	< 4	14.2	300	0.7	1.7	62	7120	13	15	68	0.01	101
CPRC-13-04-18	15.2	8.9	< 4	15.5	< 200	2.7	< 0.5	39	6640	14	13	26	0.08	49
CPRC-13-04-19	17.7	< 0.5	< 4	12.0	400	0.3	0.6	32	5230	7	13	23	0.04	40
CPRC-13-05-01	22.5	13.5	< 4	9.7	< 200	0.4	< 0.5	37	1050	4	27	19	0.45	83
CPRC-13-05-02	76.4	20.9	< 4	13.4	< 200	1.6	< 0.5	37	735	4	24	17	0.91	57
CPRC-13-05-03	20.8	13.9	< 4	9.9	200	0.3	< 0.5	42	725	4	17	51	1.04	64
CPRC-13-05-04	20.1	13.1	< 4	7.5	300	0.3	< 0.5	54	1340	6	27	23	1.49	94
CPRC-13-05-05	33.2	13.5	< 4	12.5	< 200	< 0.2	0.6	37	1030	4	19	22	0.16	149
CPRC-13-05-06	33.7	10.9	< 4	12.5	< 200	< 0.2	< 0.5	34	1390	3	28	17	0.11	87
CPRC-13-05-07	33.6	19.1	< 4	12.9	< 200	< 0.2	< 0.5	32	1250	3	23	21	0.04	75
CPRC-13-05-08	22.9	15.8	< 4	8.6	< 200	< 0.2	< 0.5	25	1230	< 2	45	8	0.24	113
CPRC-13-05-09	35.4	10.5	< 4	10.7	400	0.3	< 0.5	22	1420	< 2	110	6	0.08	149
CPRC-13-05-10	28.2	7.4	< 4	10.6	< 200	< 0.2	< 0.5	23	977	< 2	55	6	0.49	105
CPRC-13-05-11	56.5	23.1	< 4	16.4	< 200	< 0.2	< 0.5	29	1080	< 2	39	15	0.03	74
CPRC-13-05-12	51.4	17.5	< 4	14.5	< 200	< 0.2	< 0.5	25	1060	< 2	24	16	0.01	72
CPRC-13-05-13	31.2	12.6	< 4	10.9	< 200	< 0.2	< 0.5	23	1040	< 2	100	10	0.08	88
CPRC-13-05-14	38.2	11.0	< 4	9.8	< 200	< 0.2	< 0.5	20	707	< 2	25	8	0.01	83
CPRC-13-05-15	54.2	25.5	< 4	12.5	< 200	< 0.2	< 0.5	25	1140	4	22	11	< 0.01	74
CPRC-13-05-16	44.5	16.9	< 4	12.3	< 200	< 0.2	< 0.5	21	603	< 2	12	13	< 0.01	67
CPRC-13-05-17	47.3	16.6	< 4	12.8	400	< 0.2	< 0.5	22	652	2	9	17	< 0.01	67
CPRC-13-05-18	35.0	12.4	< 4	13.3	< 200	0.4	0.9	55	10400	32	24	37	< 0.01	82
CPRC-13-05-19	40.5	12.1	< 4	12.0	< 200	< 0.2	< 0.5	35	5150	19	9	17	< 0.01	73
CPRC-13-05-20	24.5	10.0	< 4	10.9	< 200	< 0.2	< 0.5	35	1310	6	12	34	0.03	62
CPRC-13-05-21	16.9	10.4	< 4	19.0	< 200	0.3	< 0.5	24	6210	16	7	49	0.01	46
CPRC-13-05-22	18.3	12.9	< 4	20.2	< 200	0.7	< 0.5	24	9480	25	9	83	< 0.01	48
CPRC-13-05-23	19.3	10.6	< 4	16.3	< 200	4.1	1.9	74	21700	74	19	218	< 0.01	95
CPRC-13-05-24	25.5	24.5	< 4	14.5	< 200	0.9	0.7	58	9360	17	83	104	< 0.01	56
CPRC-13-05-25	< 0.5	< 0.5	< 4	1.9	400	< 0.2	< 0.5	62	2510	< 2	555	< 2	0.02	155
CPRC-13-05-26	18.1	5.7	< 4	13.6	< 200	< 0.2	< 0.5	24	714	< 2	9	30	< 0.01	52
CPRC-13-05-27	15.5	13.6	< 4	11.3	< 200	< 0.2	1.3	30	1270	4	11	35	0.02	66
CPRC-13-05-28	21.7	10.3	< 4	18.4	< 200	0.7	3.1	45	4730	3	5	37	0.20	41

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13-05-29	28.7	14.4	< 4	18.8	< 200	2.2	1.9	60	7620	< 2	5	20	0.46	22
CPRC-13-05-30	24.7	< 0.5	< 4	32.2	< 200	2.4	4.4	358	569	31	30	221	> 10.0	475
CPRC-13-06-01	24.8	8.8	< 4	9.5	< 200	< 0.2	< 0.5	37	1480	3	36	20	0.05	96
CPRC-13-06-02	61.8	28.0	< 4	18.6	< 200	< 0.2	< 0.5	42	1200	2	35	20	0.06	91
CPRC-13-06-03	34.8	23.9	< 4	13.4	< 200	< 0.2	< 0.5	43	1360	< 2	41	22	0.05	106
CPRC-13-06-04	27.6	14.6	< 4	10.9	< 200	< 0.2	< 0.5	31	1300	2	33	16	0.03	84
CPRC-13-06-05	28.9	10.0	< 4	9.1	< 200	< 0.2	< 0.5	26	804	< 2	27	8	0.02	71
CPRC-13-06-06	26.9	12.1	< 4	11.2	< 200	< 0.2	< 0.5	22	568	< 2	11	12	< 0.01	58
CPRC-13-06-07	34.2	8.3	< 4	12.3	< 200	< 0.2	< 0.5	25	562	< 2	12	16	< 0.01	57

QC

Analyte Symbol	Ag	As	Au	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	2	5	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
DMMAS 115 Meas		529	1640	1300			36	26	110			2.81			
DMMAS 115 Cert		527	1720	1210			40.0	21.0	100			2.64			
DMMAS 115 Meas		531	1610	1300			40	28	100			3.30			
DMMAS 115 Cert		527	1720	1210			40.0	21.0	100			2.64			
DMMAS 115 Meas		521	1760	1200			42	23	110			3.02			
DMMAS 115 Cert		527	1720	1210			40.0	21.0	100			2.64			
CPRC-13-02-10 Orig															
CPRC-13-02-10 Dup															
CPRC-13-03-02 Orig															
CPRC-13-03-02 Dup															
CPRC-13-04-08 Orig															
CPRC-13-04-08 Dup															
CPRC-13-05-26 Orig															
CPRC-13-05-26 Dup															
CPRC-13-05-30 Orig															
CPRC-13-05-30 Dup															
CPRC-13-06-07 Orig															

Analyte Symbol	Ag	As	Au	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	2	5	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-06-07 Dup															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank	< 5	< 2	< 5	< 200	< 5	< 1	< 3	< 5	< 10	< 2	< 0.2	< 0.02	< 1	< 5	< 50
Method Blank															

QC

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05		20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-1 Meas															
GXR-1 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-4 Meas															
GXR-4 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
GXR-6 Meas															
GXR-6 Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
SAR-M (U.S.G.S.) Meas															
SAR-M (U.S.G.S.) Cert															
DMMAS 115 Meas	24				2.04				4.4	7.9		3.1			
DMMAS 115 Cert	21.9				1.92				5.50	7.30		3.10			
DMMAS 115 Meas	24				1.97				4.1	7.6		3.3			
DMMAS 115 Cert	21.9				1.92				5.50	7.30		3.10			
DMMAS 115 Meas	26				1.95				4.3	7.8		3.7			
DMMAS 115 Cert	21.9				1.92				5.50	7.30		3.10			
CPRC-13-02-10 Orig															
CPRC-13-02-10 Dup															
CPRC-13-03-02 Orig															
CPRC-13-03-02 Dup															
CPRC-13-04-08 Orig															
CPRC-13-04-08 Dup															
CPRC-13-05-26 Orig															
CPRC-13-05-26 Dup															
CPRC-13-05-30 Orig															
CPRC-13-05-30 Dup															
CPRC-13-06-07 Orig															

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05		20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13-06-07 Dup															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank															
Method Blank	< 1	< 0.05	10.0	< 20	< 0.05	< 10	< 200	< 50	< 0.2	< 0.1	< 20	< 0.1	< 0.2	< 1	< 2
Method Blank															

QC

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas						32.6	1.3	1170	822	17	36	749	0.21	737
GXR-1 Cert						31.0	3.30	1110	852	18.0	41.0	730	0.257	760
GXR-1 Meas						31.9	2.8	1230	915	15	36	691	0.21	779
GXR-1 Cert						31.0	3.30	1110	852	18.0	41.0	730	0.257	760
GXR-1 Meas						29.9	2.8	1160	920	15	35	658	0.19	737
GXR-1 Cert						31.0	3.30	1110	852	18.0	41.0	730	0.257	760
GXR-1 Meas						31.0	2.6	1190	895	15	34	670	0.19	752
GXR-1 Cert						31.0	3.30	1110	852	18.0	41.0	730	0.257	760
GXR-4 Meas						3.6	< 0.5	6620	148	377	39	43	1.75	73
GXR-4 Cert						4.00	0.860	6520	155	310	42.0	52.0	1.77	73.0
GXR-4 Meas						3.9	< 0.5	7180	164	365	41	46	1.83	83
GXR-4 Cert						4.00	0.860	6520	155	310	42.0	52.0	1.77	73.0
GXR-4 Meas						3.6	< 0.5	6710	155	345	37	42	1.68	81
GXR-4 Cert						4.00	0.860	6520	155	310	42.0	52.0	1.77	73.0
GXR-6 Meas						0.2	< 0.5	63	984	< 2	20	90	0.01	120
GXR-6 Cert						1.30	1.00	66.0	1010	2.40	27.0	101	0.0160	118
GXR-6 Meas						0.3	< 0.5	73	1210	2	23	104	0.02	141
GXR-6 Cert						1.30	1.00	66.0	1010	2.40	27.0	101	0.0160	118
GXR-6 Meas						0.3	< 0.5	72	1210	3	23	100	0.01	137
GXR-6 Cert						1.30	1.00	66.0	1010	2.40	27.0	101	0.0160	118
GXR-6 Meas						0.3	< 0.5	67	1120	3	19	95	0.01	127
GXR-6 Cert						1.30	1.00	66.0	1010	2.40	27.0	101	0.0160	118
SAR-M (U.S.G.S.) Meas						3.9	5.9	382	5570	16	45	1200		1180
SAR-M (U.S.G.S.) Cert						3.64	5.27	331	5220	13.10	41.50	982		930.0
SAR-M (U.S.G.S.) Meas						3.7	5.3	358	5100	15	46	1140		1090
SAR-M (U.S.G.S.) Cert						3.64	5.27	331	5220	13.10	41.50	982		930.0
SAR-M (U.S.G.S.) Meas						3.6	5.0	339	4900	16	49	1100		1030
SAR-M (U.S.G.S.) Cert						3.64	5.27	331	5220	13.10	41.50	982		930.0
DMMAS 115 Meas		110												
DMMAS 115 Cert		101												
DMMAS 115 Meas		99.6												
DMMAS 115 Cert		101												
DMMAS 115 Meas		103												
DMMAS 115 Cert		101												
CPRC-13-02-10 Orig						0.2	< 0.5	31	2350	< 2	60	8	0.07	118
CPRC-13-02-10 Dup						0.3	< 0.5	24	2270	< 2	59	8	0.06	131
CPRC-13-03-02 Orig						1.7	5.2	139	641	6	45	125	> 10.0	494
CPRC-13-03-02 Dup						1.3	3.8	114	681	5	45	123	> 10.0	381
CPRC-13-04-08 Orig						< 0.2	< 0.5	25	711	< 2	16	11	0.06	100
CPRC-13-04-08 Dup						< 0.2	< 0.5	26	743	< 2	23	13	0.08	109
CPRC-13-05-26 Orig						< 0.2	< 0.5	24	684	< 2	9	30	< 0.01	52
CPRC-13-05-26 Dup						< 0.2	< 0.5	24	744	< 2	9	29	< 0.01	53
CPRC-13-05-30 Orig						2.6	4.1	364	466	31	30	230	> 10.0	529
CPRC-13-05-30 Dup						2.2	4.7	353	672	31	29	211	> 10.0	421
CPRC-13-06-07 Orig						< 0.2	< 0.5	24	565	< 2	12	16	< 0.01	56

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13-06-07 Dup						< 0.2	< 0.5	26	559	2	11	16	< 0.01	58
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1
Method Blank	< 0.5	< 0.5	< 4	< 0.2	< 200									
Method Blank						< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 0.01	< 1

Date Submitted: 02-Aug-13
Invoice No.: A13-08960
Invoice Date: 20-Aug-13
Your Reference: CPRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

99 Heavy Mineral Concentrates samples were submitted for analysis.

The following analytical package was requested: Code 3A-Large HMC INAA(INAAGEO)
Code 3C Aqua Regia ICP(AQUAGEO)

REPORT **A13-08960**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Results

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:06-08	< 5	< 5	34	< 200	< 5	11	196	23	240	< 2	2.7	12.8	38	< 5	< 50
CRPC-13:06-09	126	< 5	38	< 200	< 5	< 1	301	36	360	< 2	5.3	17.2	97	< 5	< 50
CRPC-13:06-10	305	< 5	45	3000	< 5	< 1	359	162	290	< 2	4.1	18.0	83	< 5	< 50
CRPC-13:06-11	5410	< 5	231	2500	< 5	< 1	354	104	130	< 2	3.6	40.9	61	< 5	< 50
CRPC-13:06-12	78	< 5	117	< 200	< 5	< 1	527	43	560	< 2	3.9	28.7	162	< 5	< 50
CRPC-13:06-13	4190	< 5	50	6900	< 5	< 1	937	< 5	170	< 2	5.0	16.9	46	< 5	< 50
CRPC-13:06-15	183	< 5	461	< 200	< 5	< 1	245	168	< 10	< 2	3.5	41.6	< 1	< 5	< 50
CRPC-13:06-16	80	< 5	1290	< 200	< 5	< 1	93	79	< 10	< 2	< 0.2	29.6	< 1	< 5	< 50
CRPC-13:06-17	< 5	< 5	572	< 200	< 5	< 1	77	94	230	< 2	< 0.2	50.2	26	< 5	< 50
CRPC-13:07-01	350	< 5	66	< 200	< 5	< 1	225	52	290	< 2	4.6	19.6	92	< 5	< 50
CRPC-13:07-02	< 5	< 5	60	11300	< 5	< 1	353	50	440	< 2	5.2	21.3	65	< 5	< 50
CRPC-13:07-03	53	< 5	69	6800	< 5	< 1	334	50	340	< 2	3.9	19.2	48	< 5	< 50
CRPC-13:07-04	293	< 5	53	< 200	< 5	< 1	321	53	480	< 2	2.9	20.6	55	< 5	< 50
CRPC-13:07-05	203	< 5	45	< 200	< 5	15	383	49	450	< 2	4.4	20.3	70	< 5	< 50
CRPC-13:07-06	992	< 5	54	< 200	< 5	< 1	287	62	430	< 2	4.4	20.3	56	< 5	< 50
CRPC-13:07-07	156	< 5	25	< 200	< 5	< 1	360	47	520	< 2	4.3	21.4	120	< 5	< 50
CRPC-13:07-08	88	< 5	37	< 200	< 5	< 1	271	55	380	12	3.6	19.7	61	< 5	< 50
CRPC-13:07-09	527	< 5	48	< 200	< 5	< 1	464	53	440	< 2	4.8	22.0	98	< 5	< 50
CRPC-13:07-10	163	< 5	27	< 200	< 5	< 1	334	47	310	< 2	3.2	21.2	74	< 5	< 50
CRPC-13:07-11	< 5	< 5	32	< 200	< 5	< 1	347	35	280	< 2	3.2	15.1	71	< 5	< 50
CRPC-13:07-12	88	< 5	42	< 200	< 5	4	481	37	340	< 2	4.9	18.0	95	< 5	< 50
CRPC-13:07-13	< 5	< 5	44	< 200	< 5	< 1	505	52	440	< 2	5.6	20.2	120	< 5	< 50
CRPC-13:07-14	198	< 5	89	1100	< 5	< 1	569	65	380	< 2	3.8	21.1	86	< 5	< 50
CRPC-13:07-15	112	< 5	116	< 200	< 5	10	218	68	250	< 2	3.2	22.4	66	< 5	< 50
CRPC-13:07-16	191	< 5	86	< 200	< 5	< 1	266	67	290	< 2	3.5	21.3	78	< 5	< 50
CRPC-13:07-17	< 5	< 5	59	< 200	< 5	12	184	60	190	< 2	5.3	20.4	58	< 5	< 50
CRPC-13:07-18	713	< 5	232	2500	< 5	< 1	435	96	150	< 2	4.9	28.8	66	< 5	< 50
CRPC-13:07-19	3900	< 5	215	5400	< 5	< 1	661	169	90	< 2	4.6	24.6	33	< 5	< 50
CRPC-13:07-20	4600	< 5	229	< 200	< 5	< 1	608	99	120	< 2	3.9	25.8	28	< 5	< 50
CRPC-13:07-21	1750	< 5	201	4200	< 5	< 1	732	135	30	< 2	3.1	26.8	26	< 5	< 50
CRPC-13:08-01	476	< 5	57	< 200	< 5	< 1	330	61	380	< 2	4.4	21.9	68	< 5	< 50
CRPC-13:08-02	594	< 5	49	< 200	< 5	10	320	67	580	< 2	4.9	23.4	79	< 5	< 50
CRPC-13:08-03	< 5	< 5	56	< 200	< 5	< 1	467	40	500	< 2	7.8	23.0	83	< 5	< 50
CRPC-13:08-04	72	< 5	38	< 200	< 5	< 1	402	55	450	< 2	5.3	25.7	94	< 5	< 50
CRPC-13:08-05	1120	< 5	37	300	< 5	< 1	243	82	470	< 2	4.4	23.4	68	< 5	< 50
CRPC-13:08-06	< 5	< 5	25	< 200	< 5	< 1	268	77	410	< 2	4.3	23.1	76	< 5	< 50
CRPC-13:08-07	367	< 5	45	< 200	< 5	< 1	685	49	500	< 2	5.2	22.3	142	< 5	< 50
CRPC-13:08-08	180	< 5	74	< 200	< 5	< 1	804	46	510	< 2	7.1	24.0	162	< 5	< 50
CRPC-13:08-09	306	< 5	174	< 200	< 5	< 1	227	72	190	< 2	3.5	26.0	59	< 5	< 50
CRPC-13:08-10	< 5	< 5	203	600	< 5	< 1	207	69	190	< 2	3.6	26.8	61	< 5	< 50
CRPC-13:08-11	< 5	< 5	90	< 200	< 5	< 1	330	75	400	< 2	4.3	25.5	58	< 5	< 50
CRPC-13:08-12	< 5	< 5	120	< 200	< 5	< 1	580	44	280	< 2	7.3	21.2	43	< 5	< 50
CRPC-13:08-13	58	< 5	61	< 200	< 5	9	156	55	190	< 2	4.8	17.2	44	< 5	< 50
CRPC-13:08-14	< 5	< 5	616	< 200	< 5	< 1	138	66	130	< 2	3.7	36.5	30	< 5	< 50
CRPC-13:08-15	< 5	< 5	202	< 200	< 5	< 1	570	74	190	< 2	9.9	24.5	39	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:09-01	41	< 5	155	< 200	< 5	< 1	209	59	300	< 2	3.6	17.2	35	< 5	< 50
CRPC-13:09-02	222	< 5	91	< 200	< 5	< 1	276	44	280	< 2	4.3	17.4	59	< 5	< 50
CRPC-13:09-03	163	< 5	64	< 200	< 5	6	204	45	310	< 2	3.7	19.7	70	< 5	< 50
CRPC-13:09-04	372	< 5	36	< 200	< 5	< 1	461	60	560	< 2	5.7	27.2	131	< 5	< 50
CRPC-13:09-05	126	< 5	17	< 200	< 5	< 1	221	60	450	< 2	4.0	23.2	108	< 5	< 50
CRPC-13:09-06	552	< 5	169	< 200	< 5	< 1	468	92	300	< 2	3.4	29.6	50	< 5	< 50
CRPC-13:09-07	1390	< 5	157	< 200	< 5	< 1	394	83	260	< 2	6.0	27.0	43	< 5	< 50
CRPC-13:09-08	2540	< 5	105	< 200	< 5	6	245	72	140	< 2	3.2	21.2	47	< 5	< 50
CRPC-13:09-09	< 5	< 5	144	< 200	< 5	< 1	312	77	290	< 2	3.6	30.0	54	< 5	< 50
CRPC-13:09-10	794	< 5	147	< 200	< 5	< 1	584	75	480	< 2	5.5	29.8	99	< 5	< 50
CRPC-13:09-11	1040	< 5	68	< 200	< 5	< 1	946	61	560	< 2	5.5	24.5	153	< 5	< 50
CRPC-13:09-12	419	< 5	117	< 200	< 5	< 1	523	64	320	< 2	5.6	23.4	130	< 5	< 50
CRPC-13:09-13	652	< 5	110	< 200	< 5	5	250	66	240	< 2	3.6	24.4	79	< 5	< 50
CRPC-13:09-14	320	< 5	122	< 200	< 5	< 1	230	82	280	< 2	3.9	26.2	61	< 5	< 50
CRPC-13:09-15	98	< 5	58	< 200	< 5	< 1	156	58	190	< 2	3.3	17.8	56	< 5	< 50
CRPC-13:09-16	233	< 5	151	< 200	< 5	25	161	103	50	< 2	3.4	21.3	19	< 5	< 50
CRPC-13:09-17	3550	< 5	179	1500	< 5	< 1	456	132	150	< 2	5.9	26.0	51	< 5	< 50
CRPC-13:10-01	82	< 5	45	< 200	< 5	< 1	725	56	420	< 2	9.2	24.5	162	< 5	< 50
CRPC-13:10-02	116	< 5	33	< 200	< 5	< 1	402	64	230	< 2	4.6	17.0	161	< 5	< 50
CRPC-13:10-03	45	< 5	29	< 200	< 5	6	308	106	400	< 2	5.1	16.5	123	< 5	< 50
CRPC-13:11-01	161	< 5	36	< 200	< 5	< 1	447	34	530	< 2	5.6	23.5	162	< 5	< 50
CRPC-13:11-02	371	< 5	34	< 200	< 5	< 1	321	41	320	< 2	5.3	22.5	173	< 5	< 50
CRPC-13:11-03	438	< 5	24	< 200	< 5	9	393	46	340	< 2	6.6	21.6	103	< 5	< 50
CRPC-13:11-04	315	< 5	17	< 200	< 5	< 1	403	58	390	< 2	5.5	23.6	95	< 5	< 50
CRPC-13:11-05	< 5	< 5	19	< 200	< 5	< 1	436	61	380	< 2	4.9	25.6	141	< 5	< 50
CRPC-13:11-06	485	< 5	105	< 200	< 5	8	238	77	200	< 2	4.4	23.0	98	< 5	< 50
CRPC-13:11-07	519	< 5	178	< 200	< 5	12	177	110	140	< 2	3.2	28.3	35	< 5	< 50
CRPC-13:11-08	40	< 5	90	< 200	< 5	7	122	80	110	< 2	2.5	20.7	30	< 5	< 50
CRPC-13:11-09	321	< 5	77	< 200	< 5	< 1	109	66	90	< 2	2.7	18.3	26	< 5	< 50
CRPC-13:11-10	771	< 5	62	< 200	< 5	8	90	53	70	< 2	3.6	16.4	17	< 5	< 50
CRPC-13:12-01	216	< 5	48	< 200	< 5	16	295	45	300	< 2	5.5	19.9	115	< 5	< 50
CRPC-13:12-02	104	< 5	78	< 200	< 5	< 1	283	45	270	< 2	5.2	19.4	67	< 5	< 50
CRPC-13:13-01	419	< 5	52	800	< 5	11	321	37	280	< 2	5.7	19.1	78	< 5	< 50
CRPC-13:14-01	243	< 5	47	< 200	< 5	10	310	33	380	< 2	5.2	20.9	92	< 5	< 50
CRPC-13:14-02	143	< 5	37	< 200	< 5	< 1	179	53	300	< 2	2.8	17.1	39	< 5	< 50
CRPC-13:15-01	264	< 5	29	< 200	< 5	< 1	248	26	270	< 2	4.8	16.2	80	< 5	< 50
CRPC-13:15-02	305	< 5	47	< 200	< 5	< 1	235	33	270	< 2	3.7	16.5	59	< 5	< 50
CRPC-13:16-01	221	< 5	40	< 200	< 5	< 1	196	39	280	< 2	3.7	15.7	56	< 5	< 50
CRPC-13:16-02	531	< 5	43	< 200	< 5	12	224	34	280	< 2	4.9	16.4	67	< 5	< 50
CRPC-13:16-03	247	< 5	52	< 200	< 5	< 1	238	37	350	< 2	4.5	17.6	63	< 5	< 50
CRPC-13:16-04	324	< 5	46	< 200	< 5	< 1	308	38	330	< 2	4.9	18.7	91	< 5	< 50
CRPC-13:16-05	372	< 5	94	< 200	< 5	< 1	335	59	230	7	4.1	19.5	81	< 5	< 50
CRPC-13:16-06	10800	< 5	103	< 200	< 5	< 1	775	76	120	< 2	4.8	20.1	124	< 5	< 50
CRPC-13:17-01	504	< 5	51	< 200	< 5	< 1	315	48	390	< 2	5.3	21.7	111	< 5	< 50
CRPC-13:17-02	278	< 5	74	< 200	< 5	< 1	279	58	400	< 2	5.3	22.0	83	< 5	< 50
CRPC-13:17-03	1260	< 5	78	< 200	< 5	< 1	204	61	440	< 2	5.5	21.3	55	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:17-04	370	< 5	68	< 200	< 5	< 1	209	65	440	< 2	4.8	21.7	55	< 5	< 50
CRPC-13:17-05	431	< 5	88	< 200	< 5	8	257	61	310	< 2	3.9	16.9	53	< 5	< 50
CRPC-13:18-01	219	< 5	53	< 200	< 5	< 1	287	34	270	< 2	4.4	15.4	61	< 5	< 50
CRPC-13:18-02	286	< 5	58	< 200	< 5	16	286	42	320	< 2	4.2	20.4	78	< 5	< 50
CRPC-13:18-03	589	< 5	67	< 200	< 5	< 1	251	65	280	< 2	4.4	19.9	53	< 5	< 50
CRPC-13:18-04	589	< 5	79	< 200	< 5	< 1	368	59	330	< 2	4.0	19.8	48	< 5	< 50
CRPC-13:18-05	454	< 5	124	< 200	< 5	< 1	375	71	500	< 2	5.1	24.8	76	< 5	< 50
CRPC-13:18-06	972	< 5	68	< 200	< 5	< 1	742	53	370	< 2	4.4	25.9	60	< 5	< 50

Results

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:06-08	90	0.21	57.9	< 20	0.26	50	< 200	< 50	4.6	26.1	< 20	12.2	< 0.2	12	3
CRPC-13:06-09	119	0.66	32.7	< 20	0.28	70	< 200	< 50	5.3	33.2	< 20	17.0	< 0.2	17	< 2
CRPC-13:06-10	122	0.29	34.6	< 20	0.30	60	< 200	< 50	6.6	29.6	< 20	15.3	< 0.2	< 1	< 2
CRPC-13:06-11	169	2.02	8.30	50	0.13	100	< 200	< 50	16.6	31.5	< 20	18.4	< 0.2	18	< 2
CRPC-13:06-12	332	3.29	7.00	30	0.15	240	< 200	< 50	10.8	39.5	< 20	25.6	< 0.2	< 1	< 2
CRPC-13:06-13	385	0.58	15.2	< 20	0.36	420	< 200	< 50	13.9	38.4	< 20	36.3	< 0.2	< 1	< 2
CRPC-13:06-15	131	0.55	6.20	< 20	0.11	140	< 200	< 50	28.2	11.7	< 20	25.3	< 0.2	< 1	< 2
CRPC-13:06-16	44	0.10	47.5	< 20	0.13	60	< 200	< 50	19.5	5.2	< 20	7.4	< 0.2	< 1	< 2
CRPC-13:06-17	47	1.29	3.70	40	0.08	< 10	< 200	< 50	28.1	14.1	< 20	7.9	< 0.2	< 1	< 2
CRPC-13:07-01	143	1.79	12.9	< 20	0.38	110	< 200	< 50	7.2	39.5	< 20	16.0	< 0.2	< 1	< 2
CRPC-13:07-02	151	0.37	16.8	< 20	0.57	60	< 200	< 50	9.2	45.6	< 20	18.6	< 0.2	< 1	< 2
CRPC-13:07-03	123	0.38	17.0	< 20	0.56	60	< 200	< 50	7.1	41.2	< 20	15.9	< 0.2	< 1	< 2
CRPC-13:07-04	128	0.42	18.9	< 20	0.57	50	< 200	< 50	8.3	41.7	< 20	15.9	< 0.2	< 1	< 2
CRPC-13:07-05	170	0.46	19.3	< 20	0.60	190	< 200	240	7.3	43.9	< 20	19.9	< 0.2	< 1	< 2
CRPC-13:07-06	129	0.41	22.6	< 20	0.57	80	< 200	< 50	6.8	39.8	< 20	15.9	< 0.2	< 1	< 2
CRPC-13:07-07	167	0.42	24.8	< 20	0.42	50	< 200	< 50	5.8	41.9	< 20	16.6	< 0.2	9	< 2
CRPC-13:07-08	126	0.29	36.2	< 20	0.38	80	< 200	< 50	5.8	36.8	< 20	13.6	< 0.2	< 1	< 2
CRPC-13:07-09	180	0.74	20.2	< 20	0.58	150	< 200	< 50	8.0	40.7	< 20	19.3	< 0.2	< 1	< 2
CRPC-13:07-10	148	0.18	28.0	< 20	0.42	90	< 200	< 50	3.6	33.9	< 20	15.3	< 0.2	8	< 2
CRPC-13:07-11	158	0.32	41.7	< 20	0.39	90	< 200	< 50	3.3	29.0	< 20	16.7	< 0.2	< 1	< 2
CRPC-13:07-12	200	0.46	37.2	< 20	0.42	110	< 200	< 50	4.5	33.0	< 20	20.4	< 0.2	< 1	3
CRPC-13:07-13	211	0.68	28.6	< 20	0.45	180	< 200	< 50	6.1	37.0	< 20	21.0	< 0.2	< 1	< 2
CRPC-13:07-14	232	0.29	22.9	< 20	0.42	120	< 200	< 50	9.1	34.0	< 20	22.8	< 0.2	8	< 2
CRPC-13:07-15	127	0.70	14.7	< 20	0.32	100	< 200	< 50	7.1	32.3	< 20	12.9	< 0.2	< 1	< 2
CRPC-13:07-16	170	0.92	13.9	< 20	0.33	100	< 200	< 50	5.9	33.2	< 20	15.0	< 0.2	9	< 2
CRPC-13:07-17	112	0.87	8.80	< 20	0.34	80	< 200	< 50	6.0	35.9	< 20	14.0	< 0.2	< 1	< 2
CRPC-13:07-18	153	0.48	20.2	30	0.36	90	< 200	< 50	15.1	30.3	< 20	19.6	< 0.2	< 1	< 2
CRPC-13:07-19	257	0.71	31.8	50	0.28	210	< 200	< 50	13.9	28.6	< 20	26.3	< 0.2	< 1	< 2
CRPC-13:07-20	237	0.50	27.5	< 20	0.31	130	< 200	< 50	14.2	22.9	< 20	21.2	< 0.2	< 1	< 2
CRPC-13:07-21	344	2.39	12.1	70	0.30	200	< 200	< 50	12.6	21.1	< 20	27.7	< 0.2	< 1	3
CRPC-13:08-01	144	0.47	18.9	< 20	0.54	60	< 200	< 50	5.7	46.5	< 20	17.3	< 0.2	< 1	< 2
CRPC-13:08-02	155	0.53	23.6	< 20	0.50	100	< 200	< 50	6.5	51.6	< 20	19.0	< 0.2	< 1	< 2
CRPC-13:08-03	231	0.57	21.2	< 20	0.57	200	< 200	< 50	7.7	53.5	< 20	27.4	< 0.2	< 1	< 2
CRPC-13:08-04	187	0.55	23.9	< 20	0.41	120	< 200	< 50	6.1	46.3	< 20	20.5	< 0.2	< 1	< 2
CRPC-13:08-05	126	0.41	29.9	< 20	0.45	60	< 200	< 50	5.5	39.1	< 20	13.3	< 0.2	< 1	< 2
CRPC-13:08-06	136	0.48	28.7	< 20	0.60	90	< 200	< 50	4.5	41.9	< 20	14.9	< 0.2	< 1	< 2
CRPC-13:08-07	362	0.67	36.9	< 20	0.34	140	< 200	< 50	5.8	36.8	< 20	27.1	< 0.2	20	< 2
CRPC-13:08-08	397	0.71	21.6	< 20	0.39	340	< 200	< 50	6.9	39.9	< 20	34.5	< 0.2	30	5
CRPC-13:08-09	134	1.33	13.7	< 20	0.32	70	< 200	< 50	13.1	29.7	< 20	14.6	< 0.2	< 1	< 2
CRPC-13:08-10	117	0.98	9.80	< 20	0.33	80	< 200	< 50	14.9	28.1	< 20	14.4	< 0.2	< 1	< 2
CRPC-13:08-11	142	0.31	16.9	< 20	0.49	130	< 200	210	9.5	43.3	< 20	17.4	< 0.2	< 1	< 2
CRPC-13:08-12	266	0.49	24.6	< 20	0.42	110	< 200	< 50	9.2	39.2	< 20	28.9	< 0.2	< 1	< 2
CRPC-13:08-13	95	0.59	11.9	< 20	0.45	50	< 200	< 50	5.6	32.8	< 20	11.6	< 0.2	< 1	< 2
CRPC-13:08-14	72	3.11	5.50	< 20	0.25	50	< 200	< 50	35.2	27.8	< 20	13.5	< 0.2	< 1	< 2
CRPC-13:08-15	351	3.46	7.20	< 20	0.30	250	< 200	< 50	13.3	35.4	< 20	47.9	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:09-01	102	0.28	29.9	< 20	0.51	50	< 200	< 50	9.1	42.0	< 20	13.0	< 0.2	< 1	< 2
CRPC-13:09-02	137	0.55	30.6	< 20	0.50	90	< 200	< 50	8.1	44.8	< 20	17.4	< 0.2	< 1	< 2
CRPC-13:09-03	124	2.23	12.0	< 20	0.47	60	< 200	< 50	8.4	41.7	< 20	14.0	< 0.2	< 1	< 2
CRPC-13:09-04	253	0.95	20.1	< 20	0.67	110	< 200	< 50	9.3	48.1	< 20	27.5	< 0.2	< 1	< 2
CRPC-13:09-05	127	0.54	34.3	< 20	0.37	60	< 200	< 50	3.3	39.6	< 20	13.0	< 0.2	< 1	< 2
CRPC-13:09-06	259	0.23	14.9	< 20	0.56	140	< 200	< 50	11.2	36.7	< 20	26.7	< 0.2	< 1	< 2
CRPC-13:09-07	205	0.21	15.2	< 20	0.49	160	< 200	< 50	10.8	33.0	< 20	22.7	< 0.2	< 1	< 2
CRPC-13:09-08	163	0.20	14.9	< 20	0.40	110	< 200	< 50	6.6	27.3	< 20	15.5	< 0.2	< 1	< 2
CRPC-13:09-09	175	0.30	17.2	< 20	0.65	210	< 200	< 50	10.9	35.9	< 20	20.3	< 0.2	< 1	< 2
CRPC-13:09-10	311	0.53	15.7	< 20	0.58	190	< 200	< 50	11.1	36.9	< 20	30.3	< 0.2	< 1	< 2
CRPC-13:09-11	540	0.66	25.4	< 20	0.50	360	< 200	< 50	8.1	34.2	< 20	40.3	< 0.2	27	< 2
CRPC-13:09-12	356	1.67	13.8	< 20	0.31	190	< 200	< 50	9.9	29.8	< 20	25.2	< 0.2	20	5
CRPC-13:09-13	147	1.00	11.5	< 20	0.40	80	< 200	< 50	8.2	31.6	< 20	14.6	< 0.2	< 1	< 2
CRPC-13:09-14	135	0.17	18.6	< 20	0.50	140	< 200	< 50	8.9	38.6	< 20	16.8	< 0.2	< 1	< 2
CRPC-13:09-15	93	0.67	11.4	< 20	0.41	130	< 200	< 50	3.8	27.3	< 20	10.9	< 0.2	6	< 2
CRPC-13:09-16	84	0.40	21.7	< 20	0.25	100	< 200	< 50	6.9	16.5	< 20	14.0	< 0.2	< 1	3
CRPC-13:09-17	249	0.59	17.4	< 20	0.31	190	< 200	< 50	8.6	21.8	< 20	26.8	< 0.2	< 1	< 2
CRPC-13:10-01	371	1.45	15.8	< 20	0.71	190	< 200	< 50	7.9	43.1	< 20	45.1	< 0.2	< 1	< 2
CRPC-13:10-02	247	4.82	12.1	< 20	0.44	130	< 200	< 50	4.6	38.4	< 20	25.7	< 0.2	10	< 2
CRPC-13:10-03	197	2.69	10.9	< 20	0.31	80	< 200	130	2.6	28.4	< 20	21.7	< 0.2	< 1	< 2
CRPC-13:11-01	222	1.26	20.8	< 20	0.67	190	< 200	< 50	7.7	41.3	< 20	25.1	< 0.2	< 1	< 2
CRPC-13:11-02	207	6.58	12.5	< 20	0.50	150	< 200	< 50	5.5	39.0	< 20	18.1	< 0.2	13	< 2
CRPC-13:11-03	200	1.35	26.9	< 20	0.53	100	< 200	110	5.7	42.5	< 20	23.9	< 0.2	< 1	< 2
CRPC-13:11-04	219	0.92	20.2	< 20	0.64	130	< 200	< 50	6.2	44.2	< 20	24.6	< 0.2	< 1	< 2
CRPC-13:11-05	226	1.26	16.4	< 20	0.72	170	< 200	< 50	5.4	43.3	< 20	25.1	< 0.2	< 1	< 2
CRPC-13:11-06	131	2.14	7.90	< 20	0.56	130	< 200	< 50	6.3	29.3	< 20	14.7	< 0.2	< 1	< 2
CRPC-13:11-07	96	0.36	19.3	< 20	0.37	110	< 200	< 50	7.5	18.9	< 20	12.4	< 0.2	< 1	< 2
CRPC-13:11-08	63	0.30	33.3	< 20	0.26	50	< 200	< 50	5.8	16.7	< 20	9.8	< 0.2	< 1	< 2
CRPC-13:11-09	51	0.26	32.6	< 20	0.23	50	< 200	< 50	5.9	17.2	< 20	8.8	< 0.2	< 1	2
CRPC-13:11-10	42	0.18	35.0	< 20	0.24	30	< 200	< 50	3.8	15.6	< 20	7.5	< 0.2	< 1	< 2
CRPC-13:12-01	174	2.54	12.5	< 20	0.50	100	< 200	< 50	6.3	39.7	< 20	17.9	< 0.2	< 1	< 2
CRPC-13:12-02	146	0.50	27.6	< 20	0.46	100	< 200	< 50	9.4	42.7	< 20	17.3	< 0.2	< 1	< 2
CRPC-13:13-01	168	0.74	19.9	< 20	0.52	100	< 200	< 50	7.5	48.3	< 20	21.6	< 0.2	< 1	< 2
CRPC-13:14-01	166	0.61	20.3	< 20	0.59	140	< 200	< 50	9.2	44.5	< 20	19.8	< 0.2	< 1	< 2
CRPC-13:14-02	116	0.31	31.6	< 20	0.46	50	< 200	< 50	6.0	36.1	< 20	12.0	< 0.2	< 1	< 2
CRPC-13:15-01	165	0.61	35.9	< 20	0.48	80	< 200	< 50	6.5	41.7	< 20	16.3	< 0.2	< 1	3
CRPC-13:15-02	158	0.47	36.7	< 20	0.50	120	< 200	< 50	5.8	40.9	< 20	14.9	< 0.2	< 1	< 2
CRPC-13:16-01	143	0.42	33.0	< 20	0.53	80	< 200	< 50	5.6	41.6	< 20	14.3	< 0.2	< 1	< 2
CRPC-13:16-02	149	0.53	34.7	< 20	0.55	70	< 200	< 50	5.3	42.4	< 20	14.4	< 0.2	< 1	< 2
CRPC-13:16-03	158	0.46	34.4	< 20	0.50	80	< 200	< 50	7.0	46.3	< 20	15.5	0.3	< 1	3
CRPC-13:16-04	181	0.70	25.4	< 20	0.50	130	< 200	< 50	6.7	46.2	< 20	17.4	< 0.2	< 1	< 2
CRPC-13:16-05	206	0.73	20.5	< 20	0.44	100	< 200	< 50	8.7	40.6	< 20	19.2	< 0.2	< 1	< 2
CRPC-13:16-06	491	1.45	24.1	< 20	0.44	230	< 200	< 50	7.8	35.2	< 20	38.3	< 0.2	< 1	8
CRPC-13:17-01	209	0.77	21.3	< 20	0.53	70	< 200	120	7.2	49.1	< 20	19.3	< 0.2	< 1	< 2
CRPC-13:17-02	178	0.56	20.1	< 20	0.49	110	< 200	< 50	8.0	48.5	< 20	17.8	< 0.2	< 1	< 2
CRPC-13:17-03	175	0.55	28.5	< 20	0.46	100	< 200	< 50	11.0	39.6	< 20	17.1	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:17-04	141	0.48	19.1	< 20	0.58	60	< 200	< 50	10.0	50.2	< 20	15.3	< 0.2	< 1	< 2
CRPC-13:17-05	154	1.39	12.2	< 20	0.48	130	< 200	< 50	6.7	38.4	< 20	15.7	< 0.2	< 1	< 2
CRPC-13:18-01	176	0.55	38.1	< 20	0.52	150	< 200	< 50	6.3	43.4	< 20	18.0	< 0.2	< 1	< 2
CRPC-13:18-02	174	0.62	31.9	< 20	0.51	100	< 200	< 50	5.8	48.6	< 20	17.3	< 0.2	< 1	< 2
CRPC-13:18-03	166	0.48	35.2	< 20	0.40	100	< 200	< 50	9.3	37.5	< 20	16.4	< 0.2	< 1	3
CRPC-13:18-04	241	0.68	39.6	< 20	0.40	150	< 200	< 50	7.2	35.4	< 20	21.1	< 0.2	< 1	< 2
CRPC-13:18-05	238	0.62	25.5	< 20	0.47	120	< 200	< 50	9.8	39.8	< 20	21.6	< 0.2	< 1	< 2
CRPC-13:18-06	441	1.17	18.5	< 20	0.49	350	< 200	< 50	10.0	50.7	< 20	37.5	< 0.2	< 1	< 2

Results

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:06-08	18.4	12.2	< 4	8.9	< 200	< 0.2	< 0.5	25	673	3	17	17	< 0.01	82
CRPC-13:06-09	34.4	14.0	< 4	14.2	< 200	< 0.2	< 0.5	29	894	6	11	23	< 0.01	64
CRPC-13:06-10	23.9	14.6	< 4	11.9	< 200	0.3	< 0.5	39	15000	27	16	26	< 0.01	86
CRPC-13:06-11	25.2	10.7	< 4	15.1	300	< 0.2	< 0.5	80	6140	18	21	66	0.01	183
CRPC-13:06-12	38.2	23.0	< 4	21.9	< 200	< 0.2	< 0.5	28	1840	12	8	66	< 0.01	88
CRPC-13:06-13	22.1	18.0	< 4	21.5	< 200	< 0.2	< 0.5	20	1670	4	5	34	0.04	50
CRPC-13:06-15	3.3	< 0.5	< 4	4.0	300	0.9	2.4	384	48	7	22	68	> 10.0	187
CRPC-13:06-16	< 0.5	< 0.5	< 4	< 0.2	400	0.7	1.7	100	37	6	15	99	> 10.0	469
CRPC-13:06-17	13.6	< 0.5	< 4	4.1	< 200	0.7	< 0.5	102	218	11	16	78	> 10.0	61
CRPC-13:07-01	29.8	11.7	< 4	13.5	< 200	0.5	< 0.5	57	1660	7	26	36	0.28	90
CRPC-13:07-02	26.1	23.0	< 4	11.9	< 200	< 0.2	< 0.5	39	1580	5	28	25	0.10	96
CRPC-13:07-03	20.8	20.3	< 4	13.1	< 200	< 0.2	< 0.5	36	1550	5	27	26	0.09	96
CRPC-13:07-04	20.0	9.7	< 4	12.1	< 200	< 0.2	< 0.5	33	960	4	23	21	0.86	77
CRPC-13:07-05	34.8	15.8	< 4	15.7	< 200	0.6	< 0.5	173	1540	3	42	29	0.18	87
CRPC-13:07-06	21.9	13.7	< 4	12.1	< 200	< 0.2	< 0.5	28	1130	< 2	70	16	0.03	92
CRPC-13:07-07	25.9	46.8	< 4	16.6	< 200	< 0.2	< 0.5	16	665	< 2	17	9	0.02	73
CRPC-13:07-08	20.5	13.5	< 4	11.9	< 200	< 0.2	< 0.5	18	999	< 2	25	10	0.03	77
CRPC-13:07-09	38.5	25.4	< 4	19.4	< 200	< 0.2	< 0.5	33	1130	3	20	19	0.02	76
CRPC-13:07-10	19.9	11.5	< 4	10.4	< 200	< 0.2	< 0.5	32	693	< 2	18	16	0.01	73
CRPC-13:07-11	25.3	16.0	< 4	11.3	< 200	< 0.2	< 0.5	23	738	< 2	17	14	< 0.01	68
CRPC-13:07-12	30.9	13.1	< 4	14.3	< 200	< 0.2	< 0.5	24	723	< 2	13	17	0.02	65
CRPC-13:07-13	38.3	19.6	< 4	15.9	< 200	< 0.2	< 0.5	24	740	3	15	14	0.03	66
CRPC-13:07-14	31.4	11.9	< 4	14.1	< 200	< 0.2	< 0.5	54	4290	7	22	33	0.01	78
CRPC-13:07-15	16.3	6.9	< 4	9.0	500	0.4	0.9	120	582	5	18	109	1.65	84
CRPC-13:07-16	23.3	9.4	< 4	10.9	< 200	< 0.2	1.2	105	634	2	20	24	1.58	88
CRPC-13:07-17	17.7	4.0	< 4	9.8	< 200	0.2	< 0.5	82	585	2	21	31	1.50	63
CRPC-13:07-18	17.0	10.5	< 4	13.9	< 200	0.3	< 0.5	67	11200	32	28	52	0.02	110
CRPC-13:07-19	18.3	15.0	< 4	16.0	< 200	2.1	1.2	65	22100	61	21	57	0.01	115
CRPC-13:07-20	15.8	10.0	26	12.6	< 200	0.3	< 0.5	56	3510	16	12	65	0.01	89
CRPC-13:07-21	20.7	< 0.5	< 4	14.3	< 200	1.4	0.7	54	15500	38	10	84	0.02	92
CRPC-13:08-01	25.4	23.7	< 4	14.4	< 200	< 0.2	< 0.5	34	1400	4	35	23	0.18	95
CRPC-13:08-02	26.5	11.1	< 4	14.2	< 200	< 0.2	< 0.5	32	1110	2	35	20	0.14	85
CRPC-13:08-03	39.1	16.8	< 4	15.6	< 200	< 0.2	< 0.5	36	1160	3	18	31	0.11	62
CRPC-13:08-04	36.8	16.0	< 4	16.9	< 200	< 0.2	< 0.5	28	1060	< 2	31	21	0.05	90
CRPC-13:08-05	28.8	16.8	< 4	13.5	< 200	< 0.2	< 0.5	40	1080	< 2	71	21	0.26	110
CRPC-13:08-06	37.3	15.0	< 4	12.6	< 200	< 0.2	< 0.5	31	1090	< 2	43	12	0.01	96
CRPC-13:08-07	51.5	20.4	< 4	17.9	< 200	< 0.2	< 0.5	24	945	2	16	15	< 0.01	65
CRPC-13:08-08	57.4	31.2	< 4	21.4	400	< 0.2	< 0.5	32	1280	2	15	19	< 0.01	62
CRPC-13:08-09	14.1	4.3	< 4	9.9	300	< 0.2	< 0.5	72	4110	16	25	57	0.02	139
CRPC-13:08-10	15.2	9.9	< 4	10.2	< 200	< 0.2	< 0.5	98	2910	16	23	70	0.20	137
CRPC-13:08-11	19.5	< 0.5	< 4	12.4	< 200	0.2	1.0	228	647	2	17	27	1.63	72
CRPC-13:08-12	33.7	18.9	< 4	14.3	< 200	< 0.2	1.7	72	948	4	14	30	0.69	71
CRPC-13:08-13	14.3	8.3	< 4	7.8	< 200	0.2	0.7	82	710	2	17	27	1.57	85
CRPC-13:08-14	20.0	12.9	< 4	17.6	< 200	0.2	< 0.5	215	717	28	22	166	0.85	232
CRPC-13:08-15	36.1	16.7	< 4	25.4	< 200	0.2	0.7	82	4180	15	13	64	0.35	108

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:09-01	14.4	9.1	< 4	9.0	< 200	0.2	< 0.5	60	990	3	27	23	1.35	77
CRPC-13:09-02	19.2	11.0	< 4	12.1	< 200	< 0.2	< 0.5	39	1360	4	20	22	0.66	72
CRPC-13:09-03	22.9	11.3	< 4	10.4	< 200	< 0.2	< 0.5	42	1360	5	27	32	0.18	89
CRPC-13:09-04	58.4	27.6	< 4	24.5	< 200	< 0.2	< 0.5	24	1040	< 2	37	17	0.03	86
CRPC-13:09-05	32.2	14.5	< 4	13.6	< 200	< 0.2	< 0.5	27	986	< 2	34	12	0.01	96
CRPC-13:09-06	26.4	< 0.5	< 4	13.9	< 200	< 0.2	< 0.5	51	883	3	20	35	0.04	89
CRPC-13:09-07	20.0	7.7	< 4	13.2	< 200	< 0.2	< 0.5	49	920	3	13	25	0.01	81
CRPC-13:09-08	16.3	4.3	< 4	8.4	< 200	< 0.2	< 0.5	50	937	3	15	30	0.01	83
CRPC-13:09-09	19.7	7.3	< 4	12.4	< 200	< 0.2	< 0.5	52	1400	3	17	36	< 0.01	88
CRPC-13:09-10	38.1	21.0	< 4	18.4	< 200	0.4	< 0.5	42	1150	4	18	31	< 0.01	84
CRPC-13:09-11	67.5	19.0	< 4	18.1	< 200	< 0.2	< 0.5	30	1080	2	13	26	< 0.01	65
CRPC-13:09-12	47.6	17.5	< 4	15.4	< 200	< 0.2	< 0.5	63	1500	7	15	45	< 0.01	87
CRPC-13:09-13	15.6	7.9	< 4	9.4	< 200	< 0.2	< 0.5	96	619	5	16	47	0.21	83
CRPC-13:09-14	18.0	11.8	< 4	12.3	< 200	0.7	< 0.5	128	698	3	18	30	1.49	63
CRPC-13:09-15	19.7	7.0	< 4	8.5	< 200	0.4	3.0	220	978	< 2	19	24	1.12	63
CRPC-13:09-16	8.8	10.3	< 4	7.2	< 200	0.3	1.2	41	909	< 2	9	82	0.03	51
CRPC-13:09-17	23.5	17.5	< 4	15.4	< 200	0.4	2.2	52	8940	7	13	43	0.02	74
CRPC-13:10-01	186	50.3	< 4	28.8	< 200	0.3	< 0.5	32	1150	2	155	20	0.07	106
CRPC-13:10-02	104	25.7	< 4	22.2	< 200	< 0.2	< 0.5	70	917	< 2	134	17	0.34	65
CRPC-13:10-03	174	33.0	< 4	13.6	< 200	< 0.2	< 0.5	19	1050	< 2	596	12	0.04	90
CRPC-13:11-01	46.8	22.7	< 4	22.9	< 200	< 0.2	< 0.5	22	789	< 2	15	14	< 0.01	61
CRPC-13:11-02	126	40.4	< 4	28.8	< 200	< 0.2	< 0.5	26	1120	< 2	39	16	0.02	82
CRPC-13:11-03	77.3	32.2	< 4	28.2	< 200	0.7	< 0.5	20	959	< 2	33	17	0.01	72
CRPC-13:11-04	66.2	30.1	< 4	22.1	< 200	< 0.2	< 0.5	18	1030	< 2	36	19	0.09	73
CRPC-13:11-05	65.0	27.1	< 4	24.7	< 200	< 0.2	< 0.5	19	1080	< 2	21	18	< 0.01	78
CRPC-13:11-06	33.8	15.8	< 4	13.1	< 200	< 0.2	< 0.5	47	1520	3	19	36	0.03	81
CRPC-13:11-07	12.8	4.1	< 4	10.3	< 200	0.3	0.9	71	1730	5	19	30	0.06	121
CRPC-13:11-08	9.9	2.3	< 4	8.2	< 200	< 0.2	1.3	62	1710	4	19	30	0.02	116
CRPC-13:11-09	7.0	5.8	< 4	8.7	< 200	< 0.2	1.1	58	1850	4	22	36	0.02	95
CRPC-13:11-10	6.1	4.3	< 4	7.1	< 200	< 0.2	0.8	49	1790	3	15	28	0.02	80
CRPC-13:12-01	31.5	13.9	< 4	14.7	< 200	< 0.2	< 0.5	27	783	3	14	19	0.12	58
CRPC-13:12-02	20.9	7.9	< 4	14.6	< 200	< 0.2	0.6	30	823	4	13	27	0.27	86
CRPC-13:13-01	26.7	12.7	< 4	14.4	< 200	< 0.2	< 0.5	27	788	3	10	20	0.11	51
CRPC-13:14-01	24.8	15.4	< 4	16.5	< 200	0.4	< 0.5	25	811	3	14	20	0.29	57
CRPC-13:14-02	18.0	9.0	< 4	8.6	< 200	< 0.2	< 0.5	44	1310	3	117	23	0.27	98
CRPC-13:15-01	22.7	9.9	< 4	13.4	< 200	< 0.2	< 0.5	15	714	< 2	8	13	0.26	43
CRPC-13:15-02	17.8	10.7	< 4	12.4	< 200	0.6	0.7	32	785	3	13	31	0.31	73
CRPC-13:16-01	20.4	10.1	< 4	10.7	< 200	< 0.2	< 0.5	38	862	3	17	17	1.00	75
CRPC-13:16-02	17.8	11.1	< 4	12.5	< 200	< 0.2	< 0.5	32	757	2	14	36	0.99	56
CRPC-13:16-03	22.7	10.6	< 4	10.5	< 200	< 0.2	< 0.5	47	798	3	14	18	0.72	66
CRPC-13:16-04	27.4	15.0	< 4	14.3	< 200	< 0.2	< 0.5	28	778	4	14	20	0.88	59
CRPC-13:16-05	27.7	20.8	< 4	15.5	< 200	0.3	< 0.5	42	845	3	14	29	0.57	63
CRPC-13:16-06	56.9	17.3	< 4	23.7	< 200	0.7	0.6	38	842	2	8	88	0.01	60
CRPC-13:17-01	35.2	17.0	< 4	17.2	< 200	< 0.2	< 0.5	32	702	3	14	20	0.93	55
CRPC-13:17-02	26.5	14.5	< 4	17.6	< 200	< 0.2	< 0.5	32	880	3	27	19	0.84	85
CRPC-13:17-03	18.4	7.2	< 4	16.0	< 200	0.6	< 0.5	56	1100	3	43	23	0.06	92

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:17-04	20.7	18.7	< 4	11.3	< 200	0.3	< 0.5	59	966	4	71	22	0.41	80
CRPC-13:17-05	20.7	9.0	< 4	10.1	< 200	0.6	0.6	65	986	10	55	35	0.38	77
CRPC-13:18-01	17.6	9.1	< 4	13.1	< 200	< 0.2	< 0.5	21	920	10	13	19	0.30	56
CRPC-13:18-02	25.0	10.7	< 4	15.8	< 200	< 0.2	< 0.5	32	697	3	12	18	1.21	52
CRPC-13:18-03	21.8	14.9	< 4	15.0	< 200	< 0.2	< 0.5	25	961	3	23	22	0.04	77
CRPC-13:18-04	48.3	12.4	< 4	11.1	< 200	8.2	< 0.5	39	829	3	26	25	0.05	80
CRPC-13:18-05	28.7	11.2	< 4	19.7	< 200	< 0.2	< 0.5	43	998	5	33	25	0.05	96
CRPC-13:18-06	60.6	17.9	< 4	23.9	< 200	< 0.2	< 0.5	34	1020	4	29	22	0.08	84

Quality Analysis ... *Innovative Technologies*

Date Submitted: 12-Aug-13
Invoice No.: A13-09317
Invoice Date: 26-Aug-13
Your Reference: CPRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

99 Heavy Mineral Concentrates samples were submitted for analysis.

The following analytical package was requested: Code 3A-Large HMC INAA(INAAGEO)
Code 3C Aqua Regia ICP(AQUAGEO)

REPORT **A13-09317**

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Notes:

Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Results

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:19-01	178	< 5	50	< 200	< 5	< 1	287	60	370	< 2	3.5	17.8	58	< 5	< 50
CPRC-13:19-02	3730	< 5	84	< 200	< 5	< 1	498	75	290	< 2	3.4	16.3	48	< 5	< 50
CPRC-13:19-03	5520	< 5	310	< 200	< 5	< 1	821	140	370	< 2	6.2	21.4	75	< 5	< 50
CPRC-13:20-01	237	< 5	40	< 200	< 5	< 1	240	56	340	< 2	4.6	15.7	61	< 5	< 50
CPRC-13:20-02	134	< 5	57	< 200	< 5	< 1	298	55	340	< 2	4.5	17.9	63	< 5	< 50
CPRC-13:20-03	989	< 5	149	< 200	< 5	< 1	350	83	330	< 2	4.2	22.2	67	< 5	< 50
CPRC-13:20-04	458	< 5	137	< 200	< 5	< 1	317	66	280	< 2	3.4	20.1	56	< 5	< 50
CPRC-13:20-05	2270	< 5	80	< 200	< 5	< 1	374	79	460	< 2	3.1	22.9	57	< 5	< 50
CPRC-13:20-06	1180	< 5	75	< 200	< 5	< 1	343	78	320	< 2	4.9	25.9	69	< 5	< 50
CPRC-13:20-07	1370	< 5	74	< 200	< 5	< 1	323	88	300	< 2	3.9	24.8	64	< 5	< 50
CPRC-13:20-08	2100	< 5	86	< 200	< 5	< 1	358	84	350	< 2	3.2	22.6	53	< 5	< 50
CPRC-13:20-09	1330	< 5	38	< 200	< 5	< 1	156	81	250	< 2	2.4	19.4	34	< 5	< 50
CPRC-13:20-10	325	< 5	50	< 200	< 5	< 1	234	94	310	< 2	3.7	18.8	47	< 5	< 50
CPRC-13:20-11	517	< 5	29	< 200	< 5	< 1	122	95	210	< 2	3.0	15.3	25	< 5	< 50
CPRC-13:21-01	< 5	< 5	24	< 200	< 5	< 1	282	108	430	< 2	3.9	15.6	54	< 5	< 50
CPRC-13:21-02	55	< 5	242	< 200	< 5	< 1	529	81	340	< 2	7.0	23.4	242	< 5	< 50
CPRC-13:21-03	190	< 5	363	< 200	< 5	< 1	430	47	90	< 2	9.4	13.6	166	< 5	< 50
CPRC-13:21-04	1140	< 5	342	< 200	< 5	< 1	552	48	250	< 2	11.9	18.5	725	< 5	< 50
CPRC-13:21-05	233	< 5	486	< 200	< 5	< 1	245	59	150	7	4.1	29.0	74	< 5	< 50
CPRC-13:21-06	134	< 5	164	600	< 5	< 1	101	68	40	< 2	3.2	25.5	32	< 5	< 50
CPRC-13:21-07	152	< 5	285	< 200	< 5	< 1	232	54	130	< 2	6.7	24.0	154	< 5	< 50
CPRC-13:22-01	114	< 5	20	< 200	< 5	< 1	348	69	380	< 2	4.4	19.3	65	< 5	< 50
CPRC-13:23-01	143	< 5	20	< 200	< 5	< 1	314	119	730	< 2	3.2	26.1	50	< 5	< 50
CPRC-13:23-02	< 5	< 5	< 2	< 200	< 5	< 1	131	55	360	< 2	< 0.2	58.5	76	< 5	< 50
CPRC-13:24-01	98	< 5	29	< 200	< 5	< 1	427	65	320	< 2	4.8	19.8	65	< 5	< 50
CPRC-13:24-02	< 5	< 5	50	< 200	< 5	< 1	525	48	320	< 2	7.5	19.1	86	< 5	< 50
CPRC-13:24-03	176	< 5	49	< 200	< 5	< 1	418	59	340	< 2	6.9	17.7	82	< 5	< 50
CPRC-13:24-04	176	< 5	56	< 200	< 5	< 1	434	65	380	< 2	6.1	17.5	74	< 5	< 50
CPRC-13:24-05	42	< 5	26	< 200	< 5	< 1	243	99	250	< 2	3.1	16.7	48	< 5	< 50
CPRC-13:24-06	292	< 5	33	< 200	< 5	< 1	275	100	390	< 2	4.2	19.1	58	< 5	< 50
CPRC-13:24-07	< 5	< 5	< 2	< 200	< 5	< 1	41	194	620	< 2	0.8	17.5	< 1	< 5	< 50
CPRC-13:24-09	< 5	< 5	14	< 200	< 5	< 1	< 3	152	590	< 2	1.2	23.5	< 1	< 5	< 50
CPRC-13:25-01	< 5	< 5	29	< 200	< 5	< 1	1180	83	340	< 2	7.6	26.7	123	< 5	< 50
CPRC-13:26-01	< 5	< 5	45	< 200	< 5	< 1	31	143	260	< 2	0.5	17.8	3	< 5	< 50
CPRC-13:27-01	< 5	< 5	20	< 200	< 5	< 1	605	74	220	< 2	6.2	17.4	80	< 5	< 50
CPRC-13:27-02	< 5	< 5	20	< 200	< 5	< 1	324	111	250	< 2	4.0	16.4	42	< 5	< 50
CPRC-13:28-01	< 5	< 5	38	< 200	< 5	< 1	1040	60	280	< 2	8.2	23.4	82	< 5	< 50
CPRC-13:28-02	< 5	< 5	39	< 200	< 5	< 1	2890	< 5	210	< 2	13.7	36.4	214	< 5	< 50
CPRC-13:29-01	< 5	< 5	36	< 200	< 5	< 1	1470	70	450	< 2	12.2	31.3	137	< 5	< 50
CPRC-13:30-01	530	< 5	65	< 200	< 5	< 1	1950	< 5	310	< 2	6.3	38.3	111	< 5	< 50
CPRC-13:31-01	162	< 5	69	< 200	< 5	< 1	281	47	250	< 2	3.2	17.0	61	< 5	< 50
CPRC-13:31-02	86	< 5	65	< 200	< 5	12	247	46	270	< 2	3.3	15.2	60	< 5	< 50
CPRC-13:31-03	70	< 5	45	< 200	< 5	< 1	213	42	240	6	3.7	13.7	58	< 5	< 50
CPRC-13:31-04	254	< 5	63	< 200	< 5	< 1	266	62	310	< 2	3.2	20.6	41	< 5	< 50
CPRC-13:31-05	30	< 5	53	< 200	< 5	< 1	142	54	260	< 2	2.8	16.9	39	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:31-06	490	< 5	51	< 200	< 5	3	204	52	250	< 2	3.3	15.0	53	< 5	< 50
CPRC-13:31-07	615	< 5	63	< 200	< 5	< 1	247	68	250	< 2	3.0	17.0	50	< 5	< 50
CPRC-13:31-08	1350	< 5	39	< 200	< 5	< 1	224	64	300	< 2	2.6	16.3	54	< 5	< 50
CPRC-13:31-09	4260	< 5	48	< 200	< 5	< 1	236	58	260	< 2	2.0	17.2	48	< 5	< 50
CPRC-13:31-10	5200	< 5	42	< 200	< 5	< 1	241	60	210	< 2	3.9	17.9	60	< 5	< 50
CPRC-13:31-11	496	< 5	30	< 200	< 5	< 1	252	89	290	< 2	4.0	15.7	39	< 5	< 50
CPRC-13:31-12	35	< 5	26	< 200	< 5	8	127	124	180	< 2	2.3	14.7	43	< 5	< 50
CPRC-13:31-13	5680	< 5	47	< 200	< 5	< 1	306	124	350	< 2	5.3	20.4	79	< 5	< 50
CPRC-13:32-01	264	< 5	106	< 200	< 5	< 1	331	86	290	< 2	3.8	20.6	67	< 5	< 50
CPRC-13:32-02	83	< 5	90	< 200	< 5	7	218	71	220	< 2	2.8	14.7	73	< 5	< 50
CPRC-13:32-03	625	< 5	99	< 200	< 5	< 1	296	80	300	< 2	3.8	18.2	84	< 5	< 50
CPRC-13:32-04	131	< 5	92	< 200	< 5	< 1	331	49	320	< 2	4.4	19.8	70	< 5	< 50
CPRC-13:32-05	154	< 5	102	< 200	< 5	< 1	319	46	300	< 2	4.3	19.4	64	< 5	< 50
CPRC-13:32-06	167	< 5	121	< 200	< 5	< 1	321	54	290	< 2	4.8	21.2	50	< 5	< 50
CPRC-13:32-07	524	< 5	100	< 200	< 5	< 1	330	73	450	< 2	4.5	22.4	55	< 5	< 50
CPRC-13:32-08	388	< 5	98	< 200	< 5	< 1	385	74	440	< 2	4.8	27.2	85	< 5	< 50
CPRC-13:32-09	172	< 5	62	< 200	< 5	< 1	259	79	330	< 2	3.1	20.3	43	< 5	< 50
CPRC-13:32-10	91	< 5	95	< 200	< 5	< 1	433	71	300	< 2	4.6	22.3	99	< 5	< 50
CPRC-13:32-11	234	< 5	71	< 200	< 5	< 1	264	39	210	< 2	4.6	16.4	73	< 5	< 50
CPRC-13:32-12	726	< 5	76	< 200	< 5	< 1	332	59	320	< 2	6.1	21.6	116	< 5	< 50
CPRC-13:32-13	3110	< 5	78	< 200	< 5	12	285	110	310	< 2	5.5	24.0	69	< 5	< 50
CPRC-13:32-14	194	< 5	69	< 200	< 5	< 1	215	98	250	< 2	3.4	21.8	46	< 5	< 50
CPRC-13:32-15	128	< 5	59	< 200	< 5	< 1	314	58	320	< 2	4.8	20.3	64	< 5	< 50
CPRC-13:32-16	227	< 5	67	< 200	< 5	< 1	371	75	430	< 2	4.4	26.0	85	< 5	< 50
CPRC-13:32-17	560	< 5	28	< 200	< 5	< 1	298	97	240	< 2	4.9	18.5	85	< 5	< 50
CPRC-13:32-18	127	< 5	23	< 200	< 5	< 1	117	103	240	< 2	3.6	15.1	55	< 5	< 50
CPRC-13:32-19	431	< 5	31	< 200	< 5	< 1	202	95	280	< 2	3.7	18.6	66	< 5	< 50
CPRC-13:32-20	64	< 5	38	< 200	< 5	< 1	177	139	290	< 2	4.7	21.1	87	< 5	< 50
CPRC-13:32-21	150	< 5	35	< 200	< 5	< 1	155	126	240	< 2	3.8	17.2	57	< 5	< 50
CPRC-13:32-22	1180	< 5	31	< 200	< 5	10	201	139	240	< 2	5.8	16.7	64	< 5	< 50
CPRC-13:33-01	< 5	< 5	46	< 200	< 5	17	239	31	200	< 2	5.6	15.8	62	< 5	< 50
CPRC-13:33-02	139	< 5	52	< 200	< 5	< 1	256	31	250	< 2	4.3	14.8	73	< 5	< 50
CPRC-13:33-03	124	< 5	80	< 200	< 5	< 1	262	51	290	< 2	3.1	18.3	50	< 5	< 50
CPRC-13:33-04	1170	< 5	109	< 200	< 5	< 1	466	93	530	< 2	4.5	20.0	77	< 5	< 50
CPRC-13:33-05	246	< 5	74	900	< 5	< 1	258	52	260	< 2	2.7	16.9	60	< 5	< 50
CPRC-13:33-06	119	< 5	82	< 200	< 5	16	281	42	280	< 2	3.1	16.7	78	< 5	< 50
CPRC-13:33-07	221	< 5	107	< 200	< 5	12	307	47	220	< 2	2.8	16.0	65	< 5	< 50
CPRC-13:33-08	111	< 5	134	< 200	< 5	< 1	368	54	260	< 2	3.2	17.0	86	< 5	< 50
CPRC-13:33-09	555	< 5	74	< 200	< 5	< 1	312	49	280	< 2	5.4	17.7	88	< 5	< 50
CPRC-13:33-10	239	< 5	61	< 200	< 5	< 1	297	43	420	< 2	5.6	17.5	127	< 5	< 50
CPRC-13:33-11	< 5	< 5	63	< 200	< 5	< 1	180	48	300	< 2	4.1	18.6	48	< 5	< 50
CPRC-13:33-12	268	< 5	57	< 200	< 5	< 1	249	47	270	< 2	3.8	17.6	54	< 5	< 50
CPRC-13:33-13	720	< 5	136	< 200	< 5	< 1	283	85	290	< 2	4.3	22.2	59	< 5	< 50
CPRC-13:33-14	199	< 5	81	< 200	< 5	< 1	198	88	210	< 2	2.6	21.3	32	< 5	< 50
CPRC-13:33-15	468	< 5	50	< 200	< 5	< 1	317	61	320	< 2	3.2	21.9	66	< 5	< 50
CPRC-13:33-16	1360	< 5	47	< 200	< 5	< 1	274	68	280	< 2	3.9	20.4	50	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:33-17	65	< 5	26	< 200	< 5	14	142	75	140	< 2	2.1	17.5	22	< 5	< 50
CPRC-13:33-18	343	< 5	61	< 200	< 5	< 1	312	64	250	< 2	2.8	20.4	56	< 5	< 50
CPRC-13:33-19	246	< 5	68	< 200	< 5	< 1	370	63	290	< 2	4.1	19.4	58	< 5	< 50
CPRC-13:33-20	426	< 5	94	< 200	< 5	< 1	730	70	330	< 2	5.6	23.0	94	< 5	< 50
CPRC-13:33-21	361	< 5	60	< 200	< 5	13	512	96	230	< 2	6.0	17.8	260	< 5	< 50
CPRC-13:34-01	314	< 5	78	< 200	< 5	< 1	249	57	200	< 2	4.2	16.0	84	< 5	< 50
CPRC-13:34-02	343	< 5	68	< 200	< 5	< 1	291	59	320	< 2	5.3	19.9	73	< 5	< 50
CPRC-13:34-03	293	< 5	89	< 200	< 5	< 1	323	77	270	< 2	4.9	21.0	70	< 5	< 50

Results

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:19-01	163	0.47	38.0	< 20	0.46	80	< 200	< 50	5.6	36.0	< 20	24.2	< 0.2	< 1	4
CPRC-13:19-02	297	0.58	43.9	< 20	0.45	170	< 200	< 50	9.4	34.5	< 20	37.8	< 0.2	< 1	< 2
CPRC-13:19-03	492	1.27	16.2	< 20	0.51	290	< 200	< 50	16.8	43.5	< 20	63.0	< 0.2	< 1	< 2
CPRC-13:20-01	145	0.54	38.2	< 20	0.45	110	< 200	< 50	5.6	36.5	< 20	21.1	< 0.2	< 1	< 2
CPRC-13:20-02	195	0.53	46.1	< 20	0.38	100	< 200	< 50	6.6	32.8	< 20	24.1	< 0.2	< 1	2
CPRC-13:20-03	215	0.71	32.1	< 20	0.50	120	< 200	< 50	8.4	34.8	< 20	26.2	< 0.2	< 1	< 2
CPRC-13:20-04	196	0.54	36.8	< 20	0.40	80	< 200	< 50	6.2	32.2	< 20	24.3	< 0.2	< 1	< 2
CPRC-13:20-05	215	0.57	22.8	< 20	0.53	120	< 200	< 50	9.1	33.5	< 20	27.3	< 0.2	< 1	< 2
CPRC-13:20-06	212	0.48	31.5	< 20	0.44	90	< 200	< 50	9.0	37.3	< 20	26.8	< 0.2	< 1	< 2
CPRC-13:20-07	205	0.70	28.9	< 20	0.51	100	< 200	< 50	8.3	36.6	< 20	24.4	< 0.2	< 1	< 2
CPRC-13:20-08	215	0.45	36.7	< 20	0.43	90	< 200	< 50	9.6	35.0	< 20	26.4	< 0.2	< 1	< 2
CPRC-13:20-09	100	0.37	37.7	< 20	0.52	40	< 200	< 50	4.1	28.2	< 20	14.5	< 0.2	6	< 2
CPRC-13:20-10	139	0.46	26.4	< 20	0.63	80	< 200	< 50	6.7	38.1	< 20	22.5	< 0.2	< 1	< 2
CPRC-13:20-11	75	0.19	38.7	< 20	0.60	60	< 200	< 50	3.7	27.2	< 20	12.7	< 0.2	< 1	< 2
CPRC-13:21-01	162	0.60	23.1	< 20	0.36	50	< 200	< 50	3.2	28.9	< 20	24.2	< 0.2	< 1	< 2
CPRC-13:21-02	290	1.57	6.00	< 20	0.22	170	< 200	< 50	35.2	38.7	< 20	27.2	< 0.2	< 1	< 2
CPRC-13:21-03	242	1.52	9.30	< 20	0.10	100	< 200	< 50	28.9	35.4	< 20	27.0	< 0.2	< 1	< 2
CPRC-13:21-04	335	3.25	7.70	< 20	0.09	290	< 200	< 50	20.0	43.5	< 20	33.9	< 0.2	45	10
CPRC-13:21-05	137	1.55	15.4	< 20	0.08	40	< 200	< 50	17.0	29.3	< 20	20.6	< 0.2	< 1	< 2
CPRC-13:21-06	57	0.76	37.5	< 20	< 0.05	50	< 200	< 50	10.2	14.0	< 20	11.4	< 0.2	< 1	< 2
CPRC-13:21-07	124	1.43	18.1	< 20	0.05	30	< 200	< 50	14.8	26.2	< 20	15.8	< 0.2	< 1	5
CPRC-13:22-01	207	0.56	26.3	< 20	0.39	120	< 200	< 50	3.6	28.1	< 20	31.6	< 0.2	< 1	< 2
CPRC-13:23-01	185	0.85	7.70	< 20	0.63	100	< 200	< 50	3.7	29.3	< 20	24.1	< 0.2	< 1	< 2
CPRC-13:23-02	75	0.20	3.30	< 20	0.29	< 10	< 200	< 50	4.1	26.8	< 20	8.0	< 0.2	28	< 2
CPRC-13:24-01	242	0.76	21.9	< 20	0.65	140	< 200	< 50	6.7	41.8	< 20	38.0	< 0.2	< 1	< 2
CPRC-13:24-02	304	0.78	24.1	< 20	0.65	200	< 200	< 50	7.7	44.7	< 20	44.2	< 0.2	< 1	< 2
CPRC-13:24-03	243	0.63	25.6	< 20	0.58	170	< 200	< 50	6.2	42.4	< 20	35.5	< 0.2	12	< 2
CPRC-13:24-04	248	0.71	23.1	< 20	0.68	130	< 200	< 50	6.6	40.0	< 20	36.1	< 0.2	< 1	< 2
CPRC-13:24-05	137	0.45	41.2	< 20	0.46	100	< 200	< 50	2.3	22.4	< 20	20.4	< 0.2	< 1	< 2
CPRC-13:24-06	145	0.61	24.2	< 20	0.55	60	< 200	< 50	4.0	23.9	< 20	21.5	< 0.2	< 1	< 2
CPRC-13:24-07	14	< 0.05	5.30	< 20	0.22	< 10	2600	< 50	1.5	9.8	< 20	3.2	< 0.2	< 1	< 2
CPRC-13:24-09	26	0.30	3.30	< 20	0.44	< 10	< 200	< 50	< 0.2	20.3	< 20	7.9	< 0.2	< 1	< 2
CPRC-13:25-01	684	1.27	19.3	< 20	0.44	380	< 200	< 50	7.4	43.4	< 20	89.8	< 0.2	61	< 2
CPRC-13:26-01	15	< 0.05	33.2	< 20	0.42	< 10	< 200	< 50	< 0.2	9.9	< 20	3.1	< 0.2	< 1	< 2
CPRC-13:27-01	358	0.83	34.4	< 20	0.42	160	< 200	< 50	2.5	31.2	< 20	52.1	< 0.2	< 1	< 2
CPRC-13:27-02	165	0.41	26.8	< 20	0.38	100	< 200	< 50	1.1	18.6	< 20	27.2	< 0.2	< 1	< 2
CPRC-13:28-01	615	0.98	22.4	< 20	0.40	240	< 200	< 50	4.3	49.3	< 20	75.7	< 0.2	37	< 2
CPRC-13:28-02	1640	2.20	10.5	< 20	0.33	560	< 200	< 50	6.6	41.4	< 20	145	< 0.2	44	< 2
CPRC-13:29-01	824	1.76	13.9	< 20	0.38	380	< 200	< 50	5.5	60.9	< 20	104	< 0.2	100	< 2
CPRC-13:30-01	1230	1.52	15.7	< 20	0.51	510	< 200	< 50	9.9	64.8	< 20	138	< 0.2	83	< 2
CPRC-13:31-01	173	0.60	45.3	< 20	0.50	70	< 200	< 50	6.0	32.5	< 20	23.1	< 0.2	< 1	< 2
CPRC-13:31-02	149	0.71	40.9	< 20	0.61	80	< 200	< 50	4.6	35.0	< 20	20.6	< 0.2	< 1	< 2
CPRC-13:31-03	124	0.55	44.7	< 20	0.52	80	< 200	< 50	4.8	34.8	< 20	19.0	< 0.2	< 1	< 2
CPRC-13:31-04	150	0.37	20.7	< 20	0.49	70	< 200	< 50	6.5	37.6	< 20	20.1	< 0.2	< 1	< 2
CPRC-13:31-05	122	0.36	36.8	< 20	0.41	70	< 200	< 50	4.6	31.8	< 20	17.3	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:31-06	133	0.37	52.9	< 20	0.42	80	< 200	< 50	4.8	30.0	< 20	18.4	< 0.2	< 1	< 2
CPRC-13:31-07	150	0.53	35.1	< 20	0.43	60	< 200	< 50	5.9	33.4	< 20	21.1	< 0.2	< 1	< 2
CPRC-13:31-08	134	0.44	45.4	< 20	0.31	60	< 200	< 50	4.7	29.0	< 20	17.7	< 0.2	< 1	3
CPRC-13:31-09	149	0.43	40.0	< 20	0.37	150	< 200	< 50	5.5	29.8	< 20	19.2	< 0.2	< 1	< 2
CPRC-13:31-10	145	0.45	27.9	< 20	0.50	80	< 200	< 50	5.8	36.2	< 20	22.1	< 0.2	< 1	< 2
CPRC-13:31-11	123	0.31	28.6	< 20	0.78	70	< 200	< 50	3.6	33.5	< 20	25.0	< 0.2	< 1	< 2
CPRC-13:31-12	68	0.25	46.1	< 20	0.55	60	< 200	< 50	1.8	24.1	< 20	15.6	< 0.2	< 1	< 2
CPRC-13:31-13	169	0.57	22.7	< 20	0.68	70	< 200	< 50	2.9	35.9	< 20	30.9	< 0.2	< 1	< 2
CPRC-13:32-01	195	0.61	35.8	< 20	0.51	80	< 200	< 50	9.8	34.3	< 20	25.7	< 0.2	< 1	< 2
CPRC-13:32-02	138	0.51	54.1	< 20	0.51	60	< 200	< 50	6.1	29.6	< 20	19.5	< 0.2	< 1	< 2
CPRC-13:32-03	184	0.57	37.8	< 20	0.46	100	< 200	< 50	7.2	35.2	< 20	24.8	< 0.2	< 1	< 2
CPRC-13:32-04	199	0.88	33.5	< 20	0.51	130	< 200	< 50	8.7	43.0	< 20	27.6	< 0.2	< 1	< 2
CPRC-13:32-05	188	0.81	32.7	< 20	0.51	80	< 200	< 50	8.0	43.0	< 20	26.2	< 0.2	< 1	< 2
CPRC-13:32-06	178	0.64	16.3	< 20	0.52	100	< 200	< 50	8.0	48.5	< 20	25.0	0.2	< 1	< 2
CPRC-13:32-07	191	0.50	19.1	< 20	0.47	130	< 200	< 50	9.5	44.3	< 20	27.4	< 0.2	< 1	< 2
CPRC-13:32-08	226	0.73	21.3	< 20	0.38	100	< 200	< 50	10.2	45.2	< 20	30.1	< 0.2	< 1	< 2
CPRC-13:32-09	145	0.50	32.6	< 20	0.42	170	< 200	< 50	5.8	35.8	< 20	22.2	< 0.2	< 1	< 2
CPRC-13:32-10	232	0.86	21.4	20	0.51	140	< 200	< 50	8.4	45.8	< 20	33.1	< 0.2	< 1	< 2
CPRC-13:32-11	168	0.64	42.7	< 20	0.68	130	< 200	< 50	8.9	37.8	< 20	24.4	< 0.2	< 1	< 2
CPRC-13:32-12	202	0.84	27.1	< 20	0.47	110	< 200	< 50	11.3	47.5	< 20	26.6	< 0.2	< 1	< 2
CPRC-13:32-13	135	0.86	16.4	< 20	0.51	130	< 200	< 50	5.6	46.0	< 20	22.8	< 0.2	< 1	< 2
CPRC-13:32-14	112	0.40	23.3	< 20	0.48	70	< 200	< 50	6.6	34.4	< 20	17.0	< 0.2	< 1	< 2
CPRC-13:32-15	177	0.56	26.1	< 20	0.48	210	< 200	< 50	6.5	40.1	< 20	27.5	< 0.2	10	< 2
CPRC-13:32-16	219	0.78	25.3	< 20	0.59	120	< 200	< 50	8.1	43.8	< 20	29.9	< 0.2	< 1	5
CPRC-13:32-17	161	0.69	37.3	< 20	0.43	110	< 200	< 50	3.1	30.4	< 20	30.5	< 0.2	< 1	< 2
CPRC-13:32-18	73	0.30	46.3	< 20	0.47	70	< 200	< 50	2.2	27.9	< 20	15.4	< 0.2	< 1	< 2
CPRC-13:32-19	116	0.50	41.7	< 20	0.43	70	< 200	< 50	3.0	32.9	< 20	24.4	< 0.2	< 1	< 2
CPRC-13:32-20	89	0.54	23.1	< 20	0.56	50	< 200	< 50	2.7	35.5	< 20	21.8	< 0.2	< 1	< 2
CPRC-13:32-21	80	0.53	34.7	< 20	0.57	80	< 200	< 50	1.9	39.3	< 20	20.2	< 0.2	< 1	< 2
CPRC-13:32-22	99	0.53	14.1	< 20	0.61	100	< 200	< 50	2.0	48.9	< 20	29.2	< 0.2	< 1	< 2
CPRC-13:33-01	122	0.55	31.8	< 20	0.56	80	< 200	< 50	7.6	39.2	< 20	19.5	< 0.2	< 1	< 2
CPRC-13:33-02	143	0.65	41.1	< 20	0.48	120	< 200	< 50	4.8	38.7	< 20	22.6	0.3	< 1	< 2
CPRC-13:33-03	148	0.46	28.7	< 20	0.41	100	< 200	< 50	7.7	37.3	< 20	23.2	< 0.2	< 1	< 2
CPRC-13:33-04	236	1.23	11.8	< 20	0.38	120	< 200	< 50	7.0	45.8	< 20	29.3	< 0.2	< 1	7
CPRC-13:33-05	150	0.53	45.2	< 20	0.43	80	< 200	< 50	8.2	32.0	< 20	21.5	< 0.2	< 1	< 2
CPRC-13:33-06	169	0.77	40.1	< 20	0.50	70	< 200	< 50	6.8	36.5	< 20	25.3	< 0.2	< 1	3
CPRC-13:33-07	169	0.69	38.3	< 20	0.46	150	< 200	< 50	7.2	34.9	< 20	23.6	< 0.2	< 1	< 2
CPRC-13:33-08	191	0.91	34.2	< 20	0.49	80	< 200	< 50	7.1	38.3	< 20	27.8	< 0.2	< 1	< 2
CPRC-13:33-09	163	0.82	24.4	< 20	0.58	110	< 200	< 50	6.8	49.0	< 20	26.9	< 0.2	< 1	< 2
CPRC-13:33-10	149	1.22	9.00	< 20	0.86	90	< 200	< 50	5.9	51.2	< 20	22.3	< 0.2	< 1	< 2
CPRC-13:33-11	151	0.34	21.5	< 20	0.59	100	< 200	< 50	5.1	41.2	< 20	23.7	< 0.2	< 1	< 2
CPRC-13:33-12	138	0.40	41.3	< 20	0.42	110	< 200	< 50	5.8	33.6	< 20	22.4	< 0.2	< 1	< 2
CPRC-13:33-13	149	0.65	22.5	< 20	0.41	110	< 200	< 50	7.3	44.1	< 20	26.0	< 0.2	< 1	< 2
CPRC-13:33-14	111	0.31	31.0	< 20	0.38	60	< 200	< 50	4.8	32.9	< 20	17.6	< 0.2	< 1	< 2
CPRC-13:33-15	165	0.64	23.3	< 20	0.50	120	< 200	< 50	6.3	39.7	< 20	25.6	< 0.2	< 1	< 2
CPRC-13:33-16	147	0.56	25.3	< 20	0.51	60	< 200	< 50	7.6	36.5	< 20	22.9	< 0.2	< 1	3

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:33-17	76	0.13	39.6	< 20	0.55	30	< 200	< 50	2.1	33.8	< 20	12.4	< 0.2	< 1	< 2
CPRC-13:33-18	173	0.51	42.9	< 20	0.48	90	< 200	< 50	5.2	29.3	< 20	25.1	< 0.2	< 1	< 2
CPRC-13:33-19	220	0.51	32.6	< 20	0.54	130	< 200	< 50	6.8	31.1	< 20	29.6	< 0.2	< 1	< 2
CPRC-13:33-20	381	0.78	23.9	< 20	0.47	300	< 200	< 50	6.5	37.3	< 20	48.1	< 0.2	< 1	< 2
CPRC-13:33-21	279	1.00	11.3	< 20	0.45	110	< 200	< 50	5.7	46.0	< 20	32.8	< 0.2	< 1	< 2
CPRC-13:34-01	143	0.53	34.6	< 20	0.42	80	< 200	< 50	10.2	36.0	< 20	22.3	< 0.2	< 1	< 2
CPRC-13:34-02	161	0.64	34.1	< 20	0.43	100	< 200	< 50	7.8	41.0	< 20	25.0	< 0.2	< 1	< 2
CPRC-13:34-03	158	0.68	20.6	< 20	0.33	100	< 200	< 50	8.6	40.7	< 20	24.8	< 0.2	< 1	< 2

Results

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13:19-01	22.7	11.2	< 4	12.5	< 200	< 0.2	< 0.5	29	862	2	18	14	0.03	65
CPRC-13:19-02	26.6	10.0	< 4	15.1	< 200	< 0.2	< 0.5	31	949	2	25	18	0.01	85
CPRC-13:19-03	56.9	28.4	< 4	25.8	< 200	0.5	< 0.5	95	856	4	21	25	0.09	70
CPRC-13:20-01	18.9	7.5	< 4	11.8	< 200	< 0.2	< 0.5	24	741	< 2	22	17	0.02	62
CPRC-13:20-02	19.6	13.6	17	11.6	< 200	0.2	< 0.5	23	689	< 2	20	18	0.01	71
CPRC-13:20-03	26.8	15.1	30	15.3	< 200	< 0.2	< 0.5	53	1030	< 2	40	15	0.07	102
CPRC-13:20-04	21.5	13.9	30	13.5	< 200	< 0.2	< 0.5	50	1070	< 2	37	19	0.07	106
CPRC-13:20-05	44.4	14.6	32	13.8	< 200	< 0.2	< 0.5	34	1180	< 2	101	18	0.02	120
CPRC-13:20-06	37.0	13.5	< 4	15.2	< 200	< 0.2	< 0.5	35	1010	< 2	40	23	0.07	105
CPRC-13:20-07	27.2	14.2	< 4	12.2	< 200	< 0.2	< 0.5	32	1220	< 2	42	11	0.50	140
CPRC-13:20-08	27.3	18.3	< 4	13.9	< 200	1.2	< 0.5	34	880	< 2	40	25	0.06	95
CPRC-13:20-09	17.5	5.5	< 4	7.9	< 200	< 0.2	< 0.5	40	1490	< 2	114	7	0.02	159
CPRC-13:20-10	27.9	13.3	< 4	10.3	< 200	< 0.2	< 0.5	49	1250	< 2	67	15	0.08	90
CPRC-13:20-11	18.3	6.9	< 4	6.0	< 200	< 0.2	< 0.5	51	1390	< 2	126	9	0.01	121
CPRC-13:21-01	57.5	19.6	< 4	9.9	< 200	< 0.2	0.8	26	1250	< 2	445	11	0.06	136
CPRC-13:21-02	103	57.5	< 4	20.0	900	0.5	0.9	41	3440	3	168	159	0.01	144
CPRC-13:21-03	84.3	27.9	60	21.6	2300	0.8	10.2	53	6840	4	25	277	0.19	2380
CPRC-13:21-04	139	71.1	< 4	42.8	1700	1.8	8.5	33	5960	2	21	252	0.28	2070
CPRC-13:21-05	34.6	30.6	60	21.9	1100	0.7	2.4	195	2110	14	17	360	0.04	367
CPRC-13:21-06	15.3	13.3	28	15.7	3600	2.7	3.8	128	4010	18	17	99	> 10.0	330
CPRC-13:21-07	42.5	36.6	77	23.9	1900	1.9	2.6	101	5930	23	22	176	0.09	341
CPRC-13:22-01	73.0	27.4	< 4	12.0	< 200	< 0.2	< 0.5	45	1260	< 2	227	6	0.03	120
CPRC-13:23-01	95.1	20.6	< 4	8.1	< 200	< 0.2	< 0.5	71	1760	< 2	269	5	0.01	192
CPRC-13:23-02	64.1	17.8	< 4	< 0.2	< 200	0.4	< 0.5	26	794	< 2	80	21	< 0.01	66
CPRC-13:24-01	66.6	22.4	< 4	15.1	< 200	< 0.2	< 0.5	22	998	< 2	118	11	0.03	80
CPRC-13:24-02	96.2	30.6	23	19.2	< 200	< 0.2	< 0.5	25	729	< 2	54	13	0.19	60
CPRC-13:24-03	72.6	22.9	< 4	15.8	< 200	1.2	< 0.5	29	1040	< 2	121	11	0.16	80
CPRC-13:24-04	71.1	28.9	< 4	15.4	< 200	< 0.2	< 0.5	28	1020	< 2	130	10	0.12	81
CPRC-13:24-05	46.9	15.9	< 4	8.8	< 200	< 0.2	< 0.5	43	1490	< 2	288	6	0.08	116
CPRC-13:24-06	59.7	17.9	< 4	9.4	< 200	< 0.2	< 0.5	40	1410	< 2	412	7	0.02	122
CPRC-13:24-07	3.0	< 0.5	< 4	< 0.2	< 200	< 0.2	< 0.5	30	1420	< 2	989	4	< 0.01	190
CPRC-13:24-09	< 0.5	< 0.5	< 4	< 0.2	600	< 0.2	1.1	76	2120	< 2	505	< 2	< 0.01	276
CPRC-13:25-01	337	54.9	65	18.7	< 200	< 0.2	< 0.5	29	1120	< 2	186	12	0.07	104
CPRC-13:26-01	2.5	< 0.5	< 4	1.5	< 200	< 0.2	< 0.5	40	1990	< 2	391	< 2	0.02	173
CPRC-13:27-01	164	39.0	< 4	14.9	< 200	< 0.2	< 0.5	26	1340	< 2	215	10	0.03	105
CPRC-13:27-02	98.3	23.0	< 4	7.8	< 200	< 0.2	< 0.5	25	1640	< 2	330	2	0.03	132
CPRC-13:28-01	221	52.3	< 4	24.2	< 200	< 0.2	< 0.5	26	1020	< 2	127	16	0.02	76
CPRC-13:28-02	771	104	130	28.8	< 200	< 0.2	0.8	18	3860	< 2	100	39	< 0.01	56
CPRC-13:29-01	349	75.4	< 4	31.4	< 200	< 0.2	< 0.5	27	835	3	140	13	< 0.01	64
CPRC-13:30-01	472	63.8	146	30.9	< 200	< 0.2	< 0.5	56	556	< 2	30	23	< 0.01	48
CPRC-13:31-01	25.6	15.6	< 4	11.5	< 200	0.2	< 0.5	37	979	< 2	33	23	0.09	78
CPRC-13:31-02	23.0	12.4	< 4	12.6	< 200	0.8	< 0.5	49	878	< 2	26	19	0.14	73
CPRC-13:31-03	19.4	13.0	< 4	10.8	< 200	< 0.2	< 0.5	29	955	2	20	20	0.02	71
CPRC-13:31-04	26.9	8.6	< 4	10.5	< 200	< 0.2	< 0.5	37	1040	2	40	23	0.02	78
CPRC-13:31-05	16.1	8.8	< 4	10.1	< 200	< 0.2	< 0.5	36	926	< 2	36	14	0.01	86

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13:31-06	21.3	10.4	< 4	9.6	< 200	< 0.2	< 0.5	41	846	< 2	32	16	0.03	78
CPRC-13:31-07	31.0	14.1	< 4	9.8	< 200	< 0.2	< 0.5	84	867	< 2	66	13	0.12	81
CPRC-13:31-08	20.5	12.7	< 4	10.5	< 200	< 0.2	< 0.5	27	977	< 2	92	13	0.02	86
CPRC-13:31-09	21.0	16.3	< 4	11.6	< 200	< 0.2	< 0.5	29	981	< 2	74	12	0.04	94
CPRC-13:31-10	35.7	14.7	< 4	12.7	< 200	7.6	< 0.5	41	1030	< 2	38	13	0.04	82
CPRC-13:31-11	55.0	16.1	< 4	9.3	< 200	5.9	< 0.5	42	1300	< 2	93	8	< 0.01	112
CPRC-13:31-12	21.2	11.7	< 4	7.9	< 200	27.2	< 0.5	41	1610	< 2	123	6	0.01	139
CPRC-13:31-13	89.7	26.3	< 4	14.2	< 200	< 0.2	< 0.5	52	1420	< 2	113	9	0.06	128
CPRC-13:32-01	18.6	11.2	< 4	12.4	< 200	< 0.2	< 0.5	46	1240	< 2	71	20	0.02	87
CPRC-13:32-02	19.7	10.0	< 4	11.3	< 200	< 0.2	< 0.5	46	1120	< 2	53	18	0.04	81
CPRC-13:32-03	28.9	21.9	< 4	12.9	< 200	< 0.2	< 0.5	51	1200	< 2	53	21	0.08	98
CPRC-13:32-04	28.4	14.2	< 4	15.9	< 200	0.7	< 0.5	66	986	2	28	35	0.28	76
CPRC-13:32-05	22.9	11.6	< 4	14.5	< 200	0.6	0.5	60	698	4	21	39	0.74	69
CPRC-13:32-06	24.9	11.4	< 4	13.3	< 200	0.6	< 0.5	53	765	3	27	40	0.46	110
CPRC-13:32-07	35.9	13.3	< 4	13.5	< 200	< 0.2	< 0.5	42	1220	2	52	18	0.06	98
CPRC-13:32-08	29.0	13.6	< 4	19.3	< 200	< 0.2	< 0.5	44	948	< 2	46	21	0.10	85
CPRC-13:32-09	20.2	12.4	< 4	10.8	< 200	< 0.2	< 0.5	30	1150	< 2	72	13	0.03	102
CPRC-13:32-10	30.5	9.0	< 4	17.9	< 200	< 0.2	< 0.5	40	915	< 2	31	20	0.18	76
CPRC-13:32-11	28.5	15.9	24	13.3	< 200	< 0.2	< 0.5	40	843	2	24	27	0.04	71
CPRC-13:32-12	35.3	19.7	< 4	16.2	< 200	< 0.2	< 0.5	37	830	6	26	22	0.12	73
CPRC-13:32-13	54.3	34.1	< 4	17.4	< 200	< 0.2	< 0.5	51	1370	< 2	63	9	0.20	105
CPRC-13:32-14	18.1	12.8	49	11.8	< 200	< 0.2	< 0.5	36	1640	< 2	86	13	0.08	145
CPRC-13:32-15	36.2	21.1	< 4	14.9	< 200	< 0.2	< 0.5	38	1050	< 2	31	23	0.02	82
CPRC-13:32-16	39.1	18.7	< 4	17.6	< 200	< 0.2	< 0.5	33	1090	< 2	38	17	0.03	77
CPRC-13:32-17	105	23.6	< 4	12.5	< 200	< 0.2	< 0.5	40	1520	< 2	107	10	< 0.01	130
CPRC-13:32-18	35.4	16.6	< 4	7.9	< 200	< 0.2	< 0.5	46	1290	< 2	140	4	0.01	107
CPRC-13:32-19	53.2	18.4	< 4	8.9	< 200	< 0.2	< 0.5	36	1270	< 2	85	6	0.01	100
CPRC-13:32-20	39.0	15.0	15	13.6	< 200	< 0.2	< 0.5	37	1460	< 2	128	5	0.02	101
CPRC-13:32-21	22.8	9.5	< 4	10.0	< 200	< 0.2	< 0.5	33	1330	< 2	85	2	< 0.01	104
CPRC-13:32-22	32.8	24.2	86	15.3	< 200	< 0.2	< 0.5	48	894	< 2	66	5	< 0.01	77
CPRC-13:33-01	17.4	12.4	< 4	11.5	< 200	0.2	< 0.5	33	739	3	14	17	0.14	83
CPRC-13:33-02	21.8	11.8	< 4	12.8	< 200	0.2	< 0.5	31	618	2	16	30	0.26	50
CPRC-13:33-03	19.4	9.6	< 4	11.4	< 200	0.2	< 0.5	35	710	2	30	18	0.07	74
CPRC-13:33-04	31.0	17.2	< 4	16.3	< 200	< 0.2	< 0.5	53	1250	4	157	20	0.32	98
CPRC-13:33-05	17.4	15.9	< 4	12.8	< 200	6.3	< 0.5	42	1030	< 2	43	19	0.18	76
CPRC-13:33-06	26.4	20.0	< 4	15.7	< 200	0.6	0.5	53	811	3	24	31	0.26	66
CPRC-13:33-07	30.0	23.8	< 4	14.0	< 200	57.1	1.0	1980	680	3	29	> 5000	0.87	77
CPRC-13:33-08	35.7	22.7	< 4	17.0	< 200	2.0	0.8	61	754	3	27	48	0.79	75
CPRC-13:33-09	26.4	19.7	< 4	15.7	< 200	1.1	< 0.5	44	728	2	15	57	0.26	59
CPRC-13:33-10	26.2	12.2	< 4	14.8	< 200	< 0.2	< 0.5	59	822	2	14	15	0.02	85
CPRC-13:33-11	18.3	7.0	< 4	13.2	< 200	< 0.2	< 0.5	30	835	< 2	26	21	0.01	65
CPRC-13:33-12	17.2	11.1	< 4	10.5	< 200	< 0.2	< 0.5	31	845	< 2	35	17	0.03	87
CPRC-13:33-13	26.2	21.7	< 4	15.0	< 200	< 0.2	< 0.5	46	709	< 2	48	16	0.67	80
CPRC-13:33-14	20.3	16.6	< 4	10.2	300	< 0.2	< 0.5	61	1380	< 2	100	11	0.04	124
CPRC-13:33-15	44.2	28.3	< 4	15.4	< 200	< 0.2	< 0.5	42	1430	< 2	55	16	0.02	95
CPRC-13:33-16	34.0	21.5	< 4	11.8	< 200	< 0.2	< 0.5	41	1560	< 2	55	11	0.02	95

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13:33-17	12.1	8.2	< 4	7.6	< 200	< 0.2	< 0.5	29	1510	< 2	59	7	0.02	133
CPRC-13:33-18	24.6	13.5	< 4	12.0	< 200	< 0.2	< 0.5	32	1190	< 2	53	14	< 0.01	119
CPRC-13:33-19	34.1	29.2	< 4	14.9	< 200	< 0.2	< 0.5	54	1040	< 2	45	14	0.04	99
CPRC-13:33-20	47.7	25.3	< 4	20.3	< 200	< 0.2	< 0.5	40	691	< 2	45	24	0.04	81
CPRC-13:33-21	55.3	18.7	< 4	18.3	< 200	0.5	< 0.5	28	818	< 2	41	10	0.12	72
CPRC-13:34-01	18.8	24.7	< 4	13.8	< 200	0.4	< 0.5	32	791	2	18	23	0.08	64
CPRC-13:34-02	32.3	16.3	< 4	13.3	< 200	< 0.2	< 0.5	32	787	2	21	16	0.24	56
CPRC-13:34-03	36.5	20.2	< 4	15.7	< 200	< 0.2	< 0.5	31	984	< 2	35	14	0.13	69

Date Submitted: 26-Aug-13
Invoice No.: A13-10262
Invoice Date: 16-Sep-13
Your Reference: CPRC-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

163 Heavy Mineral Concentrates samples were submitted for analysis.

The following analytical package was requested: Code 3A-Large HMC INAA(INAAGEO)
Code 3C Aqua Regia ICP(AQUAGEO)

REPORT **A13-10262**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Unaltered silicates and resistate minerals may not be dissolved. Values which exceed upper limit should be assayed.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

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Results

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:34-04	332	< 5	95	< 200	< 5	< 1	346	96	270	< 2	4.9	19.2	75	< 5	< 50
CPRC-13:34-05	283	< 5	76	< 200	< 5	< 1	284	76	280	< 2	3.4	18.6	73	< 5	< 50
CPRC-13:34-06	633	< 5	102	< 200	< 5	< 1	414	78	260	< 2	4.0	20.6	56	< 5	< 50
CPRC-13:34-07	1460	< 5	85	< 200	< 5	< 1	371	55	170	< 2	2.9	15.3	61	< 5	< 50
CPRC-13:34-08	754	< 5	78	< 200	< 5	< 1	265	67	130	< 2	3.7	13.6	64	< 5	< 50
CPRC-13:34-09	835	< 5	125	< 200	< 5	< 1	359	106	270	< 2	4.1	18.7	66	< 5	< 50
CPRC-13:34-10	1010	< 5	63	< 200	< 5	< 1	233	59	190	< 2	2.8	15.9	45	< 5	< 50
CPRC-13:34-11	418	< 5	73	< 200	< 5	< 1	238	86	260	< 2	3.4	16.3	70	< 5	< 50
CPRC-13:34-12	173	< 5	68	< 200	< 5	< 1	186	67	190	< 2	3.2	15.4	57	< 5	< 50
CPRC-13:34-13	78	< 5	40	< 200	< 5	< 1	185	71	180	< 2	2.5	16.2	46	< 5	< 50
CPRC-13:35-01	180	< 5	55	< 200	< 5	< 1	274	38	300	< 2	5.4	16.8	70	< 5	< 50
CPRC-13:35-02	138	< 5	68	< 200	< 5	< 1	329	57	300	< 2	4.0	15.5	74	< 5	< 50
CPRC-13:35-03	186	< 5	43	< 200	< 5	< 1	284	54	320	< 2	5.3	18.0	60	< 5	< 50
CPRC-13:35-04	284	< 5	80	< 200	< 5	20	602	59	320	< 2	5.9	17.5	66	< 5	< 50
CPRC-13:35-05	885	< 5	75	< 200	< 5	< 1	385	60	350	< 2	5.0	18.7	73	< 5	< 50
CPRC-13:35-06	284	< 5	75	< 200	< 5	< 1	339	88	370	< 2	4.0	21.3	53	< 5	< 50
CPRC-13:35-07	1230	< 5	54	< 200	< 5	< 1	315	78	390	< 2	3.8	22.2	68	< 5	< 50
CPRC-13:35-08	275	< 5	134	< 200	< 5	< 1	586	114	400	< 2	5.7	26.1	160	< 5	< 50
CRPC-13:36-01	185	< 5	58	< 200	< 5	15	214	50	300	< 2	4.4	14.3	91	< 5	< 50
CRPC-13:36-02	103	< 5	58	< 200	< 5	< 1	364	61	220	< 2	5.6	15.1	121	< 5	< 50
CRPC-13:37-01	112	< 5	95	< 200	< 5	< 1	402	67	360	< 2	6.5	20.2	58	< 5	< 50
CRPC-13:37-02	129	< 5	313	< 200	< 5	< 1	270	87	260	< 2	4.1	17.2	58	< 5	< 50
CRPC-13:37-03	32	< 5	483	< 200	< 5	< 1	166	97	190	< 2	4.4	14.1	31	< 5	< 50
CRPC-13:37-04	141	< 5	90	< 200	< 5	< 1	372	57	400	4	4.8	20.6	66	< 5	< 50
CRPC-13:37-05	54	< 5	61	< 200	< 5	< 1	354	99	260	< 2	4.2	21.6	75	< 5	< 50
CRPC-13:38-01	101	< 5	77	< 200	< 5	9	273	50	100	< 2	2.7	12.3	53	< 5	< 50
CRPC-13:38-02	511	< 5	97	< 200	< 5	11	294	36	230	< 2	3.9	16.0	49	< 5	< 50
CRPC-13:38-03	124	< 5	49	< 200	< 5	< 1	311	26	240	< 2	2.6	16.7	50	< 5	< 50
CRPC-13:38-04	418	< 5	34	< 200	< 5	< 1	303	37	360	< 2	3.7	20.2	51	< 5	< 50
CRPC-13:38-05	162	< 5	34	< 200	< 5	< 1	324	37	420	< 2	4.3	21.1	64	< 5	< 50
CRPC-13:38-06	110	< 5	58	< 200	< 5	< 1	428	52	400	< 2	4.3	24.5	74	< 5	< 50
CRPC-13:38-07	203	< 5	105	< 200	< 5	< 1	284	52	190	< 2	4.8	16.4	83	< 5	< 50
CRPC-13:39-01	984	< 5	59	< 200	< 5	< 1	351	65	180	< 2	4.5	19.5	85	< 5	< 50
CRPC-13:39-02	1110	< 5	254	< 200	< 5	14	340	73	170	< 2	2.7	22.2	43	< 5	< 50
CRPC-13:39-03	352	< 5	211	< 200	< 5	8	384	79	340	< 2	4.3	27.0	84	< 5	< 50
CRPC-13:39-04	266	< 5	46	< 200	< 5	< 1	390	44	430	< 2	4.2	26.0	86	< 5	< 50
CRPC-13:39-05	194	< 5	51	< 200	< 5	< 1	242	70	540	< 2	4.8	28.4	70	< 5	< 50
CRPC-13:40-01	372	< 5	74	< 200	< 5	< 1	385	59	340	< 2	5.2	24.6	95	< 5	< 50
CRPC-13:40-02	242	< 5	76	< 200	< 5	< 1	398	< 5	420	< 2	4.9	27.3	137	< 5	< 50
CRPC-13:40-03	115	< 5	55	< 200	< 5	< 1	324	41	450	< 2	4.6	24.8	68	< 5	< 50
CRPC-13:40-04	158	< 5	31	< 200	< 5	< 1	259	42	390	< 2	4.9	21.8	72	< 5	< 50
CRPC-13:40-05	83	< 5	41	< 200	< 5	< 1	358	41	460	< 2	4.1	23.8	85	< 5	< 50
CRPC-13:40-06	160	< 5	114	< 200	< 5	< 1	2460	74	370	< 2	13.4	22.5	418	< 5	< 50
CRPC-13:41-01	< 5	< 5	28	< 200	< 5	< 1	1690	57	430	< 2	9.0	27.7	140	< 5	< 50
CRPC-13:42-01	< 5	< 5	79	< 200	< 5	< 1	1070	28	310	< 2	8.7	31.5	203	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:43-01	< 5	< 5	60	< 200	< 5	< 1	2030	< 5	340	< 2	14.7	25.1	251	< 5	< 50
CRPC-13:44-01	205	< 5	23	< 200	< 5	< 1	562	50	510	< 2	4.8	26.4	86	< 5	< 50
CRPC-13:44-02	< 5	< 5	21	< 200	< 5	< 1	444	102	680	< 2	3.8	26.0	52	< 5	< 50
CRPC-13:44-03	< 5	< 5	26	< 200	< 5	< 1	491	122	750	< 2	4.2	29.1	50	< 5	< 50
CRPC-13:44-04	54	< 5	18	< 200	< 5	< 1	387	133	630	< 2	2.8	24.7	54	< 5	< 50
CRPC-13:44-05	< 5	< 5	31	< 200	< 5	< 1	459	79	540	< 2	5.8	26.9	167	< 5	< 50
CRPC-13:45-01	< 5	< 5	< 2	< 200	< 5	< 1	3010	< 5	200	< 2	32.9	12.5	321	< 5	< 50
CRPC-13:46-01	< 5	< 5	29	< 200	< 5	< 1	1830	37	190	< 2	21.6	25.8	220	< 5	< 50
CRPC-13:48-01	219	< 5	26	< 200	< 5	< 1	651	43	390	< 2	9.5	18.1	147	< 5	< 50
CRPC-13:48-02	297	< 5	27	< 200	< 5	< 1	516	47	260	< 2	7.2	19.1	136	< 5	< 50
CRPC-13:48-03	173	< 5	19	< 200	< 5	< 1	722	73	240	< 2	12.9	15.8	160	< 5	< 50
CRPC-13:48-04	593	< 5	56	< 200	< 5	< 1	2050	< 5	310	< 2	32.0	20.6	610	< 5	< 50
CRPC-13:49-01	< 5	< 5	52	< 200	< 5	< 1	470	66	280	< 2	4.8	17.1	83	< 5	< 50
CRPC-13:49-02	< 5	< 5	22	< 200	< 5	< 1	384	79	310	< 2	4.3	19.2	69	< 5	< 50
CRPC-13:49-03	92	< 5	17	< 200	< 5	< 1	458	42	400	< 2	4.5	18.8	93	< 5	< 50
CRPC-13:49-04	106	< 5	29	< 200	< 5	< 1	386	47	260	< 2	4.6	18.9	68	< 5	< 50
CRPC-13:49-05	87	< 5	41	< 200	< 5	< 1	552	28	200	< 2	7.6	18.9	116	< 5	< 50
CRPC-13:49-06	< 5	< 5	24	< 200	< 5	< 1	1220	38	170	< 2	22.7	14.1	446	< 5	< 50
CRPC-13:49-07	2090	< 5	106	< 200	< 5	< 1	513	49	190	< 2	10.8	17.1	241	< 5	< 50
CRPC-13:50-01	643	< 5	48	< 200	< 5	< 1	682	40	570	< 2	14.7	27.9	776	< 5	< 50
CRPC-13:51-01	514	< 5	115	< 200	< 5	14	290	76	160	< 2	3.4	19.3	70	< 5	< 50
CRPC-13:51-02	178	< 5	84	< 200	< 5	< 1	182	56	260	< 2	4.2	14.9	63	< 5	< 50
CRPC-13:51-03	841	< 5	193	< 200	< 5	< 1	773	127	230	< 2	6.9	21.5	107	< 5	< 50
CRPC-13:51-04	478	< 5	133	< 200	< 5	< 1	940	85	360	< 2	8.3	28.1	144	< 5	< 50
CRPC-13:51-05	265	< 5	37	< 200	< 5	< 1	318	57	530	< 2	5.2	24.9	109	< 5	< 50
CRPC-13:51-06	520	< 5	59	< 200	< 5	< 1	265	49	350	< 2	5.3	20.2	74	< 5	< 50
CRPC-13:51-07	646	< 5	102	< 200	< 5	< 1	389	63	540	< 2	5.0	28.8	98	< 5	< 50
CRPC-13:51-08	313	< 5	96	< 200	< 5	< 1	280	59	530	< 2	4.3	26.0	54	< 5	< 50
CRPC-13:51-09	332	< 5	104	< 200	< 5	< 1	373	59	510	< 2	6.8	26.4	55	< 5	< 50
CRPC-13:52-01	519	< 5	58	< 200	< 5	< 1	233	51	300	< 2	5.2	16.1	70	< 5	< 50
CRPC-13:52-02	263	< 5	101	< 200	< 5	< 1	353	49	480	< 2	4.5	24.8	110	< 5	< 50
CRPC-13:52-03	743	< 5	185	< 200	< 5	< 1	337	81	240	< 2	5.9	22.3	96	< 5	< 50
CRPC-13:52-04	587	< 5	92	< 200	< 5	< 1	379	42	290	< 2	4.4	17.2	51	< 5	< 50
CRPC-13:52-05	719	< 5	296	< 200	< 5	< 1	1220	209	370	< 2	9.5	27.2	157	< 5	< 50
CRPC-13:53-01	162	< 5	656	< 200	< 5	< 1	208	121	280	< 2	5.2	23.2	69	< 5	< 50
CRPC-13:53-02	176	< 5	116	< 200	< 5	< 1	226	107	180	< 2	5.7	21.6	62	< 5	< 50
CRPC-13:53-03	285	< 5	64	< 200	< 5	< 1	244	48	190	< 2	4.1	17.8	56	< 5	< 50
CRPC-13:53-04	673	< 5	55	< 200	< 5	< 1	343	59	270	< 2	6.6	22.1	87	< 5	< 50
CRPC-13:53-05	102	< 5	34	< 200	< 5	< 1	167	46	220	< 2	3.4	15.5	54	< 5	< 50
CRPC-13:54-01	< 5	< 5	125	< 200	< 5	< 1	227	149	240	< 2	5.5	28.7	53	< 5	< 50
CRPC-13:54-02	178	< 5	122	< 200	< 5	< 1	240	158	230	< 2	5.0	28.7	46	< 5	< 50
CRPC-13:54-03	396	< 5	54	< 200	< 5	< 1	423	76	180	< 2	6.5	21.9	58	< 5	< 50
CRPC-13:55-01	47	< 5	82	< 200	< 5	17	128	102	170	< 2	3.5	21.4	11	< 5	< 50
CRPC-13:55-02	219	< 5	106	< 200	< 5	13	222	114	150	< 2	4.7	34.7	33	< 5	< 50
CRPC-13:55-03	119	< 5	65	< 200	< 5	< 1	127	113	240	< 2	2.6	20.7	29	< 5	< 50
CRPC-13:55-04	293	< 5	150	< 200	< 5	< 1	507	59	290	< 2	6.5	26.2	79	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:55-05	277	< 5	87	< 200	< 5	< 1	442	84	300	< 2	6.2	24.7	85	< 5	< 50
CRPC-13:55-06	261	< 5	44	< 200	< 5	< 1	716	45	280	< 2	8.4	23.9	125	< 5	< 50
CRPC-13:55-07	222	< 5	30	< 200	< 5	7	837	28	330	< 2	10.6	28.7	153	< 5	< 50
CRPC-13:55-08	167	< 5	30	< 200	< 5	< 1	586	30	180	< 2	6.8	19.4	83	< 5	< 50
CRPC-13:55-09	285	< 5	34	< 200	< 5	< 1	781	< 5	360	< 2	9.8	26.7	146	< 5	< 50
CRPC-13:55-10	435	< 5	34	< 200	< 5	< 1	494	57	310	< 2	6.7	27.9	102	< 5	< 50
CRPC-13:56-01	333	< 5	58	< 200	< 5	< 1	368	71	260	< 2	5.5	25.1	79	< 5	< 50
CRPC-13:56-02	468	< 5	122	< 200	< 5	< 1	952	71	310	< 2	6.8	33.3	198	< 5	< 50
CRPC-13:56-03	264	< 5	64	< 200	< 5	< 1	569	51	340	< 2	7.5	25.7	132	< 5	< 50
CRPC-13:56-04	269	< 5	68	< 200	< 5	< 1	672	67	330	< 2	7.6	25.7	131	< 5	< 50
CRPC-13:56-05	258	< 5	17	< 200	< 5	< 1	278	58	170	< 2	6.0	23.1	34	< 5	< 50
CRPC-13:56-06	128	< 5	14	< 200	< 5	< 1	240	30	90	< 2	5.0	21.0	60	< 5	< 50
CRPC-13:56-07	143	< 5	16	< 200	< 5	< 1	224	21	70	< 2	4.4	16.0	46	< 5	< 50
CRPC-13:56-08	226	< 5	18	< 200	< 5	< 1	323	46	100	< 2	5.7	27.4	85	< 5	< 50
CRPC-13:56-09	< 5	< 5	35	< 200	< 5	< 1	212	73	130	< 2	4.9	25.0	52	< 5	< 50
CRPC-13:57-01	183	< 5	40	< 200	< 5	< 1	277	42	250	< 2	5.0	17.4	57	< 5	< 50
CRPC-13:57-02	118	< 5	35	< 200	< 5	< 1	208	60	250	< 2	3.6	17.5	39	< 5	< 50
CRPC-13:57-03	456	< 5	46	< 200	< 5	9	220	64	140	< 2	3.7	17.8	29	< 5	< 50
CRPC-13:57-04	3560	< 5	49	< 200	< 5	< 1	247	61	100	< 2	3.8	19.4	26	< 5	< 50
CRPC-13:57-05	293	< 5	37	< 200	< 5	< 1	670	47	90	< 2	10.6	13.6	146	< 5	< 50
CRPC-13:58-01	1150	< 5	60	< 200	< 5	< 1	359	62	270	< 2	5.7	18.5	101	< 5	< 50
CRPC-13:58-02	593	< 5	46	< 200	< 5	< 1	362	60	280	< 2	5.8	17.2	78	< 5	< 50
CRPC-13:58-03	215	< 5	57	< 200	< 5	< 1	415	69	410	< 2	9.7	20.4	156	< 5	< 50
CRPC-13:59-01	353	< 5	48	< 200	< 5	5	395	48	180	< 2	6.1	17.0	83	< 5	< 50
CRPC-13:59-02	287	< 5	46	< 200	< 5	< 1	439	52	340	< 2	5.9	19.6	118	< 5	< 50
CRPC-13:59-03	57	< 5	23	< 200	< 5	< 1	836	45	330	< 2	11.9	17.3	195	< 5	< 50
CRPC-13:59-04	563	< 5	25	< 200	< 5	< 1	662	37	240	< 2	7.4	15.6	129	< 5	< 50
CRPC-13:59-05	520	< 5	30	< 200	< 5	< 1	883	79	370	< 2	10.9	22.4	138	< 5	< 50
CRPC-13:60-01	< 5	< 5	17	< 200	< 5	< 1	1420	23	150	< 2	29.1	9.11	608	< 5	< 50
CRPC-13:61-01	684	< 5	482	1700	< 5	< 1	181	28	40	< 2	3.6	8.70	54	< 5	< 50
CRPC-13:61-02	2550	< 5	1080	4400	< 5	< 1	377	27	110	< 2	6.2	9.61	323	< 5	< 50
CRPC-13:61-03	3550	< 5	777	6400	< 5	< 1	1220	52	< 10	< 2	13.7	9.63	698	< 5	< 50
CRPC-13:61-04	1320	< 5	1090	1700	< 5	< 1	2160	35	< 10	< 2	5.7	6.86	503	< 5	< 50
CRPC-13:62-01	817	< 5	276	< 200	< 5	< 1	2680	76	760	< 2	39.8	29.8	2910	< 5	< 50
CRPC-13:63-01	< 5	< 5	20	< 200	< 5	< 1	408	105	380	< 2	5.8	20.5	81	< 5	< 50
CRPC-13:63-02	128	< 5	38	< 200	< 5	< 1	75	133	250	< 2	1.8	16.7	42	< 5	< 50
CRPC-13:63-03	369	< 5	169	< 200	< 5	< 1	873	58	50	< 2	9.7	32.5	159	< 5	< 50
CRPC-13:63-04	991	< 5	269	< 200	< 5	< 1	534	17	140	< 2	10.4	15.5	316	< 5	< 50
CRPC-13:63-05	252	< 5	128	< 200	< 5	< 1	445	17	< 10	< 2	12.7	20.1	896	< 5	< 50
CRPC-13:65-01	136	< 5	58	< 200	< 5	< 1	243	47	250	< 2	3.4	18.8	66	< 5	< 50
CRPC-13:65-02	802	< 5	130	< 200	< 5	< 1	317	52	310	< 2	4.1	24.6	181	< 5	< 50
CRPC-13:65-03	707	< 5	202	< 200	< 5	< 1	426	43	330	< 2	5.5	25.4	148	< 5	< 50
CRPC-13:65-04	7830	< 5	627	5900	< 5	< 1	709	130	180	< 2	9.4	26.7	564	< 5	< 50
CRPC-13:65-05	3580	< 5	435	12500	< 5	< 1	753	199	510	< 2	10.9	25.1	458	< 5	< 50
CRPC-13:65-06	1270	< 5	382	< 200	< 5	19	394	122	110	< 2	10.1	33.8	297	< 5	< 50
CRPC-13:65-07	394	< 5	289	3400	< 5	20	386	195	120	< 2	7.6	36.3	131	< 5	< 50

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Ce	Co	Cr	Cs	Eu	Fe	Hf	Hg	Ir
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb
Detection limit	5	5	2	200	5	1	3	5	10	2	0.2	0.02	1	5	50
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:65-08	206	< 5	740	1600	< 5	< 1	296	118	60	< 2	5.8	25.6	96	< 5	< 50
CRPC-13:65-09	49	< 5	542	2900	< 5	< 1	170	101	80	< 2	4.6	25.4	32	< 5	< 50
CRPC-13:65-10	94	< 5	779	2800	< 5	< 1	351	115	120	< 2	5.9	20.9	276	< 5	< 50
CRPC-13:65-11	32	< 5	836	2800	< 5	< 1	232	80	150	< 2	4.8	21.7	203	< 5	< 50
CRPC-13:65-12	130	< 5	398	1000	< 5	< 1	252	62	90	< 2	6.3	28.3	154	< 5	< 50
CRPC-13:65-13	294	< 5	419	< 200	< 5	< 1	281	38	< 10	< 2	6.6	16.5	70	< 5	< 50
CRPC-13:65-14	690	< 5	242	1300	< 5	< 1	776	41	120	< 2	9.3	29.8	216	< 5	< 50
CRPC-13:66-01	92	< 5	< 2	< 200	< 5	< 1	69	106	690	< 2	1.5	20.0	22	< 5	< 50
CRPC-13:67-01	< 5	< 5	< 2	< 200	< 5	< 1	38	156	710	< 2	< 0.2	18.0	5	< 5	< 50
CRPC-13:68-01	< 5	< 5	26	< 200	< 5	< 1	352	112	680	< 2	4.4	21.8	50	< 5	< 50
CRPC-13:68-02	65	< 5	18	< 200	< 5	< 1	185	119	680	< 2	1.7	20.2	29	< 5	< 50
CRPC-13:68-03	557	< 5	552	< 200	< 5	< 1	707	194	1910	< 2	19.0	52.9	226	< 5	< 50
CRPC-13:69-01	147	< 5	33	< 200	< 5	< 1	290	48	340	< 2	3.7	18.3	70	< 5	< 50
CRPC-13:69-02	932	< 5	68	< 200	< 5	< 1	551	68	540	< 2	6.4	23.4	162	< 5	< 50
CRPC-13:69-03	< 5	< 5	39	< 200	< 5	< 1	246	82	370	< 2	3.7	22.2	56	< 5	< 50
CRPC-13:69-04	< 5	< 5	20	< 200	< 5	< 1	156	54	190	< 2	2.3	14.4	34	< 5	< 50
CRPC-13:69-05	60	< 5	19	< 200	< 5	< 1	225	44	260	< 2	3.1	17.2	59	< 5	< 50
CRPC-13:69-06	75	< 5	19	< 200	< 5	< 1	225	49	300	< 2	2.7	19.6	75	< 5	< 50
CRPC-13:69-07	601	< 5	32	< 200	< 5	< 1	334	83	520	< 2	5.3	35.7	112	< 5	< 50
CRPC-13:69-08	97	< 5	9	< 200	< 5	< 1	300	89	390	< 2	3.7	26.9	86	< 5	< 50
CRPC-13:69-09	< 5	< 5	30	< 200	< 5	< 1	429	92	330	< 2	7.0	33.6	88	< 5	< 50
CRPC-13:69-10	87	< 5	13	< 200	< 5	< 1	285	75	200	< 2	3.8	22.3	48	< 5	< 50
CRPC-13:69-11	137	< 5	18	< 200	< 5	< 1	290	48	260	< 2	5.0	21.7	97	< 5	< 50
CRPC-13:69-12	39	< 5	14	< 200	< 5	< 1	230	49	210	< 2	3.6	17.1	62	< 5	< 50
CRPC-13:69-13	< 5	< 5	12	< 200	< 5	< 1	161	97	200	< 2	2.8	23.2	45	< 5	< 50
CRPC-13:69-14	34	< 5	9	< 200	< 5	< 1	349	60	240	< 2	3.6	25.6	71	< 5	< 50

Results

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CPRC-13:34-04	197	0.63	25.7	< 20	0.47	100	< 200	220	10.4	37.5	< 20	19.2	< 0.2	< 1	< 2
CPRC-13:34-05	159	0.43	41.6	< 20	0.43	80	< 200	< 50	11.0	30.9	< 20	14.6	< 0.2	< 1	< 2
CPRC-13:34-06	249	0.68	35.5	< 20	0.52	120	< 200	< 50	14.0	32.1	< 20	20.1	< 0.2	< 1	< 2
CPRC-13:34-07	234	0.52	47.1	< 20	0.45	180	< 200	< 50	8.9	23.8	< 20	18.0	< 0.2	< 1	< 2
CPRC-13:34-08	170	0.56	58.1	< 20	0.41	100	< 200	< 50	9.0	22.3	< 20	13.4	< 0.2	< 1	< 2
CPRC-13:34-09	220	0.53	34.5	< 20	0.40	80	< 200	< 50	10.4	28.6	< 20	18.1	< 0.2	< 1	< 2
CPRC-13:34-10	142	0.34	46.0	20	0.45	90	< 200	< 50	6.5	25.0	< 20	11.8	< 0.2	< 1	< 2
CPRC-13:34-11	153	0.42	41.1	< 20	0.37	80	< 200	< 50	8.7	27.4	< 20	13.0	< 0.2	< 1	< 2
CPRC-13:34-12	130	0.44	59.0	< 20	0.44	50	< 200	< 50	6.2	27.4	< 20	11.9	< 0.2	< 1	< 2
CPRC-13:34-13	114	0.32	45.2	< 20	0.47	60	< 200	< 50	5.7	28.0	< 20	10.6	< 0.2	< 1	< 2
CPRC-13:35-01	165	0.57	34.9	< 20	0.43	100	< 200	< 50	7.9	38.7	< 20	16.0	< 0.2	< 1	< 2
CPRC-13:35-02	154	0.50	42.7	< 20	0.53	70	< 200	< 50	6.2	33.1	< 20	14.1	< 0.2	< 1	< 2
CPRC-13:35-03	142	0.45	42.3	< 20	0.46	60	< 200	< 50	6.4	36.0	< 20	13.6	< 0.2	< 1	< 2
CPRC-13:35-04	279	1.02	38.1	< 20	0.41	140	< 200	< 50	6.4	37.5	< 20	28.0	< 0.2	< 1	5
CPRC-13:35-05	179	0.46	23.9	< 20	0.47	90	< 200	< 50	5.7	39.4	< 20	18.2	< 0.2	< 1	< 2
CPRC-13:35-06	154	0.44	30.7	< 20	0.43	90	< 200	< 50	7.9	33.8	< 20	14.9	< 0.2	< 1	< 2
CPRC-13:35-07	162	0.52	44.9	< 20	0.36	100	< 200	< 50	6.3	30.9	< 20	14.1	< 0.2	< 1	< 2
CPRC-13:35-08	275	1.02	14.5	< 20	0.44	80	< 200	< 50	43.5	39.2	< 20	26.7	< 0.2	< 1	< 2
CRPC-13:36-01	150	0.61	33.6	< 20	0.32	130	< 200	< 50	7.4	31.4	< 20	15.4	< 0.2	< 1	< 2
CRPC-13:36-02	166	0.64	44.2	< 20	0.42	50	< 200	< 50	4.8	33.3	< 20	15.9	< 0.2	< 1	< 2
CRPC-13:37-01	211	0.46	24.0	< 20	0.57	120	< 200	< 50	9.8	40.7	< 20	20.5	< 0.2	< 1	< 2
CRPC-13:37-02	208	0.64	13.5	< 20	0.25	110	< 200	< 50	11.9	31.3	< 20	24.9	< 0.2	< 1	< 2
CRPC-13:37-03	125	0.77	8.70	< 20	0.23	80	< 200	< 50	14.9	25.9	< 20	18.8	< 0.2	< 1	< 2
CRPC-13:37-04	182	0.57	39.4	< 20	0.35	120	< 200	< 50	8.0	33.5	< 20	16.2	< 0.2	< 1	< 2
CRPC-13:37-05	135	0.47	30.9	< 20	0.38	80	< 200	< 50	4.6	37.6	< 20	16.9	0.2	< 1	< 2
CRPC-13:38-01	114	0.50	44.5	< 20	0.35	50	< 200	< 50	8.3	29.9	< 20	14.5	< 0.2	< 1	2
CRPC-13:38-02	113	0.38	38.4	< 20	0.50	40	< 200	< 50	7.0	38.3	< 20	14.6	< 0.2	< 1	< 2
CRPC-13:38-03	109	0.38	41.7	< 20	0.40	70	< 200	< 50	5.4	34.6	< 20	13.6	< 0.2	< 1	< 2
CRPC-13:38-04	121	0.38	37.2	< 20	0.43	80	< 200	< 50	6.4	41.3	< 20	14.9	< 0.2	< 1	< 2
CRPC-13:38-05	136	0.50	37.5	< 20	0.48	60	< 200	< 50	4.4	42.5	< 20	16.4	< 0.2	< 1	< 2
CRPC-13:38-06	158	0.43	23.1	< 20	0.41	80	< 200	< 50	6.6	44.3	< 20	19.7	0.2	< 1	< 2
CRPC-13:38-07	239	0.66	14.7	< 20	0.29	160	< 200	< 50	10.0	30.2	< 20	27.3	< 0.2	< 1	< 2
CRPC-13:39-01	131	0.62	25.9	< 20	0.34	80	< 200	< 50	10.3	37.3	< 20	16.8	< 0.2	< 1	< 2
CRPC-13:39-02	120	0.56	17.7	< 20	0.41	120	< 200	< 50	16.1	37.7	< 20	21.5	< 0.2	< 1	< 2
CRPC-13:39-03	141	0.66	23.4	< 20	0.43	110	< 200	< 50	12.9	39.4	< 20	22.9	< 0.2	< 1	< 2
CRPC-13:39-04	149	0.50	26.7	< 20	0.43	80	< 200	< 50	7.0	47.5	< 20	18.7	< 0.2	< 1	< 2
CRPC-13:39-05	131	0.39	29.6	< 20	0.43	60	< 200	< 50	4.7	40.1	< 20	15.1	< 0.2	< 1	< 2
CRPC-13:40-01	198	0.77	25.5	< 20	0.40	110	< 200	< 50	10.3	41.4	< 20	20.6	< 0.2	< 1	< 2
CRPC-13:40-02	208	0.99	21.6	< 20	0.45	140	< 200	< 50	8.5	46.7	< 20	22.9	< 0.2	< 1	< 2
CRPC-13:40-03	174	0.55	22.6	< 20	0.32	120	< 200	< 50	7.8	43.1	< 20	19.9	< 0.2	< 1	< 2
CRPC-13:40-04	144	0.41	38.5	< 20	0.51	70	< 200	< 50	5.5	40.2	< 20	15.3	< 0.2	< 1	3
CRPC-13:40-05	185	0.60	35.3	< 20	0.44	80	< 200	< 50	6.1	42.5	< 20	19.6	< 0.2	< 1	< 2
CRPC-13:40-06	1820	5.48	7.60	< 20	0.75	1220	< 200	< 50	12.0	62.0	< 20	190	< 0.2	< 1	28
CRPC-13:41-01	1350	1.27	12.1	< 20	0.43	820	< 200	< 50	2.0	51.9	< 20	133	< 0.2	79	19
CRPC-13:42-01	892	1.13	11.1	< 20	0.25	380	< 200	< 50	15.9	49.7	< 20	95.4	< 0.2	79	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:43-01	1650	1.34	9.60	30	0.57	780	< 200	< 50	12.9	77.9	< 20	176	< 0.2	136	< 2
CRPC-13:44-01	295	0.83	23.2	< 20	0.35	200	< 200	< 50	3.5	40.8	< 20	31.3	< 0.2	< 1	< 2
CRPC-13:44-02	228	0.43	18.9	< 20	0.34	120	< 200	< 50	4.3	30.1	< 20	26.2	< 0.2	16	< 2
CRPC-13:44-03	241	0.48	17.7	< 20	0.28	150	< 200	< 50	3.2	32.0	< 20	29.4	< 0.2	< 1	< 2
CRPC-13:44-04	191	0.39	24.4	< 20	0.22	130	< 200	< 50	2.0	18.4	< 20	21.3	< 0.2	< 1	< 2
CRPC-13:44-05	354	0.69	15.7	< 20	0.26	440	< 200	< 50	3.3	32.5	< 20	43.9	< 0.2	36	< 2
CRPC-13:45-01	1480	3.92	19.1	< 20	0.64	540	< 200	< 50	< 0.2	33.9	< 20	176	< 0.2	< 1	< 2
CRPC-13:46-01	921	2.30	22.5	< 20	0.32	540	< 200	< 50	5.4	42.0	< 20	131	< 0.2	55	< 2
CRPC-13:48-01	349	1.07	48.5	< 20	0.30	180	< 200	< 50	5.3	32.0	< 20	49.4	< 0.2	26	< 2
CRPC-13:48-02	284	0.95	53.6	< 20	0.26	120	< 200	< 50	4.2	25.1	< 20	38.6	< 0.2	< 1	< 2
CRPC-13:48-03	495	1.61	37.7	< 20	0.29	140	< 200	< 50	4.2	24.2	< 20	68.1	< 0.2	< 1	< 2
CRPC-13:48-04	870	3.91	16.2	< 20	0.50	460	< 200	< 50	8.3	31.0	< 20	145	< 0.2	57	< 2
CRPC-13:49-01	227	0.74	41.4	< 20	0.32	140	< 200	< 50	4.3	28.4	< 20	31.5	< 0.2	< 1	< 2
CRPC-13:49-02	199	0.72	26.2	< 20	0.29	90	< 200	< 50	4.8	28.3	< 20	28.6	< 0.2	< 1	< 2
CRPC-13:49-03	221	0.91	20.3	< 20	0.43	120	< 200	< 50	4.8	42.9	< 20	31.5	< 0.2	< 1	< 2
CRPC-13:49-04	198	0.91	24.1	< 20	0.64	130	< 200	< 50	6.0	42.2	< 20	27.7	< 0.2	< 1	4
CRPC-13:49-05	254	1.34	29.9	< 20	0.48	110	< 200	< 50	6.1	43.5	< 20	40.9	< 0.2	< 1	< 2
CRPC-13:49-06	619	2.74	27.4	< 20	1.00	310	< 200	< 50	2.9	19.0	< 20	94.9	< 0.2	< 1	< 2
CRPC-13:49-07	270	1.64	28.9	< 20	0.58	90	< 200	< 50	8.8	18.3	< 20	37.4	< 0.2	< 1	< 2
CRPC-13:50-01	427	1.82	11.4	50	0.33	440	< 200	< 50	5.1	29.5	< 20	60.4	< 0.2	< 1	< 2
CRPC-13:51-01	170	0.70	25.6	< 20	0.40	120	< 200	< 50	11.0	37.5	< 20	21.5	< 0.2	< 1	< 2
CRPC-13:51-02	121	0.53	36.1	< 20	0.57	90	< 200	< 50	4.3	39.0	< 20	16.5	< 0.2	< 1	< 2
CRPC-13:51-03	452	1.23	18.6	< 20	0.69	280	< 200	< 50	13.8	41.4	< 20	53.3	< 0.2	< 1	4
CRPC-13:51-04	542	1.94	15.6	< 20	0.68	460	< 200	< 50	12.3	52.2	< 20	59.2	< 0.2	< 1	< 2
CRPC-13:51-05	185	0.55	20.4	< 20	0.52	100	< 200	< 50	6.4	46.9	< 20	22.0	< 0.2	< 1	< 2
CRPC-13:51-06	160	0.66	29.0	< 20	0.54	100	< 200	< 50	4.5	39.9	< 20	19.1	< 0.2	< 1	< 2
CRPC-13:51-07	245	0.70	21.0	< 20	0.39	100	< 200	< 50	11.8	39.6	< 20	26.0	< 0.2	< 1	< 2
CRPC-13:51-08	178	0.47	22.9	< 20	0.40	150	< 200	< 50	9.7	41.3	< 20	21.1	< 0.2	< 1	< 2
CRPC-13:51-09	237	0.54	22.5	< 20	0.51	70	< 200	< 50	11.8	40.6	< 20	25.4	< 0.2	< 1	< 2
CRPC-13:52-01	145	0.74	35.5	< 20	0.47	120	< 200	< 50	8.7	38.8	< 20	18.5	< 0.2	< 1	< 2
CRPC-13:52-02	165	0.71	27.8	< 20	0.51	40	< 200	< 50	8.6	43.9	< 20	19.9	< 0.2	< 1	< 2
CRPC-13:52-03	174	0.53	32.4	< 20	0.50	100	< 200	< 50	6.6	39.2	< 20	21.8	< 0.2	< 1	7
CRPC-13:52-04	190	0.64	37.1	< 20	0.43	110	< 200	< 50	10.3	38.9	< 20	22.1	< 0.2	< 1	< 2
CRPC-13:52-05	574	1.98	17.1	< 20	0.52	820	< 200	< 50	18.3	41.6	< 20	59.3	< 0.2	< 1	7
CRPC-13:53-01	117	0.59	29.3	< 20	0.31	140	< 200	< 50	9.7	30.2	< 20	14.9	< 0.2	< 1	< 2
CRPC-13:53-02	134	0.92	28.3	< 20	0.40	100	< 200	< 50	13.3	37.1	20	17.3	0.2	< 1	< 2
CRPC-13:53-03	124	0.59	41.4	< 20	0.28	40	< 200	< 50	8.4	28.2	< 20	13.3	< 0.2	< 1	< 2
CRPC-13:53-04	158	0.74	22.3	< 20	0.56	100	< 200	< 50	7.3	38.2	< 20	20.4	< 0.2	< 1	< 2
CRPC-13:53-05	99	0.35	46.6	< 20	0.38	60	< 200	< 50	6.4	29.0	< 20	12.9	< 0.2	< 1	< 2
CRPC-13:54-01	110	0.49	25.2	< 20	0.41	70	< 200	< 50	8.5	33.6	< 20	15.8	< 0.2	< 1	4
CRPC-13:54-02	110	0.41	23.4	< 20	0.42	90	< 200	< 50	9.3	32.5	< 20	15.6	< 0.2	< 1	< 2
CRPC-13:54-03	189	0.65	38.3	< 20	0.40	110	< 200	< 50	6.8	31.9	< 20	26.5	< 0.2	< 1	< 2
CRPC-13:55-01	102	0.30	12.8	< 20	0.30	180	< 200	< 50	10.4	24.7	< 20	14.1	< 0.2	< 1	< 2
CRPC-13:55-02	139	0.33	21.9	< 20	0.35	90	< 200	< 50	16.4	30.2	< 20	19.4	< 0.2	< 1	< 2
CRPC-13:55-03	94	0.20	12.9	< 20	0.32	70	< 200	< 50	6.9	24.4	< 20	14.1	< 0.2	< 1	< 2
CRPC-13:55-04	199	0.73	20.3	< 20	0.40	100	< 200	< 50	9.7	37.3	< 20	30.8	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:55-05	188	0.87	22.6	< 20	0.42	100	< 200	< 50	8.0	36.5	< 20	26.3	< 0.2	< 1	< 2
CRPC-13:55-06	271	0.82	22.4	< 20	0.48	140	< 200	< 50	7.4	44.8	< 20	36.6	< 0.2	< 1	< 2
CRPC-13:55-07	329	1.13	25.9	< 20	0.38	340	< 200	< 50	7.0	42.9	< 20	44.0	0.2	< 1	< 2
CRPC-13:55-08	258	0.86	36.5	< 20	0.36	140	< 200	< 50	7.1	32.5	< 20	36.0	0.3	< 1	< 2
CRPC-13:55-09	321	1.03	24.4	< 20	0.35	220	< 200	< 50	6.3	42.9	< 20	41.7	< 0.2	< 1	< 2
CRPC-13:55-10	211	0.84	17.1	< 20	0.60	110	< 200	< 50	8.0	50.8	< 20	32.8	< 0.2	< 1	< 2
CRPC-13:56-01	156	0.72	30.4	< 20	0.52	70	< 200	< 50	8.8	41.9	< 20	22.6	< 0.2	< 1	< 2
CRPC-13:56-02	409	1.41	16.2	< 20	0.41	210	< 200	< 50	7.3	50.4	< 20	42.9	< 0.2	< 1	< 2
CRPC-13:56-03	273	0.87	20.6	< 20	0.55	140	< 200	< 50	9.9	52.9	< 20	38.0	< 0.2	< 1	4
CRPC-13:56-04	307	1.21	15.1	< 20	0.58	250	< 200	< 50	7.6	57.9	< 20	46.5	< 0.2	< 1	< 2
CRPC-13:56-05	123	0.41	26.1	< 20	0.50	80	< 200	< 50	6.3	42.4	< 20	23.5	< 0.2	< 1	< 2
CRPC-13:56-06	112	0.43	32.6	< 20	0.65	70	< 200	< 50	3.0	37.4	< 20	19.3	< 0.2	< 1	< 2
CRPC-13:56-07	101	0.35	41.9	< 20	0.83	60	< 200	< 50	3.0	36.1	< 20	17.2	< 0.2	< 1	< 2
CRPC-13:56-08	134	0.50	17.4	< 20	0.68	100	< 200	< 50	7.2	49.3	< 20	24.8	< 0.2	< 1	< 2
CRPC-13:56-09	101	0.56	24.9	< 20	0.72	150	< 200	< 50	4.4	39.5	< 20	19.7	0.3	< 1	< 2
CRPC-13:57-01	121	0.62	36.4	< 20	0.48	60	< 200	< 50	7.5	38.0	< 20	20.7	< 0.2	< 1	2
CRPC-13:57-02	98	0.37	45.0	< 20	0.55	70	< 200	< 50	4.1	28.8	< 20	14.8	< 0.2	< 1	< 2
CRPC-13:57-03	103	0.37	46.8	< 20	0.13	60	< 200	< 50	5.4	15.2	< 20	14.0	< 0.2	< 1	< 2
CRPC-13:57-04	117	0.54	38.5	< 20	0.20	50	< 200	< 50	8.9	18.3	< 20	16.4	< 0.2	< 1	< 2
CRPC-13:57-05	268	0.90	37.6	< 20	0.30	190	< 200	< 50	5.9	22.6	< 20	32.8	< 0.2	< 1	< 2
CRPC-13:58-01	162	0.68	27.1	< 20	0.51	120	< 200	< 50	8.2	35.9	< 20	16.7	< 0.2	< 1	< 2
CRPC-13:58-02	171	0.57	39.8	< 20	0.34	150	< 200	< 50	7.9	35.6	< 20	17.9	< 0.2	< 1	< 2
CRPC-13:58-03	277	1.00	27.5	< 20	0.41	110	< 200	< 50	7.0	40.9	< 20	30.1	< 0.2	13	< 2
CRPC-13:59-01	172	0.61	35.7	< 20	0.49	100	< 200	< 50	7.7	28.4	< 20	16.8	< 0.2	< 1	< 2
CRPC-13:59-02	204	1.04	33.3	< 20	0.33	100	< 200	< 50	6.2	40.5	< 20	20.6	< 0.2	< 1	< 2
CRPC-13:59-03	359	1.40	24.2	< 20	0.39	220	< 200	< 50	4.8	40.5	< 20	38.3	< 0.2	24	< 2
CRPC-13:59-04	311	1.03	31.7	< 20	0.57	200	< 200	< 50	4.5	36.4	< 20	33.1	< 0.2	< 1	< 2
CRPC-13:59-05	386	1.25	21.1	< 20	0.53	320	< 200	< 50	4.4	33.8	< 20	44.0	< 0.2	< 1	6
CRPC-13:60-01	1300	2.00	13.3	< 20	0.54	360	< 200	< 50	3.0	21.1	< 20	119	< 0.2	< 1	< 2
CRPC-13:61-01	74	0.70	45.7	< 20	0.06	60	< 200	< 50	17.4	8.9	< 20	10.7	< 0.2	< 1	3
CRPC-13:61-02	212	1.55	11.9	40	< 0.05	120	< 200	< 50	12.4	16.4	< 20	29.9	< 0.2	21	10
CRPC-13:61-03	780	3.09	8.10	50	< 0.05	300	< 200	< 50	13.7	41.3	< 20	88.8	< 0.2	50	22
CRPC-13:61-04	161	2.38	16.4	< 20	< 0.05	80	< 200	< 50	12.6	27.6	< 20	17.6	< 0.2	< 1	< 2
CRPC-13:62-01	601	6.05	2.90	90	0.13	290	< 200	< 50	14.4	51.5	< 20	81.4	< 0.2	< 1	< 2
CRPC-13:63-01	188	0.65	15.6	< 20	0.38	100	< 200	< 50	3.3	23.8	< 20	27.5	< 0.2	< 1	< 2
CRPC-13:63-02	40	0.30	28.8	< 20	0.09	< 10	800	< 50	1.3	9.1	< 20	6.0	< 0.2	< 1	< 2
CRPC-13:63-03	477	2.14	22.4	< 20	< 0.05	220	< 200	< 50	11.7	26.3	< 20	58.7	< 0.2	26	8
CRPC-13:63-04	420	2.31	13.0	< 20	0.07	240	< 200	< 50	10.4	25.5	< 20	48.5	< 0.2	25	< 2
CRPC-13:63-05	340	4.33	7.00	< 20	0.16	90	< 200	< 50	6.4	27.3	< 20	38.8	< 0.2	25	< 2
CRPC-13:65-01	124	0.37	37.0	< 20	0.43	50	< 200	< 50	2.8	27.7	< 20	15.3	< 0.2	< 1	< 2
CRPC-13:65-02	144	0.86	43.0	< 20	0.20	50	< 200	< 50	6.7	23.6	< 20	17.0	< 0.2	< 1	< 2
CRPC-13:65-03	246	1.02	21.8	< 20	0.36	120	< 200	< 50	10.3	35.2	< 20	31.4	< 0.2	< 1	< 2
CRPC-13:65-04	425	3.07	8.00	80	0.08	190	< 200	< 50	22.1	35.4	< 20	63.6	< 0.2	62	8
CRPC-13:65-05	438	2.96	8.00	90	< 0.05	220	< 200	< 50	13.4	36.6	< 20	61.9	< 0.2	40	< 2
CRPC-13:65-06	304	1.12	11.1	< 20	< 0.05	100	< 200	< 50	10.0	22.7	< 20	35.3	< 0.2	< 1	< 2
CRPC-13:65-07	100	0.79	13.5	60	< 0.05	40	< 200	< 50	15.9	18.2	< 20	16.3	< 0.2	< 1	< 2

Analyte Symbol	La	Lu	Mass	Mo	Na	Nd	Ni	Rb	Sb	Sc	Se	Sm	Sr	Ta	Tb
Unit Symbol	ppm	ppm	g	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Detection limit	1	0.05	0.01	20	0.05	10	200	50	0.2	0.1	20	0.1	0.2	1	2
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
CRPC-13:65-08	111	1.72	18.5	< 20	< 0.05	< 10	< 200	< 50	25.5	25.2	< 20	18.9	< 0.2	14	3
CRPC-13:65-09	70	1.11	23.6	< 20	< 0.05	< 10	< 200	< 50	20.8	16.0	< 20	17.4	< 0.2	< 1	< 2
CRPC-13:65-10	124	1.13	11.2	< 20	< 0.05	40	< 200	< 50	22.0	33.8	< 20	19.8	< 0.2	< 1	< 2
CRPC-13:65-11	90	1.00	13.7	< 20	< 0.05	30	< 200	100	19.3	24.8	< 20	15.0	< 0.2	19	< 2
CRPC-13:65-12	124	2.10	19.1	< 20	0.07	30	< 200	< 50	21.1	32.9	< 20	21.9	< 0.2	< 1	< 2
CRPC-13:65-13	130	1.17	20.6	< 20	0.07	40	< 200	< 50	19.0	29.5	< 20	20.3	< 0.2	< 1	4
CRPC-13:65-14	312	2.16	16.5	< 20	0.10	420	< 200	< 50	20.3	31.0	< 20	59.6	< 0.2	< 1	< 2
CRPC-13:66-01	44	0.12	9.00	< 20	0.58	< 10	< 200	< 50	< 0.2	17.5	< 20	8.5	< 0.2	< 1	< 2
CRPC-13:67-01	18	< 0.05	22.6	< 20	0.36	< 10	200	< 50	< 0.2	9.3	< 20	3.2	< 0.2	< 1	< 2
CRPC-13:68-01	134	0.54	20.9	< 20	0.46	100	< 200	< 50	< 0.2	21.1	< 20	22.5	< 0.2	< 1	< 2
CRPC-13:68-02	73	0.33	25.5	< 20	0.42	40	< 200	< 50	1.0	15.3	< 20	12.0	< 0.2	< 1	< 2
CRPC-13:68-03	191	4.30	2.70	90	0.15	190	< 200	< 50	5.4	28.5	< 20	59.7	< 0.2	< 1	36
CRPC-13:69-01	128	0.58	42.4	< 20	0.37	60	< 200	< 50	4.2	30.7	< 20	15.4	< 0.2	< 1	< 2
CRPC-13:69-02	231	1.35	22.0	< 20	0.50	120	< 200	< 50	5.3	42.1	< 20	33.0	< 0.2	< 1	< 2
CRPC-13:69-03	109	0.48	29.6	< 20	0.47	60	< 200	< 50	3.4	32.2	< 20	14.1	< 0.2	< 1	4
CRPC-13:69-04	71	0.16	56.6	< 20	0.43	20	< 200	< 50	2.5	25.0	< 20	8.8	< 0.2	< 1	< 2
CRPC-13:69-05	101	0.40	59.0	< 20	0.35	50	< 200	< 50	2.8	21.9	< 20	10.4	< 0.2	< 1	< 2
CRPC-13:69-06	109	0.41	56.7	< 20	0.39	70	< 200	< 50	2.4	25.2	< 20	12.1	< 0.2	< 1	< 2
CRPC-13:69-07	141	0.58	21.8	< 20	0.28	80	< 200	< 50	4.9	27.7	20	17.1	< 0.2	< 1	< 2
CRPC-13:69-08	115	0.48	36.7	< 20	0.32	80	< 200	< 50	1.8	29.1	< 20	15.7	< 0.2	< 1	< 2
CRPC-13:69-09	191	0.87	27.3	< 20	0.39	180	< 200	< 50	3.5	31.9	< 20	29.0	< 0.2	< 1	< 2
CRPC-13:69-10	134	0.44	48.3	< 20	0.50	80	< 200	< 50	1.6	28.5	< 20	18.3	< 0.2	8	< 2
CRPC-13:69-11	158	0.69	50.0	< 20	0.50	100	< 200	< 50	3.3	27.0	< 20	18.2	< 0.2	< 1	< 2
CRPC-13:69-12	122	0.51	58.6	< 20	0.44	60	< 200	< 50	2.1	25.6	< 20	14.4	< 0.2	< 1	< 2
CRPC-13:69-13	85	0.25	48.3	< 20	0.36	60	< 200	< 50	2.0	24.8	< 20	10.3	< 0.2	< 1	< 2
CRPC-13:69-14	171	0.66	52.1	< 20	0.50	80	< 200	< 50	1.3	25.6	< 20	18.6	< 0.2	< 1	< 2

Results

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CPRC-13:34-04	25.5	14.4	< 4	14.2	< 200	0.2	< 0.5	52	985	< 2	29	19	0.22	61
CPRC-13:34-05	19.9	12.6	< 4	12.1	< 200	< 0.2	0.5	49	1410	10	52	25	0.04	85
CPRC-13:34-06	24.6	14.4	< 4	12.5	< 200	1.1	< 0.5	53	1040	2	35	29	0.21	78
CPRC-13:34-07	18.3	6.9	< 4	15.2	< 200	0.5	< 0.5	50	1530	2	47	26	0.04	78
CPRC-13:34-08	16.7	8.1	< 4	11.7	< 200	0.6	0.5	54	1360	2	49	30	0.04	79
CPRC-13:34-09	20.3	10.0	< 4	14.2	< 200	1.2	< 0.5	67	1220	3	49	30	0.11	85
CPRC-13:34-10	18.4	5.7	< 4	9.6	< 200	0.4	< 0.5	42	1460	2	66	23	0.04	89
CPRC-13:34-11	19.7	17.2	41	9.8	300	0.3	0.6	59	1530	3	45	30	0.09	78
CPRC-13:34-12	17.6	13.2	< 4	10.5	400	1.1	0.5	51	1500	3	44	25	0.03	92
CPRC-13:34-13	18.6	11.3	< 4	9.1	600	< 0.2	< 0.5	37	1440	< 2	77	13	0.02	112
CPRC-13:35-01	19.5	13.6	< 4	12.6	200	< 0.2	< 0.5	27	932	3	15	20	0.27	60
CPRC-13:35-02	20.2	8.6	< 4	14.0	300	0.3	< 0.5	28	916	3	24	29	0.09	65
CPRC-13:35-03	15.4	8.4	< 4	6.3	200	< 0.2	< 0.5	32	1210	3	32	20	0.17	90
CPRC-13:35-04	35.9	14.6	< 4	20.4	300	< 0.2	< 0.5	36	1190	4	37	21	0.16	91
CPRC-13:35-05	17.4	8.1	< 4	14.2	< 200	< 0.2	< 0.5	30	970	3	45	18	0.04	83
CPRC-13:35-06	23.2	20.2	< 4	12.9	600	< 0.2	< 0.5	45	1380	3	63	22	0.10	108
CPRC-13:35-07	21.4	9.5	< 4	13.9	300	0.2	< 0.5	44	1330	4	51	31	0.01	101
CPRC-13:35-08	44.3	27.2	73	24.8	1000	0.2	0.7	81	1160	8	40	51	0.12	141
CRPC-13:36-01	21.4	18.3	< 4	13.8	500	< 0.2	< 0.5	28	954	2	14	21	0.11	65
CRPC-13:36-02	32.2	20.3	< 4	16.9	300	< 0.2	< 0.5	19	763	< 2	17	14	0.10	52
CRPC-13:37-01	23.2	15.9	< 4	15.1	400	< 0.2	< 0.5	37	1230	4	50	22	0.08	86
CRPC-13:37-02	21.6	17.1	< 4	14.3	< 200	0.4	0.5	63	1660	8	44	33	0.12	118
CRPC-13:37-03	18.2	20.7	68	8.8	< 200	1.2	0.9	103	1700	11	46	45	0.15	119
CRPC-13:37-04	20.2	17.1	34	13.3	500	< 0.2	< 0.5	41	1040	5	33	27	0.03	87
CRPC-13:37-05	19.0	12.2	16	11.8	400	0.8	< 0.5	84	824	3	26	21	0.32	65
CRPC-13:38-01	16.4	10.2	< 4	9.6	< 200	< 0.2	< 0.5	43	979	3	15	18	0.64	50
CRPC-13:38-02	15.9	7.9	10	10.3	< 200	1.1	< 0.5	36	826	4	16	36	0.54	60
CRPC-13:38-03	13.2	9.0	< 4	9.4	< 200	< 0.2	< 0.5	28	1210	4	17	24	0.32	66
CRPC-13:38-04	15.8	8.2	< 4	9.8	400	< 0.2	< 0.5	42	999	4	20	28	0.59	72
CRPC-13:38-05	20.9	19.1	< 4	11.7	400	< 0.2	< 0.5	36	871	3	22	17	0.12	74
CRPC-13:38-06	20.0	16.6	< 4	13.0	300	0.4	< 0.5	31	1000	4	36	21	0.12	75
CRPC-13:38-07	19.7	12.9	< 4	15.5	< 200	0.5	< 0.5	68	958	6	25	24	0.07	82
CRPC-13:39-01	21.8	19.8	< 4	13.6	500	0.2	< 0.5	40	1140	3	17	19	0.20	67
CRPC-13:39-02	21.6	12.1	< 4	14.2	400	6.1	1.5	84	1200	6	17	60	0.15	84
CRPC-13:39-03	20.9	12.6	31	15.4	600	0.4	1.6	75	1140	6	21	60	0.09	101
CRPC-13:39-04	19.8	15.5	< 4	14.2	500	< 0.2	< 0.5	32	1020	3	26	20	0.11	79
CRPC-13:39-05	19.0	19.8	< 4	13.9	400	0.7	< 0.5	36	1490	2	84	25	0.11	142
CRPC-13:40-01	25.1	18.8	< 4	15.7	300	0.3	< 0.5	42	1130	3	16	21	0.47	63
CRPC-13:40-02	32.8	19.5	< 4	19.0	2900	1.5	68.6	48	1030	3	13	26	1.13	2400
CRPC-13:40-03	23.1	14.8	< 4	13.4	500	< 0.2	< 0.5	39	975	5	28	25	0.22	94
CRPC-13:40-04	17.6	12.2	< 4	12.1	< 200	< 0.2	< 0.5	34	939	3	22	17	0.21	86
CRPC-13:40-05	24.6	20.1	< 4	14.8	< 200	< 0.2	< 0.5	30	1070	3	21	21	0.12	77
CRPC-13:40-06	145	35.3	< 4	84.0	< 200	< 0.2	< 0.5	35	1450	3	18	34	0.02	63
CRPC-13:41-01	397	72.3	< 4	32.1	< 200	< 0.2	< 0.5	12	1190	< 2	167	13	0.08	103
CRPC-13:42-01	430	61.6	196	21.1	< 200	< 0.2	< 0.5	9	458	< 2	29	33	< 0.01	41

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:43-01	634	55.0	236	34.5	< 200	< 0.2	0.5	12	592	< 2	36	47	0.02	57
CRPC-13:44-01	93.9	24.4	< 4	15.8	< 200	< 0.2	< 0.5	26	1050	< 2	67	12	0.02	82
CRPC-13:44-02	81.2	29.0	< 4	10.0	300	< 0.2	< 0.5	22	1900	< 2	235	22	< 0.01	124
CRPC-13:44-03	83.8	29.7	< 4	10.4	600	< 0.2	< 0.5	23	2260	< 2	253	44	< 0.01	128
CRPC-13:44-04	66.6	15.0	20	7.8	500	< 0.2	< 0.5	12	1780	< 2	331	12	< 0.01	129
CRPC-13:44-05	160	40.3	< 4	13.4	< 200	< 0.2	< 0.5	24	3040	< 2	125	16	< 0.01	94
CRPC-13:45-01	1530	252	< 4	47.7	< 200	0.6	< 0.5	15	541	< 2	18	7	< 0.01	23
CRPC-13:46-01	528	128	< 4	39.1	< 200	0.2	< 0.5	32	725	3	76	19	< 0.01	52
CRPC-13:48-01	162	48.7	34	20.4	800	< 0.2	< 0.5	26	1080	4	96	11	0.03	95
CRPC-13:48-02	192	57.4	< 4	18.5	500	< 0.2	< 0.5	40	1300	5	184	13	0.02	100
CRPC-13:48-03	588	113	< 4	18.8	< 200	0.2	< 0.5	61	1250	2	291	15	0.01	106
CRPC-13:48-04	1230	215	85	46.0	900	0.6	0.6	178	1940	5	100	44	0.01	104
CRPC-13:49-01	105	33.7	15	13.6	400	0.3	< 0.5	31	1850	< 2	252	72	0.04	119
CRPC-13:49-02	75.8	33.4	18	13.8	< 200	0.2	< 0.5	25	1370	< 2	314	17	0.12	129
CRPC-13:49-03	74.0	29.4	< 4	17.3	700	< 0.2	< 0.5	27	938	< 2	111	10	0.06	80
CRPC-13:49-04	63.8	22.7	< 4	15.0	< 200	< 0.2	< 0.5	26	923	< 2	100	14	0.13	70
CRPC-13:49-05	200	51.0	< 4	20.3	< 200	0.2	< 0.5	65	746	< 2	29	19	0.50	52
CRPC-13:49-06	1120	163	< 4	33.3	< 200	0.6	< 0.5	142	523	3	30	24	0.01	65
CRPC-13:49-07	491	102	23	18.2	1500	2.0	0.9	82	5350	3	74	60	0.01	167
CRPC-13:50-01	683	105	530	27.9	< 200	0.4	< 0.5	37	898	71	52	34	< 0.01	70
CRPC-13:51-01	25.2	9.7	< 4	16.0	< 200	0.3	0.6	60	1100	3	18	27	0.12	94
CRPC-13:51-02	21.0	12.9	< 4	13.5	400	< 0.2	< 0.5	59	857	2	15	22	0.79	56
CRPC-13:51-03	58.2	19.5	< 4	29.6	1300	0.3	0.6	55	921	4	22	42	0.13	66
CRPC-13:51-04	78.3	35.1	< 4	34.0	1000	0.6	< 0.5	41	1050	9	22	95	0.06	73
CRPC-13:51-05	31.9	13.8	< 4	17.7	1100	< 0.2	< 0.5	24	1000	2	19	18	0.11	67
CRPC-13:51-06	24.6	12.0	< 4	13.8	400	< 0.2	< 0.5	27	999	3	24	20	0.11	70
CRPC-13:51-07	38.7	19.4	< 4	18.1	700	< 0.2	< 0.5	41	1150	4	25	31	0.03	81
CRPC-13:51-08	26.6	8.1	< 4	12.6	< 200	0.2	< 0.5	50	1620	5	40	34	0.09	83
CRPC-13:51-09	28.6	19.8	< 4	14.3	< 200	< 0.2	< 0.5	45	1080	5	46	29	0.07	88
CRPC-13:52-01	21.6	17.5	< 4	11.6	400	< 0.2	< 0.5	27	845	3	11	19	0.19	51
CRPC-13:52-02	33.7	16.6	< 4	18.0	500	0.2	< 0.5	42	822	2	16	21	1.08	61
CRPC-13:52-03	24.9	12.0	< 4	17.2	700	< 0.2	< 0.5	25	1120	< 2	27	20	0.04	82
CRPC-13:52-04	20.5	7.6	< 4	13.0	< 200	< 0.2	0.6	24	1270	9	20	17	0.06	56
CRPC-13:52-05	55.4	19.0	< 4	33.1	600	0.3	< 0.5	58	1060	3	91	33	0.07	84
CRPC-13:53-01	20.5	11.4	< 4	13.7	< 200	0.8	1.0	80	911	3	27	38	2.30	91
CRPC-13:53-02	27.1	9.8	< 4	14.5	600	0.8	< 0.5	100	957	2	28	33	2.11	71
CRPC-13:53-03	20.4	12.2	< 4	11.7	< 200	0.2	< 0.5	53	1150	3	26	25	0.20	70
CRPC-13:53-04	30.7	18.2	< 4	16.4	400	0.3	< 0.5	138	967	< 2	15	19	0.42	59
CRPC-13:53-05	20.1	9.5	40	10.9	300	< 0.2	< 0.5	107	1610	< 2	17	7	0.93	49
CRPC-13:54-01	26.1	13.2	29	13.2	400	1.4	0.6	114	949	< 2	26	75	4.25	89
CRPC-13:54-02	26.9	12.9	< 4	12.8	500	1.3	< 0.5	110	953	< 2	23	128	4.76	106
CRPC-13:54-03	62.9	14.2	< 4	11.6	600	0.4	< 0.5	116	1110	< 2	42	22	2.05	74
CRPC-13:55-01	16.6	9.3	23	7.3	< 200	1.4	0.6	122	1980	2	20	48	0.51	104
CRPC-13:55-02	23.9	8.9	< 4	11.1	700	1.3	0.9	74	1660	< 2	18	50	0.42	110
CRPC-13:55-03	20.0	10.8	33	6.3	< 200	1.4	1.5	87	1480	< 2	40	88	2.05	234
CRPC-13:55-04	76.2	14.8	< 4	16.0	600	0.4	< 0.5	54	1410	< 2	59	28	0.72	72

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:55-05	58.6	14.2	< 4	15.2	400	0.6	< 0.5	99	1090	< 2	36	24	2.32	72
CRPC-13:55-06	103	34.7	< 4	20.7	< 200	< 0.2	< 0.5	28	986	< 2	26	14	0.67	48
CRPC-13:55-07	157	31.8	< 4	21.7	1000	0.2	< 0.5	23	1020	< 2	34	29	0.22	52
CRPC-13:55-08	116	16.8	< 4	16.7	< 200	< 0.2	< 0.5	17	1110	< 2	54	11	0.25	52
CRPC-13:55-09	158	40.4	< 4	20.0	1300	0.2	< 0.5	27	1060	< 2	35	17	0.47	54
CRPC-13:55-10	67.5	24.1	62	13.7	1000	12.6	< 0.5	47	1100	< 2	44	22	1.41	86
CRPC-13:56-01	36.3	21.8	< 4	14.8	< 200	1.1	< 0.5	68	1080	< 2	43	19	1.36	75
CRPC-13:56-02	126	45.9	< 4	30.1	1200	2.5	1.3	68	842	< 2	27	23	2.21	143
CRPC-13:56-03	65.7	13.5	< 4	21.3	< 200	< 0.2	< 0.5	40	821	< 2	24	21	0.65	54
CRPC-13:56-04	92.1	34.9	< 4	21.6	< 200	< 0.2	< 0.5	35	818	< 2	22	20	0.66	49
CRPC-13:56-05	38.8	9.5	45	8.8	< 200	< 0.2	< 0.5	52	902	< 2	27	11	0.91	45
CRPC-13:56-06	22.0	13.2	30	7.3	< 200	< 0.2	< 0.5	31	739	< 2	17	6	0.09	38
CRPC-13:56-07	15.8	10.2	< 4	6.6	< 200	< 0.2	< 0.5	35	659	< 2	13	4	0.30	34
CRPC-13:56-08	27.8	14.5	44	12.6	< 200	< 0.2	< 0.5	56	774	< 2	15	6	0.07	34
CRPC-13:56-09	19.7	9.8	44	7.3	< 200	0.3	< 0.5	113	669	< 2	13	7	2.66	87
CRPC-13:57-01	30.1	13.0	< 4	14.3	< 200	0.7	< 0.5	887	1210	< 2	27	16	0.22	55
CRPC-13:57-02	20.0	12.9	< 4	7.0	< 200	< 0.2	< 0.5	35	1410	< 2	108	9	0.39	82
CRPC-13:57-03	21.9	6.4	24	8.1	200	0.2	0.7	61	2530	3	86	11	0.23	114
CRPC-13:57-04	26.6	11.5	40	10.5	3600	2.0	68.7	91	2400	3	44	231	1.54	2830
CRPC-13:57-05	114	39.7	31	19.2	< 200	< 0.2	1.4	61	2100	2	18	21	0.23	127
CRPC-13:58-01	27.3	15.0	< 4	13.9	< 200	< 0.2	< 0.5	39	1230	< 2	18	18	0.07	57
CRPC-13:58-02	46.3	19.9	< 4	14.2	< 200	< 0.2	< 0.5	37	1170	2	50	22	0.56	68
CRPC-13:58-03	148	41.0	< 4	23.7	< 200	< 0.2	< 0.5	49	1350	3	46	21	0.38	71
CRPC-13:59-01	86.6	22.3	< 4	11.1	< 200	0.2	< 0.5	50	1570	2	30	14	0.73	63
CRPC-13:59-02	98.0	34.5	< 4	21.4	< 200	< 0.2	< 0.5	34	1030	< 2	29	16	0.80	68
CRPC-13:59-03	227	49.0	< 4	23.9	< 200	8.0	< 0.5	20	1010	< 2	28	9	0.09	42
CRPC-13:59-04	195	33.7	< 4	21.8	< 200	< 0.2	< 0.5	18	942	< 2	35	10	0.07	46
CRPC-13:59-05	162	47.4	< 4	20.0	< 200	< 0.2	< 0.5	14	1250	< 2	132	21	0.07	110
CRPC-13:60-01	2670	348	< 4	32.6	< 200	1.2	< 0.5	20	748	< 2	15	10	0.02	27
CRPC-13:61-01	29.0	27.2	31	9.5	1700	10.4	8.9	166	25300	39	10	620	0.01	525
CRPC-13:61-02	83.1	41.6	165	21.9	9300	24.7	9.2	244	28400	65	12	1450	0.01	681
CRPC-13:61-03	258	87.1	604	44.7	10000	24.8	11.6	242	27400	48	10	1720	< 0.01	640
CRPC-13:61-04	104	83.7	141	34.4	2700	3.4	5.7	80	15500	11	7	401	< 0.01	349
CRPC-13:62-01	7500	510	< 4	75.1	2200	2.3	1.6	64	3340	10	56	226	0.01	168
CRPC-13:63-01	119	33.9	< 4	10.6	< 200	< 0.2	< 0.5	24	1400	< 2	654	6	< 0.01	135
CRPC-13:63-02	17.4	12.1	41	5.2	1200	< 0.2	0.9	25	1740	4	936	17	< 0.01	184
CRPC-13:63-03	118	50.3	225	38.3	1300	0.8	2.7	110	1530	12	19	56	0.05	320
CRPC-13:63-04	182	46.6	214	36.4	2300	3.5	1.6	146	10200	35	16	368	0.02	316
CRPC-13:63-05	187	131	168	44.8	2800	0.2	1.0	129	2410	26	10	38	0.01	290
CRPC-13:65-01	52.1	21.3	< 4	9.0	500	0.5	1.2	53	4110	6	87	48	< 0.01	218
CRPC-13:65-02	115	37.8	32	13.4	1500	1.2	1.8	95	4500	9	63	124	< 0.01	385
CRPC-13:65-03	94.3	41.2	67	18.0	11000	3.0	1.3	85	5800	12	33	381	0.01	387
CRPC-13:65-04	210	80.1	360	38.2	9400	26.3	6.9	338	23800	69	36	1430	0.02	873
CRPC-13:65-05	196	96.1	294	35.2	13100	42.1	15.9	454	33000	93	44	546	0.01	1190
CRPC-13:65-06	90.6	170	300	24.2	4200	8.9	3.7	453	8940	59	31	207	0.04	1080
CRPC-13:65-07	39.1	181	196	14.2	3500	7.3	5.2	314	12100	54	32	836	0.03	1060

Analyte Symbol	Th	U	W	Yb	Zn	Ag	Cd	Cu	Mn	Mo	Ni	Pb	S	Zn
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
Detection limit	0.5	0.5	4	0.2	200	0.2	0.5	1	2	2	1	2	0.01	1
Analysis Method	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CRPC-13:65-08	45.8	189	113	16.2	1000	8.1	4.8	221	13700	37	24	665	0.02	728
CRPC-13:65-09	15.3	133	62	11.6	900	42.7	19.6	228	29100	41	26	644	0.02	1130
CRPC-13:65-10	51.6	108	111	25.3	800	7.6	6.2	201	14200	23	26	788	0.02	626
CRPC-13:65-11	44.1	95.8	78	16.9	900	7.7	5.4	180	12000	19	26	727	0.02	577
CRPC-13:65-12	54.3	98.2	64	27.6	700	8.7	7.6	115	12500	14	19	223	0.02	530
CRPC-13:65-13	44.5	33.6	< 4	21.5	500	3.7	1.8	85	7550	3	9	402	0.03	234
CRPC-13:65-14	240	96.7	102	31.4	1200	1.6	2.2	125	4070	6	12	583	0.03	304
CRPC-13:66-01	8.0	6.3	< 4	< 0.2	< 200	< 0.2	< 0.5	23	2370	< 2	212	5	< 0.01	190
CRPC-13:67-01	4.7	< 0.5	17	1.1	400	< 0.2	< 0.5	14	2120	< 2	374	5	0.01	175
CRPC-13:68-01	65.2	18.8	< 4	9.9	< 200	< 0.2	0.6	35	1820	< 2	349	10	< 0.01	341
CRPC-13:68-02	30.5	11.3	< 4	4.8	700	< 0.2	0.7	25	2430	< 2	349	4	< 0.01	420
CRPC-13:68-03	61.0	50.0	222	67.2	3000	6.0	2.5	171	10200	43	69	577	0.03	809
CRPC-13:69-01	25.6	11.8	< 4	11.9	200	< 0.2	< 0.5	25	1120	< 2	34	20	0.04	81
CRPC-13:69-02	104	39.4	< 4	23.8	< 200	< 0.2	< 0.5	39	1060	< 2	62	22	0.58	75
CRPC-13:69-03	26.3	19.6	< 4	11.2	400	< 0.2	< 0.5	27	1420	< 2	96	16	0.20	111
CRPC-13:69-04	14.6	8.9	< 4	7.0	< 200	< 0.2	< 0.5	24	1230	< 2	70	7	0.02	122
CRPC-13:69-05	58.5	21.8	< 4	9.1	< 200	< 0.2	< 0.5	26	1290	< 2	54	14	< 0.01	90
CRPC-13:69-06	60.0	15.1	< 4	10.9	< 200	< 0.2	< 0.5	26	1280	< 2	50	15	< 0.01	91
CRPC-13:69-07	120	39.5	< 4	11.6	< 200	< 0.2	< 0.5	27	1560	< 2	60	20	0.02	87
CRPC-13:69-08	85.2	19.6	45	9.1	< 200	< 0.2	< 0.5	25	1360	< 2	104	11	< 0.01	109
CRPC-13:69-09	114	21.0	< 4	13.5	< 200	< 0.2	< 0.5	28	1540	< 2	80	13	0.04	114
CRPC-13:69-10	79.1	10.5	< 4	9.2	500	< 0.2	< 0.5	28	1490	< 2	76	12	< 0.01	108
CRPC-13:69-11	82.9	20.8	< 4	14.3	200	< 0.2	< 0.5	20	1000	< 2	36	11	< 0.01	87
CRPC-13:69-12	48.8	13.7	< 4	11.7	300	< 0.2	< 0.5	24	1060	< 2	38	10	< 0.01	88
CRPC-13:69-13	41.1	9.2	< 4	7.5	< 200	< 0.2	< 0.5	18	1880	< 2	153	6	0.02	159
CRPC-13:69-14	83.0	14.2	< 4	12.5	< 200	< 0.2	< 0.5	19	1240	< 2	47	10	< 0.01	109

Quality Analysis ... *Innovative Technologies*

Date Submitted: 28-Oct-13
Invoice No.: A13-13024
Invoice Date: 08-Nov-13
Your Reference: RAU-13

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Robin Whiteaker (invoices)

CERTIFICATE OF ANALYSIS

38 Crushed Rock samples were submitted for analysis.

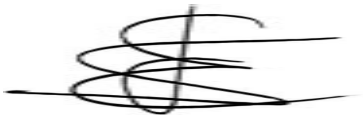
The following analytical packages were requested: Code 1D INAA(INAAGEO)
Code 1E Aqua Regia ICP(AQUAGEO)
Code 4C (11+) Whole Rock Analysis-XRF

REPORT **A13-13024**

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Notes:
For values exceeding the upper limits we recommend assays.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :



Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
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Activation Laboratories Ltd. Report: A13-13024

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
RAU-13-01-23	< 5	< 5	< 2	1100	< 1	< 1	22	120	< 2	4.39	3	< 1	< 5	< 5	2.83	< 50	< 30	< 0.2	12.5	< 5	< 0.05	< 0.1	< 1	8.7
RAU-13-02-21	< 5	< 5	4	1300	< 1	< 1	10	100	< 2	4.68	3	< 1	< 5	< 5	3.08	< 50	< 30	< 0.2	12.1	< 5	< 0.05	< 0.1	< 1	6.1
RAU-13-03-14	< 5	< 5	4	1100	< 1	< 1	23	80	6	4.53	6	< 1	< 5	< 5	2.69	< 50	< 30	0.9	11.0	< 5	< 0.05	< 0.1	< 1	8.9
RAU-13-04-06	< 5	< 5	< 2	1600	< 1	3	25	90	< 2	5.36	5	< 1	< 5	< 5	2.51	< 50	50	< 0.2	12.3	< 5	< 0.05	< 0.1	< 1	6.9
RAU-13-06-02	< 5	< 5	< 2	800	< 1	2	45	220	< 2	7.90	2	< 1	< 5	< 5	1.46	< 50	80	< 0.2	27.0	< 5	< 0.05	< 0.1	< 1	6.4
RAU-13-07-18	< 5	< 5	< 2	1400	< 1	3	24	< 10	< 2	6.70	2	< 1	< 5	< 5	1.96	< 50	160	< 0.2	14.4	< 5	< 0.05	< 0.1	< 1	6.2
RAU-13-08-27	< 5	< 5	11	900	< 1	< 1	18	90	6	6.29	3	< 1	< 5	< 5	1.60	< 50	220	1.5	14.8	< 5	< 0.05	< 0.1	< 1	7.5
RAU-13-09-14	< 5	< 5	< 2	1400	< 1	2	25	70	6	6.37	2	< 1	< 5	< 5	1.70	< 50	130	0.7	19.7	< 5	< 0.05	0.4	< 1	4.1
RAU-13-11-11	< 5	< 5	9	1200	< 1	< 1	25	40	6	5.85	7	< 1	< 5	< 5	0.86	< 50	50	2.1	11.6	< 5	< 0.05	< 0.1	< 1	10.8
RAU-13-12-09	< 5	< 5	< 2	600	< 1	2	53	70	< 2	8.92	5	< 1	< 5	< 5	2.52	< 50	< 30	< 0.2	14.3	< 5	< 0.05	< 0.1	< 1	3.2
RAU-13-13-05	< 5	< 5	< 2	500	< 1	< 1	50	90	< 2	9.95	3	< 1	< 5	< 5	2.14	< 50	< 30	< 0.2	14.8	< 5	< 0.05	< 0.1	< 1	4.0
RAU-13-16-02	< 5	< 5	< 2	900	< 1	3	41	130	< 2	9.07	5	< 1	< 5	< 5	2.87	< 50	< 30	< 0.2	16.5	< 5	< 0.05	< 0.1	< 1	5.2
RAU-13-17-03	< 5	< 5	< 2	1100	< 1	4	40	170	< 2	9.03	5	< 1	< 5	< 5	2.33	< 50	< 30	< 0.2	17.2	< 5	< 0.05	< 0.1	< 1	4.6
RAU-13-18-05	< 5	< 5	< 2	1800	< 1	< 1	8	30	5	3.17	4	< 1	< 5	< 5	2.46	< 50	180	1.0	8.2	< 5	< 0.05	< 0.1	< 1	12.0
RAU-13-19-06	< 5	< 5	25	1400	< 1	4	22	80	< 2	6.72	< 1	< 1	< 5	< 5	1.44	< 50	< 30	3.3	20.4	< 5	< 0.05	< 0.1	< 1	3.0
RAU-13-20-10	< 5	< 5	8	1800	< 1	< 1	16	120	< 2	5.51	5	< 1	< 5	< 5	1.85	< 50	50	5.8	15.2	< 5	< 0.05	< 0.1	< 1	7.9
RAU-13-25-04	< 5	< 5	< 2	1600	< 1	< 1	5	30	8	2.47	4	< 1	< 5	< 5	3.07	< 50	< 30	< 0.2	4.4	< 5	< 0.05	< 0.1	< 1	17.0
RAU-13-26-08	38	< 5	175	1200	< 1	< 1	< 5	< 10	13	1.22	4	< 1	< 5	< 5	0.88	< 50	130	4.6	3.4	< 5	< 0.05	< 0.1	< 1	16.1
RAU-13-27-04	< 5	< 5	< 2	1200	< 1	< 1	9	30	5	2.98	4	< 1	< 5	< 5	2.87	< 50	130	< 0.2	5.7	< 5	< 0.05	< 0.1	< 1	12.7
RAU-13-28-05	< 5	< 5	< 2	1300	< 1	< 1	9	30	4	2.39	3	< 1	< 5	< 5	3.02	< 50	140	< 0.2	4.4	< 5	< 0.05	< 0.1	< 1	12.6
RAU-13-29-05	< 5	< 5	< 2	1700	< 1	4	< 5	< 10	< 2	2.33	4	< 1	< 5	< 5	3.29	< 50	120	< 0.2	4.8	< 5	< 0.05	< 0.1	< 1	10.8
RAU-13-30-05	< 5	< 5	< 2	2000	< 1	< 1	5	20	< 2	2.09	4	< 1	< 5	< 5	3.17	< 50	< 30	< 0.2	4.0	< 5	< 0.05	< 0.1	< 1	10.5
RAU-13-31-04	< 5	< 5	8	1000	< 1	< 1	17	90	4	3.85	8	< 1	< 5	< 5	1.00	< 50	60	1.8	11.3	< 5	< 0.05	< 0.1	< 1	13.4
RAU-13-32-04	< 5	< 5	11	500	< 1	< 1	17	60	3	3.75	10	< 1	< 5	< 5	1.03	< 50	< 30	1.1	11.1	< 5	< 0.05	< 0.1	< 1	9.5
RAU-13-33-02	< 5	< 5	6	< 100	< 1	< 1	7	50	5	4.45	13	< 1	< 5	< 5	1.44	< 50	200	1.0	9.3	< 5	< 0.05	< 0.1	< 1	13.6
RAU-13-34-12	< 5	< 5	< 2	2300	< 1	1	< 5	< 10	3	1.34	4	< 1	< 5	< 5	2.70	< 50	190	< 0.2	1.9	< 5	< 0.05	< 0.1	< 1	8.5
RAU-13-35-17	< 5	< 5	9	900	< 1	< 1	15	80	< 2	4.61	6	< 1	< 5	< 5	1.78	< 50	< 30	1.9	9.9	< 5	< 0.05	< 0.1	< 1	8.6
RAU-13-38-12	< 5	< 5	4	1500	< 1	< 1	< 5	< 10	8	1.15	4	< 1	< 5	< 5	2.38	< 50	90	< 0.2	2.4	< 5	< 0.05	< 0.1	< 1	14.6
RAU-13-39-20	< 5	< 5	< 2	1400	< 1	< 1	35	110	6	6.99	3	< 1	< 5	< 5	1.88	< 50	< 30	2.6	22.3	< 5	< 0.05	< 0.1	< 1	5.4
RAU-13-40-02	< 5	< 5	< 2	1700	< 1	< 1	16	100	13	4.49	4	< 1	< 5	< 5	2.12	< 50	< 30	< 0.2	12.0	< 5	< 0.05	< 0.1	< 1	7.5
RAU-13-41-20	< 5	< 5	< 2	2700	< 1	< 1	10	< 10	< 2	1.71	5	< 1	< 5	< 5	2.25	< 50	240	< 0.2	2.1	< 5	< 0.05	< 0.1	< 1	8.8
RAU-13-43-03	< 5	< 5	5	1700	< 1	< 1	9	20	4	4.45	4	< 1	< 5	< 5	3.17	< 50	140	1.4	10.0	< 5	< 0.05	< 0.1	< 1	10.8
RAU-13-44-04	< 5	< 5	8	1800	< 1	< 1	17	50	10	3.59	4	< 1	< 5	< 5	2.14	< 50	100	2.5	9.5	< 5	< 0.05	0.3	< 1	10.1
RAU-13-45-04	< 5	< 5	< 2	1900	< 1	< 1	13	60	< 2	3.97	5	< 1	< 5	< 5	2.15	< 50	60	2.3	11.0	< 5	< 0.05	< 0.1	< 1	4.4
RAU-13-46-10	< 5	< 5	< 2	1200	< 1	< 1	< 5	< 10	7	0.73	3	< 1	< 5	< 5	1.81	< 50	50	1.0	2.6	< 5	< 0.05	< 0.1	< 1	8.6
RAU-13-47-09	< 5	< 5	10	500	< 1	4	39	470	< 2	6.40	< 1	< 1	< 5	< 5	1.19	< 50	< 30	4.1	28.3	< 5	< 0.05	0.4	< 1	2.8
RAU-13-48-12	< 5	< 5	< 2	900	< 1	< 1	23	70	< 2	5.09	5	< 1	< 5	< 5	2.17	< 50	< 30	1.5	11.3	< 5	< 0.05	< 0.1	< 1	6.0
RAU-13-50-06	< 5	< 5	< 2	500	< 1	3	41	140	12	7.12	< 1	< 1	< 5	10	1.40	< 50	< 30	0.5	24.2	< 5	< 0.05	< 0.1	< 1	2.1

Activation Laboratories Ltd. Report: A13-13024

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
RAU-13-01-23	< 0.5	< 4	< 50	26	53	< 5	4.8	1.0	< 0.5	1.6	0.08	31.1	< 0.2	< 0.5	32	511	< 2	24	3	65	0.001	57.97	15.81	6.37
RAU-13-02-21	2.8	< 4	< 50	29	48	23	5.2	1.4	< 0.5	1.6	< 0.05	28.9	< 0.2	< 0.5	15	338	< 2	19	4	56	0.002	59.78	16.27	6.55
RAU-13-03-14	2.2	< 4	< 50	27	44	14	5.3	0.9	< 0.5	1.4	< 0.05	23.3	< 0.2	< 0.5	39	671	< 2	37	6	83	0.001	57.79	16.02	6.64
RAU-13-04-06	< 0.5	< 4	< 50	24	46	< 5	4.8	1.0	< 0.5	1.3	< 0.05	29.7	< 0.2	< 0.5	27	638	< 2	27	2	59	0.002	55.88	16.86	7.96
RAU-13-06-02	< 0.5	< 4	< 50	24	43	31	6.0	1.7	< 0.5	2.2	0.12	35.2	< 0.2	< 0.5	217	735	< 2	48	3	68	0.004	48.46	15.24	12.25
RAU-13-07-18	< 0.5	< 4	< 50	33	49	21	7.3	1.8	< 0.5	2.3	0.27	28.4	< 0.2	< 0.5	93	1120	< 2	5	5	107	0.002	51.84	17.37	9.68
RAU-13-08-27	3.1	< 4	< 50	26	35	14	5.1	1.0	< 0.5	1.8	0.12	26.4	< 0.2	< 0.5	53	476	< 2	22	5	71	< 0.001	56.25	15.75	9.63
RAU-13-09-14	< 0.5	< 4	< 50	37	47	27	7.0	2.1	< 0.5	3.1	0.13	30.5	< 0.2	< 0.5	134	937	< 2	17	< 2	92	0.002	51.99	16.62	10.00
RAU-13-11-11	2.9	< 4	< 50	46	77	23	7.5	2.1	< 0.5	3.4	0.32	24.3	< 0.2	< 0.5	28	5580	2	24	14	97	0.001	56.96	16.69	9.04
RAU-13-12-09	< 0.5	< 4	< 50	28	49	20	6.4	2.5	< 0.5	2.0	< 0.05	35.1	< 0.2	< 0.5	28	845	< 2	50	< 2	93	0.007	46.11	16.29	14.24
RAU-13-13-05	< 0.5	< 4	< 50	40	65	36	9.2	2.9	< 0.5	2.5	< 0.05	28.5	< 0.2	< 0.5	28	837	< 2	61	< 2	98	0.003	43.77	16.90	15.51
RAU-13-16-02	< 0.5	< 4	< 50	35	60	25	7.8	3.1	< 0.5	1.5	< 0.05	34.0	< 0.2	< 0.5	35	941	< 2	57	< 2	99	0.009	48.92	16.00	12.25
RAU-13-17-03	< 0.5	< 4	< 50	33	62	31	7.7	3.1	< 0.5	2.4	< 0.05	27.9	< 0.2	< 0.5	35	797	< 2	56	< 2	91	0.007	47.55	15.29	11.83
RAU-13-18-05	2.3	< 4	< 50	27	46	15	3.8	1.0	< 0.5	1.4	0.06	28.7	< 0.2	< 0.5	8	612	< 2	5	6	63	0.002	63.23	15.67	4.19
RAU-13-19-06	< 0.5	< 4	430	26	41	31	6.3	1.7	1.1	2.2	0.10	24.7	0.2	1.3	119	1300	< 2	19	21	422	0.002	52.31	16.02	9.27
RAU-13-20-10	< 0.5	< 4	< 50	26	45	< 5	5.0	1.5	< 0.5	2.0	0.24	27.8	< 0.2	< 0.5	28	968	< 2	25	3	92	0.002	57.52	15.85	7.57
RAU-13-25-04	8.1	< 4	< 50	27	35	< 5	2.7	1.0	< 0.5	< 0.2	0.14	29.2	< 0.2	< 0.5	20	277	< 2	4	3	35	0.002	68.61	15.78	3.00
RAU-13-26-08	3.6	< 4	200	29	38	11	2.9	< 0.2	< 0.5	1.0	0.13	29.1	0.3	0.9	51	248	3	< 1	37	74	0.008	70.92	13.24	1.62
RAU-13-27-04	7.7	< 4	< 50	28	48	< 5	2.9	1.1	< 0.5	< 0.2	< 0.05	31.6	< 0.2	< 0.5	11	263	< 2	7	< 2	23	0.031	66.61	15.82	4.05
RAU-13-28-05	4.9	< 4	< 50	23	39	10	2.7	< 0.2	< 0.5	< 0.2	0.10	32.1	< 0.2	< 0.5	7	220	< 2	4	< 2	23	0.002	68.76	15.69	3.15
RAU-13-29-05	3.9	< 4	< 50	24	36	< 5	2.7	0.6	< 0.5	< 0.2	< 0.05	31.2	< 0.2	< 0.5	9	202	< 2	4	3	25	0.001	67.13	16.51	2.98
RAU-13-30-05	4.4	< 4	< 50	22	34	< 5	2.4	< 0.2	< 0.5	0.8	0.13	28.7	< 0.2	< 0.5	6	198	< 2	3	3	23	0.001	68.72	15.97	2.73
RAU-13-31-04	5.3	< 4	< 50	36	69	23	6.8	1.4	< 0.5	3.3	0.21	25.7	< 0.2	< 0.5	24	613	2	23	12	90	0.046	63.89	15.96	5.40
RAU-13-32-04	4.8	< 4	< 50	49	89	26	9.9	1.6	1.8	4.3	0.38	21.7	< 0.2	< 0.5	34	764	6	19	7	105	0.430	59.77	13.31	5.14
RAU-13-33-02	6.5	< 4	< 50	67	125	54	12.9	1.5	< 0.5	4.5	0.51	20.1	< 0.2	< 0.5	23	215	2	15	8	101	0.020	62.75	16.57	5.72
RAU-13-34-12	< 0.5	< 4	< 50	21	42	< 5	2.3	0.3	< 0.5	< 0.2	< 0.05	30.6	< 0.2	< 0.5	4	178	< 2	1	< 2	19	0.002	69.99	15.20	1.77
RAU-13-35-17	4.1	< 4	< 50	32	54	18	5.7	1.2	< 0.5	3.0	0.25	31.4	< 0.2	< 0.5	18	428	< 2	17	10	72	0.002	66.68	13.84	5.90
RAU-13-38-12	5.1	< 4	< 50	29	48	14	3.0	< 0.2	< 0.5	1.4	0.15	29.3	< 0.2	< 0.5	< 1	245	< 2	< 1	7	23	< 0.001	73.30	13.73	1.42
RAU-13-39-20	< 0.5	< 4	< 50	29	53	20	7.2	1.8	< 0.5	2.0	0.18	30.7	< 0.2	< 0.5	73	653	< 2	21	4	72	0.001	51.04	16.37	10.40
RAU-13-40-02	4.1	< 4	< 50	27	38	14	4.2	< 0.2	< 0.5	1.6	0.08	30.1	< 0.2	< 0.5	25	622	< 2	18	3	67	0.002	59.87	16.01	6.51
RAU-13-41-20	2.4	< 4	< 50	31	53	17	3.8	< 0.2	< 0.5	0.8	0.10	33.5	< 0.2	< 0.5	6	613	< 2	2	6	24	0.002	72.92	14.26	2.10
RAU-13-43-03	5.0	< 4	150	41	68	27	7.7	2.0	< 0.5	3.5	0.31	32.9	< 0.2	< 0.5	58	1210	< 2	3	22	105	0.002	58.92	18.00	5.88
RAU-13-44-04	3.6	< 4	< 50	26	38	23	4.2	1.2	< 0.5	1.5	0.09	30.2	< 0.2	< 0.5	19	631	< 2	20	6	60	0.004	62.45	15.31	5.04
RAU-13-45-04	1.6	< 4	80	22	34	23	3.5	0.8	< 0.5	1.5	0.09	29.1	< 0.2	< 0.5	19	565	< 2	11	3	52	0.026	59.89	16.64	5.99
RAU-13-46-10	5.8	< 4	< 50	22	30	< 5	2.3	< 0.2	< 0.5	1.3	0.18	25.9	< 0.2	< 0.5	2	348	< 2	< 1	15	231	< 0.001	75.22	13.22	1.29
RAU-13-47-09	< 0.5	< 4	< 50	17	26	17	4.5	1.1	< 0.5	1.9	0.05	33.8	< 0.2	< 0.5	119	919	< 2	156	< 2	60	0.058	45.69	14.76	9.67
RAU-13-48-12	< 0.5	< 4	< 50	26	42	24	5.1	1.1	< 0.5	2.0	0.22	28.6	< 0.2	< 0.5	7	908	< 2	26	4	111	0.002	56.58	16.09	7.78
RAU-13-50-06	2.9	< 4	< 50	19	33	21	4.6	0.9	< 0.5	2.1	0.19	31.1	< 0.2	< 0.5	134	812	< 2	44	< 2	59	0.002	47.04	17.36	10.50

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
RAU-13-01-23	0.072	2.47	4.32	3.73	2.66	0.99	0.40	0.02	0.022	4.49	99.33
RAU-13-02-21	0.049	1.22	4.80	4.12	2.83	1.00	0.43	0.02	0.024	3.62	100.7
RAU-13-03-14	0.085	2.26	3.51	3.45	3.18	1.03	0.46	0.10	0.025	5.22	99.77
RAU-13-04-06	0.110	3.25	5.91	3.48	2.34	1.09	0.46	0.01	0.030	2.44	99.82
RAU-13-06-02	0.228	7.00	10.38	1.98	2.64	0.90	0.53	0.04	0.060	0.74	100.4
RAU-13-07-18	0.207	2.89	6.86	2.60	4.08	0.89	0.64	< 0.01	0.038	3.73	100.8
RAU-13-08-27	0.090	1.93	3.73	2.22	3.74	0.79	0.37	0.01	0.044	5.67	100.2
RAU-13-09-14	0.216	3.92	7.28	2.41	4.69	0.86	0.58	0.01	0.047	1.97	100.6
RAU-13-11-11	0.790	1.10	1.15	1.12	2.16	0.94	0.16	0.01	0.021	10.48	100.6
RAU-13-12-09	0.160	6.12	8.73	3.46	1.34	3.61	0.70	0.02	0.045	-0.41	100.4
RAU-13-13-05	0.156	4.81	7.55	2.96	1.11	3.90	0.72	0.01	0.043	2.60	100.0
RAU-13-16-02	0.168	5.27	8.02	3.80	2.03	2.66	0.73	0.02	0.032	-0.38	99.52
RAU-13-17-03	0.151	4.93	7.66	3.09	1.85	2.60	0.67	0.03	0.032	4.09	99.77
RAU-13-18-05	0.076	1.64	3.32	3.35	3.29	0.65	0.26	< 0.01	0.014	4.02	99.71
RAU-13-19-06	0.219	2.23	6.06	1.98	3.19	0.76	0.55	0.01	0.044	6.85	99.50
RAU-13-20-10	0.165	2.49	5.79	2.47	2.77	0.97	0.43	0.01	0.026	3.46	99.52
RAU-13-25-04	0.038	1.08	2.81	4.09	3.81	0.39	0.14	0.01	0.007	0.58	100.3
RAU-13-26-08	0.028	0.55	1.84	1.30	4.91	0.23	0.06	< 0.01	< 0.003	5.66	100.4
RAU-13-27-04	0.044	1.55	3.34	4.09	3.55	0.52	0.20	< 0.01	0.013	0.58	100.4
RAU-13-28-05	0.034	1.06	2.91	4.10	3.73	0.40	0.16	< 0.01	0.009	0.48	100.5
RAU-13-29-05	0.039	1.02	3.36	4.37	3.75	0.37	0.15	0.02	0.008	0.53	100.2
RAU-13-30-05	0.032	0.79	2.90	4.23	3.90	0.32	0.12	0.02	0.008	0.22	99.95
RAU-13-31-04	0.075	0.75	1.02	1.37	1.77	0.92	0.08	0.01	0.017	8.91	100.2
RAU-13-32-04	0.098	0.83	1.23	1.36	1.34	0.66	0.10	0.01	0.017	15.85	99.71
RAU-13-33-02	0.041	0.92	1.49	1.95	2.12	0.61	0.07	< 0.01	0.012	7.73	99.99
RAU-13-34-12	0.024	0.28	1.73	3.92	4.84	0.21	0.06	0.01	0.004	0.28	98.32
RAU-13-35-17	0.061	0.87	1.73	2.41	2.43	0.95	0.12	0.02	0.017	4.41	99.43
RAU-13-38-12	0.027	0.34	0.39	3.20	4.85	0.22	0.04	< 0.01	< 0.003	1.74	99.25
RAU-13-39-20	0.185	4.47	8.86	2.71	3.00	0.88	0.51	0.02	0.050	1.36	99.87
RAU-13-40-02	0.081	2.74	4.34	3.02	2.37	0.83	0.32	0.02	0.022	4.05	100.2
RAU-13-41-20	0.067	0.30	1.32	3.05	5.38	0.22	0.04	< 0.01	0.003	0.58	100.2
RAU-13-43-03	0.197	1.11	4.47	4.29	5.50	0.71	0.31	0.01	0.016	1.05	100.5
RAU-13-44-04	0.077	2.46	3.27	2.90	3.42	0.68	0.24	0.02	0.018	4.66	100.5
RAU-13-45-04	0.083	1.63	3.28	3.19	3.68	0.88	0.34	< 0.01	0.023	3.87	99.50
RAU-13-46-10	0.038	0.21	0.21	2.69	5.03	0.14	0.02	< 0.01	< 0.003	1.28	99.35
RAU-13-47-09	0.155	8.59	9.33	1.82	1.96	0.82	0.45	0.12	0.048	6.78	100.2
RAU-13-48-12	0.117	2.70	3.71	3.41	3.12	1.09	0.41	0.03	0.027	4.58	99.64
RAU-13-50-06	0.134	6.19	8.75	2.06	2.03	0.97	0.45	0.02	0.053	4.16	99.71

Quality Control

Analyte Symbol	Au	Ag	As	Ba	Br	Ca	Co	Cr	Cs	Fe	Hf	Hg	Ir	Mo	Na	Ni	Rb	Sb	Sc	Se	Sn	Sr	Ta	Th
Unit Symbol	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm
Detection Limit	5	5	2	100	1	1	5	10	2	0.02	1	1	5	5	0.05	50	30	0.2	0.1	5	0.05	0.1	1	0.5
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas																								
GXR-1 Cert																								
MICA-FE Meas																								
MICA-FE Cert																								
GXR-4 Meas																								
GXR-4 Cert																								
AN-G Meas																								
AN-G Cert																								
GXR-6 Meas																								
GXR-6 Cert																								
BE-N Meas																								
BE-N Cert																								
AC-E Meas																								
AC-E Cert																								
BIR-1a Meas																								
BIR-1a Cert																								
SAR-M (U.S.G.S.) Meas																								
SAR-M (U.S.G.S.) Cert																								
DMMAS 115 Meas	1730		584	1600			20	100		2.86					1.95			4.6	7.4					
DMMAS 115 Cert	1720		527	1210			21.0	100		2.64					1.92			5.50	7.30					
RAU-13-06-02 Orig																								
RAU-13-06-02 Dup																								
RAU-13-07-18 Orig																								
RAU-13-07-18 Dup																								
RAU-13-38-12 Orig																								
RAU-13-38-12 Dup																								
RAU-13-40-02 Orig																								
RAU-13-40-02 Dup																								
RAU-13-50-06 Orig																								
RAU-13-50-06 Dup																								
Method Blank	< 5	< 5	< 2	< 100	< 1	< 1	< 5	< 10	< 2	< 0.02	< 1	< 1	< 5	< 5	< 0.05	< 50	< 30	< 0.2	< 0.1	< 5	< 0.05	< 0.1	< 1	< 0.5
Method Blank																								
Method Blank																								

Quality Control

Analyte Symbol	U	W	Zn	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Mass	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	S	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Detection Limit	0.5	4	50	1	3	5	0.1	0.2	0.5	0.2	0.05		0.2	0.5	1	2	2	1	2	1	0.001	0.01	0.01	0.01
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-XRF	FUS-XRF	FUS-XRF
GXR-1 Meas													26.8	2.5	1090	764	14	31	593	689	0.180			
GXR-1 Cert													31.0	3.30	1110	852	18.0	41.0	730	760	0.257			
MICA-FE Meas																						34.36	19.40	25.88
MICA-FE Cert																						34.4	19.5	25.6
GXR-4 Meas													3.4	< 0.5	6280	142	332	29	44	76	1.719			
GXR-4 Cert													4.00	0.860	6520	155	310	42.0	52.0	73.0	1.77			
AN-G Meas																						46.04	29.53	3.33
AN-G Cert																						46.30	29.8	3.36
GXR-6 Meas													0.3	< 0.5	62	985	< 2	17	88	119	0.015			
GXR-6 Cert													1.30	1.00	66.0	1010	2.40	27.0	101	118	0.0160			
BE-N Meas																						38.86	10.56	13.20
BE-N Cert																						38.2	10.1	12.8
AC-E Meas																						71.44	15.32	2.58
AC-E Cert																						70.35	14.70	2.56
BIR-1a Meas																						47.56	15.54	11.61
BIR-1a Cert																						47.96	15.50	11.30
SAR-M (U.S.G.S.) Meas													3.2	5.2	333	4600	14	33	1070	1060				
SAR-M (U.S.G.S.) Cert													3.64	5.27	331	5220	13.1	41.5	982	930.0				
DMMAS 115 Meas	105			20	19		2.8																	
DMMAS 115 Cert	101			21.9	40.0		3.10																	
RAU-13-06-02 Orig													< 0.2	< 0.5	217	732	< 2	48	3	68	0.004			
RAU-13-06-02 Dup													< 0.2	< 0.5	218	739	< 2	48	3	69	0.004			
RAU-13-07-18 Orig													< 0.2	< 0.5	94	1120	< 2	5	6	107	0.003			
RAU-13-07-18 Dup													< 0.2	< 0.5	92	1120	< 2	5	5	106	0.002			
RAU-13-38-12 Orig													< 0.2	< 0.5	2	243	< 2	< 1	7	23	< 0.001			
RAU-13-38-12 Dup													< 0.2	< 0.5	< 1	247	< 2	< 1	7	23	< 0.001			
RAU-13-40-02 Orig																						59.77	15.95	6.49
RAU-13-40-02 Dup																						59.97	16.08	6.53
RAU-13-50-06 Orig																						47.13	17.40	10.52
RAU-13-50-06 Dup																						46.96	17.32	10.47
Method Blank	< 0.5	< 4	< 50	< 1	< 3	< 5	< 0.1	< 0.2	< 0.5	< 0.2	< 0.05	30.0												
Method Blank													< 0.2	< 0.5	< 1	< 2	< 2	< 1	< 2	< 1	< 0.001			
Method Blank																						< 0.01	< 0.01	< 0.01

Quality Control

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Cr2O3	V2O5	LOI	Total
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003		0.01
Analysis Method	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF
GXR-1 Meas											
GXR-1 Cert											
MICA-FE Meas	0.351	4.64	0.42	0.28	8.68	2.52	0.42	0.01	0.023		
MICA-FE Cert	0.350	4.55	0.430	0.300	8.75	2.50	0.450	0.01	0.024		
GXR-4 Meas											
GXR-4 Cert											
AN-G Meas	0.043	1.82	15.94	1.68	0.15	0.23	0.01	0.01	0.013		
AN-G Cert	0.040	1.79	15.90	1.63	0.13	0.22	0.01	0.01	0.012		
GXR-6 Meas											
GXR-6 Cert											
BE-N Meas	0.201	13.23	14.11	3.36	1.37	2.73	1.07	0.05	0.042		
BE-N Cert	0.200	13.1	13.9	3.18	1.39	2.61	1.05	0.0500	0.042		
AC-E Meas	0.056	0.03	0.37	6.74	4.52	0.11					
AC-E Cert	0.058	0.03	0.34	6.54	4.49	0.11					
BIR-1a Meas	0.173	9.69	13.38	1.83	0.04	0.98					
BIR-1a Cert	0.175	9.700	13.30	1.82	0.030	0.96					
SAR-M (U.S.G.S.) Meas											
SAR-M (U.S.G.S.) Cert											
DMMAS 115 Meas											
DMMAS 115 Cert											
RAU-13-06-02 Orig											
RAU-13-06-02 Dup											
RAU-13-07-18 Orig											
RAU-13-07-18 Dup											
RAU-13-38-12 Orig											
RAU-13-38-12 Dup											
RAU-13-40-02 Orig	0.081	2.74	4.34	3.00	2.37	0.82	0.32	0.02	0.022	4.05	99.97
RAU-13-40-02 Dup	0.080	2.74	4.35	3.04	2.38	0.83	0.32	0.02	0.022	4.05	100.4
RAU-13-50-06 Orig	0.135	6.21	8.74	2.07	2.03	0.97	0.45	0.02	0.053	4.17	99.90
RAU-13-50-06 Dup	0.134	6.17	8.76	2.06	2.02	0.96	0.45	0.02	0.052	4.15	99.52
Method Blank											
Method Blank											
Method Blank	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003		