BC Geological Survey
Assessment Report
40393

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Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: GEOCHEMICAL, GEOLOGICAL

TOTAL COST: $8,145.80

AUTHOR(S): A. Kikauka, P Geo

SIGNATURE(S): A. Kikauka

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

YEAR OF WORK: 2022

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5937338

PROPERTY NAME: Marysville

CLAIM NAME(S) (on which the work was done): 1033194, 1095455, 1095507

COMMODITIES SOUGHT: Magnesite

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 082GNW005

MINING DIVISION: Fort Steele

NTS/BCGS: 082G 12/W, 082G.051

LATITUDE: 49 ° 34 '40 " **LONGITUDE:** 115 ° 58 '33 " (at centre of work)

OWNER(S):
1) MGX Minerals Inc
2) Jared Lazerson

MAILING ADDRESS:
500-666 Burrard St,
Vancouver, BC V6C 2X8

3689 Angus Dr
Vancouver, BC V6J 4H6

OPERATOR(S) [who paid for the work]:
1) same
2)

MAILING ADDRESS:
same

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Lower Cambrian Cranbrook Fm quartzite, with minor dolomite, siltstone quartz arenite form fining up sequence 260 meters thick stratabound magnesite lenses 10-15 meters thick (sedimentary platform carbonate deposition recrystallized by a burial process) identified stratbound magnesite layers and lenses strike north-northeast and dipping steeply northwest. Dominant structures are steeply dipping, NE trending strata and sub-vertically oriented late-stage, cross faults generally striking northwest

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 35436, 36175, 36596, 37598, 38602

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TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	1:5,000 14 hectares	1033194, 1095456, 1095507	2,455.75
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil	[illegible] Hydrocarbon analysis Actlabs compounds in the [illegible]		
Silt			
Rock	12 ALS ME-XRF 26	1033194, 1095456, 1095507	4,699.55
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic	1 sample	1095507	990.50
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$8,145.80

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Mineral Claim Exploration and Development Work/Expiry Date Change

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Recorder: KIKAUKA, ANDRIS ARTURS (114051) **Submitter:** KIKAUKA, ANDRIS ARTURS (114051)
Recorded: 2022/MAY/24 **Effective:** 2022/MAY/24
D/E Date: 2022/MAY/24

Confirmation

If you have not yet submitted your report for this work program, your technical work report is due in 90 days. The Exploration and Development Work/Expiry Date Change event number is required with your report submission. **Please attach a copy of this confirmation page to your report.** Contact Mineral Titles Branch for more information.

Event Number: **5937338**

Work Type: Technical Work
Technical Items: Geochemical, Geological, PAC Withdrawal (up to 30% of technical work required)

Work Start Date: 2022/MAY/07
Work Stop Date: 2022/MAY/11
Total Value of Work: $ 8145.80
Mine Permit No:

Summary of the work value:

Title Number	Claim Name	Issue Date	Good To Date	New Good To Date	# of Days For-ward	Area in Ha	Applied Work Value	Sub-mission Fee
1033194	MAG 1	2015/JAN/07	2021/MAR/02	2024/NOV/20	1359	125.68	$ 8817.24	$ 0.00
1033236	MARYSVILLE MAGNESIUM	2015/JAN/08	2021/MAR/02	2024/NOV/20	1359	20.95	$ 1469.35	$ 0.00
1095455	MARY 1	2022/MAY/02	2023/MAY/02	2024/NOV/20	568	41.89	$ 325.39	$ 0.00
1095456	MARY 2	2022/MAY/02	2023/MAY/02	2024/NOV/20	568	20.94	$ 162.66	$ 0.00
1095507	MAG 2	2022/MAY/06	2022/OCT/01	2024/NOV/20	781	62.83	$ 841.78	$ 0.00

Financial Summary:

Total applied work value: $ 11616.42

PAC name: Andris Arturs Kikauka
Debited PAC amount: $ 3470.62
Credited PAC amount: $ 0

Total Submission Fees: $ 0.0

Total Paid: **$ 0.0**

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NTS 082G 12/W, TRIM 082G.051

LAT. 49 34' 40" N

LONG. 115 58’ 33" W

GEOCHEMICAL, GEOLOGICAL

REPORT ON

MARYSVILLE MINERAL PROPERTY

MAGNESITE MINERAL OCCURRENCES

PERRY CREEK

MARYSVILLE, BC

Ft Steele Mining Division

by

Andris Kikauka, P.Geo.

4199 Highway 101,

Powell River, BC V8A 0C7

June 25, 2022

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LIST OF FIGURES

SUMMARY

Marysville magnesite occurrences are located about 7 km (4.5 miles) south-southwest of Marysville, BC and approximately 12 km (7.7 miles) south of Kimberly, BC (Fig 1, 2A, 2B). The Marysville MTO tenures (1033194, 1033236, 1095455, 1095456, 1095507) cover a total area of approximately 272.29 hectares (672.56 acres). The Marysville sediment hosted magnesite occurs as coarse crystalline stratabound layer that trends north-northeast, dip 50 to 80 degrees northwest, and average approximately 15 meters width (up to 50 m width including interbedded magnesite, quartzite & phyllite layers, phyllite described as weakly metamorphosed siltstone and quartzite as weakly metamorphosed impure sandstone), and individual magnesite lenses vary from 60-600 meter strike length (including minor fault offsets in the order of 5-75 meters). Stratabound magnesite forms a combined strike length of approximately 2,200 meters along a total strike length of 6,000 meters. Magnesite is hosted in the upper more calcareous Members of Lower Cambrian Cranbrook Formation quartzite (with minor interlayered phyllitic meta-siltstone).

The magnesite beds in the Central Zone (where 2019 & 2022 rock chip sampling was done) contain variable amounts of quartz (rock chip samples range 2.13-16.5% SiO_2). Other impurities include trace amounts of serpentine and talc, as well as between 0.5-3.52% CaO and 0.4-1% Al_2O_3. Fe_2O_3 values average 1.1 %. Quartz present in the magnesite was probably deposited in the Cambrian(?) as chert and re-crystallized during Cretaceous(?) deep burial low-grade regional metamorphism resulting in textures that include milky-white micro-veinlet quartz sweats, patches and bands of clear, glassy recrystallized chert. Silica can be removed from magnesite by flotation/gravity methods used for processing. CaO content > 1% approaches dolomitic magnesite can be avoided by field XRF testing because >1 % CaO (dolomitic magnesite) can contaminate MgO production from raw magnesite.

The writer performed fieldwork consisting of geochemical sampling and geological mapping on MTO claims 1033194, 1095455, 1095507 that are part of Marysville magnesite mineral property. Fieldwork was carried out May, 2022. Technical work is recorded in this assessment report, and reported as Statement of Work MEM Event number 5937338. Geochemical sampling was carried out on exposed surface bedrock located in close proximity to historic mapped lenses of magnesite. A total of 12 rock chip samples (22MA-1 to 12) were collected from 0.5 meter intervals from outcrop (5 samples from subcrop). A rock chip sample located from outcrop ID 22-MARY-1 (petrographic sample taken near rock sample 22MA-5) for petrographic description, sent to Vancouver Petrographics Ltd, Langley, BC for standard thin section, K-feldspar staining, and description by Dr Craig Leitch (Appendix B). Rock chip samples were analyzed by ALS Minerals, North Vancouver, BC, using Li Borate fusion, whole rock analysis ME-XRF-06 (XRF26). Fieldwork was carried out in order to test the mineralization present on the Central Zone. 2022 fieldwork geological descriptions and geochemical analysis results (Appendix A) from the Marysville Central Zone are listed as follows:

ID No.	Easting	Northing	Elev m	type	width	lithology (host rock)
22MA-1	575016	5494104	1316	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-2	575007	5494073	1314	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-3	574999	5494034	1318	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-4	574957	5493981	1339	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-5	574947	5493907	1347	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-6	574936	5493853	1351	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-7	574915	5493814	1357	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-8	574898	5493702	1356	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-9	574873	5493647	1341	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-10	574837	5493568	1338	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-11	574617	5493199	1377	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-12	574579	5493132	1380	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
petro ID						
22MARY-1	574954	5493935	1351	outcrop	12 cm	quartzite, calcareous siltstone, dolomitic phyllite

ID No.	alteration	mineralization	strike	dip
22MA-1	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-2	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-3	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-4	interstitial quartz, Mg-chlorite	sparry magnesite	29	64 NW
22MA-5	interstitial quartz, Mg-chlorite	sparry magnesite	30	63 NW
22MA-6	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-7	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-8	interstitial quartz, Mg-chlorite	sparry magnesite	28	61 NW
22MA-9	interstitial quartz, Mg-chlorite	sparry magnesite	29	63 NW
22MA-10	interstitial quartz, Mg-chlorite	sparry magnesite	28	65 NW
22MA-11	interstitial quartz, Mg-chlorite	sparry magnesite	30	62 NW
22MA-12	interstitial quartz, Mg-chlorite	sparry magnesite	32	62 NW
petro ID				
22MARY-1	interstitial quartz, Mg-chlorite	sparry magnesite	29	65 NW

ID No.	Al2O3%	CaO%	Fe2O3%	K2O%	MgO%	P2O5%	SO3%	SiO2%	Total%	LOI%	MgO%/Total%
22MA-1	**0.47**	**0.48**	**1.23**	**0.01**	**45.7**	**0.04**	**0.03**	**2.46**	**100.2**	**49.74**	**45.6**
22MA-2	**0.56**	**0.74**	**1.6**	**0.01**	**45**	**0.06**	**<0.01**	**2.13**	**100.05**	**49.89**	**44.98**
22MA-3	**0.56**	**0.72**	**0.81**	**0.09**	**43.8**	**0.01**	**<0.01**	**6.95**	**100.15**	**47.17**	**43.74**
22MA-4	**0.46**	**0.7**	**1.13**	**0.01**	**45.2**	**0.06**	**<0.01**	**4.31**	**100.2**	**48.27**	**45.1**
22MA-5	**0.37**	**1.11**	**1.16**	**<0.01**	**44.2**	**0.03**	**<0.01**	**6.12**	**100.25**	**47.23**	**44.09**
22MA-6	**0.19**	**1.38**	**0.98**	**<0.01**	**44**	**0.02**	**<0.01**	**6.22**	**100.35**	**47.52**	**43.85**
22MA-7	**0.63**	**0.78**	**0.95**	**0.01**	**44.4**	**0.07**	**<0.01**	**4.51**	**100.1**	**48.71**	**44.36**
22MA-8	**0.42**	**3.52**	**1.11**	**0.05**	**42.2**	**0.03**	**<0.01**	**4.02**	**100.1**	**48.7**	**42.16**
22MA-9	**0.7**	**0.79**	**1.33**	**<0.01**	**44.7**	**0.06**	**<0.01**	**3.74**	**100.15**	**48.75**	**44.63**
22MA-10	**0.44**	**1.01**	**0.96**	**<0.01**	**43.4**	**0.1**	**<0.01**	**7.14**	**100.25**	**47.16**	**43.29**
22MA-11	**0.74**	**0.98**	**1.51**	**<0.01**	**44.7**	**0.06**	**<0.01**	**3.19**	**100.25**	**49.01**	**44.59**
22MA-12	**0.45**	**0.8**	**1.11**	**0.01**	**43.4**	**0.04**	**<0.01**	**7.66**	**100.3**	**46.8**	**43.27**
Average	0.499	1.08	1.156		44.225			4.871	100.2	48.25	44.138

The relatively high MgO content (average 44.1% MgO%/Total%) in samples 22MA-1 to 12 in combination with average 4.9% SiO2 (2.13-7.14%) content suggests the Central Zone magnesite compares favourably with other magnesite producers such as Baymag property near Radium Hot Springs, BC (NOTE: pure magnesite is about 47.6% MgO, and most BC magnesite deposits range from 90-95% MgCO3). Impurity compounds of interest (Al2O3, CaO) approach specifications required for producing deadburn, calcined and fused magnesia. The relatively high SiO2 and Fe2O3, may require beneficiation in order to remove iron-bearing mineral impurities (e.g. siderite), and silica in the form of re-crystallized chert (which is a hydrated form of quartz). Based on the range of %MgO and impurities Al2O3, SiO2, CaO, Fe2O3, core drilling from 7 locations of the Marysville magnesite Central Zone is recommended in order to test the extent and purity of the Marysville magnesite (Fig 6). Further work suggested involves metallurgical testing for suitability for use as a raw material for refractories in the steel industry as well as other industrial end uses such as agricultural, fire retardant, and/or specialized moisture/mold resistant filler, MgCl (road salt). The magnesite member of the Cranbrook Formation quartzite is extensive throughout the local area as lenses along a 6 kilometer strike length. In the southern portion of Marysville magnesite there appears to be NNE trending, steeply west dipping layer approximately 1,000 meters in strike length, averaging approximately 15 meters width of magnesite mineralization that represents a significant drill target, especially where the widest magnesite zones are located. The Central Zone represents similar geological setting as the South Zone. Lithologies present on the property consist of the following:

UPPER PROTEROZOIC TO LOWER CAMBRIAN EAGER FM
7 QUARTZITE, MINOR CALCAREOUS SILTSTONE
UPPER PROTEROZOIC TO LOWER CAMBRIAN CRANBROOK FM
6 MAGNESITE BAND (15-20 m WIDE), SPARRY COARSE GRAINED
TAN WEATHERING, UPPER BAND DOLOMITIC PHYLLITE
5 IMPURE QUARTZITE, CALCAREOUS LENSES, MINOR MAGNESITE
4 QUARTZITE, MINOR CALCAREOUS PHYLLITE
3 QUARTZITE, MINOR PHYLLITE
PROTEROZOIC HELIKIAN PURCELL SUPERGRPOUP
2 GABBRO, BASALT, DIORITE SILL
1 STROMATOLITIC DOLOMITE, CALCAREOUS SILTSTONE, ARGILLITE

Geological mapping of the Cranbrook Formation suggests the magnesite is stratabound along the upper 40 meters thickness of the section where the Cranbrrok Formation forms an uncorformable erosion surface with the Eager Formation metasediments to the east. The Cranbrook Formation lithology is mainly quartzite, quartz arenite, with minor interlayered phyllite (after siltstone), and magnesite (after dolomite). The magnesite is localized in the upper layers of Cranbrook Formation stratigraphy, with a minor calcareous magnesite layer approximately 80-100 meters from the upper magnesite horizon (Fig 5, 7).

A sample (ID 22MARY1) from an outcrop near the center of the Marysville central zone magnesite was described by Vancouver Petrographics Ltd (Langley, BC). A solid and competent 5 X 8 X 15 cm sized rock sample was taken from outcrop and submitted for petrographic description (ID: 22MARY1). The sample contains very coarse grain, sparry magnesite with sub-rounded inclusions of quartz, locally mixed with Mg-chlorite (Appendix B). Quartz in this sample exhibits sub-rounded inclusions as interstitial impurities suggesting a detrital origin. The coarse grain sparry magnesite has localized recrystallization (possibly during the Cretaceous Laramide orogeny), that occurs as finer grain magnesite along poorly defined veinlets.

MGX is planning further evaluation of commercial applications for Marysville magnesite as well as geochemical analysis of rock samples and diamond drill core in order to determine grade and distribution of Marysville magnesite mineralization. A drill program is considered for the central zone consisting of 7 drill sites, all holes directed 120 degrees (azimuth), dip -48 dgerees, depth 120 meters/hole, total depth proposed 840 meters (Fig 6).

1.0 Introduction

This technical report has been prepared on behalf of MGX Minerals Inc, and describes property history and recent geological and geochemical fieldwork done on the Marysville Magnesite mineral. This report is prepared to comply with BC Ministry of Energy and Mines Mineral Act requirements for filing assessment reports.

2.0 Location, Access, Infrastructure, & Physiography

The Marysville Magnesite property consists of 5 contiguous MTO tenures that are located approximately12 km (7.7 miles) south of Kimberly, BC (Fig 1, 2). The property is located on NTS map sheet 082G/12W and on TRIM map sheet 082G.051 in the Fort Steele Mining

Division of southern British Columbia, Canada (Figure 2). The Marysville Magnesite occurrences are located near latitude 49°34' 40” N and longitude 115°58' 33” W. The property covers a north to northeast trending ridge forming quartzite with lenses of relatively pure magnesite, located approximately 1-6 km northwest of Perry Creek. Near Antwerp Creek canyon topography is steep, and N to NE trending cliffs less than 7 m (23 ft) high occur in the vicinity of a NNE trending, sub-vertical dipping major fault. Elevations on the claim block range from 1,000 to 1,550 meters (3,280-5,084 feet).

The Marysville magnesite property can be accessed using Perry Creek FSR, which is connected to paved Interprovincial Highway 95A located east of the property. There is good infrastructure in the form of paved highways, a CPR spur line and a major power line all of which are within 10 kilometres of the property. Marysville magnesite deposit is partly exposed on surface, as a series of NNE trending outcrops. A series of northwest trending, cross-cutting faults has resulted in some small scale dextral offsets (in the order of 5-75 meters) of geologic contacts.

Vegetation on the property consists mainly of Lodgepole Pine with lesser Douglas Fir and Western Yellow Larch, with minor birch and aspen. The nearest towns are Marysville, Cranbrook and Kimberly on Highway 95A. Both Kimberly and Cranbrook have suitable infrastructure to support mining and mineral processing.

3.0 Property Status

The Marysville magnesite claim consists of seven (7) contiguous mineral tenures (listed below) located within the Fort Steele Mining Division (Figure 2).

Tenure number	Claim Name	Issue Date	Good To Date	Area in hectares
1033194	Mag 1	2015/jan/07	2024/NOV/20	125.68
1033236	Marysville Magnesium	2015/jan/08	2024/NOV/20	20.95
1095455	MARY 1	2022/may/02	2024/NOV/20	62.83
1095456	MARY 2	2022/may/02	2024/NOV/20	83.77
1095507	MAG 2	2022/may/06	2024/NOV/20	41.88

The total area of the mineral tenures that comprise the property is 272.29 hectares (672.56 acres). Details of the status of tenure ownership for the Marysville Magnesite property were obtained from the Mineral-Titles-Online (MTO) electronic staking system managed by the Mineral Titles Branch of the Province of British Columbia. This system is based on mineral tenures acquired electronically online using a grid cell selection system. Tenure boundaries are based on lines of latitude and longitude. There is no requirement to mark claim boundaries on the ground as these can be determined with reasonable accuracy using a GPS. The Marysville magnesite claim has not been surveyed.

The mineral tenures comprising the Marysville Magnesite mineral property are shown in Figure 2A, & 2B. The claim map shown in Figures 2A & 2B was generated from GIS spatial data downloaded from the Government of BC GeoBC website. These spatial layers are the same as those incorporated into the Mineral-Titles-Online (MTO) electronic staking system that is used to locate and record mineral tenures in British Columbia. Information posted on the MTO website indicates that mineral tenures 1033194, 1095455, 1095456, and 1095507 are owned 100% by MGX Minerals Inc, and mineral tenures 1033236 are owned 100% by Jared Lazerson (on behalf of MGX Minerals Inc).

4.0 Marysville Magnesite Property History

In 1932 the GSC announced the discovery of coarse crystalline magnesite in the area between Perry Creek and St Marys River. Cominco acquired the property and subsequent mapping and sampling (including a 2,700 tonne bulk sample shipped to Trail, BC) was carried out. Cominco held the mineral title for Marysville magnesite for several decades and did not file any assessment reports so there are public access documents for work done by Cominco on the property. A map published in EMPR Annual Report 1964 (pg 187) suggests that Cominco performed considerable stripping and trenching at the north end of the magnesite zone, at an elevation of 4,060 to 4,120 feet (1,237.5 to 1,255.8 m) for a length of about 500 feet (152.4 m) across widths of 50-60 feet (15.24-18.3 m). The main excavation where Cominco removed 2,700 tonnes came from a NE trending pit that is about 160 ft long and 50 ft wide. A total of 4 diamond drill holes appear to have been drilled 50-150 meters west of the trenches. Cominco did not pursue commercial production and the claims eventually lapsed.

The Marysville magnesite property was acquired by Magna Precious and Industrial Minerals Inc and in 2000 the property was optioned by Stralak Res Inc. It was announced that the main purpose of the property acquisition was for the production of magnesium chloride, considered to be suitable for the replacement of road salt with magnesium chloride. Stralak Res did not file any assessment work.

In 2008, D Fredlund performed prospecting on 125 hectares and filed an assessment report (AR 30,075). One sample was reported taken from the north portion of the claims and was analyzed by ALS Minerals and returned values of 41.9% MgO, 7.39% SiO2, 0.39% Al2O3, 1.48% Fe2O3, 0.36% CaO. Conclusions of work done indicated that further work is recommended. The claims were allowed to lapse and MGX Minerals Inc has acquired the south portion of the Marysville magnesite zone.

In 2015, MGX Minerals Inc performed sampling and mapping in the north and central area of the property (fieldwork in 2017 focused on the south extension). Results from the 2015 rock chip samples are listed as follows:

SAMPLE DESCRIPTION	Al2O3 %	BaO %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SO3 %	SiO2 %	TiO2 %	Total %	LOI 1000 %
MARY-15-AR-1	0.47	0.02	1.02	1.04	0.04	40.7	0.03	0.07	0.11	0.01	11.63	0.03	100.45	45.28
MARY-15-AR-2	0.88	0.02	0.94	0.67	0.06	44.8	0.01	0.07	0.14	0.02	3.53	0.04	100.35	49.14
MARY-15-AR-3	0.67	0.01	0.56	1.8	0.03	44.3	0.03	0.07	0.08	<0.01	2.91	0.03	100.1	49.58
MARY-15-AR-4	1.1	0.01	0.62	0.81	0.19	44.9	0.01	0.09	0.08	<0.01	3.2	0.06	100.5	49.42
MARY-15-AR-5	0.6	0.01	0.56	0.92	0.06	45	0.02	0.07	0.08	0.01	2.7	0.02	100.05	49.99
MARY-15-AR-6	1.03	0.01	1.01	1.07	0.04	42.7	0.02	0.06	0.19	<0.01	6.9	0.04	100.2	47.1

In 2017, MGX Minerals Inc carried out geochemical rock sampling of the South Zone (near Antwerp Creek canyon), and the following list details location and whole rock geochemical analysis of rock chips from magnesite outcrop and float. Results from Marysville South Zone are listed as follows:

Sample ID	Zone name	Easting NAD 83	Northing NAD 83	Elev (m)	Type
17Mary-1	Main Zone South	573564	5490871	1160	outcrop
17Mary-2	Main Zone South	573584	5491625	1183	outcrop
17Mary-3	Main Zone South	573615	5490639	1188	outcrop
17Mary-4	Main Zone South	573697	5491899	1241	outcrop
17Mary-5	Main Zone South	573723	5491938	1251	outcrop
17Mary-6	Main Zone South	573758	5491983	1276	outcrop
17Mary-7	Main Zone South	573295	5490521	1177	float
17Mary-8	Main Zone South	573184	5490743	1220	float

Sample ID	Al2O3%	CaO%	Fe2O3%	K2O%	MgO%	Na2O%	P2O5%	SO3%	SiO2%	TiO2%	Total%	LOI%
17Mary-1	0.65	0.61	2.12	0.05	42.4	0.14	0.11	<0.01	6.48	0.04	99.97	47.3
17Mary-2	0.65	0.54	2.43	0.06	43.8	0.14	0.11	<0.01	3.96	0.03	100.4	48.6
17Mary-3	0.81	0.95	0.53	0.24	45	0.15	0.06	<0.01	1.89	0.06	99.89	50.14
17Mary-4	0.7	0.57	0.88	0.13	45	0.15	0.03	<0.01	2.78	0.04	99.99	49.66
17Mary-5	1.29	0.8	0.47	0.03	44.2	0.14	0.04	<0.01	4.95	0.05	99.61	47.6
17Mary-6	1.08	0.87	0.66	0.07	45.8	0.15	0.08	<0.01	2.26	0.05	100.45	49.37
17Mary-7	0.96	0.99	0.84	0.02	44.3	0.15	0.09	0.01	5.93	0.05	100.05	46.66
17Mary-8	0.77	0.51	0.95	0.03	45	0.14	0.08	<0.01	3.05	0.05	99.72	49.1

In 2018 MGX Minerals Inc performed geochemical sampling of the south portion of Marysville Central Magnesite Zone. Geochemical analysis results from Marysville Central Zone are listed as follows:

Sample ID	Al2O3%	BaO%	CaO%	Fe2O3%	K2O%	MgO%	MnO%	Na2O%
18MA-1	1.12	<0.01	0.83	0.59	0.01	44.9	0.01	0.1
18MA-2	0.87	<0.01	1.06	0.48	0.21	41.9	0.01	0.1
18MA-3	0.83	<0.01	1.04	0.5	0.19	41.8	0.01	0.09
18MA-4	1.04	<0.01	1.42	0.82	0.01	43	0.01	0.09
18MA-5	1.01	<0.01	1.26	0.76	0.04	43.3	0.01	0.09
18MA-6	0.98	<0.01	1.16	0.79	0.01	43.8	0.01	0.09
18MA-7	0.87	<0.01	1.06	0.69	0.03	43.9	0.01	0.09
18MA-8	1	<0.01	1.22	0.81	0.02	42.6	0.01	0.09
average	0.96		1.13	0.68				

Sample ID	P2O5%	SO3%	SiO2%	TiO2%	Total%	LOI%	MgO%/Total%
18MA-1	0.07	0.02	2.98	0.04	99.6	48.93	45.08
18MA-2	0.12	0.02	8.39	0.05	99.53	46.32	42.1
18MA-3	0.11	0.01	8.48	0.06	99.44	46.32	42.04
18MA-4	0.44	0.02	5.58	0.04	99.53	47.06	43.2
18MA-5	0.33	0.01	5.31	0.05	99.64	47.47	43.46
18MA-6	0.26	0.02	4.41	0.04	99.52	47.95	44.01
18MA-7	0.15	0.02	3.93	0.04	99.42	48.63	44.16
18MA-8	0.32	0.02	6.31	0.04	99.36	46.92	42.87

5.0 Regional Geology

The Marysville Magnesite high purity magnesite deposit is hosted by Lower Cambrian age Cranbrook Formation, part of the Upper Proterozoic to Lower Cambrian Eager and Cranbrook Formations consisting of various lithologies including slate, siltstone, limestone, argillite, and magnesite. The magnesite layers occur in the upper part of the Cranbrook Formation. The Marysville Magnesite Creek deposit is classified as a stratabound magnesite deposit type that is most likely of a sedimentary origin as a platform carbonate deposition, and recrystallized by a burial process that has been subjected to Cretaceous (Laramide Orogeny)? low-grade regional metamorphism (200-300 degrees C, and 300-400 MPa pressure).

Lithological units in the area of Marysville Magnesite are described as follows:

Lithology Legend
Upper-Proterozoic-Lower Cambrian
H Eager Fm argillite, clastic sediments
G Cranbrook Formation magnesite
minor serpentine/talc
(upper portion of F quartzite)
F Cranbrook Formation quartzite, minor phyllite

Middle Proterozoic Purcell Supergroup
E Purcell lava (basalt, andesite)
D Purcell intrusive sills
C Siyeh Fm argillite, clastic sediments
B Kitchener Formation dolomite
A Creston Formation quartzite

Bedrock geology of the area surrounding Marysville Magnesite magnesite occurrence has been mapped by the Geological Survey of Canada (Memoir 76). A description of lithologies are listed as follows:

Creston Formation: The oldest rocks in the area consist of Middle Proterozoic light to dark green and grey phyllitic siltstone, siltstone and sericitic quartzite. General attitude of bedding is N to NNE and dip is steep to the east. The Creston Formation has a fault contact with Cambrian Eager Formation to the north.

Kitchener Formation: Middle Proterozoic Kitchener Formation consists of dolomite, argillaceous dolomite, calcareous argillite and argillite. The bedding strikes N to NE and dips are steep to the W and NW. Cleavage and dragfolds suggest that beds are overturned and on the east limb of a large scale anticline.

Siyeh Formation: Middle Proterozoic Siyeh Formation conformably overlies the Kitchener Formation . Siyeh lithologies include fine grained, light to dark coloured, buff thin-bedded striped argillite,

Cranbrook Formation: Lower Cambrian Cranbrook Formation contains mainly quartzite, with interlayered magnesite and siltstone near the top of the section. The quartzites are medium to coarse grained white, pink, pale-green or brown. Quartzite beds vary from massive to 2-4 feet (0.61-1.22 m) thick, to 2-4 inches (5-10 cm) thick and cross-bedding is frequently preserved.

Eager Formation: The Lower Cambrian Eager Formation consists of argillite, argillaceous siltstone, minor schist, quartzite, and dolomite. The argillite is dark to light green and black slaty rocks that form thin bedded, well developed flow cleavage, and closely spaced fracture cleavage nearly parallel to bedding.

The Marysville magnesite occurrence is hosted in the upper member of the Lower Cambrian Cranbrook Formation. The magnesite member outcrops over widths of up to 75 meters wide (that includes interbedded quartzite and siltstone) near the east flank of the north- northeast trending ridge. Bedding is interpreted as compositional layering and not metamorphic banding/cleavage. Metamorphic grade is low (greenschist facies) and it is possible to identify compositional layering. The bedding in the magnesite zone trends NNE and dips steeply ENE. A series of NW trending (dextral offset 5-75 m) faults are roughly perpendicular to the magnesite beds.

Generally, magnesite deposits display the following geological features:
Depositional environment/Geological setting: The host sediments are deposited in a shallow marine environment adjacent to paleobathymetric highs or a lacustrine evaporitic environment.

Deposit form: Commonly strata, lenses or rarely irregular masses, typically few hundred metres to several kilometres in strike length. Shortest dimension of the orebody (metres to tens of metres) is commonly normal to the bedding planes.
Gangue mineralogy (Principal and subordinate): Dolomite ± quartz ± chert ± talc ± chlorite ± sulphides ± sulphosalts, ± calcite, ± mica, ± palygorskite, ± aragonite, ± clay (as veinlets), organic material. In highly metamorphosed terrains, metamorphic minerals derived from above precursors will be present.
Alteration mineralogy: Talc may form on quartz-magnesite boundaries due to low temperature metamorphism.
Ore controls: Deposits are stratabound, commonly associated with unconformities. They are typically located in basins characterized by shallow marine depositional environments. Lenses may be located at various stratigraphic levels within magnesite-hosting formation.
In British Columbia the diagenetic recrystalization theory may best explain the stratigraphic association with gypsum and halite casts, correlation with paleotopographic highs and unconformities, and shallow marine depositional features of the deposits.
End uses: Magnesite is used to produce magnesium metal and caustic, dead-burned and fused magnesia. Caustic magnesia, and derived tertiary products are used in chemical and industrial applications, construction, animal foodstuffs and environmental rehabilitation. Fused and deadburned magnesia are used in high-performance refractories. Magnesium metal has wide range of end uses, mostly in the aerospace and automotive industries. The automotive market for magnesium metal is expected to expand rapidly with current efforts to reduce the weight of vehicles to improve fuel economy and reduce harmful emissions.

6.0 2022 Field Program

6.1 Scope & Purpose

2022 geochemical sampling and geological mapping was carried out in order to evaluate mineral potential in a 350 X 1,200 m area (elongated north-northeast), located in the central portion of Marysville Magnesite property at 1,150-1,390 meters elevation. Magnesite is partly exposed as sub-crop and outcrop located approximately 7,000 meters west-southwest of Wycliffe (Fig 1, 2A). Previous geochemical rock chip sampling by MGX Minerals outlined areas of magnesite in the central zone, and due to favourable results from previous sampling and geological mapping of the central zone, the 2022 sampling was done on the central magnesite layer.

6.2 Methods and Procedures

A total of 12 rock chip samples (sample ID 22MA-1 to 12) were taken using rock hammer and moil. A total of 7 out 12 rock samples were taken across 0.5 meter intervals along exposures of bedrock, and 5 out 12 rock samples were collected from sub-crop in the Marysville central magnesite zones (Fig 4, 5). One rock chip sample was taken for petrographic description, and sent to Vancouver Petrographics Ltd (Langley, BC). Rock chip samples were taken with rock hammer and chisel and consist of acorn to walnut sized bedrock pieces for a total weight ranging from 1.0 to 1.5 kgs. Surveying of locations was assisted by Garmin 60Cx GPS receiver to an accuracy of 3-5 meters. Sample site descriptions were recorded and marked with flagging. Sample material was placed in marked poly ore bags and shipped to ALS Minerals, North Vancouver.

ALS Minerals crushed better than 70% passing a 2 mm screen split and pulverized rock chip samples. A split of 250 grams is pulverized to better than 85% passing a 75 micron screen. The sample pulp is analyzed using ALS Minerals ME-XRF-06 (XRF-26) Li borate flux major oxide whole rock geochemical analytical methods (Appendix A & B).

6.3 Property Geology & Mineralization

A total of 12 rock chip samples (22MA-1 to 12) were collected from 0.5 meter intervals from outcrop (5 samples were taken from subcrop). Rock chip samples were analyzed by ALS Minerals, North Vancouver, BC, using Li Borate fusion, whole rock analysis ME-XRF-06 (XRF26). Fieldwork was carried out in order to test the mineralization present on the Central Zone. 2022 fieldwork geological descriptions and geochemical analysis results (Appendix A) from the Marysville Central Zone are listed as follows:

ID No.	Easting	Northing	Elev m	type	width	lithology (host rock)
22MA-1	575016	5494104	1316	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-2	575007	5494073	1314	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-3	574999	5494034	1318	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-4	574957	5493981	1339	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-5	574947	5493907	1347	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-6	574936	5493853	1351	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-7	574915	5493814	1357	subcrop		quartzite, calcareous siltstone, dolomitic phyllite
22MA-8	574898	5493702	1356	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-9	574873	5493647	1341	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-10	574837	5493568	1338	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-11	574617	5493199	1377	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
22MA-12	574579	5493132	1380	outcrop	50 cm	quartzite, calcareous siltstone, dolomitic phyllite
petro ID						
22MARY-1	574954	5493935	1351	outcrop	12 cm	quartzite, calcareous siltstone, dolomitic phyllite

ID No.	alteration	mineralization	strike	dip
22MA-1	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-2	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-3	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-4	interstitial quartz, Mg-chlorite	sparry magnesite	29	64 NW
22MA-5	interstitial quartz, Mg-chlorite	sparry magnesite	30	63 NW
22MA-6	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-7	interstitial quartz, Mg-chlorite	sparry magnesite		
22MA-8	interstitial quartz, Mg-chlorite	sparry magnesite	28	61 NW
22MA-9	interstitial quartz, Mg-chlorite	sparry magnesite	29	63 NW
22MA-10	interstitial quartz, Mg-chlorite	sparry magnesite	28	65 NW

22MA-11	interstitial quartz, Mg-chlorite	sparry magnesite	30	62 NW
22MA-12	interstitial quartz, Mg-chlorite	sparry magnesite	32	62 NW
petro ID				
22MARY-1	interstitial quartz, Mg-chlorite	sparry magnesite	29	65 NW

ID No.	**Al2O3%**	**CaO%**	**Fe2O3%**	**K2O%**	**MgO%**	**P2O5%**	**SO3%**	**SiO2%**	**Total%**	**LOI%**	**MgO%/Total%**
22MA-1	**0.47**	**0.48**	**1.23**	**0.01**	**45.7**	**0.04**	**0.03**	**2.46**	**100.2**	**49.74**	**45.6**
22MA-2	**0.56**	**0.74**	**1.6**	**0.01**	**45**	**0.06**	**<0.01**	**2.13**	**100.05**	**49.89**	**44.98**
22MA-3	**0.56**	**0.72**	**0.81**	**0.09**	**43.8**	**0.01**	**<0.01**	**6.95**	**100.15**	**47.17**	**43.74**
22MA-4	**0.46**	**0.7**	**1.13**	**0.01**	**45.2**	**0.06**	**<0.01**	**4.31**	**100.2**	**48.27**	**45.1**
22MA-5	**0.37**	**1.11**	**1.16**	**<0.01**	**44.2**	**0.03**	**<0.01**	**6.12**	**100.25**	**47.23**	**44.09**
22MA-6	**0.19**	**1.38**	**0.98**	**<0.01**	**44**	**0.02**	**<0.01**	**6.22**	**100.35**	**47.52**	**43.85**
22MA-7	**0.63**	**0.78**	**0.95**	**0.01**	**44.4**	**0.07**	**<0.01**	**4.51**	**100.1**	**48.71**	**44.36**
22MA-8	**0.42**	**3.52**	**1.11**	**0.05**	**42.2**	**0.03**	**<0.01**	**4.02**	**100.1**	**48.7**	**42.16**
22MA-9	**0.7**	**0.79**	**1.33**	**<0.01**	**44.7**	**0.06**	**<0.01**	**3.74**	**100.15**	**48.75**	**44.63**
22MA-10	**0.44**	**1.01**	**0.96**	**<0.01**	**43.4**	**0.1**	**<0.01**	**7.14**	**100.25**	**47.16**	**43.29**
22MA-11	**0.74**	**0.98**	**1.51**	**<0.01**	**44.7**	**0.06**	**<0.01**	**3.19**	**100.25**	**49.01**	**44.59**
22MA-12	**0.45**	**0.8**	**1.11**	**0.01**	**43.4**	**0.04**	**<0.01**	**7.66**	**100.3**	**46.8**	**43.27**
Average	0.499	1.08	1.156		44.225			4.871	100.2	48.25	44.138

The relatively high MgO content (average 44.2% MgO%/Total%) in samples 22MA-1 to 12 in combination with average 4.9% SiO2 (2.13-7.14%) content suggests the Central Zone magnesite compares favourably with other magnesite producers such as Baymag property near Radium Hot Springs, BC (NOTE: pure magnesite is about 47.6% MgO, and most BC magnesite deposits range from 90-95% MgCO3). Impurity compounds of interest (Al2O3, CaO) approach specifications required for producing deadburn, calcined and fused magnesia. The relatively high SiO2 and Fe2O3, may require beneficiation in order to remove iron-bearing mineral impurities (e.g. siderite), and silica in the form of re-crystallized chert (which is a hydrated form of quartz). Based on the range of %MgO and impurities Al2O3, SiO2, CaO, Fe2O3, core drilling from 7 locations of the Marysville magnesite Central Zone is recommended in order to test the extent and purity of the Marysville magnesite (Fig 6). Further work suggested involves metallurgical testing for suitability for use as a raw material for refractories in the steel industry as well as other industrial end uses such as agricultural, fire retardant, and/or specialized moisture/mold resistant filler, MgCl (road salt). The magnesite member of the Cranbrook Formation quartzite is extensive throughout the local area as lenses along a 6 kilometer strike length. In the southern portion of Marysville magnesite there appears to be NNE trending, steeply west dipping layer approximately 1,000 meters in strike length, averaging approximately 15 meters width of magnesite mineralization that represents a significant drill target, especially where the widest magnesite zones are located. The Central Zone represents similar geological setting as the South Zone.

The following lithologies are present on the subject property:

UPPER PROTEROZOIC TO LOWER CAMBRIAN EAGER FM
7 QUARTZITE, MINOR CALCAREOUS SILTSTONE
UPPER PROTEROZOIC TO LOWER CAMBRIAN CRANBROOK FM
6 MAGNESITE BAND (15-20 m WIDE), SPARRY COARSE GRAINED
TAN WEATHERING, UPPER BAND DOLOMITIC PHYLLITE
5 IMPURE QUARTZITE, CALCAREOUS LENSES, MINOR MAGNESITE
4 QUARTZITE, MINOR CALCAREOUS PHYLLITE
3 QUARTZITE, MINOR PHYLLITE
PROTEROZOIC HELIKIAN PURCELL SUPERGRPOUP
2 GABBRO, BASALT, DIORITE SILL
1 STROMATOLITIC DOLOMITE, CALCAREOUS SILTSTONE, ARGILLITE

Geochemical sampling was carried out on exposed surface bedrock located in close proximity to historic mapped lenses of magnesite. In the central portion of Marysville magnesite a NNE trending, steeply west dipping layer approximately 15 meters width, and 400 meters strike length of magnesite mineralization occurs between 1,300-1,380 meters elevation. The upper Cranbrook Formation hosted magnesite layer represents a significant drill target and potential resource of raw magnesite.

6.4 PETROGRAPHIC DESCRIPTION

A solid and competent 5 X 8 X 15 cm sized rock sample was taken from outcrop and submitted for petrographic description (ID: 22MARY1). The petrographic sample was located from an outcrop (near rock sample 22MA-5) for petrographic description by Vancouver Petrographics Ltd, Langley, BC for standard thin section, K-feldspar staining, and description by Dr Craig Leitch (Appendix B).

The sample contains very coarse grain, sparry magnesite with sub-rounded inclusions of quartz, locally mixed with Mg-chlorite (Appendix B). Quartz in this sample exhibits sub-rounded inclusions as interstitial impurities suggesting a detrital origin. The coarse grain sparry magnesite has localized recrystallization (possibly during the Cretaceous Laramide orogeny), that occurs as finer grain magnesite along poorly defined veinlets.

7.0 Discussion of Results

The Marysville mineral property contains layers and lenses of high purity (>40% MgO) magnesite (and low CaO %, averaging <0.75%) hosted in the Cranbrook Formation. Geological mapping identified stratbound magnesite layers and lenses that striking north-northeast and dipping steeply northwest. The dominant structure appears to be steeply dipping, NE trending strata and sub-vertically oriented late-stage, cross faults generally striking northwest. The magnesite member of the Cranbrook Formation quartzite is extensive throughout the local area as lenses along a 6 kilometer strike length.

Based on the range of % MgO and impurities Al_2O_3, SiO_2, CaO, Fe_2O_3, detailed mapping and geochemical sampling is recommended in order to test the extent and purity of the Marysville magnesite, leading to metallurgical testing for suitability for use as a raw material for refractories in the steel industry as well as other industrial end uses such as agricultural, fire retardant, and/or specialized moisture/mold resistant filler, MgCl (road salt). MGX is planning further evaluation of commercial applications for Marysville magnesite as well as geochemical analysis of rock samples in order to determine grade and distribution of Marysville South Zone magnesite.

Marysville magnesite is a significant deposit with potential for several million tonnes, and the southern zone offers drill targets along 600 meters strike length in the area where the widest magnesite zones are located. The central zone is in steeper terrain with better exposure of the magnesite horizon on surface. The Central Zone, where the 2022 samples were taken (MTO 1095455 & 1095507), host several magnesite occurrence, and represent a drill target along a 300 meter strike length (Fig 6).

8.0 Conclusion

Reviewing available data, the writer offers the following interpretations & conclusions:

- The Marysville magnesite compares favourably in size with other deposits in BC e.g. Baymag, Driftwood.
- Access to the property is relatively good with a reasonable access road connecting Marysville Magnesite to Cranbrook and Kimberley.
- There is good infrastructure in the form of a paved highway, CPR spur line and powerline all of which are located approximately 10 kilometres east of the property.
- Lower Cambrian Cranbrook Formation sandstone, clastic and carbonate sedimentary sequence has been subjected to regional metamorphism (heat and pressure from deep burial during Cretaceous orogeny events, and subsequent erosion) has resulted in recrystallization of the sediments into magnesite, slate, marble and other metamorphic equivalents.
- Marysville property has exposed Cranbrook Formation magnesite bearing magnesite lithology along a segmented ridge crest that strikes north-northeast and dips steeply. Magnesite exposed near the crest of the ridge is accessible by a network of trails developed by Cominco in 1960's.
- High purity magnesite has been mapped over a strike length of 6,000 metres and a maximum width of about 15 meters. Impure (interbedded quartzite/siltstone) magnesite occurs as 20-60 m wide layers that are parallel to high purity lenses.

9.0 Recommendations

Future exploration and development of Marysville Magnesite should be focused on defining the extensions of known magnesite formations of the South & Central Zones. In order to outline zones of high purity magnesite, geochemical data should be collected from the South & Central Zones and drill plan consisting of 50 m spaced fence of drill holes, directed perpendicular to magnesite bed, and drill collars located approximately 30-100 meters away from target. Based on new data interpretation and geochemical results, core drilling in the central and south portion of the property is recommended. In addition to drilling, a program of metallurgical testing (bulk sampling), for use in various end products is recommended.

10.0 References

EMPR Annual Report 1937-A25, 1941-78, 1959-176, 1961-150, 1964-187

EMPR Bulletin 76, p 77

EMPR Open File 1987-13 1988-14

EMPR Property File, Oct 27, 1994

GSC Map 396A, 15-1957, 11-1960

GSC Memoir 76

GSC Summary Report 1932, Part AII

Henderson, G. G. L. (1954): Geology of the Stanford Range of the Rocky Mountains. EMPR Bulletin 35. pp.24-25, Figure 2

Leech, G. B. (1954): Canal Flats, British Columbia, GSC Paper 54-7, pp.18-19

CERTIFICATE AND DATE

I, Andris Kikauka, of 4199 Highway, Powell River, BC am a self-employed professional geoscientist. I hereby certify that:

1. I am a graduate of Brock University, St. Catharines, Ont., with an Honours Bachelor of Science Degree in Geological Sciences, 1980.

2. I am a Fellow in good standing with the Geological Association of Canada.

3. I am registered in the Province of British Columbia as a Professional Geoscientist.

4. I have practiced my profession for forty years in precious and base metal exploration in the Cordillera of Western Canada, U.S.A., Mexico, Central America, and South America, as well as for three years in uranium exploration in the Canadian Shield.

5. The information, opinions, and recommendations in this report are based on fieldwork carried out in my presence on the subject property during which time a technical evaluation consisting of rock chip sampling, and geological mapping carried out in May, 2022.

6. I have a direct interest in the Marysville Mineral Property. The recommendations in this report are for the purpose of describing future exploration work, and cannot be used for the purpose of public financing.

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

8. This technical work report supports requirements of BCEMPR for Exploration and Development Work/Expiry Date Change.

Andris Kikauka, P. Geo.,

June, 25 2022

ITEMIZED COST STATEMENT-

MARYSVILLE PROJECT-MTO Claims

MTO tenure numbers: 1033194, 1033236, 1095455, 1095456, 1095507

GEOCHEMICAL, GEOLOGICAL FIELDWORK

Dates worked: May 7-11, 2022

BCGS 082G.051, NTS 082 G 12 W, FT STEELE MINING DIVISION

Work carried out on MTO tenure number: 1033194, 1095455, 1095507

FIELD CREW:		
A. Kikauka (Geologist) 5 days	$ 3,445.30	
R. Kikauka (Geotechnician) 3 days	1,181.25	
FIELD COST:		
Preparation, Mob and Demob		$ 425.80
Equipment, Supplies, Generator		71.95
Geochemical analysis 12 rock chip samples (& shipping to ALS Minerals Laboratories) code ME-XRF26 whole rock geochemistry		734.93
Petrographic description (1 sample)		375.85
Meals		266.77
Accommodations		255.95
Fuel		325.55
Communication (sat phone, VHF radios)		112.45
Report		950.00
	Total amount=	$ 8,145.80

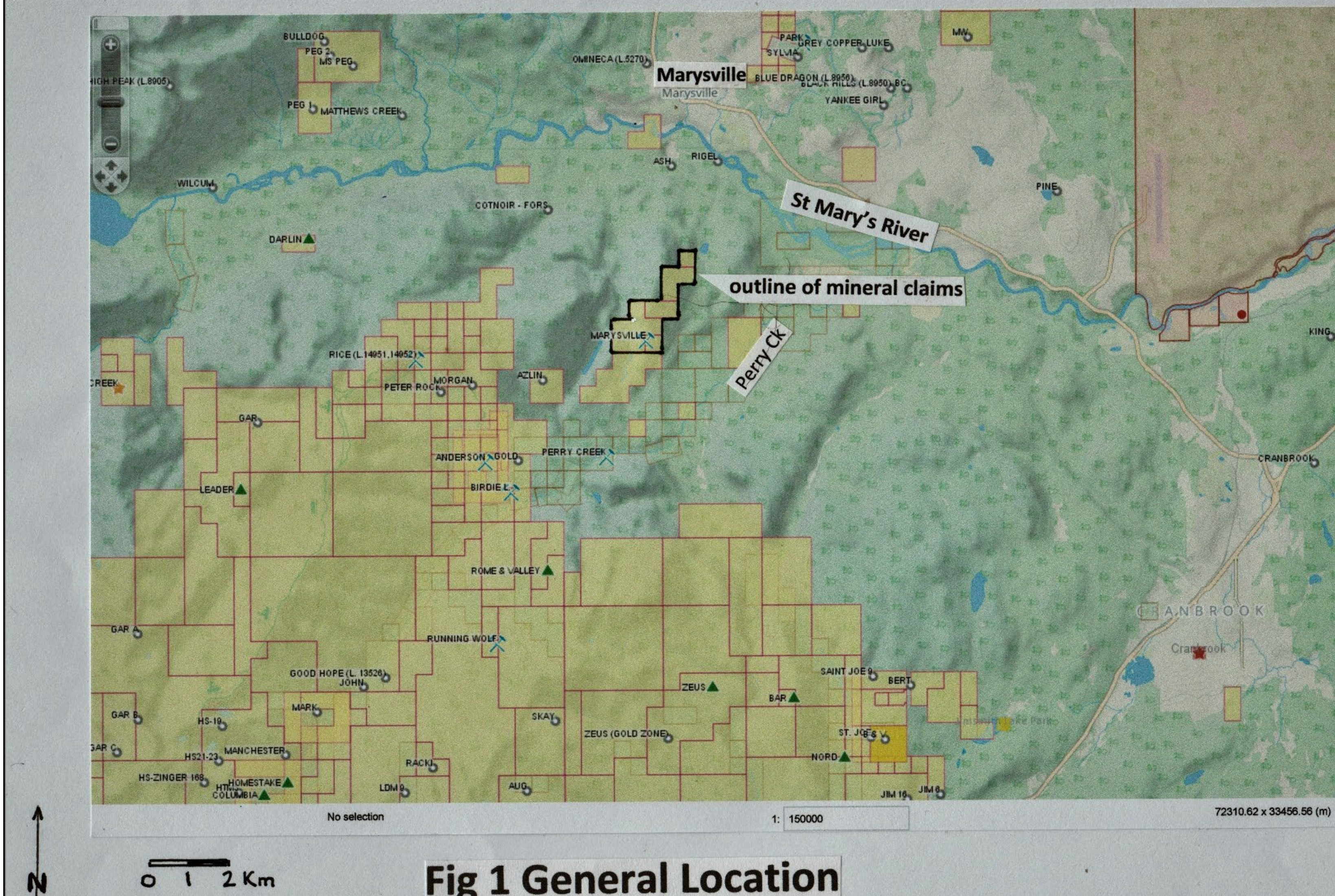
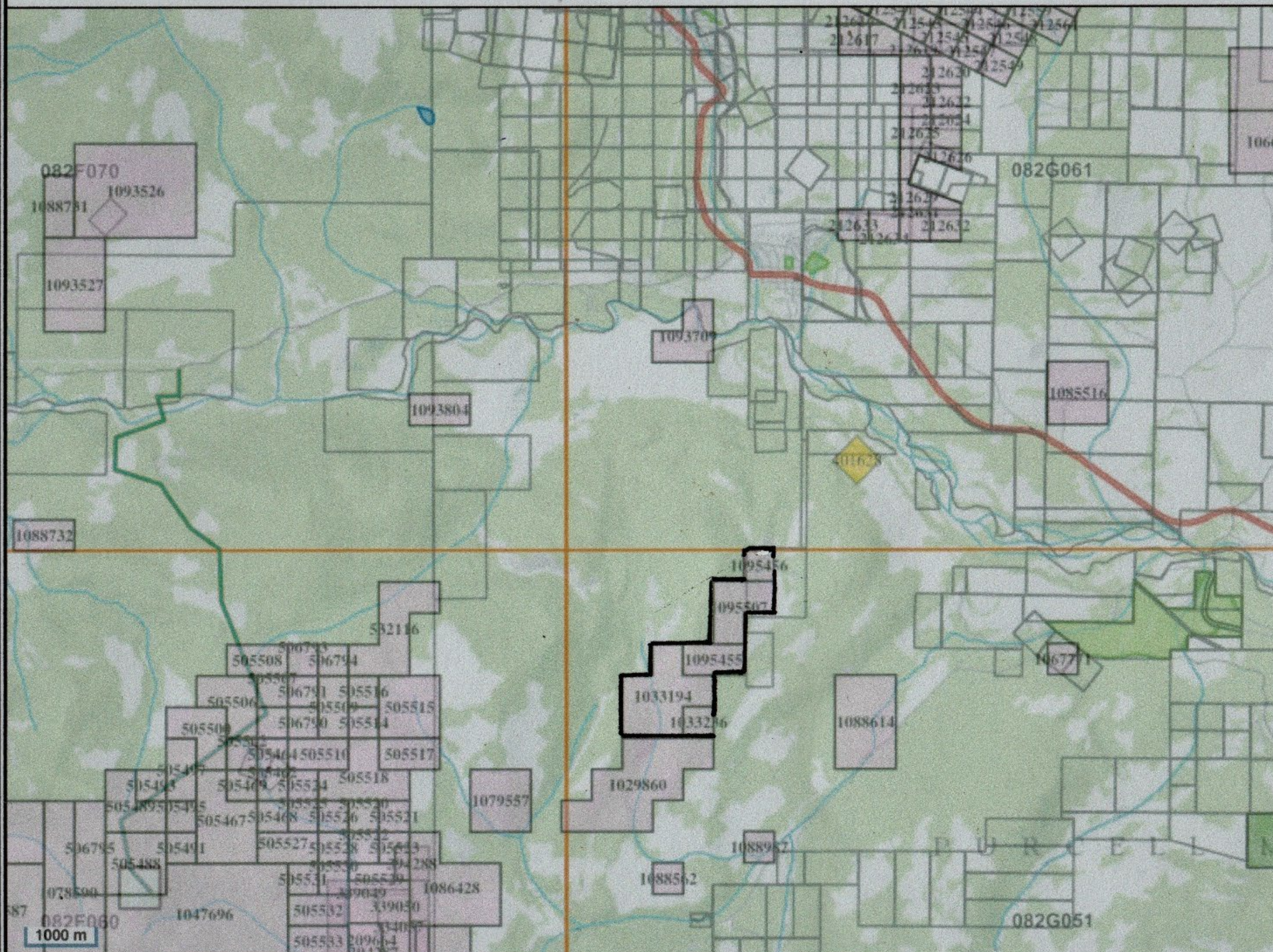


Fig 1 General Location

Southeast British Columbia,
Cranbrook-Marysville area

BRITISH COLUMBIA

Fig 2A Marysville MTO Claims



Legend

Mineral Titles (MTO)

MTO Grid

Title (current)

LEASE

CLAIM

Reserves

No Registration

Conditional

Heritage/Historic Site

Crown Land Layers (Tantalis)

Land Act Survey Parcels - Tantalis - Legal Descriptions

Label Text

Land Act Survey Parcels - Tantalis - Outlined

Administrative Boundaries

Local Regional Greenspaces - Outline

Local and Regional Greenspa

Local Regional Greenspaces - Colour Filled

Federal Transfer Lands - Outlined

Federal Transfer Lands - Colour Filled

National Parks - Outlined

National Park

National Parks - Colour Filled

Conservancy Areas - Tantalis - Colour Filled

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

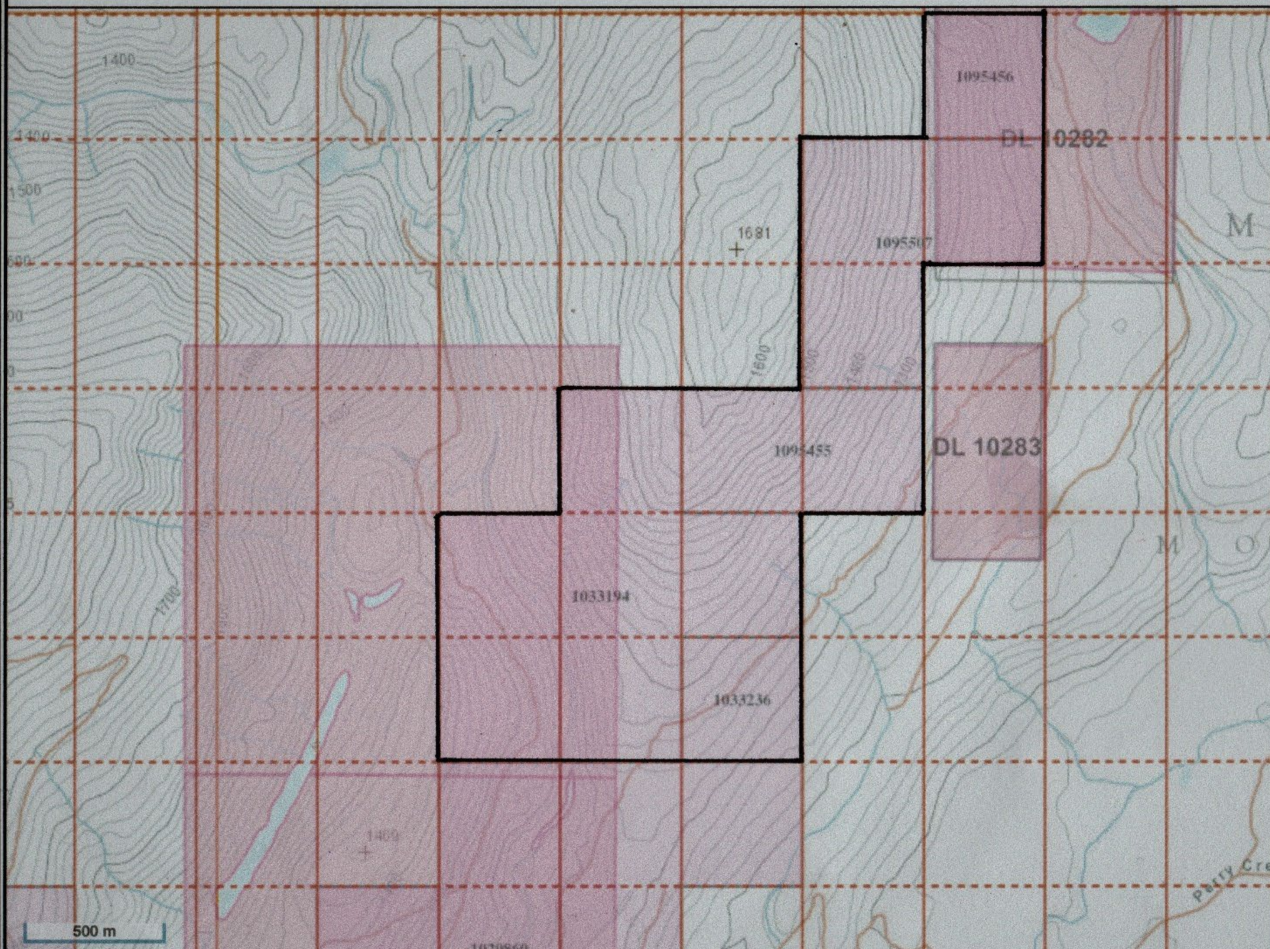
Printed using the Mineral Titles Online (MTO) application. BCGS 082G.051, Ft Steele MD

Center: 49°36'32", -115°59'2"
Scale: 1 : 135420
SRS: EPSG:3857
UTM Zone: 11

N

BRITISH COLUMBIA

Fig 2B Marysville Claim Detail



Legend

Mineral Titles (MTO)

MTO Grid

Title (current)

LEASE

CLAIM

Reserves

No Registration

Conditional

Heritage/Historic Site

Crown Land Layers (Tantalis)

Land Act Survey Parcels - Tantalis - Legal Descriptions

Label Text

Land Act Survey Parcels - Tantalis - Outlined

Administrative Boundaries

Local Regional Greenspaces - Outline

Local and Regional Greenspa

Local Regional Greenspaces - Colour Filled

Federal Transfer Lands - Outlined

Federal Transfer Lands - Colour Filled

National Parks - Outlined

National Park

National Parks - Colour Filled

Conservancy Areas - Tantalis - Colour Filled

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

Printed using the Mineral Titles Online (MTO) application. BCGS 082G.051, Ft Steele MD

Center: 49°35'4", -115°58'41"
Scale: 1 : 33855
SRS: EPSG:3857
UTM Zone: 11

N

Fig 3 Marysville Magnesite General Geology

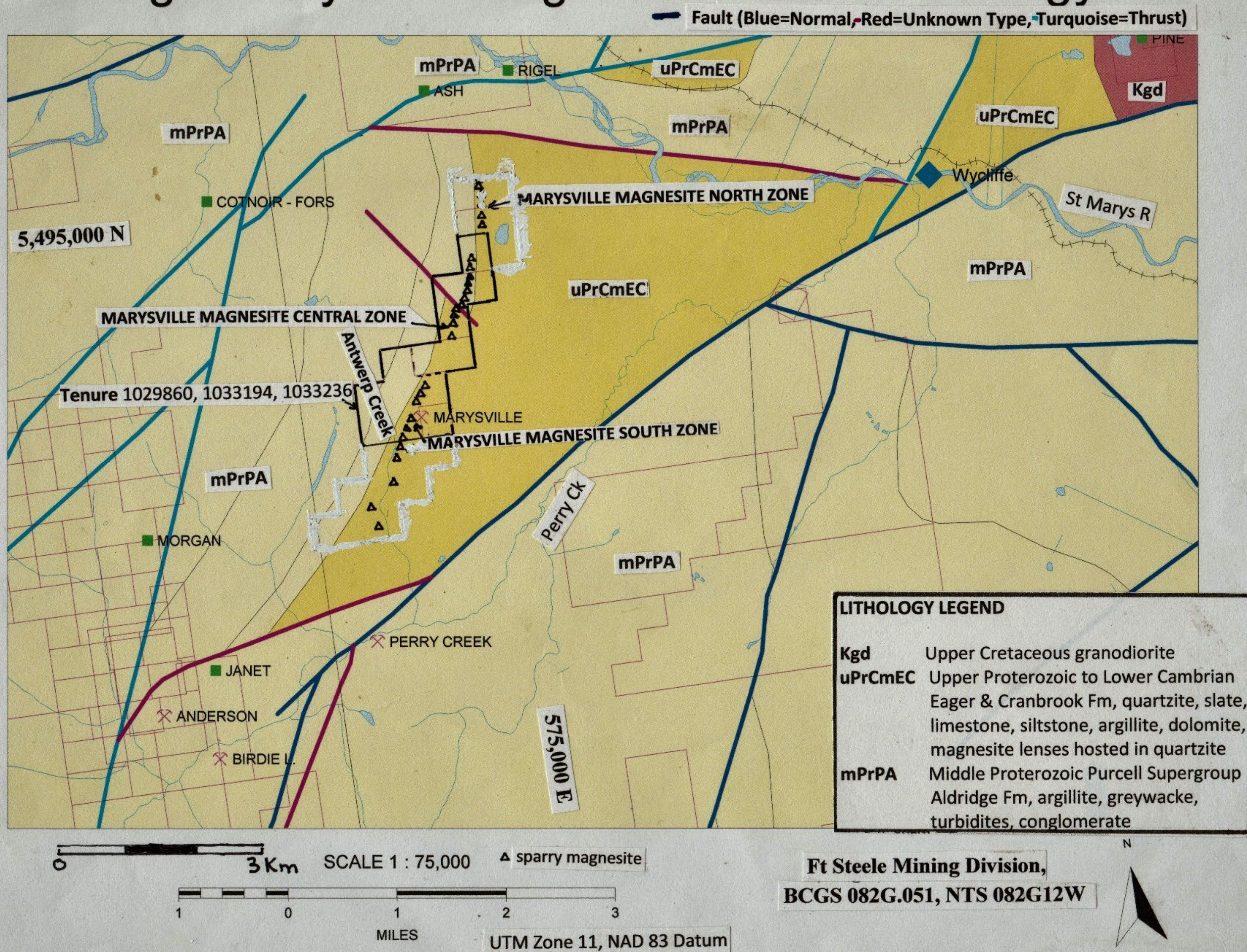
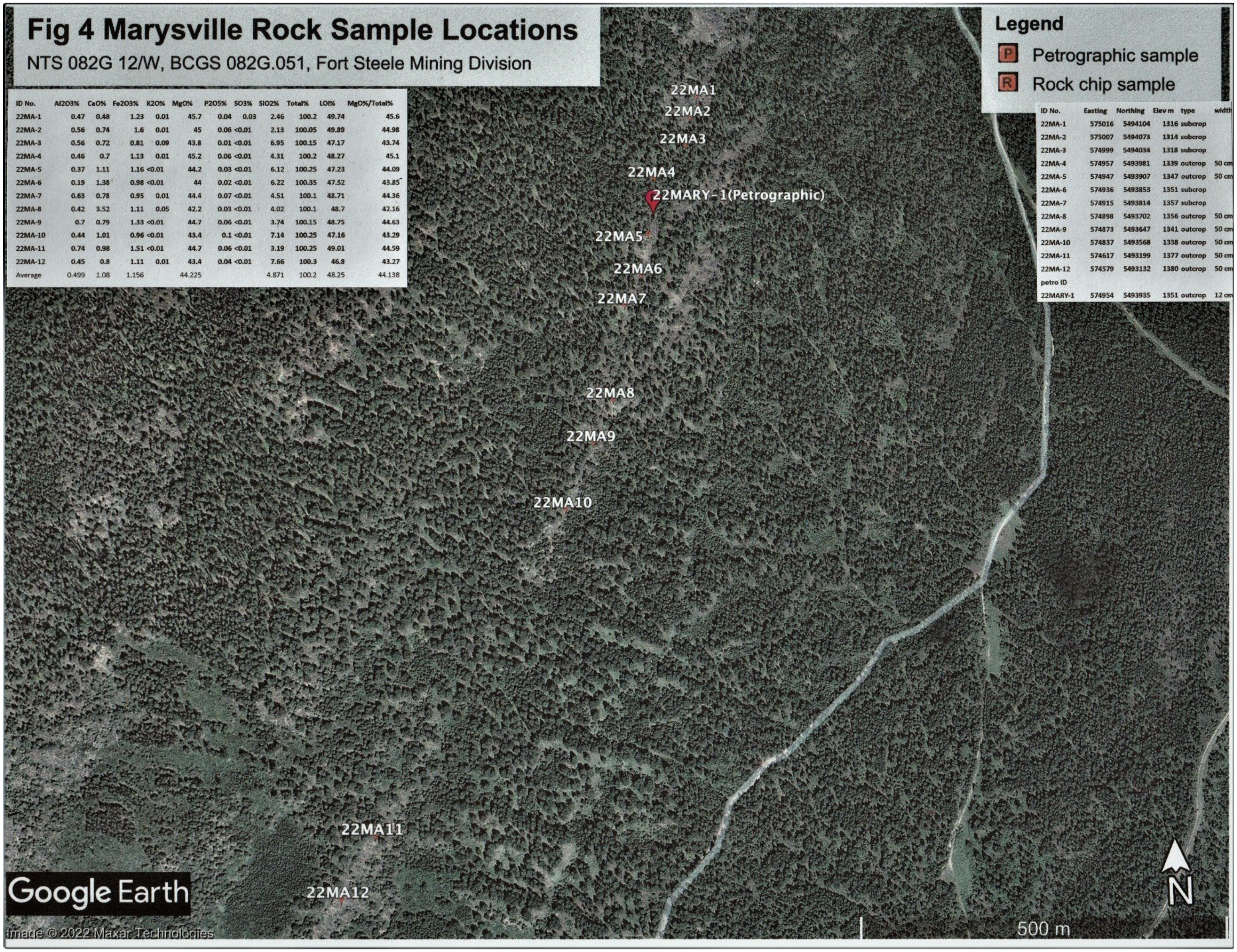


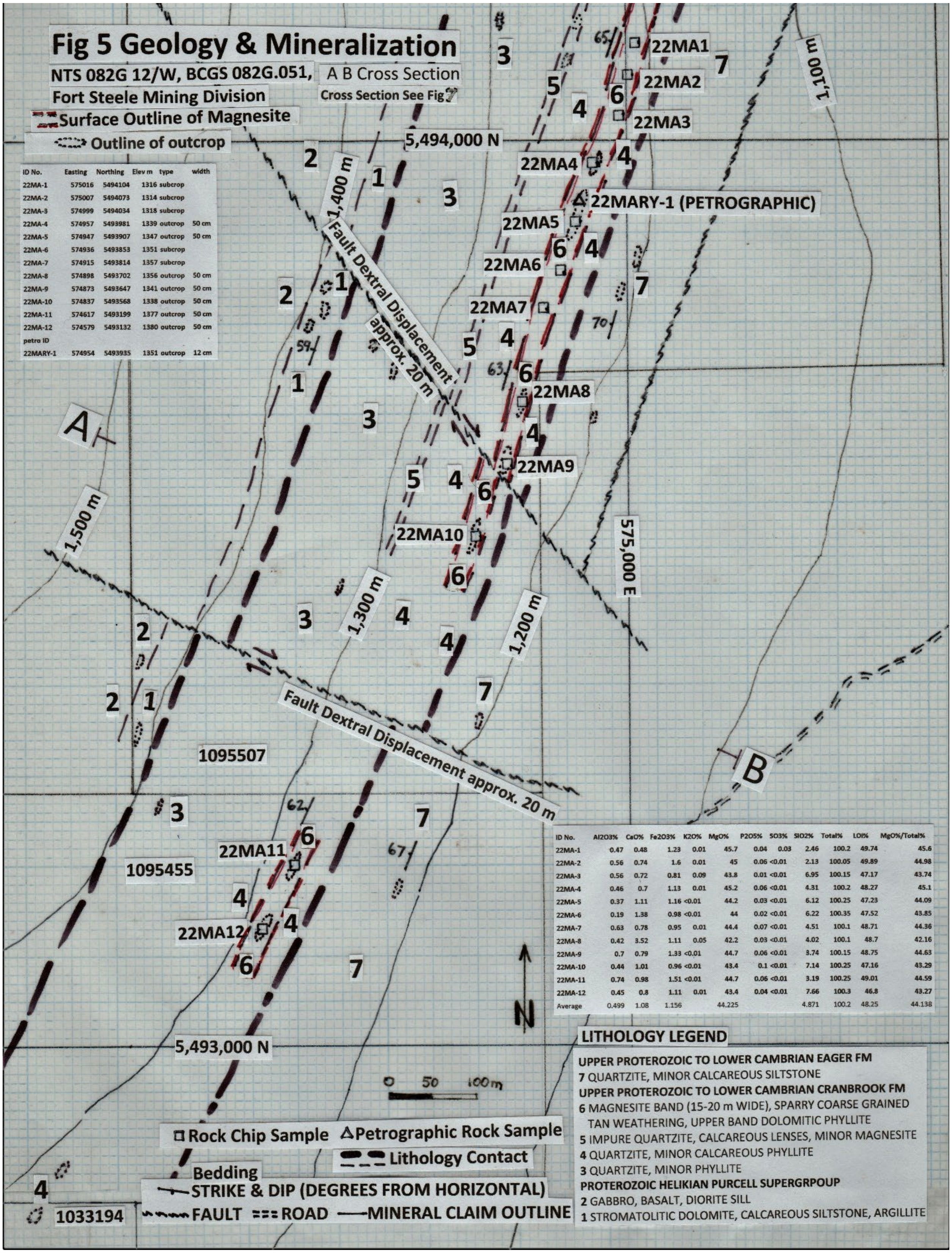
Fig 4 Marysville Rock Sample Locations

NTS 082G 12/W, BCGS 082G.051, Fort Steele Mining Division



ID No.	Al2O3%	CaO%	Fe2O3%	K2O%	MgO%	P2O5%	SO3%	SiO2%	Total%	LOI%	MgO%/Total%
22MA-1	0.47	0.48	1.23	0.01	45.7	0.04	0.03	2.46	100.2	49.74	45.6
22MA-2	0.56	0.74	1.6	0.01	45	0.06	<0.01	2.13	100.05	49.89	44.98
22MA-3	0.56	0.72	0.81	0.09	43.8	0.01	<0.01	6.95	100.15	47.17	43.74
22MA-4	0.46	0.7	1.13	0.01	45.2	0.06	<0.01	4.31	100.2	48.27	45.1
22MA-5	0.37	1.11	1.16	<0.01	44.2	0.03	<0.01	6.12	100.25	47.23	44.09
22MA-6	0.19	1.38	0.98	<0.01	44	0.02	<0.01	6.22	100.35	47.52	43.85
22MA-7	0.63	0.78	0.95	0.01	44.4	0.07	<0.01	4.51	100.1	48.71	44.36
22MA-8	0.42	3.52	1.11	0.05	42.2	0.03	<0.01	4.02	100.1	48.7	42.16
22MA-9	0.7	0.79	1.33	<0.01	44.7	0.06	<0.01	3.74	100.15	48.75	44.63
22MA-10	0.44	1.01	0.96	<0.01	43.4	0.1	<0.01	7.14	100.25	47.16	43.29
22MA-11	0.74	0.98	1.51	<0.01	44.7	0.06	<0.01	3.19	100.25	49.01	44.59
22MA-12	0.45	0.8	1.11	0.01	43.4	0.04	<0.01	7.66	100.3	46.8	43.27
Average	0.499	1.08	1.156		44.225			4.871	100.2	48.25	44.138

ID No.	Easting	Northing	Elev m	type	width
22MA-1	575016	5494104	1316	subcrop	
22MA-2	575007	5494073	1314	subcrop	
22MA-3	574999	5494034	1318	subcrop	
22MA-4	574957	5493981	1339	outcrop	50 cm
22MA-5	574947	5493907	1347	outcrop	50 cm
22MA-6	574936	5493853	1351	subcrop	
22MA-7	574915	5493814	1357	subcrop	
22MA-8	574898	5493702	1356	outcrop	50 cm
22MA-9	574873	5493647	1341	outcrop	50 cm
22MA-10	574837	5493568	1338	outcrop	50 cm
22MA-11	574617	5493199	1377	outcrop	50 cm
22MA-12	574579	5493132	1380	outcrop	50 cm
petro ID					
22MARY-1	574954	5493935	1351	outcrop	12 cm



ID No.	Easting	Northing	Elev m	type	width
22MA-1	575016	5494104	1316	subcrop	
22MA-2	575007	5494073	1314	subcrop	
22MA-3	574999	5494034	1318	subcrop	
22MA-4	574957	5493981	1339	outcrop	50 cm
22MA-5	574947	5493907	1347	outcrop	50 cm
22MA-6	574936	5493853	1351	subcrop	
22MA-7	574915	5493814	1357	subcrop	
22MA-8	574898	5493702	1356	outcrop	50 cm
22MA-9	574873	5493647	1341	outcrop	50 cm
22MA-10	574837	5493568	1338	outcrop	50 cm
22MA-11	574617	5493199	1377	outcrop	50 cm
22MA-12	574579	5493132	1380	outcrop	50 cm
petro ID					
22MARY-1	574954	5493935	1351	outcrop	12 cm

ID No.	Al_2O_3%	CaO%	Fe_2O_3%	K_2O%	MgO%	P_2O_5%	SO_3%	SiO_2%	Total%	LOI%	MgO%/Total%
22MA-1	0.47	0.48	1.23	0.01	45.7	0.04	0.03	2.46	100.2	49.74	45.6
22MA-2	0.56	0.74	1.6	0.01	45	0.06	<0.01	2.13	100.05	49.89	44.98
22MA-3	0.56	0.72	0.81	0.09	43.8	0.01	<0.01	6.95	100.15	47.17	43.74
22MA-4	0.46	0.7	1.13	0.01	45.2	0.06	<0.01	4.31	100.2	48.27	45.1
22MA-5	0.37	1.11	1.16	<0.01	44.2	0.03	<0.01	6.12	100.25	47.23	44.09
22MA-6	0.19	1.38	0.98	<0.01	44	0.02	<0.01	6.22	100.35	47.52	43.85
22MA-7	0.63	0.78	0.95	0.01	44.4	0.07	<0.01	4.51	100.1	48.71	44.36
22MA-8	0.42	3.52	1.11	0.05	42.2	0.03	<0.01	4.02	100.1	48.7	42.16
22MA-9	0.7	0.79	1.33	<0.01	44.7	0.06	<0.01	3.74	100.15	48.75	44.63
22MA-10	0.44	1.01	0.96	<0.01	43.4	0.1	<0.01	7.14	100.25	47.16	43.29
22MA-11	0.74	0.98	1.51	<0.01	44.7	0.06	<0.01	3.19	100.25	49.01	44.59
22MA-12	0.45	0.8	1.11	0.01	43.4	0.04	<0.01	7.66	100.3	46.8	43.27
Average	0.499	1.08	1.156		44.225			4.871	100.2	48.25	44.138

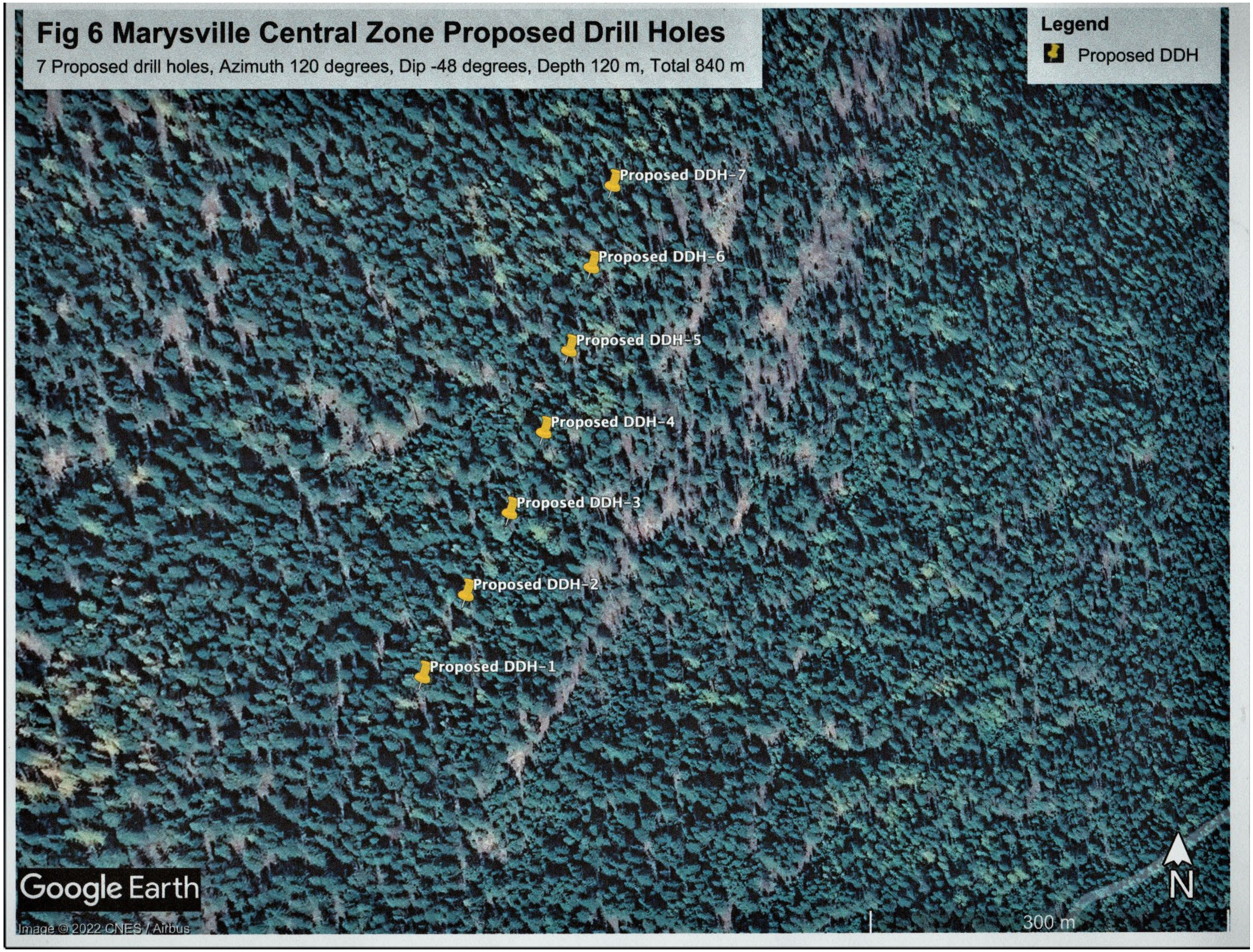


Fig 6 Marysville Central Zone Proposed Drill Holes
7 Proposed drill holes, Azimuth 120 degrees, Dip -48 degrees, Depth 120 m, Total 840 m
Legend
Proposed DDH
Proposed DDH-7
Proposed DDH-6
Proposed DDH-5
Proposed DDH-4
Proposed DDH-3
Proposed DDH-2
Proposed DDH-1
Google Earth
Image © 2022 CNES / Airbus
300 m
N

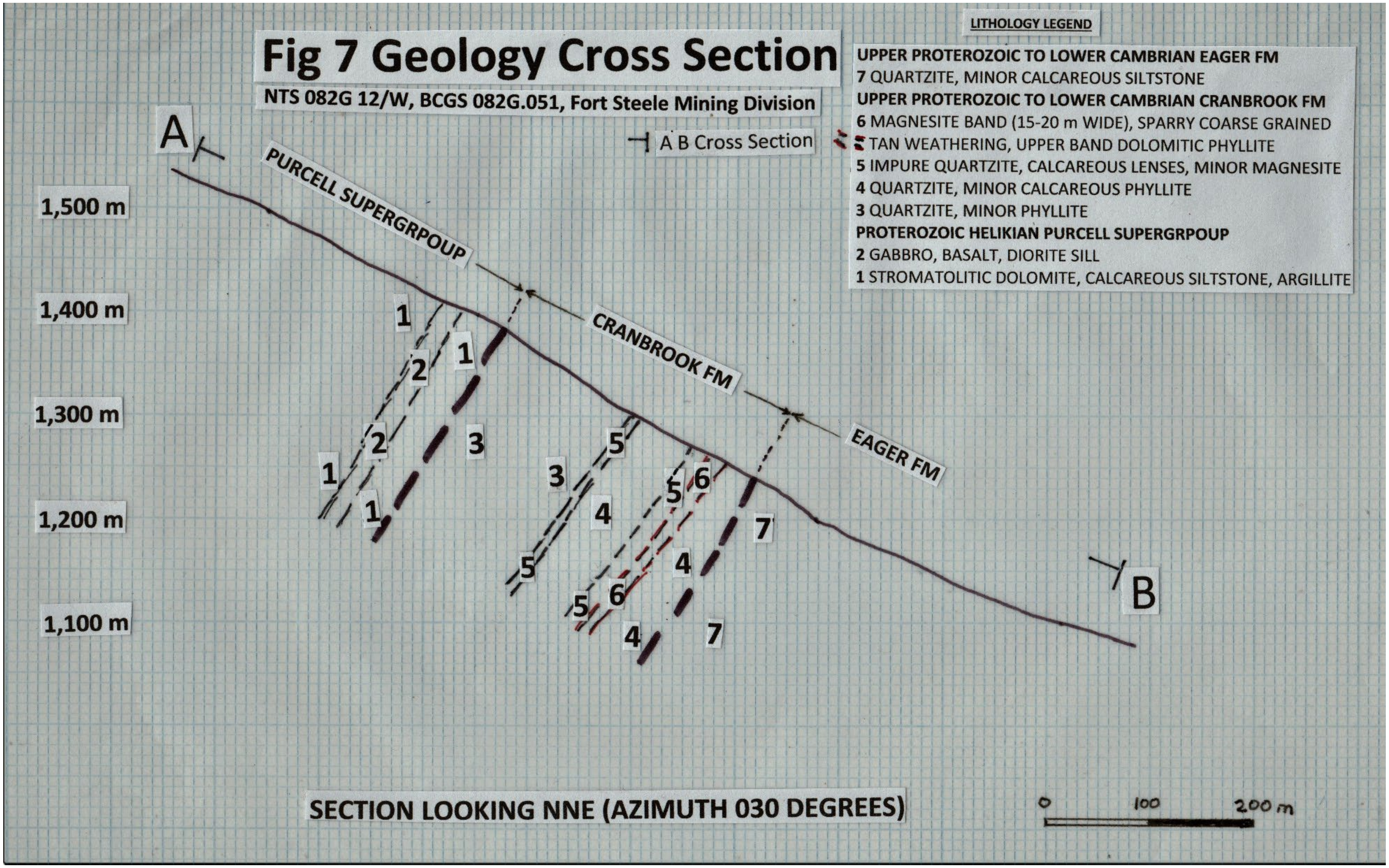


Fig 7 Geology Cross Section
NTS 082G 12/W, BCGS 082G.051, Fort Steele Mining Division
A B Cross Section
LITHOLOGY LEGEND
UPPER PROTEROZOIC TO LOWER CAMBRIAN EAGER FM
7 QUARTZITE, MINOR CALCAREOUS SILTSTONE
UPPER PROTEROZOIC TO LOWER CAMBRIAN CRANBROOK FM
6 MAGNESITE BAND (15-20 m WIDE), SPARRY COARSE GRAINED
TAN WEATHERING, UPPER BAND DOLOMITIC PHYLLITE
5 IMPURE QUARTZITE, CALCAREOUS LENSES, MINOR MAGNESITE
4 QUARTZITE, MINOR CALCAREOUS PHYLLITE
3 QUARTZITE, MINOR PHYLLITE
PROTEROZOIC HELIKIAN PURCELL SUPERGRPOUP
2 GABBRO, BASALT, DIORITE SILL
1 STROMATOLITIC DOLOMITE, CALCAREOUS SILTSTONE, ARGILLITE
A
B
1,500 m
1,400 m
1,300 m
1,200 m
1,100 m
PURCELL SUPERGRPOUP
CRANBROOK FM
EAGER FM
SECTION LOOKING NNE (AZIMUTH 030 DEGREES)
0
100
200 m

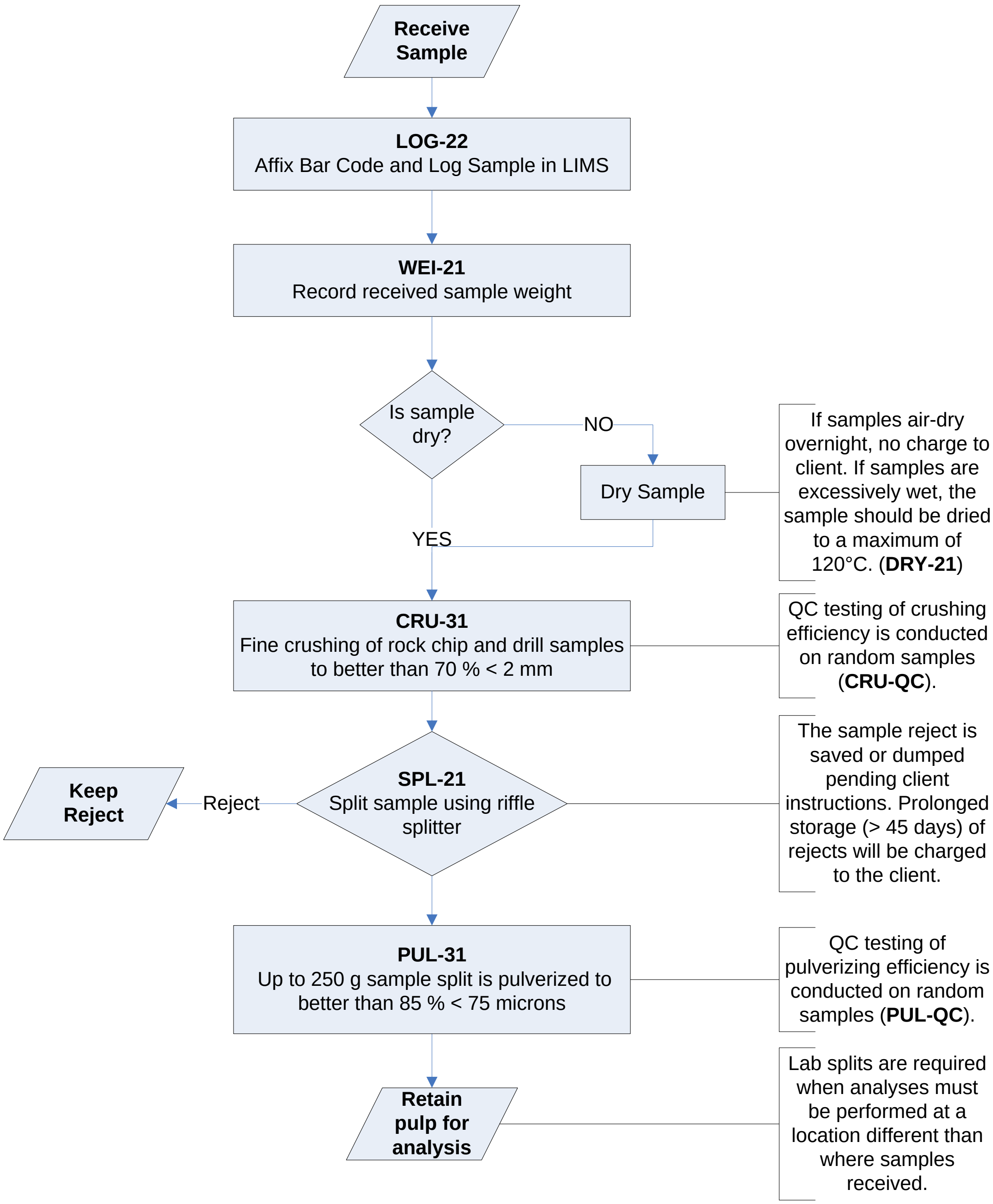
PREP-31
Standard Sample Preparation: Dry, Crush, Split and Pulverize

Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

The sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. This method is appropriate for rock chip or drill samples.

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
CRU-31	Fine crushing of rock chip and drill samples to better than 70 % of the sample passing 2 mm.
SPL-21	Split sample using riffle splitter.
PUL-31	A sample split of up to 250 g is pulverized to better than 85 % of the sample passing 75 microns.

Flow Chart - Sample Preparation Package – PREP-31
Standard Sample Preparation: Dry, Crush, Split and Pulverize



ALS Minerals

WHOLE ROCK GEOCHEMISTRY

ME- XRF06

SAMPLE DECOMPOSITION

50% - 50% $Li_2B_4O_7$ – $LiBO_2$ (WEI- GRA06)

ANALYTICAL METHOD

X-Ray Fluorescence Spectroscopy (XRF)

A calcined or ignited sample (0.9 g) is added to 9.0g of Lithium Borate Flux (50 % - 50 % $Li_2B_4O_7$ – $LiBO_2$), mixed well and fused in an auto fluxer between 1050 - 1100°C. A flat molten glass disc is prepared from the resulting melt. This disc is then analysed by X-ray fluorescence spectrometry.

ELEMENT	SYMBOL	UNITS	LOWER LIMIT	UPPER LIMIT
Aluminum Oxide	Al_2O_3	%	0.01	100
Barium Oxide	BaO	%	0.01	100
Calcium Oxide	CaO	%	0.01	100
Chromium Oxide	Cr_2O_3	%	0.01	100
Ferric Oxide	Fe_2O_3	%	0.01	100
Potassium Oxide	K_2O	%	0.01	100
Magnesium Oxide	MgO	%	0.01	100
Manganese Oxide	MgO	%	0.01	100
Sodium Oxide	Na_2O	%	0.01	100
Phosphorus Oxide	P_2O_2	%	0.01	100
Silicon Oxide	SiO_2	%	0.01	100
Strontium Oxide	SrO_2	%	0.01	100
Titanium Oxide	TiO_2	%	0.01	100
Loss On Ignition	LOI	%	0.01	100
	Total	%	0.01	101

NOTE: Since samples that are high in sulphides or base metals can damage Platinum crucibles, a ME- ICP06 finish method can be selected as an alternative method.

ALS Canada Ltd.

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North Vancouver BC V7H 0A7
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www.alsglobal.com/geochemistry

To: KIKAUKA, ANDRIS
4199 HIGHWAY 101
POWELL RIVER BC V8A 0C7

Finalized Date: 13-JUN-2022
This copy reported on
14-JUN-2022
Account: KIKAND

CERTIFICATE VA22127407

Project: Marysville

This report is for 12 samples of Rock submitted to our lab in Vancouver, BC, Canada on 15-MAY-2022.

The following have access to data associated with this certificate:

ANDRIS KIKAUKA		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
DISP-01	Disposal of all sample fractions

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-XRF26	Whole Rock By Fusion/XRF	XRF
OA-GRA05x	LOI at 1000C for XRF	WST-SEQ

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

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

Signature:
Saa Traxler, Director, North Vancouver Operations

ALS Canada Ltd.

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North Vancouver BC V7H 0A7
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4199 HIGHWAY 101
POWELL RIVER BC V8A 0C7

Finalized Date: 13-JUN-2022
Account: KIKAND

Project: Marysville

CERTIFICATE OF ANALYSIS VA22127407

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-XRF26 Al2O3 % 0.01	ME-XRF26 BaO % 0.01	ME-XRF26 CaO % 0.01	ME-XRF26 Cr2O3 % 0.01	ME-XRF26 Fe2O3 % 0.01	ME-XRF26 K2O % 0.01	ME-XRF26 MgO % 0.01	ME-XRF26 MnO % 0.01	ME-XRF26 Na2O % 0.01	ME-XRF26 P2O5 % 0.01	ME-XRF26 SO3 % 0.01	ME-XRF26 SiO2 % 0.01	ME-XRF26 SrO % 0.01	ME-XRF26 TiO2 % 0.01
22MA-1		1.50	0.47	<0.01	0.48	<0.01	1.23	0.01	45.7	0.03	<0.01	0.04	0.03	2.46	<0.01	0.02
22MA-2		1.14	0.56	<0.01	0.74	<0.01	1.60	0.01	45.0	0.03	<0.01	0.06	<0.01	2.13	<0.01	0.02
22MA-3		1.48	0.56	<0.01	0.72	<0.01	0.81	0.09	43.8	0.02	<0.01	0.01	<0.01	6.95	<0.01	0.03
22MA-4		1.08	0.46	<0.01	0.70	<0.01	1.13	0.01	45.2	0.03	<0.01	0.06	<0.01	4.31	<0.01	0.01
22MA-5		1.54	0.37	<0.01	1.11	<0.01	1.16	<0.01	44.2	0.02	<0.01	0.03	<0.01	6.12	<0.01	0.01
22MA-6		1.24	0.19	<0.01	1.38	<0.01	0.98	<0.01	44.0	0.02	<0.01	0.02	<0.01	6.22	<0.01	0.01
22MA-7		1.06	0.63	<0.01	0.78	<0.01	0.95	0.01	44.4	0.02	<0.01	0.07	<0.01	4.51	<0.01	0.04
22MA-8		1.18	0.42	<0.01	3.52	<0.01	1.11	0.05	42.2	0.03	<0.01	0.03	<0.01	4.02	0.01	0.02
22MA-9		1.06	0.70	<0.01	0.79	<0.01	1.33	<0.01	44.7	0.03	<0.01	0.06	<0.01	3.74	<0.01	0.04
22MA-10		1.02	0.44	<0.01	1.01	<0.01	0.96	<0.01	43.4	0.02	<0.01	0.10	<0.01	7.14	<0.01	0.01
22MA-11		0.98	0.74	<0.01	0.98	<0.01	1.51	<0.01	44.7	0.03	<0.01	0.06	<0.01	3.19	<0.01	0.03
22MA-12		1.34	0.45	<0.01	0.80	<0.01	1.11	0.01	43.4	0.02	<0.01	0.04	<0.01	7.66	<0.01	0.02

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

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4199 HIGHWAY 101
POWELL RIVER BC V8A 0C7

Finalized Date: 13-JUN-2022
Account: KIKAND

Project: Marysville

CERTIFICATE OF ANALYSIS VA22127407

Sample Description	Method / Analyte / Units / LOD	ME-XRF26 Total % 0.01	OA-GRA05x LOI 1000 % 0.01
22MA-1		100.20	49.74
22MA-2		100.05	49.89
22MA-3		100.15	47.17
22MA-4		100.20	48.27
22MA-5		100.25	47.23
22MA-6		100.35	47.52
22MA-7		100.10	48.71
22MA-8		100.10	48.70
22MA-9		100.15	48.75
22MA-10		100.25	47.16
22MA-11		100.25	49.01
22MA-12		100.30	46.80

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

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Project: Marysville

CERTIFICATE OF ANALYSIS VA22127407

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	CRU-31	CRU-QC	DISP-01	LOG-22
	ME-XRF26	OA-GRA05x	PUL-31	SPL-21
	WEI-21			

VANCOUVER PETROGRAPHICS LTD
8080 Glover Road, Langley, B.C. V1M 3S3

PETROGRAPHIC REPORT ON ONE SAMPLE OF MAGNESITE FROM MARYSVILLE, B.C.

Report for: Andris Kikauka, Invoice 220261
Geo-Facts Consulting
4199 Highway 101
Powell River, B.C. V8A 0C7 (250)-514-7802 May 25, 2022.

SUMMARY: Sample is described as sparry magnesite from a bed which is conformably interbedded with quartzites of the Lower Cambrian Cranbrook Formation, Fort Steele Mining Division, Omineca Belt, southeastern B.C. The occurrence is underlain by a sequence of thinly banded, reddish quartzitic and buff magnesite beds and is overlain by magnesite interstratified with thin, greenish argillite beds and locally thin limestone. It varies from coarse to finely crystalline, weathers rough commonly with a rusty brown surface; fresh surfaces are pearly grey, white or cream-coloured and are cut by minor quartz veins or host to knots of quartz. The best bed of magnesite is about 15 m thick and samples indicate the following chemistry: 4.54% SiO_2, 2.4% Fe_2O_3, 0.4% Al_2O_3, 0.79% CaO, 43.7% MgO and 48% LOI.

Capsule description is as follows:

22MARY-1: confirmed as mainly coarse-grained magnesite rich rock, with significant inclusions or interstitial impurities of quartz-minor Mg chlorite.

Detailed petrographic description and photomicrograph is appended (by email attachment). If you have any questions regarding the petrography, please do not hesitate to contact me.

Craig H.B. Leitch, Ph.D. (250) 538-1900 dromore61@gmail.com
124 Vesuvius Bay Road, Salt Spring Island, B.C. Canada V8K 1K3

22MARY-1: MAINLY COARSE-GRAINED MAGNESITE RICH ROCK, WITH SIGNIFICANT INCLUSIONS OR INTERSTITIAL IMPURITIES OF QUARTZ-MINOR MG CHLORITE

Hand specimen shows creamy white, coarse-grained, sparry carbonate rock with possible poikilitic inclusions of pale grey quartz (?). The rock is not magnetic, shows no reaction to cold dilute HCl (even where scratched, with difficulty, by steel on a previously cut surface), and no yellow stain for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

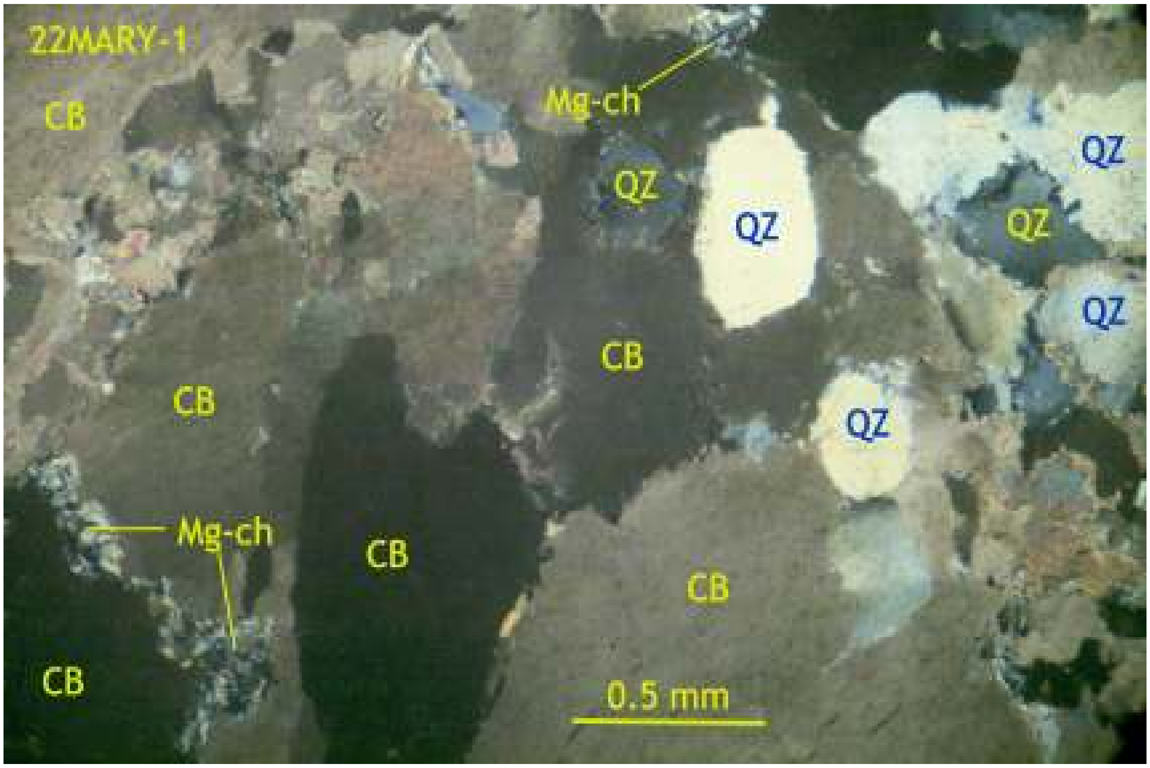
Carbonate (presumed magnesite)	90%
Quartz (included grains; locally mixed with minor Mg-chlorite)	8-10%
Mg-chlorite (locally in thin fracture veinlets)	~1%

The mineralogy of this sample is relatively simple. It consists of coarse, sparry crystals of carbonate (white in hand specimen), with variable included grains of quartz locally mixed with very minor Mg-chlorite (which also occurs with quartz interstitial to carbonate crystals and along rare thin fractures).

The bulk of the sample consists of coarse grained carbonate, presumed to be magnesite from the sample locality and reported chemistry, supported by the lack of reaction to cold dilute HCl in hand specimen, and distinct brownish colour in thin section except along local irregular to sub-planar veins <1 mm thick along which the carbonate tends to be relatively clear. The coarse, brownish carbonate crystals are subhedral to anhedral, up to almost 5 mm in diameter, with random orientations, and show only minor fracturing partly controlled along cleavage planes. Locally, recrystallization occurs to much finer grained carbonate along poorly defined veinlets, suggestive of late deformation. In places, these veinlets may also contain quartz.

Quartz forming subrounded to subangular grains up to 1.2 mm long (could be relict detrital?) are commonly poikilitically included within, or in some areas concentrated near the margins of, or along crudely vein-like zones up to almost 1 mm wide interstitial to, the coarse carbonate crystals. These areas also contain minor Mg-chlorite (subhedral flakes rarely over 0.15 mm in diameter, distinguished by length-fast extinction and first-order white to orange birefringence, indicative of Fe:Fe+Mg, or F:M, ratio around 0.2-0.3?). In places, these quartz ±Mg chlorite areas are associated with and/or remobilized into the recrystallized, finer-grained carbonate veinlets or shears mainly <0.5 mm thick, in which the Mg-chlorite is somewhat more abundant and may be partly aligned with the veinlet or shear walls.

In summary, this is confirmed as mainly coarse-grained magnesite rich rock, with significant inclusions or interstitial impurities of quartz-minor Mg chlorite.



22MARY-1: mainly coarse sparry carbonate (CB, likely magnesite) with irregular interstitial areas of possibly relict detrital quartz (QZ) and minor fine-grained matted flaky Mg-chlorite (ch). Transmitted light, crossed polars, field of view ~3 mm wide.

Overview of thin section and offcut (blue semi-circle marks photomicrograph location).