



## ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE OF REPORT: Baymag 2014 Assessment Report**

**TOTAL COST: \$66,258.93**

**AUTHOR(S): Ian Knuckey, Fabio Stern, Brody Myers**

**SIGNATURE(S):**

**NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): n/a**

**STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5522744**

**YEAR OF WORK: 2014**

**PROPERTY NAME: Baymag**

**CLAIM NAME(S) (on which work was done): 213678, 213681, 213682, 213794, 213796, 213798, 596228, 596229, 596230, 596231, 596506, 596507, 596512, 596513, 596514, 596515, 596516, 596517, 596518, 596519, 596521, 596528, 596529, 596530, 597888, 597889**

**COMMODITIES SOUGHT: magnesite**

**MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:**

**MINING DIVISION: Golden**

**NTS / BCGS: 82 J / 13**

**LATITUDE: 50 ° 47 ' "**

**LONGITUDE: 115 ° 41 ' " (at centre of work)**

**UTM Zone: EASTING: NORTHING:**

**OWNER(S): Baymag Inc.**

**MAILING ADDRESS: Box 399, Radium Hot Springs, BC, V0A 1M0**

**OPERATOR(S) [who paid for the work]: Baymag Inc.**

**MAILING ADDRESS: Box 399, Radium Hot Springs, BC, V0A 1M0**

**REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. Do not use abbreviations or codes)**  
**Magnesite, cathedral formation, carbonates**

**REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:**

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	135 km <sup>2</sup>	213678, 213681, 213682, 213794, 213796, 213798, 596228, 596229, 596230, 596231, 596506, 596507, 596512, 596513, 596514, 596515, 596516, 596517, 596518, 596519, 596521, 596528, 596529, 596530, 597888, 597889	\$46,510
Photo interpretation			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock 106			\$6360
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other		PAC	\$13,388.93
		<b>TOTAL COST</b>	<b>\$66,258.93</b>

BC Geological Survey  
Assessment Report  
35121



2014 GEOLOGICAL REPORT

## **GEOLOGICAL EXPLORATION**

Consisted of mineral exploration on Baymag Mineral Claims.

## **GOLDEN MINING DIVISION**

**NTS 82 J/13 @ 562700 N, 593000 E**

**LATITUDE 50 47' N    LONGITUDE 115 41' W**

**CLAIMS OWNED BY: Baymag Inc.**

**AUTHORS: Ian Knuckey, Fabio Stern, Brody Myers**

**DATE SUBMITTED: December 9, 2014**



## TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	LOCATION AND ACCESS.....	1
1.2	PREVIOUS WORK.....	1
2	GEOLOGICAL SETTINGS.....	4
2.1	GEOLOGY OF THE OREBODY.....	4
3	DETAILED TECHNICAL DATA AND INTERPRETATION.....	5
3.1	OBJECTIVE.....	5
3.2	METHODOLOGY.....	5
3.3	RESULTS.....	6
3.4	SUMMARY AND CONCLUSIONS.....	9
4	FIGURES.....	11
5	ITEMIZED COST STATEMENT.....	21
6	REFERENCES.....	22
7	AUTHORS' QUALIFICATIONS.....	23
8	APPENDIX A – SAMPLES ASSAY SHEET.....	24



## Table of Figures

Figure 1 – Baymag Location.....	12
Figure 2 – Regional Geology Map.....	13
Figure 3 – Claim Map .....	14
Figure 4 – Exploration Summary Map.....	15
Figure 5 – Marvel Pass Area.....	16
Figure 6 – Alcanterra Creek Area .....	17
Figure 7 – Struna Creek Area .....	18
Figure 8 – Assiniboine / Aurora Creek Area .....	19
Figure 9 – Miller Pass Area .....	20
Figure 10 – Itemized Cost Statement.....	21



# 1 INTRODUCTION

This report summarizes activities and results from the geological exploration program carried out by Baymag Inc. between May and September 2014.

During five months two geologists conducted field work in the area with the main objective of evaluating potential viable sources of magnesite ore. The main executed activities were: field reconnaissance, geological mapping, rock description and sampling. All samples were described, labeled and sent for chemical analysis. Throughout this time, several new outcrops were identified and 110 samples were collected and analyzed.

Baymag Inc. personnel were responsible for the program's design, coordination, field supervision, sampling and handling.

Geochemical composition of the samples was determined through application of Induced Coupled Plasma (ICP) analysis, at the Baymag chemical lab in Exshaw, Alberta.

## 1.1 Location and Access

The Mt. Brussilof Magnesite Mine is located within Mining Lease M31, immediately north of the confluence of the Mitchell River and Assiniboine Creek approximately 35 km north-east of Radium Hot Springs in the East Kootenay District of British Columbia (See Fig.01). The property is crossed by latitude 50°47'N and longitude 115° 41'W.

Access to the site is by Provincial Highway 93 from Radium Hot Springs northeast to Settlers Road in Kootenay National Park. The road, which starts about 20 km east of Radium, leads for 12 km south/southeast along the Valley of the Kootenay River. At the 12 km mark Palliser Forest Service Road (FSR) branches off from Settlers and continues over a bridge on the Kootenay River then connects to Cross River FSR at the 14 km junction. From the junction Cross River FSR follows a northeast direction along the south side of the Cross River valley to another junction at 32 km. Baymag's mineral tenures begin here and access can be gained by either heading northward on the Mitchell River FSR or eastward continuing along the Cross River FSR.

The Baymag minesite is accessed by heading up the Mitchell River FSR (Fig. 01). In total the roads cover a distance of 38 km from the highway to the Mine Site and are maintained year round by Baymag Inc.

## 1.2 Previous Work

Exploration activities performed on the area have a long and rewarding history. They resulted in a discovery of a world class magnesite deposit, which currently is mined and processed by Baymag Inc.

Commercial scale mining started in the second quarter of 1982 and has increased dramatically since then. The Mine is an open pit development and operates year round. Currently it produces in the order of 180,000 mt/year of high quality magnesite ore.

The ore is subsequently transported to Baymag's production facilities in Exshaw, Alberta where it is calcined into various grades of magnesium oxide (MgO). The calcined product is used in a wide variety of industrial, agricultural and environmental applications. Baymag produces several grades of MgO suitable for all of these purposes.

The history of the mine started in 1966 when G.B. Leech of the Geological Survey of Canada first discovered magnesite occurrence. Rock samples collected during the time upon chemical assaying showed high contents of MgO. The content was consistently reaching or exceeding 97% MgO level. Because of the Leech report, New Jersey Zinc Exploration Canada Ltd. staked the area and conducted a mapping and diamond drill program. Imperial Oil Enterprises also investigated the area but no additional work was performed. Baykal Minerals Ltd. conducted a mapping program in 1969, which resulted in acquisition of additional claims to bring the total to 278. Following the completion of fieldwork in 1969 to 1970, which included diamond-drilling programs, Acres Western Limited of Vancouver completed a production feasibility report for Baykal Minerals Ltd.

During 1971 Brussilof Resources Limited and Baykal Minerals Ltd. amalgamated to form Baymag Mines Co. Limited.

The property was optioned to Canadian Exploration Limited (CANEX) in 1972. CANEX conducted a field orientation program that included 2819.4 meters of diamond drilling to bring the total length then drilled on the property to 5,255 meters. Geological mapping of specific areas was also completed.

In 1975, a 250 mt. bulk sample was shipped to Refratechnik, a major German producer of refractory products, which showed interest in securing a raw material source. Crushed material was then forwarded to the research and manufacturing companies KHD, Lurgi and Polysius for industrial scale bulk testing for calcining and dead-burning Mt. Brussilof type ore.

In 1979 Baymag Mines Co. Limited - a subsidiary of Refratechnik GmbH of West Germany - contracted Techman and Kilborn Engineering (B.C.) Ltd to re-evaluate the feasibility of bringing the magnesite deposit into production. The evaluation involved surveys, 130 meters of percussion drilling, 75 meters of shallow diamond drilling and bulk sample extraction. A 100 ton sample of magnesite was extracted from a site on Rok 17 (now mine lease M31) and shipped to a crusher to be reduced to a minus 10 millimetres mesh. The crushed sample was then shipped to Nichols Engineering and Research in New Jersey for industrial scale dead burning trials.

In 1981, Baymag entered into a contractual agreement with John Wolfe Construction Co. Ltd to operate the mine and to be responsible for ore supply to the production plant at Exshaw, Alberta, a facility leased from Canada Cement Lafarge.

During 1984, eight exploration holes totalling a length of 731.5 meters of diamond drilling was completed on the Rok 17 claim. The core was descriptively logged, sampled and assayed.

A major exploration program was conducted in 1987, the purpose of which was to investigate the extension of the known magnesite deposit up-slope from the current pit development and further delineate and evaluate the quality and quantity of the ore in the immediate vicinity of the active mining operations. Thirty-four diamond drill holes totalling 2707 meters were drilled, logged, sampled and assayed.

A smaller exploration program was conducted in 1989 in two areas of the claim block. In the area proximal to the current mine development, the goal was to further delineate and evaluate the quality and quantity of ore immediately north of the known reserves. Fifteen shallow diamond drill holes totalling 273 meters were drilled, logged, sampled and assayed. The other area of interest was near the confluence of the Cross and Mitchell Rivers on the southern Vano claims (now Bay 19 & 21 claims). Ten shallow diamond drill holes totalling 110 meters were drilled, logged, sampled and assayed.

The following year Baymag acquired new ground up the Alcantara, Assiniboine and Aurora Creeks bringing the total number of claims to 461 units.

A small, percussion drilling program was conducted in 1990 with the goal of delineating zones of contamination near the little explored upper pit area. A total of 370 meters was drilled, sampled and assayed. It became evident that these localized contamination zones greatly influence the direction of pit development. Future drill and assay programs will be targeted toward these structures.

Eight shallow percussion holes were drilled in the summer of 1991 to further delineate the zones of contamination in the north section of the upper pit. A total of 166 m were drilled, logged and assayed.

A diamond-drilling program consisting of 16 holes was drilled in the summer of 1992. A total of 950 m was drilled, concentrated in an area immediately north of the upper pit. The program hoped to delineate new reserves and determine future pit development.

A small exploration program was conducted in 1993 on the Bay-21 claim. Three diamond drill holes totalling 182 meters were drilled, logged, sampled and assayed.

At the end of the 1993 exploration program, a total of 27 percussion holes and 145 diamond drill holes had been drilled on the property.

The last drilling program was executed in 2011, in the Struna Creek area (approximately 3.5 km south from the Baymag Magnesite Mine), where 5 diamond drill holes were drilled. As a result of the drilling a total of 776.1 meters of core was recovered. Subsequently 470 samples were taken from the core for purpose of mineral and chemical evaluation.

In the summer of 2012, an exploration program was conducted with the objective of evaluating potential viable sources of magnesite ore. Significant portions of the claims were mapped with a total of 105 analyses performed on rock samples collected. Three areas located within Baymag claims (Struna Creek, Aurora Creek, Miller Pass) showed geochemical evidence for existence of magnesite mineralization.

Most recently, in the summer of 2013 an exploration program was conducted with the objective of further evaluating areas previously identified as well as continuing the systematic mapping of the entire claim block. Six areas located within Baymag claims (Struna Creek, North Struna, Assiniboine Creek, Aurora Creek, Miller Pass and Cross River) showed geochemical evidence for existence of magnesite mineralization. These areas (excluding Cross River) were further investigated in the 2014 exploration campaign, with greater focus on three new areas: West Alcantara Creek, East Alcantara Creek and Marvel Pass.

## 2 GEOLOGICAL SETTINGS

According to Simandl and Hancock (1990) the Mount Brussilof deposit is situated east of a Cambrian bathymetric feature commonly referred to as the Cathedral escarpment. The carbonate rocks east of this feature, which host the magnesite mineralization, were deposited in a shallower marine environment than their stratigraphic equivalents to the west.

The magnesite deposit occurs in the Cathedral Formation (Fig. 02), a Middle Cambrian buff and grey limestone and dolomitic body with about 340 meters thick.

The carbonate rocks from Cathedral Formation are underlain by the thin bedded, brown and green shales of Naiset Formation and overlain by the argillaceous dolomites and limestones of the undivided Eldon and Pika Formations. The thin Stephen Formation, composed of fossiliferous tan to grey shale might occur at some locations between Cathedral and Eldon Formations.

It is suggested that the magnesite postdates early diagenesis of the Cathedral Formation and probably of the Stephen, Eldon and Pika formations as well. Widespread dolomitization, subsequent fracturing, and brecciation contributed significantly to an increase in porosity. Some of the fracturing may be due to reactivation of a pre-Cathedral escarpment fault or to a difference in competence of deep and shallow water sediments during the post-Middle Cambrian tectonic activity. However, most of the breccias were probably produced by a partial dissolution and collapse of the carbonate host rock, caused by incursion of meteoric water or hydrothermal solutions in the manner described by Sangster (1988). Fluids responsible for crystallization of coarse sparry carbonates reacted with dolomitized, permeable and fractured reef facies along the Cathedral escarpment and moved up-dip along the permeable zones. The fluid cooled and evolved chemically along its path due to interaction with dolomitic host rock. Predictions based on this model suggest that the highest grade magnesite deposits should be located along the edge of the Cathedral escarpment, within the reef facies. Lower grade magnesite deposits and sparry dolomites would be located at a greater distance up-dip from the Cathedral escarpment along the same permeable zones, or adjacent to escarpment but in the zones of lesser permeability.

### 2.1 Geology of the Orebody

The genesis of the deposit is thought to be mineralogical replacement or molecular substitution. As such, the process occurred when a fine-grained dolomite  $\text{CaMg}(\text{CO}_3)_2$  was substituted by a coarse-crystalline magnesite  $\text{MgCO}_3$ . The replacement, when taking place in geological past, likely included several phases of progressive influx of magnesium (Mg) rich fluids into existed dolomite sediment.

On the molecular basis, the incursion resulted in a near complete removal of  $\text{Ca}^{+2}$  from chemical structure of the sediment and a fill up of available vacancies with  $\text{Mg}^{+2}$ . The above chemical process was accompanied by a textural transformation, where original fine-grained layout of dolomite molecules was transposed into coarse-crystalline texture of newly formed magnesite.

When viewed on a large scale the deposit is a relatively homogenous, high-grade orebody. Its appearance is well defined by a white to light-grey colour and remarkably evident crystalline texture of the magnesite rock.

Closer examination, predominantly by chemical analysis, have identified that broad irregular zones of contaminants occur through such forms as veining, in-filling of fractures and within the magnesite matrix itself. The value of these contaminants and the form in which they occur play a key role in determining whether the material is considered as ore or waste.

The components of vein material are generally fine-grained pyrite and/or aphanitic white dolomite. Veins occur as irregularly oriented structures with individual veins swelling to thickness of 10 cm and pinching out to nothing. Some veins, especially pyrite, tend to form in swarms covering areas tens of meters wide.

In-filling of fractures occurs in thickness up to 5 cm and generally occurs as a light brown silty clay material, aphanitic white dolomite or as pyrite. Minor occurrences of palygorskite can sometimes be seen coating fracture walls. The fractures are generally narrow elongated curvy-planar structures with local deviations of strike and dip. An invisible chemical halo often brackets the more visible fracture. These halos pinch and swell in a similar manner as veining but on a larger scale.

The interstitial or in-matrix contaminants are comprised of thin coatings of calcite or dolomite between magnesite crystals or as a simple Ca ion exchange within the crystal lattice itself. This form of contamination is the broadest form, covering areas as wide as 100 meters. With sufficient drilling, these areas can now be generally classified in the complimentary and marginal ore types, as contaminant values are usually less than occur in the other forms of contamination.

The competitive market and specific end uses of magnesite, place a great importance on the chemical specification of the product. Somewhat unique to industrial minerals and magnesite in particular, as opposed to metal mining, is the requirement of continually meeting a set grade specification without receiving any bonus for surpassing it. Material under spec on the other hand, has a very sharp value cut-off and is essentially valueless mere tenths of a percent below spec.

### **3 DETAILED TECHNICAL DATA AND INTERPRETATION**

#### **3.1 Objective**

The primary objective of the 2014 Exploration Program was to continue the previous year's program conducting a geological and geochemical evaluation on Baymag's Mineral Claims (Fig. 03) of potentially viable sources of magnesite ore.

#### **3.2 Methodology**

The regions of interest were reached primarily by Forest Service Roads (FSR). After driving to the area of investigation, the trek continued on foot. The daily treks, outcrops and samples were tracked by a handheld GPS.

Rock that was determined to be outcrop was described and recorded in a field book as well as marked on a handheld GPS. To describe the outcrops, hand samples were obtained and characteristics such as crystal/grain

size (where crystals <2mm =fine, 2-6mm = medium, and >6mm = coarse), texture, color, mineral inclusions, level of reactivity with 10% hydrochloric acid (HCl) and hardness were observed and recorded within a field book. After these characteristics were observed, the lithology was determined.

After description and identification, rock samples were selected, cut in half, and sent for chemical analysis. Remaining sample halves were safely stored at the mine for future reference if needed.

The chemical assaying was performed by Baymag's laboratory at the processing Plant in Exshaw, Alberta. It resulted in quantitative determination of MgO, CaO, Fe<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, and SiO<sub>2</sub> as major components of the researched material. All chemical analyses are Lost of Ignition (LOI) basis. Appendix A provides a complete set of chemical data obtained from the program.

### 3.3 Results

The fieldwork conducted in the study area described and identified several outcrops of dolomite, magnesite and limestone. A total of 110 samples were analyzed in this campaign, helping to identify new magnesite outcrops. The chemical analysis results are shown in Appendix A.

The 2014 exploration campaign focused on three potential areas: Marvel Pass, West Alcantara Creek and East Alcantara Creek (Fig. 04). In addition, five areas studied in both 2012 and 2013 were further investigated, these included: Struna Creek, North Struna, Assiniboine Creek, Aurora Creek and Miller Pass. Among these areas, new outcrops of magnesite were described and sampled. All the areas studied in the 2014 campaign are described in detail below.

#### 3.3.1 Marvel Pass

The Marvel Pass area (Fig. 05) is dominated by fine grained, crystalline, massive, grey/white dolomite. Disseminated pyrite is commonly an accessory mineral and is usually ≤1mm. Magnesite outcrops were not identified in this area, nor were replacement textures associated with the transition from dolomite to magnesite (pinolite). Interbedded with these dolomites is fine grained, grey, massive limestone. These layers are typically several meters thick and are laterally continuous. Occasionally the limestone shows bedding, in such cases the orientation was measured and recorded. During explorations up the surrounding mountain, outcrops were not detected until an approximate elevation of 1775m. Below this elevation, the valley floor is covered by vegetation and transitions to talus as you near the cliff above. The valley is easily accessible due to the Marvel Pass hiking trail in the area. Above 1775m looms a steep cliff, which begins approximately at the contact between the underlying Naiset Fm. and overlying Cathedral Fm... Access above the cliff was possible only in one area; from there exploration could continue east/west with a wide, accessible range to the south. Samples were collected from dolomite outcrops within the Cathedral Fm. The maximum elevation reached was 2121 meters, where the contact between the underlying Cathedral Fm. meets the overlying Stephen Fm. shale.

A total of 15 samples were collected in this area. Among all the samples analyzed, the rocks show MgO ranging from 53 to 66.1%, Fe<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> are low (< 2.1% and < 0.7% respectively), and CaO ranges from 33.3 to 46.3%.

### 3.3.2 West Alcantara Creek

Extensive field work was conducted on the west side of Alcantara Creek (Fig. 06). The outcrops observed were located between 1450m and 2151m elevation. Magnesite was observed exclusively in boulders north of Brussilof Creek, sometimes occurring in large boulder gardens on the mountain. In this case, the provenance of the boulders is likely the Cathedral Fm. which is thought to be mostly buried under talus from the overlying Eldon Fm. On this side of the creek the Stephen Fm. was not observed. The contact between the Cathedral and Eldon Fm. lies at the base of a large, steep and laterally extensive cliff in this area. Due to having no access above the base of the cliff, it is also possible that the origin of the magnesite boulders is somewhere in the cliffs (Eldon Fm.). This is less likely due to the fact that the boulders are well sorted (on a lithological basis, not size) which would be improbable if they fell from the cliffs. The rocks have similar characteristics to each other such as: grain size, texture, colour, reactivity with 10% HCl and lithology. These boulder gardens contained few rocks that had similar characteristics to the overlying cliff, suggesting that the rocks did not come from the Eldon Fm., and are instead a remnant of the once exposed Cathedral Fm. Evidence of partial replacement of dolomite to magnesite was occasionally observed in outcrops along the base of this cliff which was displayed in rocks with pinolite texture. The dominant lithology making up the base of the cliff is fine grained dolomite with lesser fine grained, massive limestone. Disseminated pyrite is commonly seen as an accessory mineral in dolomite samples and is usually  $\leq 1$ mm. The cliff dips toward the south, beginning at an approximate elevation of 2000m (from there it does not begin again until approximately 2150m) in the north and ending around 1900m in the south. Between Brussilof Creek and about 1.2km up Alcantara Creek FSR, 16 treks were completed. The rocks in this area that were studied lie within the Eldon Fm., however the Stephen Fm. was never observed to confirm this. All of the rocks in this area were described as dolomite (except for two outcrops of fine grained, massive and bedded, grey limestone), having the following characteristics: dominantly massive texture including lesser amounts of banded, bedded, zebra, laminated, veined and granola texture. Generally grey or white (or both), had grain size ranging from fine-medium, rarely up to coarse, and most of the rocks contained disseminated pyrite.

A total of 42 samples were collected in the West Alcantara Creek area this summer. Bulk rock analysis shows MgO concentrations ranging from 55.96-78.26% for seven samples taken from the base of the cliff (between Brussilof Creek going north until the cliff ends at 2000m and starts again near 2151m). CaO is between 20.6 and 38.8%, Fe<sub>2</sub>O<sub>3</sub> is  $\leq 2.0\%$  and SiO<sub>2</sub> is  $< 1.8\%$ . An additional 18 samples were taken in this same range beneath the cliff from boulders and less commonly, outcrops. MgO concentration ranged from 46.17-96.56%. CaO fell between 2.36-52.7% and Fe<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> are low,  $< 0.93\%$ ,  $\leq 0.53\%$  respectively. In the area between Brussilof Creek and approximately 1.2km up Alcantara Creek FSR, 17 samples were collected that were of dolomitic composition. MgO concentration ranged from 44.36-65.46%, CaO 33.0-54.5%, Fe<sub>2</sub>O<sub>3</sub>  $\leq 1.0\%$  and SiO<sub>2</sub>  $< 0.5\%$ .

### 3.3.3 East Alcantara Creek

The east side of Alcantara Creek (Fig. 06) was studied to a lesser extent than the west side. On this side of the valley, the Stephen Fm. can be observed in several locations in the mountains making it simple to identify the location of the Cathedral Fm. Again, there are few exposures of the Cathedral Fm. due to it being covered by talus and vegetation. Outcrops north of Brussilof Creek were marked between the elevations 1700m and 2200m. South of this on the Cross River FSR, still on the east side of Alcantara Creek, outcrops were marked between 1550m and 1675m. Boulder gardens similar to the west side of Alcantara Creek were identified near the valley floor in four different locations and are possibly remnant exposures of the Cathedral Fm. Five samples were taken from the southernmost one which contained fine grained, massive dolomites and pinolitic textured dolomites. North of this, along the east bank of Alcantara Creek are two more boulder gardens that are coincident with avalanche slides coming from the west side of the valley. Two samples were obtained from the southernmost one (which was larger, and had the approximate dimensions 75m long by 30m wide) and were medium to coarse grained, white and had granola texture. One sample was taken from the northern most boulder field which had rocks with similar characteristics to the boulders from the south. Approximately 1km north of the end of the road on the east side of Alcantara Creek is another boulder garden where one sample was obtained that was described having the following characteristics: grey/white, medium grained, no pyrite, granola texture, and moderate-high reactivity. Exposures of the Cathedral Fm. were mainly found along creek drainages on the surrounding mountains to the east of Alcantara Creek, in which case they displayed the following characteristics: mainly fine grain size, rarely medium, grey or white colour (or a combination of the two), massive, bedded, laminated, mottled, zebra and one instance of pinolite texture, commonly contained disseminated pyrite as an accessory mineral, and reactivity with HCl was high indicating high  $\text{CaCO}_3$  concentration. Interbedded with this is fine grained, grey and black, bedded limestone. Where possible, contacts and the orientation of the limestone beds was measured and recorded in order to accurately adjust the geologic map. Limestone was observed commonly between 1690m and 1800m elevation, where it often occurs in mappable scale layers bounded by fine grained dolomite.

In this area a total of 17 samples were collected. Four samples obtained from the boulder gardens yielded MgO concentrations between 84.07% and 93.36%. In all of these samples, CaO was between 5.77-14.50%,  $\text{Fe}_2\text{O}_3$  ranged from 0.62 to 1.22%, and  $\text{SiO}_2$  was <0.25%. The remaining 13 samples showed low MgO concentrations ranging from 50.63% to 70.35%, with one sample reaching 83.20%. The remaining impurities were as follows:  $16.0\% \geq \text{CaO} \leq 48.4\%$ ,  $0.17\% \geq \text{Fe}_2\text{O}_3 \leq 0.77\%$ ,  $\text{SiO}_2 < 0.6\%$ .

### 3.3.4 Struna Creek, North Struna

Early in the field season Struna Creek and North Struna were investigated briefly to study the extent of previously identified magnesite outcrops (Fig. 07). Samples were obtained from 15 different outcrops where assay information was lacking south of Struna Creek. These samples were obtained between 1290m and 1600m elevation. The MgO concentration was determined to fall between 85.51-97.75% for all samples. In the North Struna area, 17 samples were obtained between 1442m and 1935m elevation. MgO concentration in these rocks was high, ranging between 86.63-97.95%. The remaining impurities for both areas were as follows:  $1.04\% \geq \text{CaO} \leq 17.40\%$ ,  $0.33\% \geq \text{Fe}_2\text{O}_3 \leq 3.22\%$  and  $0.15\% \geq \text{SiO}_2 \leq 3.59\%$ .

### 3.3.5 Assiniboine Creek, Aurora Creek

One sample was obtained in the Assiniboine Creek area and two in the Aurora Creek area where only one day was spent in each (Fig. 08). The trek in the Assiniboine Creek area marked outcrops between 1800m and 1895m elevation. The sample obtained was described as: white/pink, medium-coarse grained, contained disseminated and veined pyrite up to 2% abundance, had granola texture and had low reactivity with HCl. Assay results determined MgO to be 88.54%, with 8.28% CaO, 2.19%  $\text{Fe}_2\text{O}_3$  and 0.59%  $\text{SiO}_2$ . Outcrops in the Aurora Creek area were marked between 1827m and 1967m. Both samples contained pyrite, were medium coarse grained, grey and white in colour and had massive and granola texture, reactivity was high indicating dolomite composition. Assay results determined MgO concentration to be 64.67% and 52.36%, CaO was 33.70% and 46.60%,  $\text{Fe}_2\text{O}_3$  and  $\text{SiO}_2$  were both  $\leq 0.66\%$  for both samples.

### 3.3.6 Miller Pass

Two treks were completed in the Miller Pass area to collect data where exploration in 2012 and 2013 had not reached (Fig. 09). Few outcrops were seen due to a thick till blanket covering the Cathedral Fm. One sample was collected having the following characteristics: fine grain size, white colour, banded-massive texture, contained pyrite, and had high reactivity with HCl indicating high  $\text{CaCO}_3$  composition. MgO concentration was determined to be 44.28% with 55.0% CaO and  $\text{Fe}_2\text{O}_3$  and  $\text{SiO}_2 \leq 0.61\%$ .

## **3.4 Summary and Conclusions**

The Baymag Inc. 2014 exploration was focused around the north and east side of Mount Brussilof in which recent exploration had not been completed. Obtaining more information about the rocks in that area was priority. During the 2014 summer, several outcrops of various lithologies were analyzed. Rocks such as: shale, limestone, dolomite, magnesian dolomite and magnesite were described. Samples of dolomite, magnesian dolomite and magnesite were obtained to determine the concentration of MgO, CaO,  $\text{Fe}_2\text{O}_3$ , and  $\text{SiO}_2$  in each sample.

Three potential areas located within claims (Marvel Pass, West Alcantara Creek and East Alcantara Creek) were investigated this summer. Among them, several small areas within West and East Alcantara Creek contained magnesite outcrops. In addition to this, several areas that were explored in the last two summers: Struna Creek, North Struna, Assiniboine Creek, Aurora Creek and Miller Pass were further investigated with the objective of determining and expanding the known extent of previously identified magnesite outcrops and discovering new magnesite outcrops.

Further investigation is still needed to confirm the potential of the areas. Future exploration programs should focus on determining the extent and grade of the magnesite outcrops discovered in the 2012, 2013 and 2014 exploration campaigns as well as exploring areas that have not been studied in these years. The goal is to delineate the horizontal extension of the lithologically crystalline magnesite formation, which hosts the Brussilof Magnesite Orebody.

## 4 Figures

## 5 ITEMIZED COST STATEMENT

The total costs incurred during the 2014 exploration program:

**Figure 10 – Itemized Cost Statement**

	ITEM		NUMBER	UNIT	UNIT COST	QUANTITY	TOTAL COST
<b>Personnel</b>	Geo	Senior Geo	1	day	\$ 189.03	84	\$ 15,878.72
	Geo	Junior Geo	1	day	\$ 180.12	89	\$ 16,030.56
	Supervision			hr	\$ 41.00	129.0	\$ 5,289.00
	Report Preparation			hr	\$ 41.00	40	\$ 1,640.00
<b>Geochem</b>	Baymag Lab (Exshaw)	sample analysis		MgO, CaO, Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub> , SiO <sub>2</sub> sample analysis	\$ 60.00	106	\$ 6,360.00
<b>Drilling</b>	Diamond Drilling	BQW		meters	\$ 55.77	0.0	\$ -
	Core Boxes			box		0	
<b>Other Operations.....</b> <b>.....Drill access trail</b>	Drill Pad Construction	320 Backhoe		hr	\$ 135.00	0	\$ -
	Drill Mobilization / demobilization	backhoe pulling		backhoe (hr)	\$ 135.00	0	\$ -
		D7 pushing		D7 Cat (hr)	\$ 125.00	0	\$ -
	Trail Construction	320 backhoe		backhoe (hr)	\$ 135.00	0	\$ -
	Settling Pond Construction			backhoe (hr)	\$ 135.00	0	\$ -
	Lowbed	mob / demob D7 Cat		hr	\$ 194.62	0	\$ -
	Lowbed	mob / demob 320 Hoe		hr	\$ 175.00	0	\$ -
<b>Transportation</b>	Pickup (4X4)			day	\$ 25.40	89	\$ 2,260.23
	rate			km	\$ 0.38	2608	\$ 982.40
<b>Accommodation</b>	camp		2	day	\$ 19.16	84	\$ 3,218.19
<b>Equipment Rentals</b>	rock saw	sample prep		days	\$ 10.56	11	\$ 110.85
	blades	sample prep		blades	\$ 125.00	0	\$ -
	chainsaw drill			day	\$ 20.00	0	\$ -
	GPS			day	\$ 5.28	89	\$ 469.81
	Sat phone			month	\$ 133.93	5.00	\$ 669.64
	Misc supplies	bear spray, hammer, batteries, notebook, propane		item	\$ 193.92	1	\$ 193.92
<b>Grand Total</b>							<b>\$ 53,103.33</b>

## 6 REFERENCES

Sangster, D.F., 1998, *Breccia-hosted Lead-Zinc deposits in carbonate rocks*, Paleocarst, N.P. James and P.W.

Choquette, Editors, Springer-Verlag New York Inc., p. 102-116.

Simandl, G. J. and Hancock, K. D., 1990, *Geology Of The Mount Brussilof Magnesite Deposit, Southeastern*

*British Columbia (82J/12, 13)*. Geological Fieldwork 1990 – British Columbia Geological Survey Branch,

Paper 1991-1, p. 269-278.

## 7 AUTHORS' QUALIFICATIONS

Program supervision, geological interpretation, conclusions:

Ian Knuckey, MBA, B.Sc. Geology,  
Mine Manager

Report compilation, geological interpretation, conclusions:

Fabio Stern, M.Sc. Geology,  
Mine Geologist

Report compilation, geological interpretation, conclusions:

Brody Myers, B.Sc. Geology,  
Field Geologist

## 8 APPENDIX A – Samples Assay Sheet

### 2014 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
S t r u n a  C r e e k	S109	50710	594419	5623536	Magnesite	94.16	4.30	0.89	0.21	0.44
	S110	50711	594515	5623146	Magnesite	90.92	5.45	2.64	0.31	0.68
	S111	50712	594445	5622745	Magnesitic Dolomite	85.51	13.59	0.65	0.05	0.20
	S112	50713	594506	5622710	Magnesite	90.57	7.86	0.56	0.35	0.66
	S113	50714	594547	5622671	Magnesitic Dolomite	88.79	9.33	1.29	0.25	0.34
	S114	50715	594636	5622789	Magnesitic Dolomite	86.81	10.80	0.89	0.45	1.05
	S115	50716	594610	5622810	Magnesitic Dolomite	89.79	8.85	0.69	0.17	0.49
	S116	50717	594545	5622877	Magnesitic Dolomite	80.89	17.44	1.09	0.17	0.42
	S117	50718	594609	5622996	Magnesite	96.78	2.44	0.48	0.01	0.30
	S118	50719	594597	5623027	Magnesite	96.70	1.64	0.89	0.25	0.53
	S119	50720	594614	5623100	Magnesite	96.48	1.65	0.69	0.30	0.89
	S120	50721	594527	5622564	Magnesite	91.24	5.06	3.23	0.16	0.31
	S121	50722	594561	5623364	Magnesite	97.24	1.39	1.00	0.11	0.26
	S140	50723	594297	5621971	Magnesite	97.75	1.04	0.71	0.13	0.37
S122	50724	594344	5622184	Magnesite	91.18	7.51	1.04	0.12	0.15	
N o r t h  S t r u n a	S123	50725	594196	5624147	Magnesitic Dolomite	86.64	11.91	1.07	0.09	0.30
	S124	50751	594264	5624206	Magnesite	94.90	3.42	0.66	0.35	0.67
	S125	50752	594385	5624255	Magnesite	96.53	2.03	0.68	0.22	0.54
	S126	50753	594400	5624351	Magnesite	96.26	2.25	0.57	0.26	0.67
	S127	50754	594506	5624755	Magnesite	96.92	1.69	0.62	0.14	0.62
	S128	50755	594606	5624789	Magnesitic Dolomite	93.34	3.87	1.18	0.44	1.18
	S129	50756	594636	5624744	Magnesite	94.86	4.17	0.54	0.13	0.30
	S130	50757	594378	5625047	Magnesitic Dolomite	92.78	2.69	0.63	0.31	3.59
	S131	50758	594449	5625067	Magnesite	91.64	7.26	0.66	0.06	0.38
	S132	50759	594095	5624998	Magnesite	97.95	1.50	0.33	0.04	0.18
	S133	50760	594091	5625035	Magnesite	97.34	1.45	0.49	0.24	0.47
	S135	50761	594062	5624994	Magnesite	96.05	2.56	0.64	0.33	0.42
	S134	50762	594055	5625032	Magnesite	96.38	1.72	0.34	0.66	0.90
	S136	50763	594241	5625048	Magnesite	96.16	2.08	0.37	0.59	0.80
	S137	50764	594553	5625104	Magnesitic Dolomite	88.36	10.93	0.42	0.08	0.21
	S138	50765	594612	5625186	Magnesite	93.58	4.00	0.56	0.12	1.75
	S139	50766	594576	5625077	Magnesite	93.17	5.40	0.66	0.18	0.60
Miller Pass	S190	50822	599268	5618242	Dolomite	44.28	55.01	0.61	0.05	0.05
Assiniboine Creek	S140	50767	593823	5629321	Magnesitic Dolomite	88.54	8.28	2.19	0.40	0.59
Aurora Creek	S141	50768	595605	5627249	Dolomite	64.67	33.76	0.61	0.37	0.59
	S142	50769	595666	5627169	Dolomite	52.36	46.67	0.66	0.10	0.21

## 2014 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	
<b>M a r v e l  P a s s</b>	S143	50771	598870	5629423	Dolomite	56.34	41.85	1.66	0.05	0.10	
	S144	50772	598868	5629306	Dolomite	66.10	33.33	0.43	0.05	0.09	
	S145	50773	599539	5629790	Dolomite	59.96	38.36	1.56	0.05	0.08	
	S146	50774	599431	5629740	Dolomite	60.27	37.67	1.00	0.37	0.69	
	S147	50775	596993	5629159	Dolomite	60.52	38.49	0.80	0.06	0.13	
	S148	50776	597269	5629166	Dolomite	60.46	38.80	0.22	0.20	0.32	
	S149	50777	596625	5629125	Dolomite	61.36	38.24	0.30	0.04	0.06	
	S150	50778	596626	5628869	Dolomite	57.28	41.90	0.65	0.08	0.09	
	S151	50779	597173	5629329	Dolomite	59.19	39.53	1.17	0.05	0.06	
	S152	50780	596327	5628864	Dolomite	59.76	38.41	1.77	0.02	0.04	
	S153	50781	597416	5629421	Dolomite	60.32	38.61	1.02	0.02	0.03	
	S154	50782	597267	5629331	Dolomite	61.54	37.79	0.59	0.02	0.06	
	S155	50783	597807	5629486	Dolomite	61.68	36.09	2.12	0.04	0.07	
	S156	50784	599066	5629369	Dolomite	53.28	46.35	0.27	0.03	0.07	
	S157	50785	596735	5628937	Dolomite	61.06	38.38	0.40	0.06	0.10	
	<b>A l i c a n t a r a  C r e e k</b>	S158	50786	600259	5620390	Dolomite	62.28	37.21	0.46	0.02	0.03
		S159	50787	600672	5620407	Dolomite	65.46	34.15	0.35	0.01	0.03
S160		50788	600624	5620793	Dolomite	63.07	36.52	0.34	0.02	0.05	
S161		50789	600507	5621201	Dolomite	63.00	36.18	0.26	0.09	0.47	
S162		50790	600324	5621344	Dolomite	62.98	36.43	0.47	0.04	0.08	
S163		50792	600105	5621496	Dolomite	55.37	42.30	0.24	0.20	1.89	
S164		50791	601263	5621432	Dolomite	57.15	42.38	0.36	0.04	0.08	
S165		50793	601313	5621391	Dolomite	66.49	33.09	0.35	0.03	0.04	
S166		50794	600194	5621959	Dolomite	44.37	54.69	0.34	0.09	0.52	
S167		50795	600829	5622135	Dolomite	44.42	54.36	1.05	0.07	0.10	
S168		50796	600954	5622224	Dolomite	44.92	54.50	0.45	0.05	0.07	
S169		50797	601264	5622755	Dolomite	51.60	47.51	0.68	0.10	0.11	
S170		50798	601362	5622996	Dolomite	61.73	37.96	0.23	0.02	0.06	
S171		50799	601119	5623184	Dolomite	60.92	38.27	0.60	0.11	0.11	
S172		50800	601174	5621190	Dolomite	61.34	38.27	0.27	0.04	0.08	
S173		50801	601084	5623631	Dolomite	45.40	53.95	0.48	0.07	0.11	
S174		50802	601219	5623562	Dolomite	49.37	50.15	0.31	0.08	0.09	
S175		50803	601410	5624624	Dolomite	61.38	38.16	0.30	0.06	0.10	
-		50815	601520	5624836	Magnesitic Dolomite	80.28	18.19	1.04	0.26	0.23	
-		50816	601529	5624893	Dolomite	46.91	52.44	0.52	0.07	0.07	
-	50817	601513	5625071	Dolomite	69.26	30.12	0.51	0.06	0.04		
-	50818	601493	5625538	Dolomite	52.35	46.25	1.00	0.20	0.20		
-	50819	601496	5625541	Dolomite	58.45	40.04	1.08	0.19	0.24		
-	50820	601494	5625542	Dolomite	53.24	45.02	1.36	0.18	0.20		
-	50821	601492	5625549	Dolomite	46.17	52.79	0.84	0.10	0.10		
S176	50804	601983	5624649	Dolomite	60.44	39.31	0.18	0.03	0.05		
-	50823	601554	5625483	Dolomite	64.32	34.87	0.75	0.03	0.03		
-	50824	601422	5625595	Dolomite	68.83	29.81	0.50	0.32	0.54		
S177	50805	601909	5624788	Dolomite	69.89	29.57	0.34	0.07	0.12		

### 2014 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
A l c a n t a r a  C r e e k	S178	50806	602304	5624892	Dolomite	61.48	37.97	0.47	0.03	0.05
	S179	50807	602518	5625185	Dolomite	69.44	29.90	0.43	0.05	0.18
	S180	50808	601297	5625648	Magnesite	94.35	4.76	0.64	0.10	0.15
	S181	50809	601272	5625720	Magnesitic Dolomite	88.16	10.83	0.76	0.11	0.14
	S182	50810	601542	5624891	Magnesite	94.21	4.61	0.73	0.20	0.25
	S183	50811	601199	5625840	Magnesitic Dolomite	76.81	21.20	1.34	0.27	0.37
	S184	50812	601145	5626084	Magnesite	90.39	8.81	0.68	0.05	0.07
	S186	50813	601110	5626219	Magnesite	78.36	20.59	0.90	0.08	0.07
	S188	50814	601662	5625827	Magnesite	93.36	5.78	0.77	0.04	0.05
	S187	50825	601664	5625823	Magnesitic Dolomite	86.63	12.65	0.62	0.05	0.05
	S189	50826	601148	5626397	Magnesite	91.31	5.30	0.75	0.11	2.53
	S190	50827	601966	5621417	Dolomite	65.09	33.91	0.33	0.05	0.61
	S191	50828	602107	5621575	Dolomite	61.72	37.76	0.44	0.03	0.06
	S192	50829	600851	5626657	Dolomite	60.74	38.08	0.70	0.10	0.37
	S193	50830	600640	5626626	Dolomite	64.09	34.98	0.77	0.07	0.09
	S194	50831	600557	5626988	Dolomite	55.96	38.89	2.01	1.34	1.81
	S195	50832	600548	5626936	Magnesite	96.56	2.36	0.59	0.12	0.37
	S196	50833	600451	5626940	Magnesitic Dolomite	87.91	11.04	0.93	0.05	0.07
	S197	50834	600373	5626811	Dolomite	71.62	27.16	0.85	0.15	0.22
	S198	50835	600362	5626803	Dolomite	78.05	20.85	0.91	0.08	0.11
	S199	50836	600297	5626722	Dolomite	78.26	20.63	0.91	0.09	0.11
	S200	50837	601891	5624708	Dolomite	66.71	32.38	0.62	0.12	0.17
	S201	50838	601942	5624794	Dolomite	70.35	28.51	0.93	0.12	0.09
	S202	50839	601927	5624901	Dolomite	68.77	30.25	0.69	0.15	0.14
	S203	50840	601513	5626171	Magnesitic Dolomite	85.58	13.02	1.22	0.09	0.09
	S204	50841	602182	5626688	Dolomite	42.45	55.05	0.98	0.49	1.03
	S205	50842	600943	5627478	Magnesitic Dolomite	84.07	14.52	0.92	0.24	0.25
	S206	50843	600587	5627783	Dolomite	50.63	48.42	0.77	0.08	0.09
S207	50844	601216	5627511	Magnesitic Dolomite	83.20	16.02	0.71	0.05	0.02	
S208	50845	600816	5628072	Dolomite	59.04	39.97	0.69	0.15	0.15	

## 2013 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
<b>N o r t h  S t r u n a</b>	S17	50667	593999	5624238	Magnesitic Dolomite	84.95	14.22	0.26	0.02	0.55
	S18	50668	594047	5624241	Dolomite	78.63	20.24	0.35	0.21	0.56
	S19	50669	594096	5624166	Dolomite	59.28	39.54	0.14	0.36	0.68
	S20	50670	594385	5624457	Dolomite	77.85	21.37	0.53	0.06	0.19
	S21	50671	594447	5624431	Magnesitic Dolomite	82.75	16.69	0.39	0.05	0.12
	S22	50672	594468	5624395	Magnesite	97.74	1.72	0.46	0.03	0.06
	S23	50673	594472	5624161	Magnesite	95.90	2.28	1.18	0.16	0.48
	S24	50674	594504	5624197	Magnesite	97.75	1.61	0.36	0.08	0.20
	S25	50675	594469	5624284	Magnesite	96.46	2.27	0.47	0.20	0.60
	S26	50726	594464	5624009	Magnesitic Dolomite	87.07	8.01	0.56	0.55	3.80
	S27	50727	594523	5624220	Magnesite	96.82	1.99	0.67	0.16	0.36
	S28	50728	594472	5624430	Magnesite	90.66	8.33	0.31	0.23	0.48
	S29	50729	594271	5625194	Magnesite	97.52	1.51	0.31	0.17	0.49
	S30	50730	594317	5625131	Dolomite	77.02	22.12	0.44	0.18	0.25
	S31	50731	594252	5625003	Magnesite	93.50	5.47	0.31	0.28	0.44
	S32	50732	594215	5625058	Magnesite	93.83	5.45	0.40	0.09	0.24
	S33	50733	594265	5625121	Magnesitic Dolomite	82.90	16.49	0.49	0.04	0.08
	S34	50734	594022	5624731	Magnesite	90.76	8.29	0.28	0.30	0.37
	S35	50735	594101	5624780	Magnesite	90.14	9.35	0.33	0.04	0.14
	S36	50736	594290	5624927	Magnesite	95.30	2.97	0.44	0.34	0.95
S37	50737	594332	5624969	Magnesitic Dolomite	86.92	11.74	0.43	0.18	0.73	
S38	50738	594297	5624745	Magnesite	95.72	2.31	0.61	0.30	1.05	
S39	50739	594402	5624735	Magnesite	91.04	8.23	0.45	0.08	0.20	
<b>Assiniboine Creek</b>	S59	50609	594418	5628677	Magnesite	91.72	6.45	1.07	0.23	0.53
	S60	50610	594124	5629067	Magnesite	94.56	3.84	0.64	0.22	0.75
	S61	50611	594036	5629165	Magnesite	94.65	3.12	0.68	0.35	1.20
	S68	50619	593862	5629234	Magnesitic Dolomite	86.76	12.29	0.51	0.15	0.29
	S69	50620	593821	5629095	Magnesite	91.21	7.15	0.77	0.26	0.61
	S82	50683	593822	5629402	Magnesite	90.50	7.66	0.79	0.32	0.73
	S83	50684	593814	5629428	Magnesite	94.74	3.81	0.75	0.22	0.47
	S84	50685	593711	5629469	Magnesite	95.27	4.05	0.60	0.03	0.05

### 2013 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
<b>A u r o r a  C r e e k</b>	S43	50743	594342	5625560	Magnesite	95.31	3.45	0.62	0.23	0.39
	S44	50744	594389	5625631	Magnesite	96.21	2.98	0.63	0.06	0.11
	S45	50745	594444	5625589	Magnesite	97.29	1.89	0.64	0.06	0.12
	S46	50746	594495	5625642	Magnesite	96.02	2.60	0.38	0.32	0.68
	S47	50747	594421	5625702	Magnesite	97.29	1.77	0.52	0.14	0.29
	S48	50748	594404	5625713	Magnesite	96.35	2.61	0.47	0.23	0.34
	S49	50749	594428	5625793	Magnesite	96.83	2.67	0.36	0.07	0.08
	S50	50750	594593	5625603	Magnesitic Dolomite	85.66	12.74	0.36	0.40	0.84
	S51	50601	594656	5625657	Magnesite	90.52	8.92	0.43	0.04	0.10
	S52	50602	594395	5625759	Magnesite	91.60	5.77	0.61	0.80	1.23
	S53	50603	594488	5625892	Magnesitic Dolomite	86.99	11.71	0.65	0.25	0.40
	S54	50604	594917	5626783	Magnesite	90.81	7.59	0.88	0.19	0.53
	S55	50605	594875	5626741	Magnesitic Dolomite	87.52	9.54	1.04	0.70	1.20
	S56	50606	594982	5626690	Magnesitic Dolomite	87.35	11.57	0.51	0.13	0.44
	S57	50607	595025	5626621	Magnesite	96.90	1.28	0.58	0.13	1.11
	S58	50608	594564	5626075	Dolomite	45.33	52.14	1.41	0.44	0.68
	S71	50625	594391	5625616	Magnesite	94.83	2.01	1.95	0.24	0.96
	S97	50698	595895	5628255	Dolomite	61.88	37.08	0.78	0.08	0.17
	S98	50699	596037	5628369	Dolomite	43.24	54.89	1.67	0.07	0.12
<b>Alcantara Creek</b>	S40	50740	600075	5619482	Dolomite	45.64	53.48	0.65	0.09	0.14
	S41	50741	600056	5619787	Dolomite	44.56	55.01	0.35	0.04	0.03
	S42	50742	600142	5619901	Dolomite	45.52	54.07	0.36	0.02	0.02

### 2013 Samples

	Sample #	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
C r o s s  R i v e r	S01	50651	597507	5619149	Dolomite	50.32	48.89	0.69	0.05	0.05
	S03	50653	597563	5619207	Dolomite	62.26	37.46	0.16	0.04	0.08
	S04	50654	597603	5619188	Dolomite	62.48	36.91	0.45	0.08	0.08
	S05	50655	597609	5619161	Dolomite	61.81	37.10	1.00	0.03	0.06
	S06	50656	597592	5619545	Dolomite	60.64	38.19	0.60	0.18	0.38
	S07	50657	597703	5619503	Dolomite	59.35	39.47	0.59	0.24	0.36
	S08	50658	597936	5619367	Dolomite	61.36	37.95	0.26	0.18	0.25
	S09	50659	597968	5619340	Dolomite	75.50	23.33	0.84	0.13	0.21
	S10	50660	598032	5619249	Dolomite	68.06	31.37	0.41	0.07	0.09
	S11	50661	598026	5619299	Dolomite	65.24	34.10	0.55	0.03	0.07
	S12	50662	598015	5619379	Dolomite	76.69	22.43	0.67	0.07	0.14
	S13	50663	598044	5619437	Dolomite	61.42	38.02	0.45	0.05	0.06
	S14	50664	598164	5619064	Dolomite	70.92	27.92	0.20	0.06	0.90
	S15	50665	598160	5619077	Magnesite	91.19	7.42	0.41	0.13	0.84
	S16	50666	598459	5619119	Dolomite	57.51	41.61	0.79	0.04	0.05
	S62	50613	595946	5619746	Dolomite	59.82	39.58	0.29	0.10	0.21
	S63	50614	596014	5619724	Dolomite	56.73	42.56	0.37	0.12	0.23
	S64	50615	597601	5618733	Dolomite	79.25	19.80	0.84	0.04	0.07
	S93	50694	597760	5618095	Dolomite	43.28	55.80	0.71	0.09	0.12
	S95	50696	598001	5617402	Dolomite	40.86	55.46	0.90	0.97	1.80
	S99	50700	596626	5619457	Dolomite	74.29	24.42	0.49	0.32	0.48
	S100	50701	596561	5619525	Dolomite	47.02	52.16	0.72	0.03	0.06
	S101	50702	596821	5620358	Magnesite	90.46	8.61	0.63	0.08	0.21
	S102	50703	597078	5620315	Dolomite	44.51	54.80	0.58	0.03	0.08
	S103	50704	597087	5620084	Dolomite	44.42	53.74	0.82	0.32	0.69
	S104	50705	597201	5620033	Dolomite	31.68	65.75	2.09	0.18	0.29
	S105	50706	595702	5619967	Dolomite	33.33	65.21	1.11	0.13	0.22
	S106	50707	595583	5620075	Dolomite	32.54	65.45	1.92	0.03	0.07
S107	50708	597397	5619887	Dolomite	31.54	64.77	3.30	0.13	0.27	
S108	50709	597499	5619816	Dolomite	36.58	62.56	0.70	0.06	0.10	

## 2012 Samples

	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
<b>S t r u n a  C r e e k</b>	45227	594363	5621889	Dolomite	45.05	53.72	0.46	0.25	0.52
	45228	594209	5622002	Dolomite	72.71	26.65	0.45	0.07	0.12
	45229	594570	5623433	Magnesite	91.55	7.33	0.84	0.09	0.18
	45230	594597	5623436	Magnesitic Dolomite	88.64	9.90	0.66	0.25	0.56
	45232	594534	5622870	Magnesitic Dolomite	82.60	15.50	0.87	0.30	0.74
	45233	594553	5623043	Magnesite	95.63	1.51	1.73	0.28	0.86
	45234	594543	5623129	Magnesite	94.55	3.00	1.11	0.34	0.99
	45235	594668	5623249	Magnesite	95.41	1.79	0.50	0.57	1.74
	45236	594500	5623437	Magnesite	95.08	1.92	0.83	0.55	1.62
	45237	594556	5623117	Magnesite	93.59	1.98	1.90	0.62	1.91
	45238	594480	5622843	Dolomite	75.23	23.01	1.31	0.19	0.26
	45240	594092	5623556	Dolomite	59.19	40.07	0.46	0.12	0.16
	45241	594389	5623639	Magnesite	95.35	3.67	0.60	0.11	0.26
	45242	594417	5623632	Magnesitic Dolomite	86.89	10.07	1.79	0.37	0.88
	45243	594454	5623630	Magnesite	97.48	1.68	0.74	0.04	0.06
	45244	594500	5623650	Dolomite	65.86	33.62	0.39	0.06	0.07
	45245	594346	5623540	Magnesite	90.77	5.99	2.07	0.42	0.75
	45246	594412	5623559	Dolomite	79.19	18.28	2.23	0.11	0.19
	45247	594514	5623659	Magnesite	97.04	1.99	0.72	0.09	0.16
	45248	594515	5623633	Magnesitic Dolomite	85.42	13.48	0.95	0.06	0.09
	45249	594560	5623602	Magnesite	94.19	4.12	1.24	0.14	0.30
	45250	594649	5623532	Magnesite	95.96	2.92	0.76	0.10	0.26
	50001	594587	5623498	Magnesite	96.87	1.63	0.89	0.19	0.42
	50002	594560	5623531	Magnesite	96.02	1.86	1.98	0.05	0.10
	50003	594542	5623407	Magnesite	96.92	2.14	0.74	0.07	0.13
	50004	594429	5623682	Magnesite	90.26	7.53	0.98	0.35	0.89
	50005	594499	5623536	Magnesitic Dolomite	87.44	11.32	0.78	0.15	0.31
	50006	594541	5623515	Magnesite	97.26	1.76	0.68	0.10	0.20
<b>North Struna</b>	50093	594137	5625221	Dolomite	46.02	52.82	0.36	0.35	0.44
	50094	594159	5625221	Magnesite	91.03	8.26	0.36	0.12	0.23
	50095	594233	5625120	Dolomite	72.43	25.94	0.70	0.28	0.65
	50096	594212	5624833	Dolomite	58.26	39.72	0.67	0.36	0.99
	50501	594409	5624297	Dolomite	78.34	20.90	0.45	0.10	0.21
	50502	594495	5624327	Magnesite	96.95	1.85	0.49	0.20	0.51

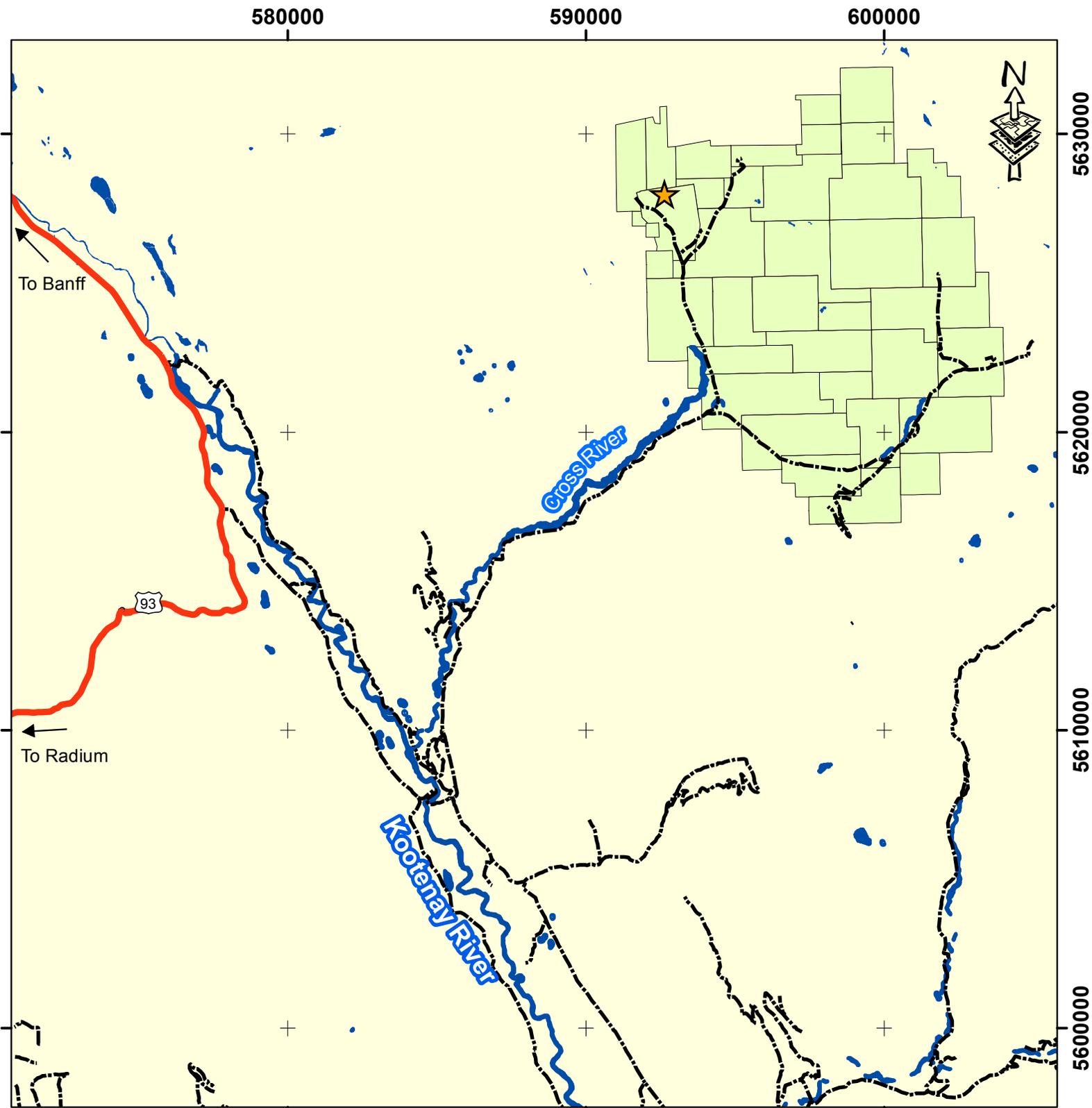
## 2012 Samples

	Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
<b>M i l l e r  P a s s</b>	50019	598610	5618098	Dolomite	52.77	46.79	0.32	0.04	0.09
	50020	598454	5618207	Dolomite	74.96	24.33	0.54	0.06	0.12
	50021	598288	5618328	Magnesite	96.11	2.54	0.96	0.09	0.30
	50022	598256	5618263	Dolomite	64.87	34.60	0.36	0.08	0.09
	50023	598164	5618338	Dolomite	49.32	49.97	0.25	0.09	0.36
	50024	598448	5618365	Magnesitic Dolomite	81.04	17.99	0.55	0.14	0.28
	50025	598375	5618441	Dolomite	60.16	39.22	0.50	0.06	0.07
	50026	598321	5618393	Dolomite	65.50	34.14	0.24	0.05	0.08
	50027	598472	5617979	Dolomite	63.02	36.04	0.26	0.11	0.57
	50028	598073	5618159	Dolomite	65.97	33.50	0.38	0.05	0.10
	50029	598067	5618126	Dolomite	66.88	32.73	0.20	0.07	0.12
	50030	598093	5617961	Dolomite	74.13	25.43	0.19	0.07	0.18
	50031	598606	5618383	Dolomite	43.17	56.02	0.57	0.04	0.20
	50032	598540	5618368	Magnesite	94.35	4.33	0.78	0.16	0.39
	50034	598454	5618410	Dolomite	47.11	51.85	0.80	0.08	0.16
50033	598492	5618381	Dolomite	62.77	36.89	0.27	0.03	0.05	
<b>Assiniboine Creek</b>	50090	593999	5628834	Dolomite	45.59	51.66	0.27	0.61	1.87
	50091	593994	5628864	Magnesite	94.59	3.97	1.00	0.14	0.29
	50092	593989	5628883	Magnesite	90.60	6.75	0.53	0.86	1.26
<b>Aurora Creek</b>	50079	595081	5626860	Dolomite	35.35	59.84	3.12	0.72	0.97
	50080	595090	5626745	Dolomite	75.48	23.59	0.54	0.11	0.27
	50081	595029	5626755	Magnesitic Dolomite	84.49	14.52	0.50	0.14	0.34
	50082	594780	5626431	Dolomite	69.84	28.27	0.83	0.40	0.66
	50083	594785	5626406	Magnesite	93.53	4.69	0.83	0.31	0.63
	50085	595942	5628042	Dolomite	41.44	56.10	0.68	0.50	1.28
	50086	594742	5626395	Magnesitic Dolomite	86.90	8.33	0.77	0.99	3.01
	50087	594689	5626293	Dolomite	57.12	40.93	1.14	0.34	0.47
<b>Camp Gully</b>	50075	594385	5625465	Magnesite	95.67	2.13	0.45	0.48	1.26
	50076	594489	5625468	Magnesite	95.15	3.34	0.77	0.20	0.54
	50077	594550	5625470	Magnesite	97.26	1.87	0.68	0.06	0.13
	50078	594528	5625456	Magnesite	95.26	4.05	0.51	0.06	0.11

## 2013 Samples

Assay #	east	north	Rock desc	MgO	CaO	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
50007	595470	5621597	Dolomite	57.90	41.34	0.46	0.09	0.21
50009	595544	5621504	Dolomite	53.34	46.16	0.36	0.06	0.08
50010	595559	5621541	Dolomite	51.13	48.06	0.66	0.05	0.10
50011	595546	5621634	Dolomite	57.09	42.38	0.42	0.02	0.10
50012	595520	5621695	Dolomite	50.90	46.26	0.49	0.05	2.30
50013	595510	5621749	Dolomite	46.25	51.34	0.73	0.58	1.10
50014	595469	5621624	Dolomite	47.78	51.17	0.52	0.15	0.38
50015	596305	5620924	Dolomite	52.49	46.51	0.85	0.05	0.10
50016	596345	5621102	Dolomite	48.45	49.93	1.40	0.08	0.14
50017	596392	5621156	Dolomite	70.43	28.37	0.71	0.04	0.45
50035	599562	5619022	Dolomite	52.51	46.80	0.30	0.14	0.25
50036	598196	5618819	Dolomite	50.54	48.33	0.42	0.20	0.52
50037	598177	5618858	Dolomite	45.62	53.74	0.25	0.11	0.27
50038	598195	5618912	Magnesitic Dolomite	81.78	16.34	0.55	0.28	1.05
50039	598208	5618925	Magnesitic Dolomite	89.52	8.46	0.44	0.43	1.14
50040	598219	5618970	Magnesitic Dolomite	81.58	17.32	0.66	0.15	0.30
50041	598221	5618997	Magnesite	95.23	3.97	0.63	0.06	0.12
50042	598317	5618908	Magnesite	90.45	8.74	0.54	0.10	0.17
50043	598311	5618891	Magnesite	96.75	2.76	0.43	0.02	0.03
50044	598239	5618818	Magnesitic Dolomite	89.44	9.31	0.52	0.25	0.48
50045	598302	5618840	Dolomite	49.50	49.42	0.39	0.24	0.46
50046	598321	5618856	Magnesite	94.16	4.76	0.52	0.15	0.42
50047	598306	5618876	Magnesitic Dolomite	82.98	16.29	0.36	0.13	0.23
50048	598330	5618868	Magnesitic Dolomite	89.02	10.35	0.47	0.04	0.12
50049	598570	5619048	Dolomite	59.60	39.63	0.59	0.09	0.10
50050	598813	5618824	Magnesitic Dolomite	83.14	15.90	0.51	0.20	0.24
50052	598978	5618831	Magnesite	91.46	7.29	0.46	0.27	0.51
50053	598990	5618839	Magnesite	92.62	6.53	0.43	0.18	0.24
50054	598952	5618806	Magnesitic Dolomite	86.73	12.38	0.52	0.17	0.21
50055	598995	5618804	Magnesitic Dolomite	85.49	14.00	0.39	0.04	0.07
50056	599137	5619070	Dolomite	72.28	26.74	0.45	0.19	0.33
50057	599019	5619021	Dolomite	43.50	55.51	0.80	0.10	0.08
50058	599162	5618957	Dolomite	41.11	57.08	0.96	0.27	0.58
50059	598961	5618775	Dolomite	67.45	31.74	0.31	0.24	0.26
50060	598937	5618771	Magnesite	92.24	7.03	0.54	0.07	0.13
50061	598924	5618778	Magnesitic Dolomite	89.54	8.99	0.69	0.33	0.45
50062	598883	5618780	Magnesite	95.41	3.18	0.59	0.34	0.49
50063	598915	5618809	Magnesite	92.03	6.82	0.74	0.17	0.25
50064	599538	5618967	Dolomite	47.34	51.93	0.41	0.12	0.20

C  
r  
o  
s  
s  
  
R  
i  
v  
e  
r



**Fig. 01: Baymag Location**

 Baymag Claims

 Mine site

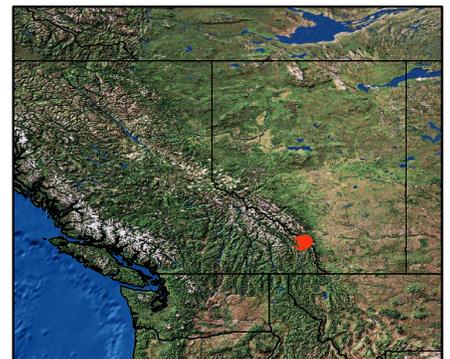
 Highway

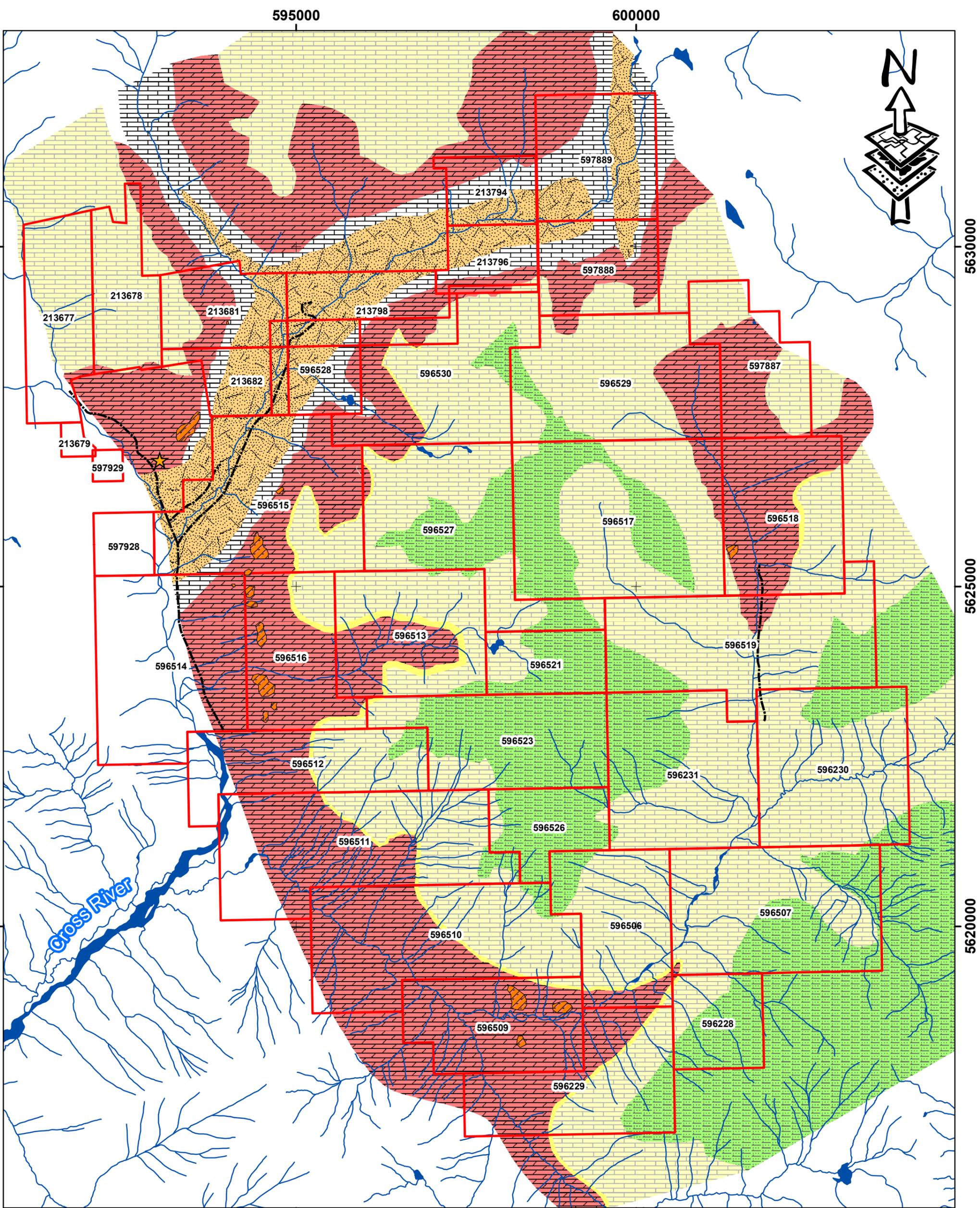
 Roads

0 2.5 5  
 Km

**1:175,000**

Datum NAD83  
 UTM Zone 11N





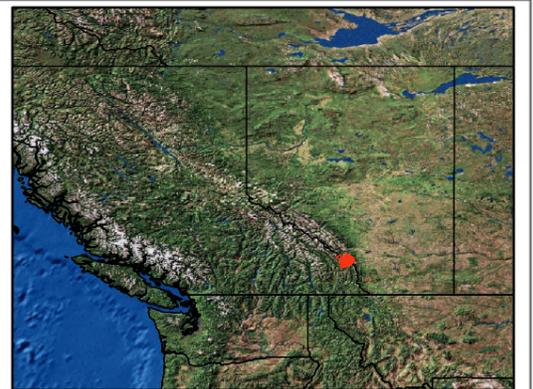
**Fig. 02: Baymag - Mt. Brussilof Mine**

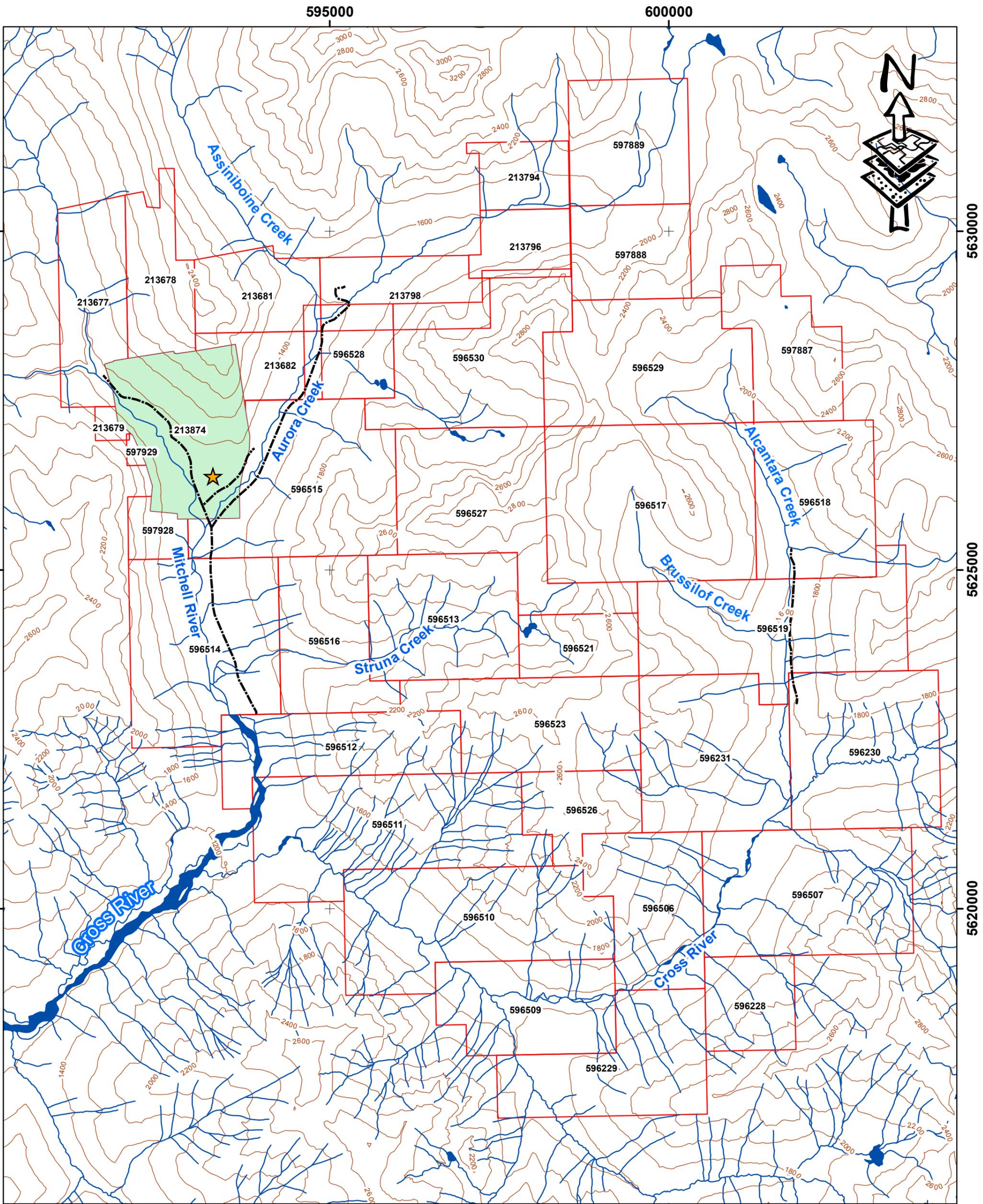
**Legend**

- |                    |              |               |
|--------------------|--------------|---------------|
| ★ Mine site        | Arctomys Fm. | Cathedral Fm. |
| Magnesite Outcrops | Eldon Fm.    | Naiset Fm.    |
| Baymag Claims      | Stephen Fm.  | Gog Group     |
| --- Roads          |              |               |

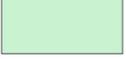
0 1000 2000  
m

1:50,000  
Datum NAD83  
UTM Zone 11N



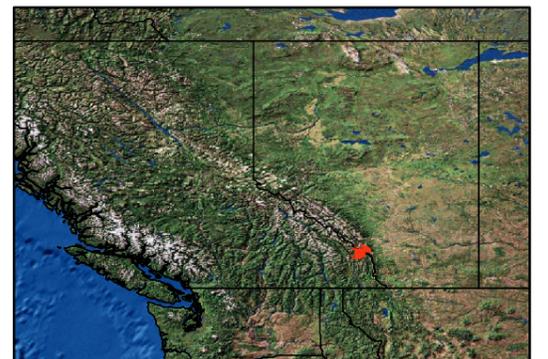


**Fig. 03: Baymag - Mineral Claims**

-  Mine site
-  Mine Lease
-  Roads
-  Baymag Claims
-  Water bodies

0 1000 2000  
m

1:50,000  
Datum NAD83  
UTM Zone 11N



592000

596000

600000

604000

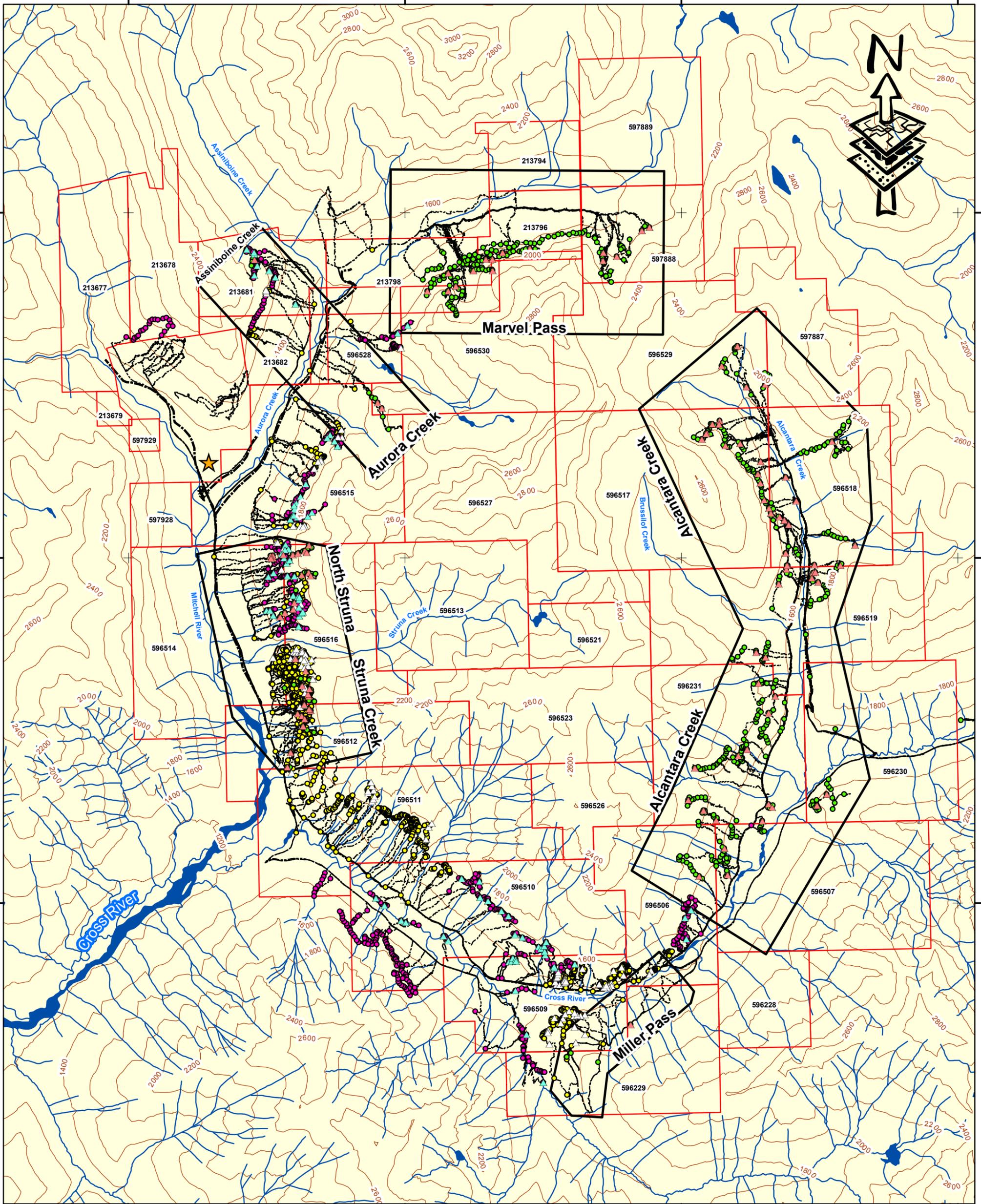


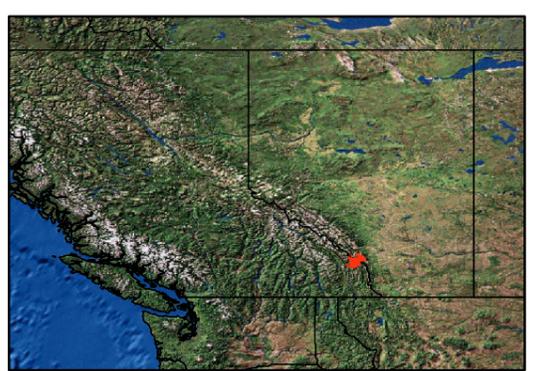
Fig. 04: Baymag - Exploration Summary

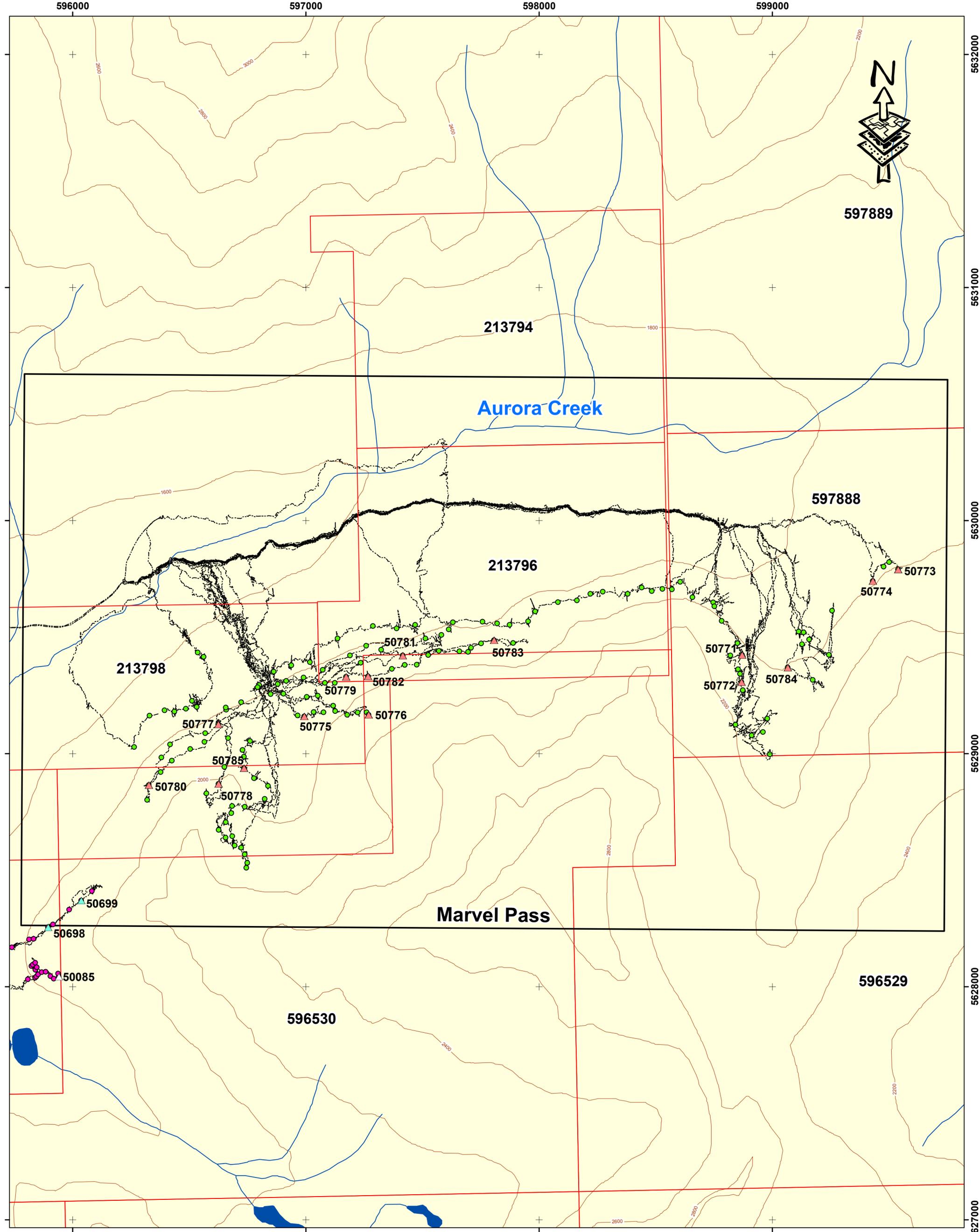
Legend

- ▲ 2014 Samples
- ▲ 2013 Samples
- ▲ 2012 Samples
- 2014 Geo Stations
- 2013 Geo Stations
- 2012 Geo Stations
- ★ Mine site
- Baymag Claims
- Tracks
- Roads



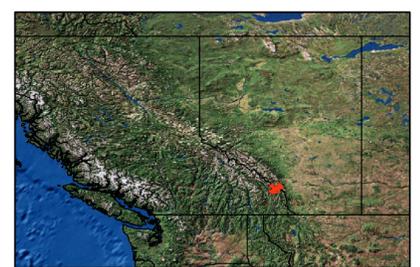
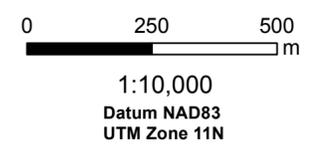
1:50,000  
Datum NAD83  
UTM Zone 11N





**Fig. 05: Baymag - Marvel Pass area**

- Legend**
- ▲ 2014 Samples
  - ▲ 2013 Samples
  - △ 2012 Samples
  - 2014 Geo Stations
  - 2013 Geo Stations
  - Baymag Claims
  - Tracks
  - Roads
  - 50776 Assay Number



5632000  
5631000  
563000  
5629000  
5628000  
5627000

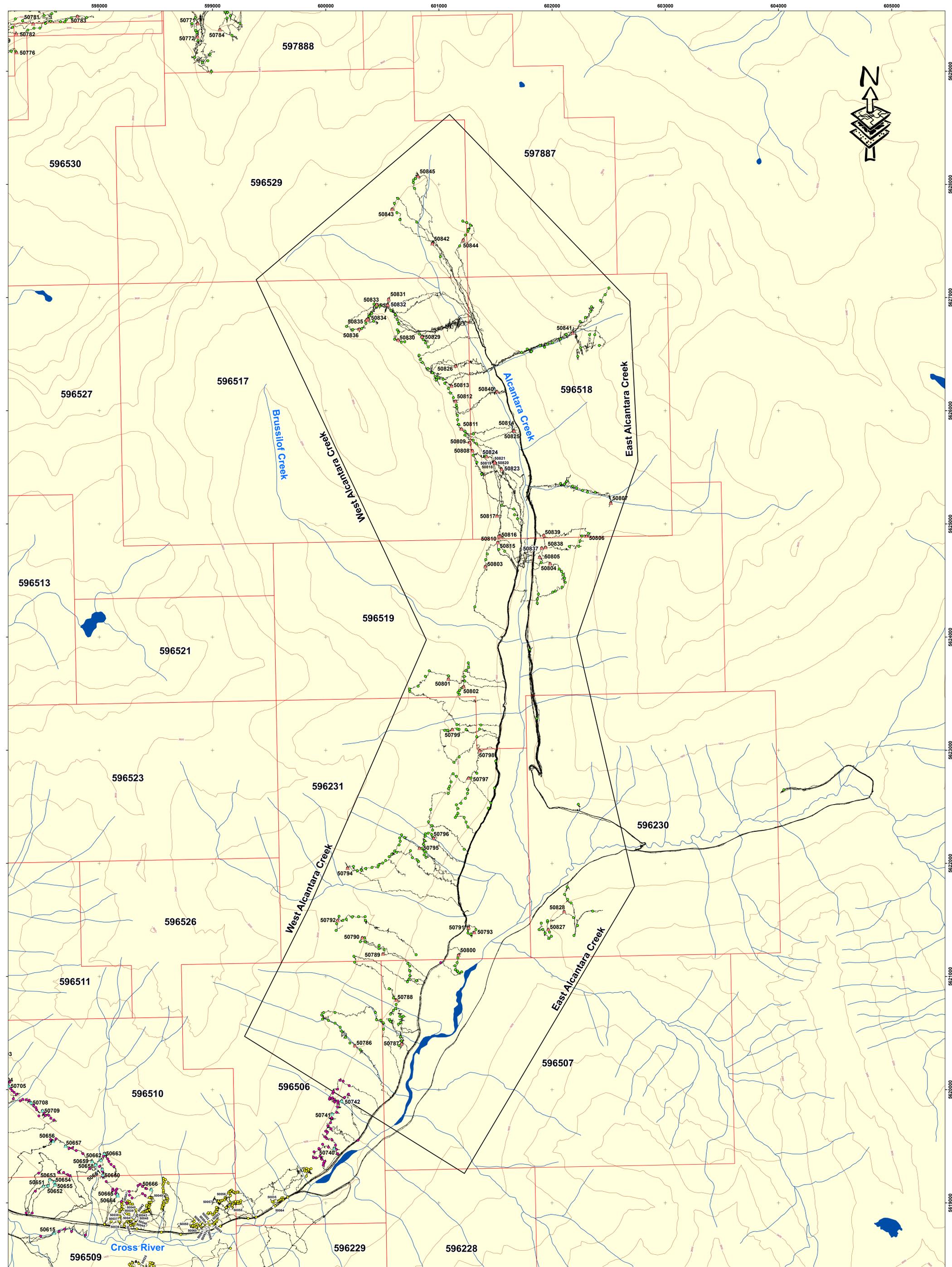
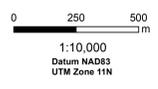
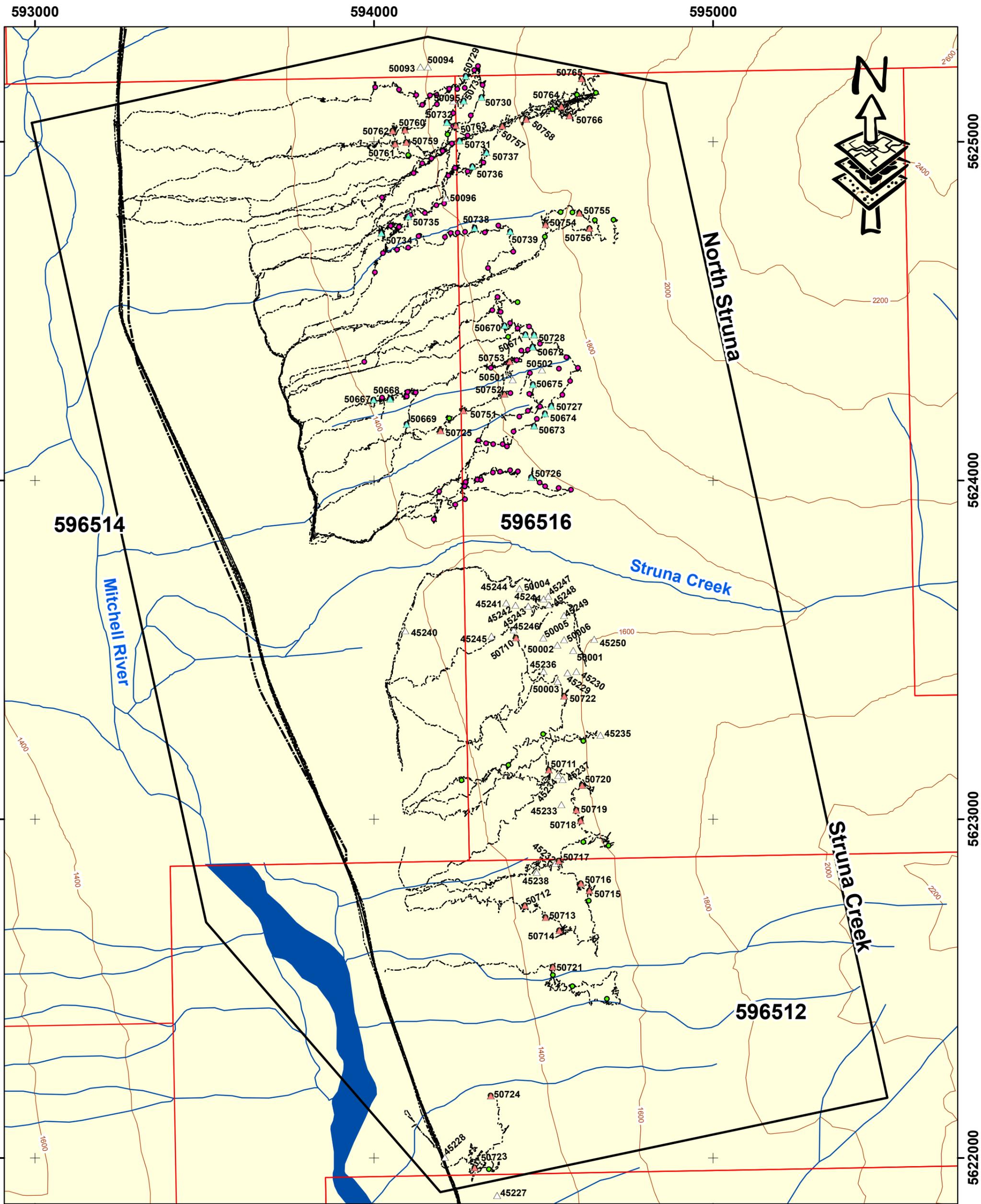


Fig. 06: Baymag - Alcantara Creek area

- Legend**
- ▲ 2014 Samples
  - 2014 Geo Stations
  - Baymag Claims
  - 50788 Assay Number
  - ▲ 2013 Samples
  - 2013 Geo Stations
  - Tracks
  - ▲ 2012 Samples
  - 2012 Geo Stations
  - Roads

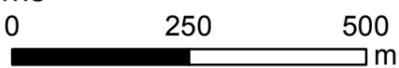




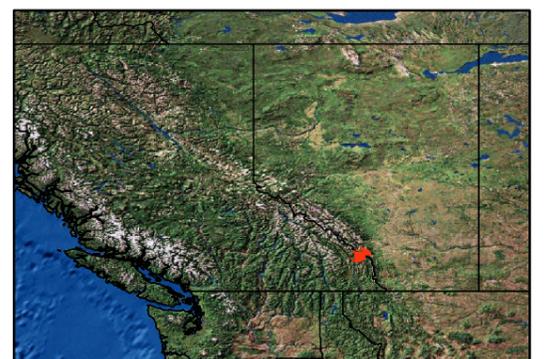
**Fig. 07: Baymag - Struna Creek/North Struna area**

**Legend**

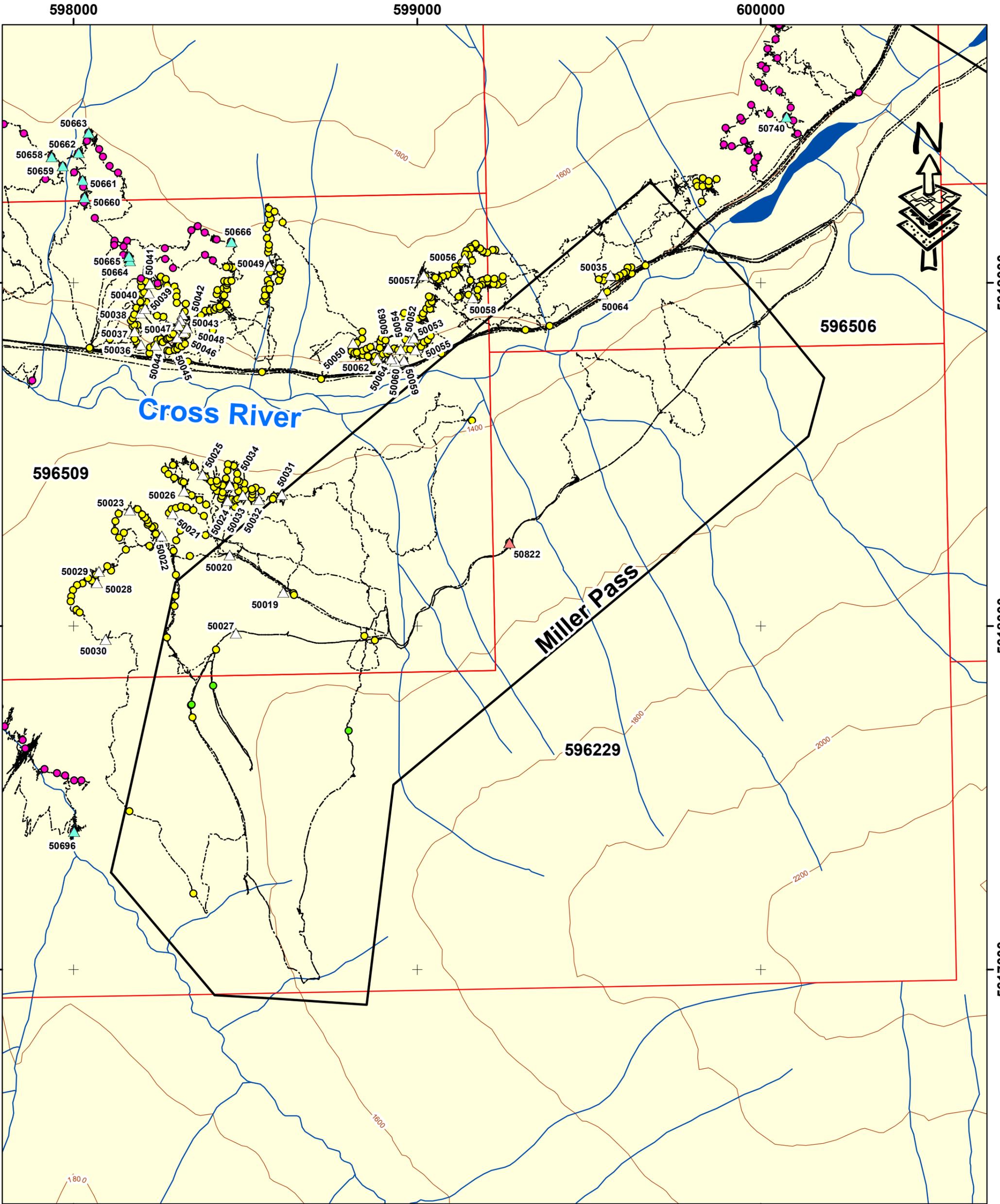
- ▲ 2014 Samples
- 2014 Geo Stations
- Baymag Claims
- ▲ 2013 Samples
- 2013 Geo Stations
- Tracks
- △ 2012 Samples
- 50724 Assay Number
- Roads



1:10,000  
Datum NAD83  
UTM Zone 11N







**Fig. 09: Baymag - Miller Pass area**

**Legend**

- |       |              |   |                   |     |               |
|-------|--------------|---|-------------------|-----|---------------|
| ▲     | 2014 Samples | ● | 2014 Geo Stations | □   | Baymag Claims |
| ▲     | 2013 Samples | ● | 2013 Geo Stations | --- | Tracks        |
| △     | 2012 Samples | ● | 2012 Geo Stations | --- | Roads         |
| 50723 | Assay Number |   |                   |     |               |

0 250 500 m

1:10,000

Datum NAD83  
UTM Zone 11N

