

GEOCHEMICAL ROCK SAMPLING
AND
RECONNAISSANCE GEOLOGICAL MAPPING
(2009 EXPLORATION PROGRAM),
MARILYN PROPERTY,
NORTHWESTERN BRITISH COLUMBIA.
ASSESSMENT REPORT

Claims involved:
203605, 555753, 567127 and 594947

BC Geological Survey
Assessment Report
31246

Work done on:
203605, 555753 and 594947

ATLIN MINING DIVISION

NTS 104N/12

Approximate coordinates of the centre of the property:

59° 37' 51" North and 133° 49' 37" West
UTM (NAD83, Zone 8): 6610920N, 566205E

Owner: Gary C. Lee of Whitehorse, Yukon Territory

Operator: Saturn Minerals Inc., Vancouver, BC

SOW 4346848

By

Krzysztof Mastalerz, Ph.D., P.Geo.

Submitted: December 17th, 2009

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

**ASSESSMENT REPORT
TITLE PAGE AND SUMMARY**

TITLE OF REPORT [type of survey(s)] GEOCHEMICAL ROCK SAMPLING / GEOL MAPPING - MARILYN TOTAL COST \$14,487.00

AUTHOR(S) K. MASTALERZ SIGNATURE(S) K. Mastalerz

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) _____ YEAR OF WORK 2009

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) SOW 4346848

PROPERTY NAME MARILYN

CLAIM NAME(S) (on which work was done) 203605, 555753, 594947

COMMODITIES SOUGHT GOLD / BASE METALS

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN N/A

MINING DIVISION ATLIN NTS 104N/12

LATITUDE 59 ° 37 ' 51 " LONGITUDE 133 ° 49 ' 37 " (at centre of work)

OWNER(S)
1) GARY C. LEE 2) _____

MAILING ADDRESS
WHITEHORSE
YUKON TERRITORY

OPERATOR(S) [who paid for the work]
1) SATURN MINERALS INC. 2) _____

MAILING ADDRESS
410-890 W. PENDER ST
VANCOUVER, BC, V6C 1J9

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
METAVOLCANICS, ULTRAMAFICS, LATE PALAEOZOIC / MESOZOIC, NAKINA
GP CACHE CREEK COMPLEX, SERPENTINIZATION, LISTWANITE,
GOLD / PYRITE ASSOCIATED WITH QUARTZ-CARBONATE VEINS IN LISTWA-
NITA ALTERATION ZONES, UNKNOWN SIZE, STEEP, NW-SE & SW-NE STRIKES

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS N/A

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 , 0.75 km ²	203605 555753 , 594947	\$6,500.00
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock	63 samples - ICP	(same)	\$ 6,500.00
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)	1: 5,000 , 1 km ²	(same)	\$ 1,487.00
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			\$14,487.00

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GEOCHEMICAL ROCK SAMPLING
AND
RECONNAISSANCE GEOLOGICAL MAPPING
(2009 EXPLORATION PROGRAM),
MARILYN PROPERTY,
NORTHWESTERN BRITISH COLUMBIA.
ASSESSMENT REPORT
(NTS 104N/12; BCGS 104N.061)

1. INTRODUCTION

1.1. Location and Access

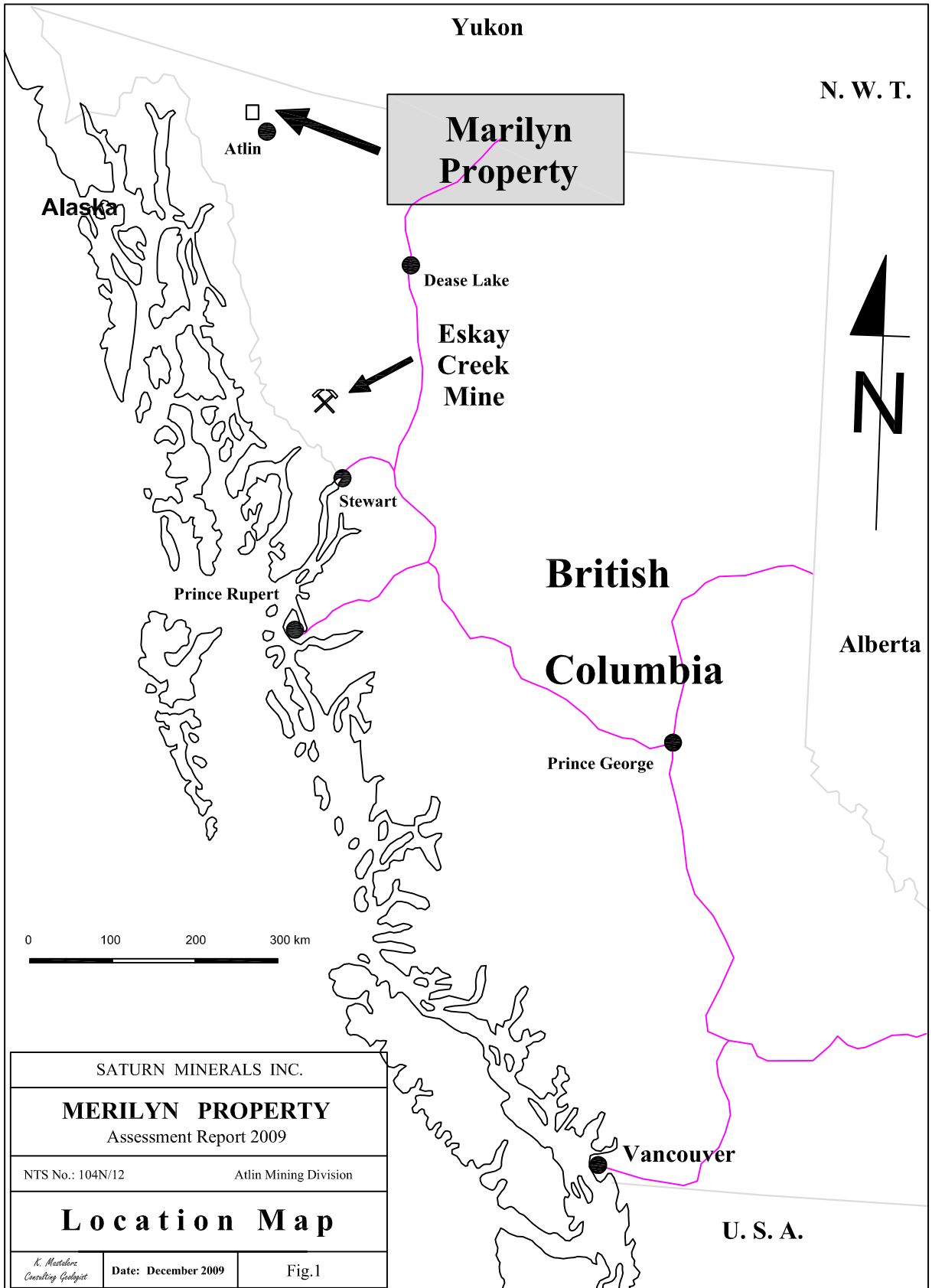
The Marilyn property is located, approximately 9 km NW from the town of Atlin, in northwestern British Columbia (Fig. 1). The group of 4 contiguous mineral claims (Table 1) covers the area on the land strip which separates Atlin and Tagish Lakes north of Atlin River (Fig. 2). The property is situated on NTS map sheet 104N/12 (BCGS map sheet 104N.061) and is centered approximately at latitude 59° 37' 51" North and 133° 49' 37" West (UTM coordinates: 6610920N, 566205E; NAD83, Zone 8).

The property can be accessed by a boat or helicopter from Atlin, or by a boat from Caircross, through Tagish Lake. There are no roads on the property. Several old, newly flagged, cut-lines are in predominantly overgrown by underbrush and hardly accessible.

1.2. Physiography, Vegetation and Climate

The Marilyn property is situated along the western shoreline of Atlin Lake south of the Safety Cove (Fig. 2). Topography of the property ranges from gently to moderately sloping rolling hills. A 5-12 metre-high, sparsely vegetated bluff is typical of the Atlin Lake shoreline. Some narrow gravelly beaches occur locally, especially in the lake coves. There are few perennial creeks and small ponds on the property. Elevations vary from approximately 668 metres along the shoreline of Atlin Lake to 800-840 locally at the top of the hills in the central-to-western part of the property.

The property lies entirely below tree-line (approximately 1000-1200 metres a.s.l.) and arborescent vegetation prevails with a mixture of poplar and lodge-pole pine. Steeper slopes are characterized by buckbrush and grass.



SATURN MINERALS INC.		
MERILYN PROPERTY		
Assessment Report 2009		
NTS No.: 104N/12	Atlin Mining Division	
Location Map		
<i>K. Mastalov</i> Consulting Geologist	Date: December 2009	Fig.1

Outcrop exposure is moderate and accounts for than 10-20% of the total area of the property. However, the bluff along the Atlin Lake shore provides numerous good-quality outcrops of bedrock formations.

Most of the property is free of snow from May through September/October. Summer daily temperatures vary from 10 to 30°C. However, the weather is frequently unstable due to strong winds generated at the Juneau Icefield and channeled toward the north along Atlin Lake.

1.3. Property Definition and Claim Information

The Marilyn property is located in the Atlin Mining Division (Fig. 2) and comprises 4 contiguous mineral claims totaling approximately 607 hectares. The property is owned by Mr. Gary C. Lee of Whitehorse, Yukon Territory. Claim information is listed below.

Table 1. Claim Status of the Marilyn Property, Atlin Mining Division

Tenure Number	Area	Good To Date	Owner
203605	100.0	2011/sep/21	Gary C. Lee
555753	229.1291	2011/sep/21	Gary C. Lee
567127	261.8637	2011/sep/21	Gary C. Lee
594947	16.367	2011/sep/21	Gary C. Lee

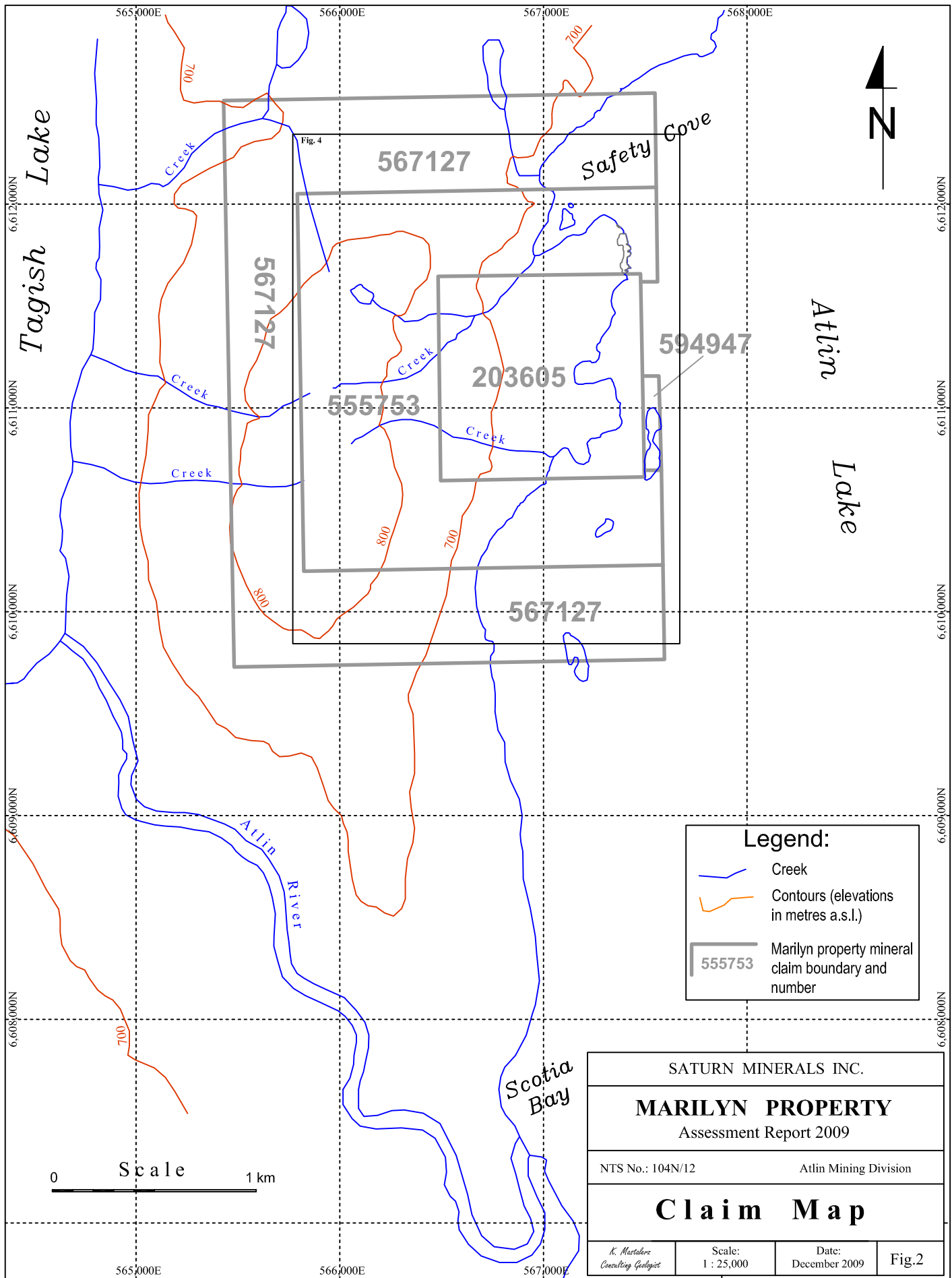
Expiry dates listed above are contingent upon acceptance of this assessment report, according to SOW, event 4346848 filed on September 16th, 2009.

The core claim of the property (203605) was staked traditional way, while the other claims were acquired by online staking. Saturn Minerals Inc. of Vancouver, BC, optioned the property (claims 203605, 555753 and 567127) in late 2007 and became the operator. Subsequently, Mr. Lee has added additional claim 594947 to the property.

1.4. History

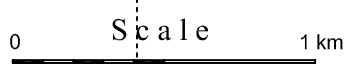
The history of mining near Atlin commenced with the discovery of placer gold on Pine Creek by Fritz Miller in 1897. By the end of 1989, more than 3000 people camped in the Atlin area. From 1898 to 1946, approximately 635,000 ounces of gold were recovered from the creeks in the Atlin Camp (Holland, 1950). Although the total placer gold production from the area to date is not known, it is estimated to exceed 1 million ounces (Ash, 2001).

Gold-bearing quartz veins were first discovered in the Atlin area probably in 1898. Such veins situated in the immediate areas of the placer gold started to be considered as the source of placers (e.g. Aitken, 1959, Ash and Arksey, 1990a, b). Soon after, most of the recently known hard-rock showings, namely: Pictou, Anaconda, Beavis, Golden View,



Legend:

- Creek
- Contours (elevations in metres a.s.l.)
- 555753 Marilyn property mineral claim boundary and number



SATURN MINERALS INC.			
MARILYN PROPERTY			
Assessment Report 2009			
NTS No.: 104N/12		Atlin Mining Division	
Claim Map			
<i>K. Mastalerz</i> Consulting Geologist	Scale: 1 : 25,000	Date: December 2009	Fig.2

were discovered. However, Imperial mine was the only recorded lode gold producer in the area, which mined 268 tonnes averaging 13 grams per tonne (Bloodgood et al., 1989).

The first geological mapping of the Atlin area was completed by Aitken in 1959. J.W.H. Monger (1975) mapped some specific areas in the northern Cache Creek terrane and provided the first tectonic synthesis of the area. Bloodgood et al. (1989) conducted 1:50000 scale geological mapping of the Atlin map area.

More recently, in 1981, Yukon Revenue Mines Ltd. re-examined the Lakeview property and showed low-grade gold values over a broad zone of a quartz stockwork developed in a listwanite alteration zone in serpenitites and ultramafics (Gonzalez and Dandy, 1987). In 1986, Homestake acquired the Yellowjacket showing on Pine Creek, east of Atlin. Preliminary drilling intersected several intervals of considerably high gold grades in a quartz stockwork with 1-2% pyrite, which was hosted by carbonatized to talcose (advanced listwanite alteration) ultramafics. More recently, MuskoX reported bonanza gold grades over numerous intervals in a few diamond drill holes on the same property (Prize Mining Corp. News Release, Apr 28, 2004).

The mineralization on the area of the present-day Marilyn property was probably first discovered in 1992 by government geologists while conducting regional geological mapping (Mihalynuk, 1992). A few samples taken from the area returned anomalous concentrations of gold, silver, copper, zinc and arsenic (see also G. Lee., 1994). The closest significant mineral exploration/mining activity to the Marilyn property was conducted on Beavis property located approximately 6 km to the southeast across Atlin Lake. The first work reported there was underground development of the Beavis shaft in 1902 (1904?). In 1981, Archer, Cathro & Associates Ltd., and then in 1987 BYG Resources Ltd. made attempts at rehabilitation of the underground workings and conducted limited re-sampling. In 2007-2008 Saturn Minerals Inc. conducted exploration programs on the McKee Creek and Beavis hard-rock properties, which included diamond drilling of 12 exploration holes.

In 1993 G. Lee conducted a magnetometer and VLF survey along approximately of 19 km of regularly cut lines (Lee, 1994). This survey resulted in delineation of several VLF conductors and magnetic lows (suspect carbonate alteration zones) on the property.

1.5. Summary of Work

On June 23rd and 24th, 2009, L. Johnson and K. Mastalerz visited the Marilyn property on behalf of Saturn Minerals. Unsettled weather conditions (strong winds and high waves on the lake) did not allow for earlier transportation to the other side of Atlin Lake. Geologists conducted routine geological observations, prospecting and sampling along several traverses (total length of approximately 10 kilometres) mainly in the core part of the property. K. Mastalerz also conducted structural observations and geological mapping on the prevailing part of the traverses. Significant part of the traverses (Fig. 4) followed the coastline where the exposure is the best and outcrop conditions are the most favorable for conducting geological observations and measurements. Predominant part of the

traverses was confined to the core part of the property - claim 203605, subordinate length of the traverses was completed on the claim 555753 and one short traverse was conducted on the claim 594948. The work resulted in a preliminary geological map at a scale of 1:5,000 (Figs. 4, 5 and 6), which covers an area of approximately 0.75 square kilometers.

Prospecting and geochemical rock sampling resulted in a collection of 63 rock samples (Appendix 1, Figs. 7a and 7b). On June 26th the samples were shipped via Greyhound from Whitehorse to Pioneer Labs in Richmond, BC, for the standard ICP and gold geochemical analyses (Appendix 2).

2. TECHNICAL DATA AND INTERPRETATION

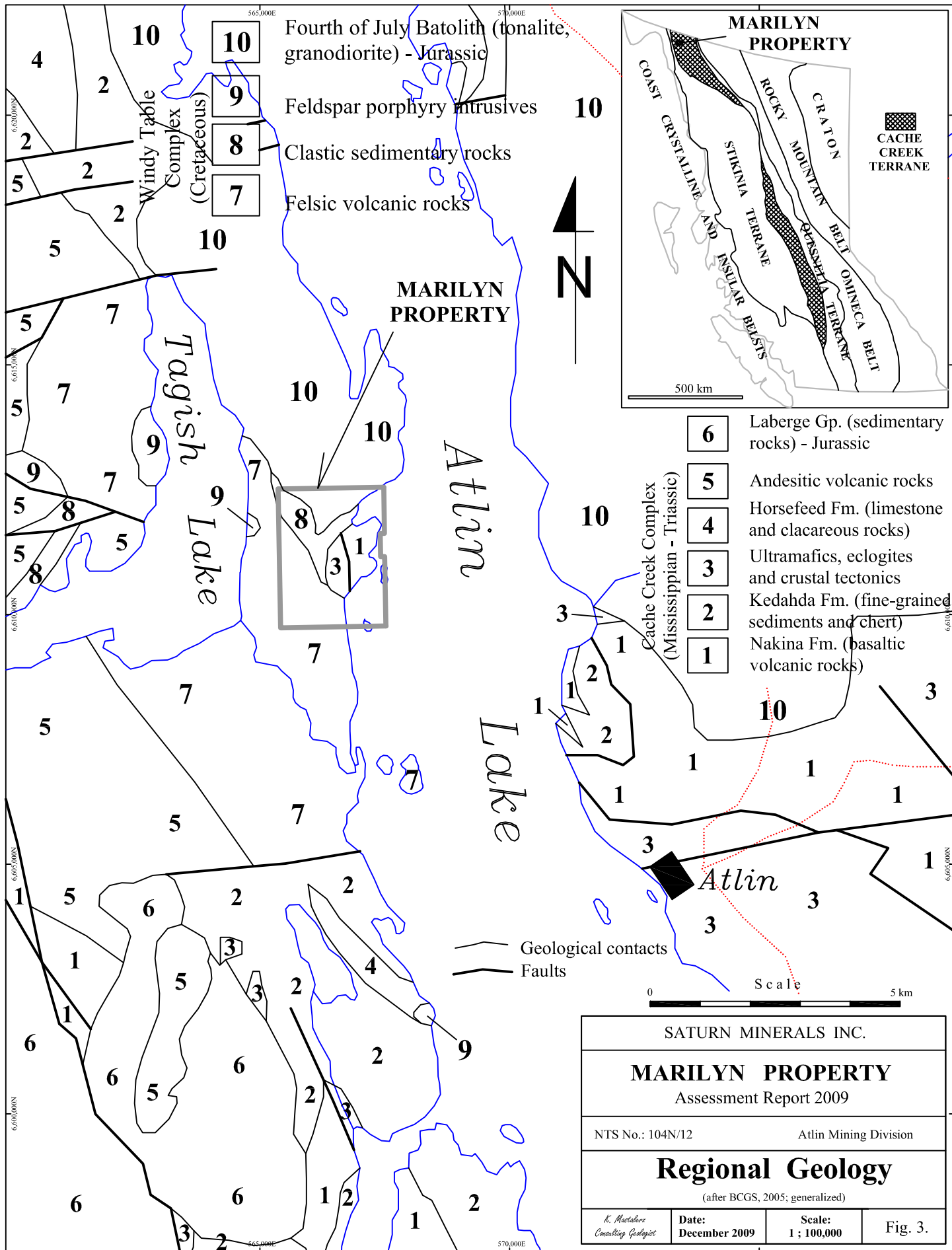
2.1. Regional Geology

The Marilyn property is situated in the northwestern part of the Cache Creek terrane (also called Atlin terrane or Atlin complex), in northwestern British Columbia (Fig. 3). This terrane is bounded to the west by the Stikinia terrane along the Nahlin fault which is regarded as a suture zone related to the Jurassic accretion and thrust faulting of these two lithotectonic units (Bloodgood et al. 1989). The eastern boundary of the Atlin terrane (complex) runs along the Thibert Creek fault and separates it from more severely deformed and metamorphosed rocks to the northwestern Quesnellia and Yukon-Tanana terranes.

The Cache Creek complex comprises a package of detached and strongly tectonically deformed remnants of the Late Paleozoic to Late Triassic Tethyan oceanic crust formations and ocean floor deposits. Its allochthonous origin is proven by exotic fauna of the fusulinid foraminifers and conodonts (Monger et al., 1982). It is interpreted as a complex lithotectonic unit related to the long lasting ocean crust evolution, volcanic arc development of the Quesnellia and Stikinia, ocean closure by subduction, and finally, the Middle Jurassic terrane accretion and localized ocean crust obduction (Monger et al., 1982). The rocks of the Cache Creek complex near Atlin show generally sub-greenschist metamorphic facies and display distinct, NW-SE trending, tectonic fabric.

There occur numerous irregular bodies of ultramafic rocks (Permian?) in the Atlin complex. These bodies, known elsewhere as the "Atlin intrusions", and interpreted before as "younger intrusions" (Aitken, 1959), do not show thermal contacts nor other signs of contact metamorphism, and have to be considered as the Alpine type ultramafics. Such bodies usually resulted from serpentinite-peridotite diapirism (relatively low-temperature) occurring within orogenic belts, due to extremely ductile-prone reology of these rocks under high pressure and elevated temperature.

The lithostratigraphic scheme of the Cache Creek terrane near Atlin is still only simplified in spite of several attempts at formalization. It is partly due to the complex nature of an overall structure and predominance of tectonic contacts between individual component



units. All the lithostratigraphic end-members (frequently of rather lithotectonic character) of the terrane are included into the Cache Creek Group. Basaltic volcanic rocks and associated volcanoclastics are grouped into the Nakina Formation, while sedimentary end-members, predominantly chert and argillites are classified into the Kedahda Formation. However, original contacts between individual lithologies of these two lithostratigraphic units are generally unknown since they form rather consistently individualized tectonic units (lithotectonic units).

Predominantly sedimentary rocks of the Lower Jurassic Laberge Group constitute the uppermost stratigraphic member of the Stikinia terrane in the SW vicinity of the Marilyn property (Fig. 3). The Group includes thick sequences of siliciclastic rocks, commonly of turbidite character, and subordinate andesitic volcanics and volcanoclastics. These rocks correspond to the upper part of much better known Hazelton Group of the Stewart Structural Complex.

Structural geology of the Atlin area is dominated by the effects of strong deformations in transpressional and partly strike-slip regimen, related to formation of an accretionary prism and to overthrusting of detached units along the western margin of the North American continent.

Elsewhere, the area of the Atlin complex is punctuated by large-scale granitoid plutons which frequently display discordant intrusive contacts. The Fourth of July Creek batholith is considered as one of the oldest post-kinematic intrusions of the northern Intramontane realm and is partly dated as old as 172 Ma (Mihalynuk et al., 1992). The intrusion is believed to be emplaced after the accretion of the Quesnellia-Cache Creek-Stikinia terrane complex to the North American continent (Nelson and Culpron, 2007).







2.2. Property Geology

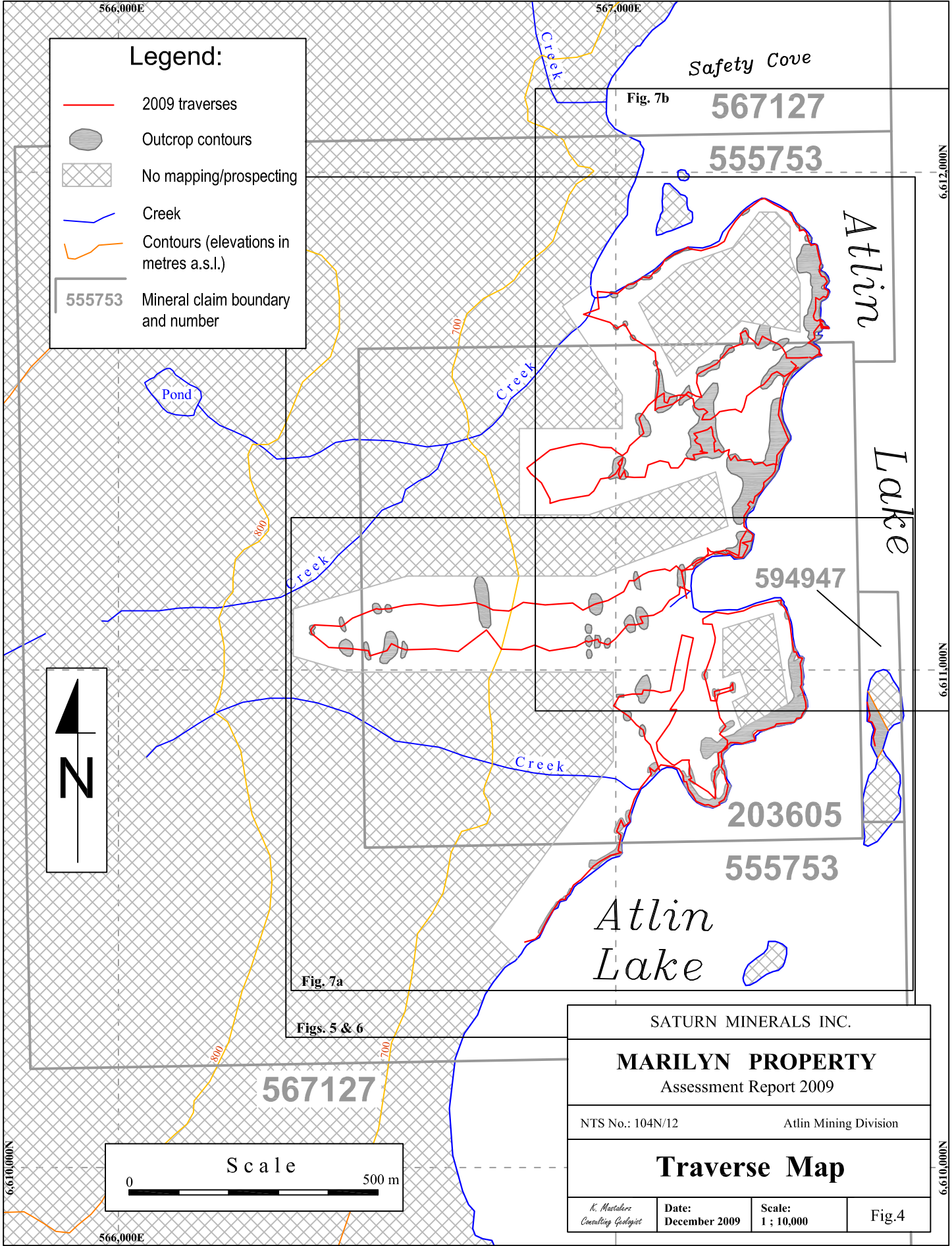
The Marilyn property was never been geologically mapped in details before. The past “exploration activity” has been predominantly some prospecting and staking, which probably occurred as a result of the “lively” looking and partly gossanous rocks exposed along the shoreline bluffs (Lee, 1994). Regional geological mapping was conducted by Aitken (1959) and some more detailed compilation was completed by Mihalynuk and Smith (1992). This compilation resulted in a few general lithostratigraphic members recognized on the area of the present day Marilyn property. These members included (in ascending order):

- Ultramafic rocks,
- Volcanic rocks,
- Coarse andesitic to dacitic breccias and flows,
- Rhyolite,
- Conglomerates and tuffaceous conglomerates, and
- Heterogeneous intrusive suite of Middle Jurassic age.

Property geology is discussed in more details in chapter 2.4.

Legend:

-  2009 traverses
-  Outcrop contours
-  No mapping/prospecting
-  Creek
-  Contours (elevations in metres a.s.l.)
-  555753 Mineral claim boundary and number



SATURN MINERALS INC.			
MARILYN PROPERTY			
Assessment Report 2009			
NTS No.: 104N/12		Atlin Mining Division	
Traverse Map			
<i>K. Mastahere</i> Consulting Geologist	Date: December 2009	Scale: 1 : 10,000	Fig.4

2.3. Mineralization types

The Marilyn property is located in the area known from four main types of mineral occurrences in hardrock settings (Aitken, 1959; see also Petersen 1985, Ash and Arksey 1990, Ash 2001):

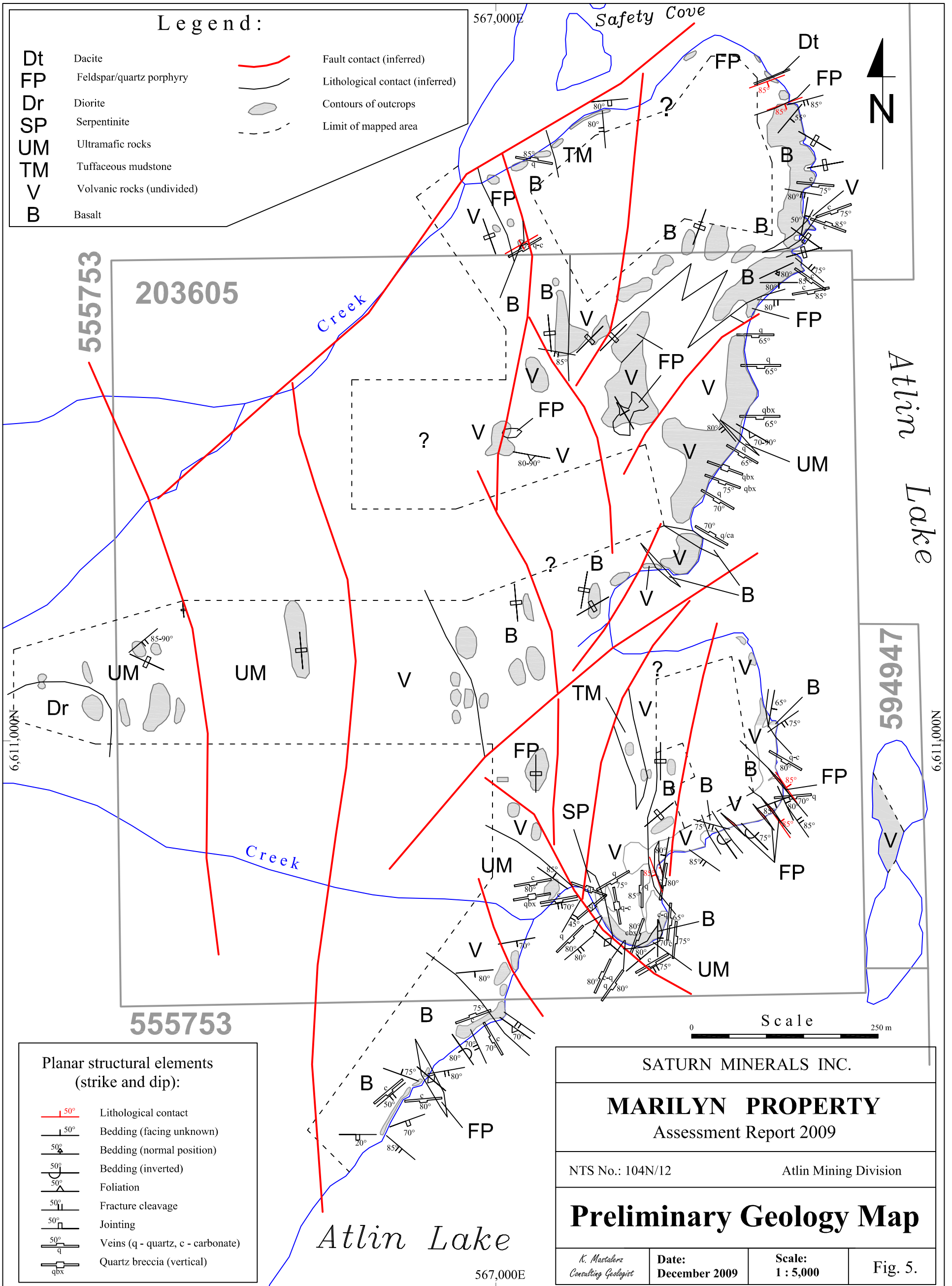
- porphyry type stockwork molybdenum deposits and showings related to late, post-kinematic alaskite intrusives (e.g. Ruby Creek),
- silver-base metals (sometimes with subordinate gold) vein deposits (e.g. Atlin Ruffner),
- listwanite-type gold deposits and showings (e.g. Yellowjacket, Beavis, Anaconda) and
- wolframite showings in quartz, usually drusy, veins.

The Marilyn property is suspected to host gold mineralization similar to the Beavis property (MTO showing 104N052). The mineralization consists of quartz and carbonate vein-and-breccia zones hosted within a strongly tectonically deformed complex of ultramafic, fragmental meta-volcanics, minor meta-sediments and intrusive rocks. The mineralization zones are accompanied by strong alteration of listwanite assemblage including serpentinization, carbonatization and development of characteristic chrome mica – mariposite.

2.4. Results of Geological Mapping

The Marilyn property overlies the contacts between few distinct lithological domains shown on Aitken's (1959) and Mihalynuk and Smith (1992) geological maps. The mapped part of the property (Fig. 4) is underlain by moderately diversified rock formations, most of which belong to a suite of mafic (basaltic composition) volcanics and related volcanoclastics (B; Fig. 5). Numerous outcrops also represent volcanic and volcanoclastic rocks of intermediate composition and aphanitic meta-volcanics and/or fine-grained volcanoclastics of unknown composition (V). Fine-grained tuffaceous sediments and tuffaceous mudstones (TM) accompany volcanogenic rocks of both types. Ultramafic rocks (UM) usually show evidence of incipient serpentinization and locally are completely serpentinized (SP). Medium-grained, feldspar-quartz porphyry (FP) form predominantly small-scale bodies of intrusive origin (Fig. 5). Subordinate lithologies include coarse-to-medium grained diorite intrusive (Dr) and aphanitic to fine-grained dacite (Dt), which occur in the western and northern, respectively, parts of the mapped area (Fig. 5).

Volcanogenic rocks of basaltic composition (B; Fig. 5) show relatively strong textural diversity and include massive basalt, lava flow units, pillow-lava flows, broken pillow breccias, autoclastic breccias and fine grained, crudely stratified volcanoclastics and tuffs. Primary textural features are locally very well preserved and include indicators of stratigraphic way-up.



The rocks of the Marilyn property have been subjected to a variable-degree of tectonic deformation which included folding, steep faulting, brecciation and development of shear zones, variable degrees of fracturing, and development of tectonic fabric up to a phase of the incipient shear bands. The rock complexes are cut by numerous discordant veins of various composition (Fig. 5), including quartz, quartz-carbonate, calcite and, less frequently, magnesite-siderite(?) and chalcedony. Some of these veins are accompanied by pyrite mineralization. A sheeted vein pattern occurs locally.

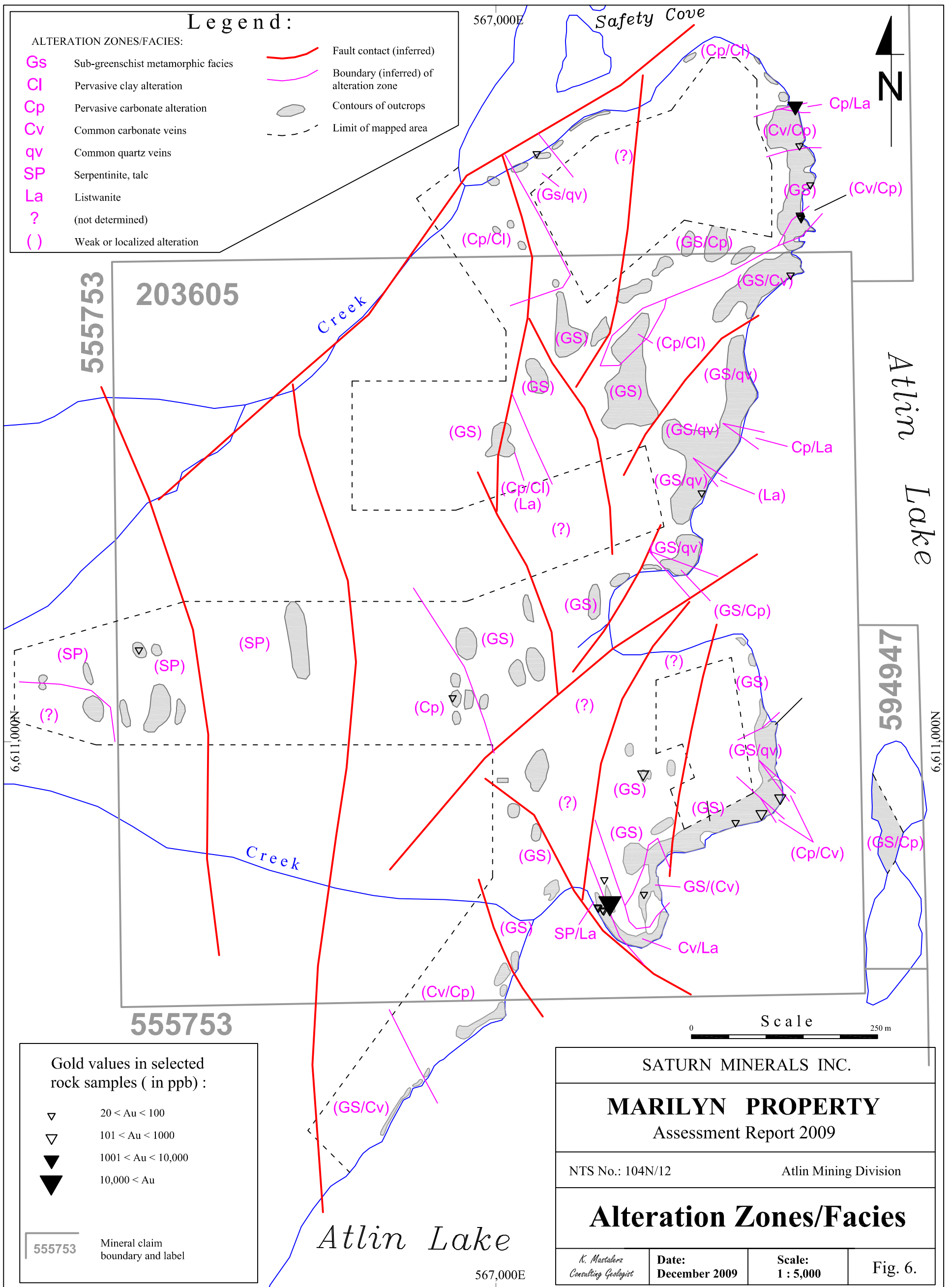
Structural features of the rock complexes include, locally well preserved, primary layering in volcanic and volcanoclastic rocks. The observed layering displays variable strikes and moderate to vertical dips (Fig. 5). The layering dips toward northeast, east and southeast with interpreted stratigraphic younging in the same directions (Fig. 5). Strong fracture cleavage was observed in many areas. It shows predominant NW-SE strikes (minor SW-NE strikes) and steep to vertical dips. Moderately well developed foliation can be observed only in few places and it parallels predominant fracture cleavage surfaces (Fig. 5). Numerous steep, and usually thin, quartz and/or carbonate veins occur in two sub-populations. The prevailing veins strike NW-SE, while the remaining veins are striking from SW to NE.

An apparent lack of larger-scale consistency in orientation and continuity of stratification and/or facies trends observed within the rock formations of the studied area is the result of a complex tectonic deformation where strong folding of diversified stratigraphic end-members was overprinted by relatively small-scale block faulting.

The primary rocks of the property have been overprinted by a moderately diversified suite of alteration products. The background metamorphic grade of the rock complexes appears to be very low and it can be compared to sub-greenschist facies (Fig. 6), although some of the studied rocks do not show clear evidence of any alteration, at all. However, the volcanogenic and ultramafic rocks of the Marilyn property frequently display localized effects of a listwanite assemblage of alteration. The alteration products include serpentinization, carbonatization, argillization and silicification. Some alteration zones include development of talc-sericite assemblage and mariposite. The style of deformation and alteration encountered on the Marilyn property is typical of ophiolitic-to-accretionary complexes and regional zones of a tectonic *mélange*.

Various effects of clay/carbonate alteration were observed in several loci on the property (Fig. 6). Numerous zones of alteration are relatively thin and are not accompanied by development of quartz veins nor pervasive silicification. However, a few inspected zones of alteration attain several metres in width and are locally accompanied by quartz and/or carbonate veins. Some of them are characterized by strong localized silicification. Some quartz veins include pyrite mineralization within the veins or along their contacts with the wall rocks. Moderate development of mariposite was observed at few locations. The observed zones of listwanite alteration display variable strikes but usually steep dips.

Continuation of a few alteration zones encountered along the lake coastline were also intersected some distance inland, although inland outcrop conditions are generally much



worse, and recessively weathered features (e.g. alteration zones) are usually concealed by thick overburden and dense vegetation. Inland outcrops are predominantly limited to relatively fresh, unaltered rocks.

2.5. Results of Geochemical Rock Sampling

In total, 63 rock samples were collected on the Marilyn property. All the samples represent grab material selected specifically from various parts of alteration zones. Very limited number of samples represents specific, poorly-to-moderately altered lithological end-members (see Appendix 1). A significant number of samples come from outcrops situated along the shore/bluffs of Atlin Lake to provide unobstructed insight in their geological context, especially lithology and alteration.

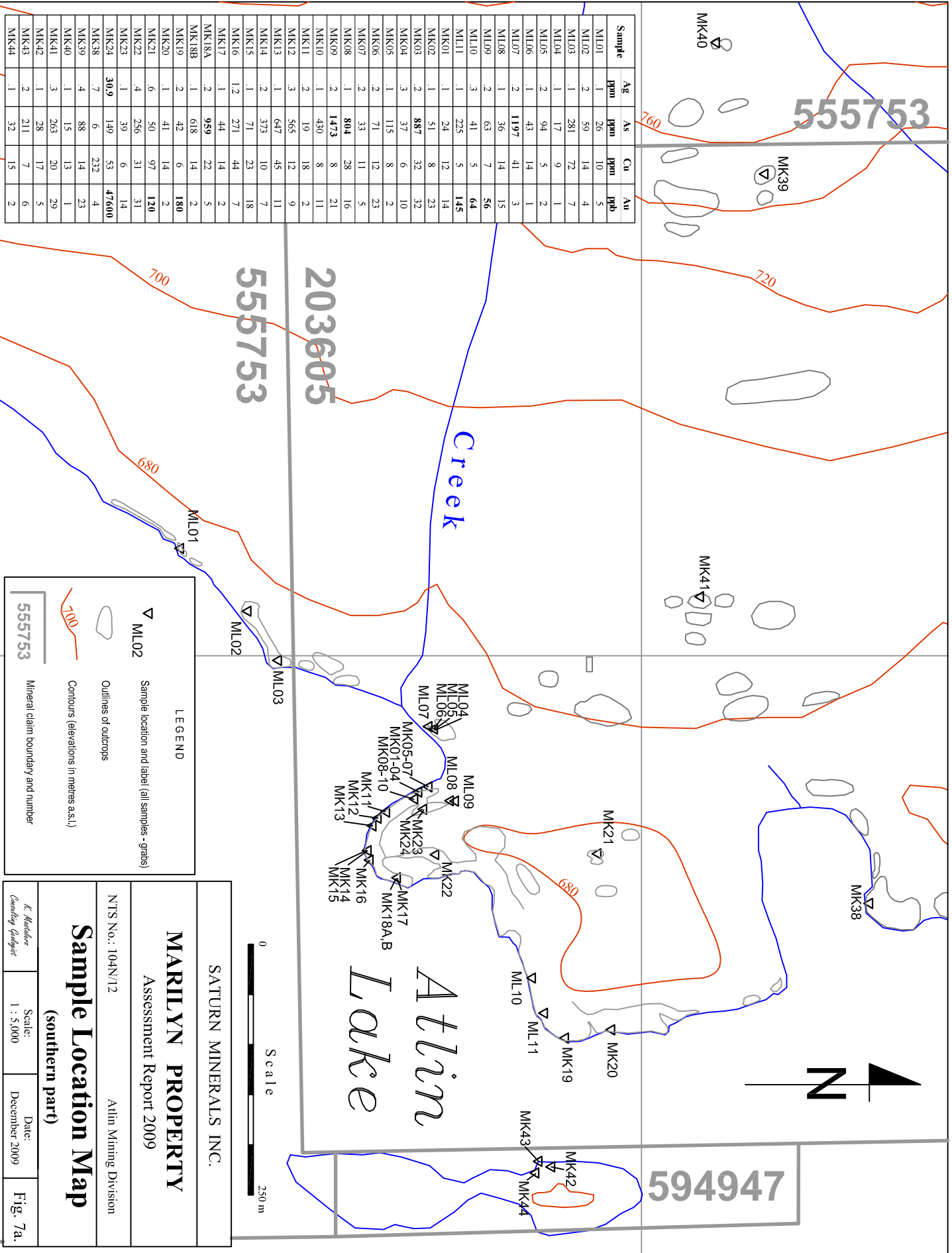
The sampling program was designed to provide information on the presence of gold (+/- silver) mineralization in the area covered by Marilyn claims and help in making decision on the extent and character of further exploration on the property and on further involvement of the company into this exploration. Most samples were selected to provide information on mineralogical and geochemical character of veins and structural features, as well as to shed some light on the alteration pattern near the vein/structure.

The sample locations and descriptions are listed in Appendix 1, and complete analytical results of the rock sampling program are contained in Appendix 2. Figures 7a and 7b show sample locations. Sample locations were tied by a hand-held Garmin GPS unit.

Table 2. The most significant results of the rock sampling program on the Marilyn property (sample locations – Appendix 1, Figs. 7a, 7b; complete analytical results – Appendix 2).

Rock Sample	Gold (Au) ppb	Silver (Ag) ppm	Arsenic (As) ppm	Copper (Cu) ppm	Lead (Pb) ppm	Antimony (Sb) ppm	Tellurium (Te) ppm
ML09	56	.2	63	7	6	<2	8
ML10	64	.3	41	5	7	5	<5
ML11	145	.1	225	5	10	5	<5
ML12	57	32.8	39	1064	1893	2	39
MK19	180	.2	42	6	6	5	<5
MK21	120	.6	50	97	815	20	<5
MK24	47600	30.9	149	53	14	7	<5
MK27	90	.2	148	14	26	5	5
MK29	24	2.9	68	259	44	<2	17
MK32	75	.1	32	12	18	7	<5
MK33	1120	.1	297	11	11	9	<5

Rock samples collected on the Marilyn property commonly returned relatively high concentrations of magnesium, nickel, chromium and iron, which is a good indication of the mafic/ultramafic geochemistry of the protolith rock formations underlying the property. Numerous zones of strong, pervasive carbonate alteration are characterized by highly elevated concentrations of calcium. Few samples returned also strongly elevated concentrations of strontium (Sr) and barium (Ba), which may be related to carbonate



Sample	Ag ppm	As ppm	Cu ppm	Au ppb
ML01	.1	26	10	5
ML02	.2	59	14	4
ML03	.1	281	72	7
ML04	.1	17	9	1
ML05	.2	94	5	2
ML06	.1	43	14	1
ML07	.2	1197	41	3
ML08	.1	36	14	15
ML09	.2	63	7	56
ML10	.3	41	5	64
ML11	.1	225	5	145
ML12	.1	24	12	14
ML13	.1	51	8	23
ML14	.2	887	32	32
ML15	.3	37	6	10
ML16	.1	115	8	2
ML17	.2	71	12	23
ML18	.2	33	11	5
ML19	.1	804	28	16
ML20	.2	1473	8	21
ML21	.1	430	8	11
ML22	.2	19	18	2
ML23	.3	565	12	9
ML24	.1	647	45	11
MK01	.2	375	10	7
MK02	.1	71	23	18
MK03	.2	271	44	7
MK04	.1	44	14	2
MK05	.2	959	22	5
MK06	.1	618	14	2
MK07	.2	42	6	180
MK08	.1	41	14	2
MK09	.6	50	97	120
MK10	.4	256	31	31
MK11	.1	39	6	14
MK12	.309	149	53	47600
MK13	.7	6	232	4
MK14	.4	88	14	23
MK15	.1	15	13	1
MK16	.3	263	20	29
MK17	.1	28	17	5
MK18	.2	211	7	6
MK19	.1	32	15	2

LEGEND

- ▽ ML02 Sample location and label (all samples - grabs)
- Outlines of outcrops
- Contours (elevations in metres a.s.l.)
- Mineral claim boundary and number

555753

SATURN MINERALS INC.

MARILYN PROPERTY

Assessment Report 2009

NTS No.: 104N/12

Atlin Mining Division

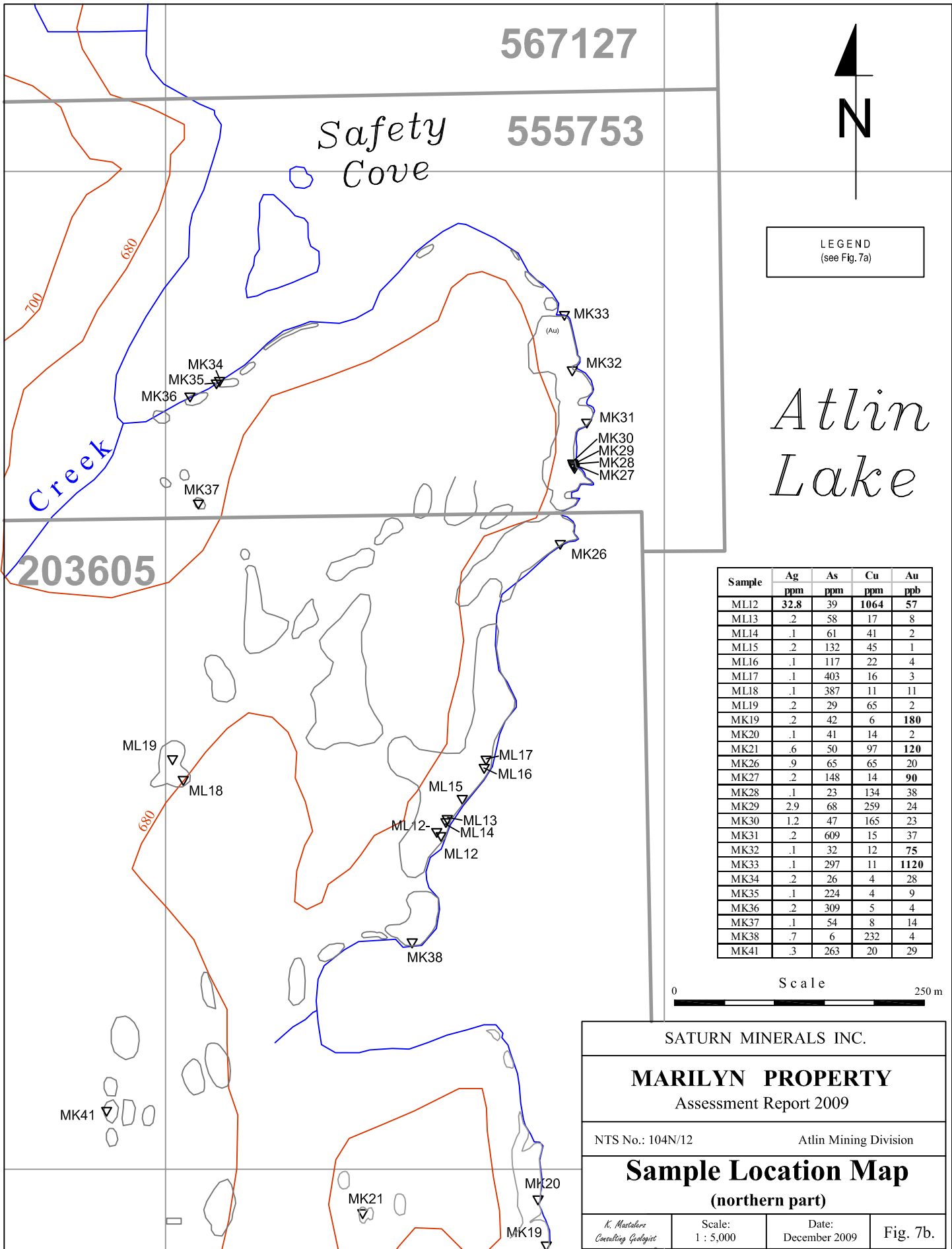
Sample Location Map
(southern part)

K. Mander
Country geologist

Scale: 1 : 5,000

Date: December 2009

Fig. 7a.



alteration, as well. Although numerous samples display strongly elevated levels of arsenic (As), no correlation exists between this element and gold concentrations in a population of collected samples.

The results of the rock sampling program prove the existence of the gold-bearing mineralization system on the Marilyn property. The higher-grade gold mineralization is apparently associated with strongly silicified (silica flood) zones and/or quartz and quartz-carbonate veins and breccias, which are frequently hosted in listwanite alteration zones. Such zones are typified by development of chrome-rich mica (mariposite) with characteristic intense green color. Pyrite is predominant sulfide mineral and appears as disseminations, fracture and veinlet infills, blebs and regular idiomorphic crystals in drusy veins. Gold mineralization in listwanite settings is believed to be related either to fine native gold or is included in pyrite-arsenopyrite.

Sample ML12 returned unexpected high concentrations of silver, copper and lead associated with strongly elevated tellurium.

3. SUMMARY

The Marilyn property is a grass-root gold exploration target located near the town of Atlin, in northwestern British Columbia. The property lies within the northern segment of the Cache Creek terrane (Atlin terrane). The area of the property is underlain by a diversified suite of lithotectonic units which represent dismembered elements of the Late Palaeozoic-Mesozoic ocean lithosphere (ophiolite) and island arc (Cache Creek terrane), and which were subsequently accreted to the edge of the North American continent. The rock units display strong NNW tectonic fabric. Gold mineralization found on the property is associated with quartz and quartz-carbonate veins hosted in listwanite altered zones.

Reconnaissance geological mapping revealed that the mapped part of the property (approximately 0.75 km² at a scale of 1:5000) is underlain by a suite of moderately diversified rock formations. Individual lithological end members can be classified into the following groups:

- basaltic volcanics and related volcanoclastics (B; Fig. 5),
- undivided volcanic and volcanoclastic rocks, partly of intermediate composition (V),
- fine-grained tuffaceous sediments and tuffaceous mudstones (TM),
- ultramafic rocks (UM),
- serpentinite (SP),
- feldspar-quartz porphyry (FP),
- diorite intrusive (Dr) and
- dacite volcanics (Dt).

The rocks of the Marilyn property have been subjected to a variable-degree of tectonic deformation which included folding, faulting, brecciation, fracturing and localized

development of incipient shear zones and foliation. The rock complexes are cut by numerous veins of various compositions, of which the most common are quartz and/or carbonate veins.

The primary rocks of the property are overprinted by a diversified suite of alteration products. The background metamorphic grade is very low and belongs to the sub-greenschist facies (Fig. 6). Mafic volcanics and ultramafic rocks of the Marilyn property frequently display localized effects of a listwanite assemblage of alteration. The alteration products include serpentinization, carbonatization, argillization and silicification.

A total of 63 rock samples were collected and analysed during the program. Significant gold mineralization was encountered in a few localities on the property, including 47,600 ppb Au in a grab sample from a strongly carbonate altered metavolcanic rock which host numerous quartz-carbonate veins, disseminated pyrite and minor mariposite, in the southern part of the mineral claim 203605.

The primary components of the rock assemblages underlying the property originated as various end-members of the ocean floor and island arc suites, including various types of magmatic products (intrusive and volcanic rocks) and associated unconsolidated sediments and volcanoclastics, both of predominantly, mixed composition. Such primary geological settings are characterized by complex relationships between individual lithological units, great variability of contact types, complex geometry and rapid facies changes. Subsequently the area experienced numerous effects of a very advanced tectonic deformation typical of tectonic mélanges. Very common are effects of brittle (strong brecciation, fracturing and faulting) and ductile (shearing, folding) styles of deformation.

4. CONCLUSIONS and RECOMMENDATIONS

The results of 2009 reconnaissance exploration program demonstrate the potential of the Marilyn property to host a significant gold mineralization. Further exploration work is warranted and recommended program is outlined herein.

The results of the exploration program demonstrate a complex character of lithology and geological structure of the property. The rocks are locally overprinted by diversified effects of alteration processes. The character and grades of mineralization are complex and still poorly understood. All these factors dictate specific approach to the further exploration and development of the property.

In spite of relatively good bedrock exposure, the geological structure of the property and character and distribution of mineralization are very poorly documented and, consequently, poorly understood. Further property-scale geological mapping is strongly recommended before any other exploration is conducted. The mapping should be preceded and complemented by the study and interpretation of satellite images and air photographs. Detailed geological mapping including structural observations and measurements should aid in much better understanding of the attitude and continuity of

the structures/alteration zones hosting mineralization. Results of the geological mapping would be also prerequisite for reliable interpretation of the existing magnetometer and VLF survey (Lee, 1994) and, eventually, in planning complementary geophysical investigations.

A complementary rock sampling program (approximately 200 rock samples, including selection of chip and/or channel samples) would provide necessary information on the rock geochemistry and distribution of mineralization. The later phase of mapping should be accompanied by hand-trenching and, preferably limited, light mechanical trenching (e.g. Kubota excavator). The knowledge gained from geological mapping is prerequisite to plan more advanced and expensive phases of the further exploration.

Subsequently, a limited soil sampling (approximately 200 samples) is recommended to be conducted along traverses designed to cross potential mineralization-hosting structural zones in areas characterized by poor bedrock exposure. A mobile metal ions (MMI) soil geochemistry on limited scale should be considered to resolve mineralization problems only along strictly selected traverses. The sensitivity of this method is considered to be of great importance in resolving geology and mineralization problems in the areas with deeper blanket of loose overburden.

Results of the field work on the property should be complemented by a microscope study of selected polished thin-sections (10-12 representative samples). The microscope petrographic/mineralogical is able to provide additional information concerning the character of mineralization and its association with particular alteration processes and/or tectonic deformations.

The total budget for the exploration program outlined above (12-14 field days; one geologist and one field assistant) is estimated at approximately 45,000-50,000 dollars. Plans of the future exploration have to take into careful consideration other economical conditions and have to be preceded by the precisely prepared business plan.

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Respectfully submitted,

Krzysztof Mastalerz

6. WORK COST STATEMENT

Item	Cost (\$CAD)
Field – June 18 to June 26, 2009:	
Geologist (K. Mastalerz) 4 days @ \$650.00 per day	2,600.00
Geologist (L. Johnson) 4 days @ \$450.00 per day	1,800.00
Food	401.05
Fuel	97.50
Supplies and small equipment	165.74
Sample shipment	61.75
Laboratory analytical costs (ICP, Gold Geochem)	1716.15
Phone calls (includes satellite phone)	45.00
Truck repair	75.08
Other services (topo maps, booking etc.)	180.00
Rental pickup (4 days @ \$75.00 per day)	300.00
Rental boat (2 days @ \$100 per day)	200.00
Air tickets	696.61
Taxi cabs	165.23
Accommodation	623.17
Data digitization and map compilation (3 days @ \$650 per day)	1,950.00
Report writing (4 days @ \$650 per day)	2,600.00
Drafting for report (18 hours @ \$45 per hour)	810.00
Total cost	14,487.27

7. CERTIFICATE OF PROFESSIONAL QUALIFICATIONS

I, Krzysztof Mastalerz, do hereby certify that:

1. I am a geologist with an office at 2005 Bow Drive, Coquitlam, B.C.
2. I am a graduate of the University of Wrocław, Poland, (M.Sc. in Geology in 1981, Ph.D. in 1990).
3. I am a Professional Geoscientist registered with the APEG of the province of British Columbia as a member, # 31243.
4. I have continually practiced my profession since graduation in 1981 as an academic teacher (University of Wrocław, A. Mickiewicz University of Poznań) through 1997, a research associate for the State Geological Survey of Poland (1993-1995), and independent consulting geologist in Canada and Peru since 1994.
5. This report is based upon field work carried on the Marilyn property, near Atlin, B.C., from June 23th through June 26th, 2009.
6. I have, personally, conducted and/or supervised field work done on the Marilyn property in 2009.
7. Interpretations and conclusions presented in this report are based on my field observations and measurements, analytical results and on previously published and archive literature available for the area.

Dated at Coquitlam, BC, this 17th day of December, 2009.

Krzysztof Mastalerz

Sample Label	UTM (NAD83, 8 Zone)			Type	Description
	East	North	Elev		
	[m]	[m]	[m]		
ML01	566892	6610539	671	G	Sugary, whitish-gray quartz vein
ML02	566955	6610606	671	G	Greenish, serpentinized and carbonatized, fractured rock
ML03	567004	6610637	673	G	Chalcedony/fine quartz veins 3-5mm wide in a carbonatized host rock stained yellow-brown
ML04	567071	6610791	666	G	Light greenish carbonate-silicious altered rock with trace of mariposite
ML05	567072	6610791	672	G	Light greenish carbonate-silicious altered rock with trace of mariposite
ML06	567071	6610791	672	G	Light greenish carbonate-silicious altered rock with trace of mariposite
ML07	567071	6610787	669	G	Light greenish carbonate-silicious altered rock with trace of mariposite
ML08	567145	6610809	674	G	Greenish-gray, silicified and fractured volcanogenic rock with quartz stringers; trace of mariposite
ML09	567145	6610813	676	G	Greenish-gray, silicified and fractured volcanogenic rock with quartz stringers; trace of mariposite
ML10	567322	6610891	673	G	Siliceous/quartz vein in volcanic rock
ML11	567356	6610902	676	G	Siliceous rock with granitoid texture, highly fractured/foliated & weathered to light brownish pink
ML12	567276	6611334	667	G	Quartz vein, approx. 1 inch wide, in volcanics; minor pyrite
ML13	567282	6611351	671	G	Quartz breccia (white quartz), approx. 1.5 metre wide, host by volcanic rock
ML14	567281	6611348	669	G	Strongly fractured, softened (clay alt'n) volcanic rock along the northern contact with quartz breccia of ML-13; 0.5 metre wide
ML15	567297	6611371	668	G	Zone of quartz breccia, 0.75 metre wide; locally mariposite and minor pyrite
ML16	567319	6611402	666	G	Carbonate alteration zone 30 metre wide; locally sparse mariposite
ML17	567321	6611410	667	G	Continuation of alteration zone from ML -16, relatively abundant mariposite
ML18	567018	6611390	677	G	Grayish-green, silicious volcanic rock, Fe staining, pyrite, mariposite
ML19	567007	6611411	695	G	Strongly fractured/foliated & weathered brown crumbly rock, distinct black crystals of biotite?
MK01	567141	6610779	675	G	Green moderately serpentinized volcanic rock with numerous thin quartz veinlets
MK02	567141	6610779	675	G	Greenish, crudely banded, silicified rock with numerous quartz veinlets; minor disseminated pyrite
MK03	567141	6610779	675	G	White quartz-carbonate vein in greenish serpentinized wall rock; 1% of disseminated pyrite along the contacts of the vein
MK04	567141	6610779	675	G	Greenish strongly serpentinized wall rock of the quartz vein; disseminated pyrite 3-5%
MK05	567138	6610789	675	G	Greenish, distinctly silicified zone in serpentinized rock with thin quartz veins (white); disseminated pyrite 0.5%

MK06	567138	6610789	675	G	1-2 cm thick quartz veins in greenish serpentized rock; silicification, 1-2% disseminated pyrite, mariposite
MK07	567138	6610789	675	G	Greenish, siliceous zone in serpentized rock with irregular quartz veins and nodules; disseminated pyrite 2-3%, abundant mariposite
MK08	567143	6610778	677	G	Moderately crystalline, whitish quartz veins with carbonate altered wall rock, abundant mariposite
MK09	567147	6610778	674	G	Sheeted quartz veins/veinlets in silicified zone of the greenstone, mariposite
MK10	567142	6610772	676	G	Sheeted quartz veins and breccias, with greenish carbonate altered host rock; abundant mariposite
MK11	567156	6610741	674	G	Carbonate-quartz vein with greenish greenstone wall rock; weak carbonate alteration
MK12	567161	6610736	671	G	Thin quartz veins in weak carbonate altered and silicified volcanic rock; mariposite
MK13	567167	6610735	671	G	Thin quartz veins in weak carbonate altered and silicified volcanic rock; mariposite
MK14	567193	6610727	673	G	Carbonate breccia in strongly carbonate altered volcanic rock
MK15	567197	6610726	673	G	Silicification zone with minor mariposite in carbonate altered volcanic host rock
MK16	567200	6610727	677	G	Carbonate-quartz veins with minor mariposite along the vein walls; host weakly altered basaltic pillow lava
MK17	567221	6610756	678	G	Moderately carbonate altered volcanic rocks with numerous carbonate-calcite veins
MK18A	567221	6610756	678	G	Carbonate veins from the zone of silicification of moderately carbonate altered volcanic rock, minor mariposite
MK18B	567221	6610756	678	G	Zones of patchy silicification in moderately carbonate altered volcanics
MK19	567380	6610924	677	G	Thin quartz veins in weakly chlorite-altered basaltic tuff-to-coarser grained volcanics
MK20	567373	6610970	673	G	Quartz-carbonate vein in thin carbonate alteration zone in basaltic volcanics; disseminated pyrite along walls
MK21	567198	6610956	685	G	Irregular quartz veins and pods, and carbonate veins in moderately carbonate altered volcanic rock
MK22	567198	6610794	681	G	Irregular quartz veins in greenstone/metavolcanic rock
MK23	567152	6610782	679	G	Brownish, moderately-to-strongly carbonate altered metavolcanic rock; weak serpentization
MK24	567149	6610789	679	G	Quartz-carbonate veins in strongly carbonate altered metavolcanic rock; disseminated pyrite and minor mariposite
MK26	567396	6611627	673	G	Carbonate-quartz veins and wallrock of moderately carbonate altered (mostly veinlets) metavolcanic rock; coarse crystalline pyrite 3-7% in the wall rocks
MK27	567408	6611702	673	G	White, coarse-crystalline calcite veins and approx. 20% of wall rock of strongly carbonate altered metavolcanic; weak silicification

MK28	567408	6611704	673	G	Greenish, medium-crystalline metavolcanic (greenstone) with coarse-grained pyrite and pyrite veinlets; minor calcite veinlets
MK29	567408	6611706	673	G	Brownish, strongly limonitic, oxidized metavolcanic rock with thin quartz-carbonate veinlets; concentrations of pyrite 5-12%
MK30	567408	6611708	674	G	Greenish-brown, carbonate altered metavolcanic rock, disseminated pyrite 3-7%, minor calcite veinlets
MK31	567423	6611748	669	G	Weak carbonate alteration zone in metavolcanic (basalt?); disseminated pyrite 1%, thin calcite veins
MK32	567408	6611801	670	G	Quartz-carbonate veins and zone of alteration in greenish-gray metavolcanic rock
MK33	567400	6611856	673	G	Strongly carbonate altered and fractured; yellowish-green metavolcanic rock; trace of disseminated pyrite and mariposite
MK34	567052	6611790	675	G	Zone of quartz veining and silicification in slightly serpentinized volcanic rock; trace of disseminated pyrite
MK35	567051	6611788	675	G	Moderately silicified metavolcanic (basaltic?) rock with thin quartz veins; trace of disseminated pyrite
MK36	567024	6611775	674	G	Zone of strong silicification and irregular quartz-carbonate pods in basaltic(?) metavolcanic rock
MK37	567033	6611667	680	G	Zone of moderate carbonate alteration and quartz flooding along the contact between andesitic(?) feldspar porphyry and basaltic tuff
MK38	567247	6611227	675	G	Slightly silicified and carbonate altered basalt with numerous pods enriched in pyrite (3-10%)
MK39	566519	6611123	751	G	Black-to-greenish, moderately serpentinized ultramafic rock; fragmental(?) texture locally
MK40	566386	6611081	784	G	Contact zone between moderately serpentinized ultramafic and coarse crystalline, intrusive diorite
MK41	566941	6611058	700	G	Zone of strong pervasive carbonate alteration in andesitic?basaltic metavolcanics; locally brecciation
MK42	567510	6610909	666	G	Brownish, strongly carbonate altered metavolcanic
MK43	567506	6610897	668	G	Brownish, strongly carbonate altered metavolcanic with subordinate quartz veins
MK44	567512	6610895	664	G	Brownish, strongly carbonate altered metavolcanic with thin quartz veinlets and weak silicification

G E O C H E M I C A L A N A L Y S I S C E R T I F I C A T E

SATURN MINERALS INC.

Project: BE/ML-09
Sample Type: Rocks

Multi-element ICP Analysis - 0.500 gram sample is digested with 3 ml of aqua regia, diluted to 10 ml with water. This leach is partial for B, Ba, Cr, Fe, Mg, Mn, Na, P, S, Sn, Ti and limited for Na, K and Al. *Au Analysis- 20 gram sample is digested with aqua regia, MIBK extracted, and is finished by AA or graphite furnace AA.

Analyst _____
Report No. 2092302
Date: July 21, 2009

ELEMENT SAMPLE	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sn ppm	Sr ppm	Te ppm	Ti %	Tl ppm	V ppm	Zn ppm	*Au ppb
ML01	.1	.35	26	<5	56	<10	2.50	<1	3	49	10	.97	.14	1.25	331	1	.03	18	.03	6	.02	7	<2	111	<5	.01	<5	9	18	5
ML02	.2	.29	59	19	119	<10	.98	<1	79	221	14	3.33	.01	8.55	691	2	.01	997	.01	8	.15	2	<2	42	<5	.02	<5	6	9	4
ML03	.1	.47	281	<5	34	<10	3.89	<1	36	305	72	2.90	.01	4.69	719	9	.02	616	.01	6	.15	11	<2	304	<5	.01	<5	18	25	7
ML04	.1	.11	17	<5	25	<10	.77	<1	75	232	9	4.05	.01	17.40	776	2	.01	1430	.02	8	.09	<2	<2	109	6	.01	<5	6	5	1
ML05	.2	.09	94	<5	12	<10	14.20	<1	15	231	5	2.90	.01	9.84	642	1	.01	310	.01	6	.02	<2	<2	719	<5	.02	<5	25	16	2
ML06	.1	.13	43	<5	25	<10	4.26	<1	48	354	14	3.58	.01	11.42	547	3	.02	820	.02	8	.05	2	<2	500	<5	.01	<5	12	10	1
ML07	.2	.06	1197	<5	22	<10	7.01	<1	54	202	41	2.81	.01	12.83	791	1	.01	1327	.01	8	.45	10	<2	748	<5	.01	<5	4	5	3
ML08	.1	.10	36	<5	235	<10	6.60	<1	61	169	14	3.70	.01	12.87	1098	2	.02	997	.03	7	.07	<2	<2	627	<5	.02	<5	22	18	15
ML09	.2	.20	63	<5	9	<10	1.56	<1	64	236	7	4.68	.01	17.65	1064	1	.01	1366	.01	6	.01	<2	<2	194	8	.01	<5	3	8	56
ML10	.3	.27	41	<5	50	<10	1.32	<1	3	36	5	.75	.23	.60	188	1	.02	9	.03	7	.28	5	<2	50	<5	.01	<5	<1	17	64
ML11	.1	.31	225	<5	92	<10	1.32	<1	3	36	5	.76	.20	.42	190	2	.01	5	.03	10	.20	5	<2	36	<5	.01	<5	<1	20	145
ML12	32.8	.22	39	<5	80	279	2.58	5	21	113	1064	2.91	.13	1.05	334	12	.02	19	.11	1893	2.07	2	<2	94	39	.01	<5	7	89	57
ML13	.2	.16	58	<5	78	<10	8.40	<1	7	55	17	2.78	.10	4.42	535	3	.01	23	.01	10	.56	9	<2	533	<5	.02	<5	24	25	8
ML14	.1	.39	61	5	261	<10	5.16	<1	17	55	41	3.12	.15	2.44	585	7	.01	39	.19	10	.50	22	<2	619	<5	.01	<5	52	41	2
ML15	.2	.13	132	<5	50	<10	8.29	<1	13	66	45	3.47	.06	4.24	1313	2	.02	91	.02	8	.62	18	<2	399	<5	.01	<5	26	34	1
ML16	.1	.52	117	<5	289	<10	7.21	<1	21	82	22	4.44	.11	3.86	874	4	.01	98	.16	11	.30	10	<2	574	7	.01	<5	55	38	4
ML17	.1	.12	403	<5	83	<10	9.33	<1	66	280	16	3.48	.06	5.58	831	3	.02	697	.02	6	.63	15	<2	657	<5	.02	<5	19	52	3
ML18	.1	.10	387	<5	106	<10	8.09	<1	75	208	11	2.71	.01	8.29	634	2	.01	1340	.01	9	.12	2	<2	509	<5	.01	<5	7	12	11
ML19	.2	2.50	29	<5	>10000	<10	5.89	1	30	220	65	4.64	.96	4.20	882	1	.06	72	.41	6	.07	7	<2	526	7	.10	<5	138	57	2
MK01	.1	.31	24	<5	150	<10	1.26	<1	53	359	12	3.36	.01	13.78	543	3	.01	793	.01	7	.12	<2	<2	75	7	.01	<5	10	4	14
MK02	.1	.15	51	<5	63	<10	.37	<1	66	231	8	3.67	.01	16.79	504	2	.01	1349	.01	6	.14	<2	<2	23	<5	.01	<5	3	12	23
MK03	.2	.24	887	<5	84	<10	1.56	<1	44	454	32	3.03	.01	15.09	785	3	.02	1107	.02	8	.09	12	<2	106	<5	.02	<5	11	3	32
MK04	.3	.16	37	<5	69	<10	.77	<1	51	278	6	3.45	.01	13.38	469	1	.01	637	.01	7	.14	<2	<2	43	<5	.01	<5	3	6	10
MK05	.1	.04	115	<5	24	<10	8.05	<1	37	267	8	2.64	.01	13.21	393	2	.02	835	.03	4	.04	6	<2	1370	<5	.01	<5	13	4	2
MK06	.2	.07	71	<5	28	<10	3.63	<1	63	256	12	3.76	.01	14.48	719	1	.01	1283	.01	7	.05	<2	<2	513	<5	.01	<5	7	4	23
MK07	.2	.15	33	<5	112	<10	5.23	<1	64	283	11	4.30	.01	13.35	671	1	.01	1350	.01	5	.03	<2	<2	334	6	.01	<5	10	10	5
MK08	.1	.10	804	<5	34	<10	4.72	<1	49	239	28	3.67	.02	13.81	857	2	.02	1058	.01	8	.08	13	<2	456	<5	.01	<5	7	11	16
MK09	.2	.09	1473	<5	36	<10	7.16	<1	68	380	8	4.37	.02	13.08	870	1	.01	1418	.03	7	.13	70	<2	616	6	.01	<5	8	10	21
MK10	.1	.07	430	<5	36	<10	2.00	<1	73	254	8	4.49	.01	14.32	610	2	.02	1393	.02	7	.18	5	<2	205	<5	.02	<5	4	6	11
MK11	.2	.27	19	<5	181	<10	14.18	<1	16	179	18	2.63	.01	9.51	746	2	.02	293	.01	18	.15	<2	<2	2706	<5	.01	<5	46	18	2
MK12	.3	.14	565	<5	135	<10	9.56	<1	47	194	12	4.51	.02	11.60	853	1	.01	952	.01	4	.29	23	<2	489	<5	.01	<5	11	13	9
MK13	.1	.23	647	<5	38	<10	8.65	<1	53	218	45	3.24	.03	8.66	905	2	.01	1092	.01	9	.19	13	<2	504	<5	.01	<5	21	15	11

ELEMENT SAMPLE	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sn ppm	Sr ppm	Te ppm	Ti %	Tl ppm	V ppm	Zn ppm	*Au ppb
MK14	.2	.07	373	<5	718	<10	11.49	<1	20	105	10	2.83	.03	6.56	668	3	.02	366	.01	8	.34	8	<2	819	<5	.02	<5	20	19	7
MK15	.1	.31	71	<5	216	<10	4.96	<1	55	373	23	3.91	.05	10.90	836	2	.01	1106	.06	9	.77	3	<2	359	6	.01	<5	21	39	18
MK16	1.2	.07	271	<5	30	<10	3.73	<1	60	177	44	4.03	.01	11.81	943	1	.01	1251	.01	14	.53	6	<2	263	<5	.01	<5	<1	22	7
MK17	.1	.18	44	<5	1112	<10	13.90	<1	6	38	14	3.74	.08	7.83	905	1	.02	60	.02	15	.14	5	<2	1163	<5	.02	<5	54	52	2
MK18(A)	.2	.08	959	<5	152	<10	12.16	<1	33	142	22	2.83	.02	6.76	819	3	.01	739	.01	8	.07	26	<2	723	<5	.01	<5	11	20	5
MK18(B)	.1	.18	618	<5	131	<10	5.12	<1	36	162	14	2.42	.05	3.12	318	2	.02	414	.01	9	.32	52	<2	301	<5	.01	<5	13	28	2
MK19	.2	.05	42	<5	119	<10	1.59	<1	2	105	6	.80	.03	.62	366	2	.01	9	.03	6	.08	5	<2	53	<5	.01	<5	3	12	180
MK20	.1	.21	41	<5	31	<10	12.13	<1	8	33	14	4.15	.03	6.05	1022	1	.01	17	.01	7	.06	2	<2	455	<5	.01	<5	62	36	2
MK21	.6	.06	50	<5	31	<10	10.18	6	30	148	97	2.90	.01	12.10	1088	3	.02	581	.02	815	.16	20	<2	882	<5	.02	<5	9	103	120
MK22	.4	.33	256	<5	415	<10	3.52	<1	68	480	31	3.42	.01	8.97	594	1	.01	901	.01	6	.27	8	<2	277	<5	.01	<5	14	7	31
MK23	.1	.08	39	<5	261	<10	3.33	<1	49	158	6	3.18	.01	14.33	490	3	.01	1039	.01	3	.07	<2	<2	436	9	.01	<5	6	8	14
MK24	30.9	.21	149	<5	22	<10	7.36	<1	40	224	53	3.10	.01	9.69	1165	1	.02	777	.01	14	.28	7	<2	310	<5	.01	<5	4	5	47600
MK26	.9	.71	65	<5	85	18	11.66	<1	17	59	65	4.59	.08	2.10	1679	3	.01	27	.02	18	1.98	6	<2	337	15	.02	<5	36	35	20
MK27	.2	.20	148	<5	541	<10	10.62	<1	11	29	14	3.90	.11	5.21	1098	6	.01	44	.13	26	.42	5	<2	854	5	.01	<5	34	71	90
MK28	.1	1.78	23	<5	132	<10	6.70	<1	12	100	134	5.67	.12	4.26	1428	2	.01	41	.09	11	1.00	<2	<2	467	6	.01	<5	114	65	38
MK29	2.9	3.13	68	<5	73	<10	.71	<1	14	172	259	11.92	.11	2.72	934	1	.02	50	.05	44	2.31	<2	<2	31	17	.02	<5	211	77	24
MK30	1.2	1.21	47	<5	93	<10	5.26	<1	14	102	165	6.93	.11	3.85	991	2	.01	54	.04	12	1.83	5	<2	341	7	.01	<5	114	65	23
MK31	.2	.31	609	<5	725	<10	9.68	<1	16	36	15	3.55	.13	4.66	996	1	.01	37	.10	37	.35	7	<2	557	<5	.01	<5	18	55	37
MK32	.1	.12	32	<5	40	<10	12.98	1	10	40	12	4.09	.04	6.58	1145	12	.02	32	.01	18	.13	7	<2	992	<5	.01	<5	55	74	75
MK33	.1	.08	297	<5	643	<10	9.09	<1	6	79	11	2.31	.05	4.36	1717	3	.01	30	.05	11	.38	9	<2	395	<5	.01	<5	6	19	1120
MK34	.2	.33	26	<5	48	<10	.85	<1	45	521	4	3.17	.01	16.04	641	1	.02	1031	.01	7	.19	<2	<2	150	<5	.02	<5	17	4	28
MK35	.1	.04	224	<5	56	<10	9.67	<1	48	181	4	3.38	.01	13.71	569	2	.01	782	.02	4	.28	6	<2	718	<5	.01	<5	7	2	9
MK36	.2	.31	309	<5	29	<10	8.39	<1	73	480	5	4.49	.01	12.83	1058	1	.01	1480	.01	4	.41	13	<2	673	<5	.01	<5	15	13	4
MK37	.1	.27	54	<5	465	<10	4.78	<1	61	377	8	3.27	.01	11.75	1232	2	.02	1138	.02	10	.07	<2	<2	362	<5	.02	<5	8	13	14
MK38	.7	2.27	6	<5	128	<10	2.11	<1	38	72	232	8.04	.08	2.96	1014	5	.03	55	.08	10	1.73	4	<2	149	11	.01	<5	279	62	4
MK39	.4	.37	88	144	25	<10	1.58	<1	85	642	14	4.41	.01	16.39	951	3	.01	2008	.01	20	.14	<2	<2	92	5	.01	<5	19	42	23
MK40	.1	2.07	15	<5	308	<10	1.36	<1	10	42	13	3.38	.62	.89	235	2	.25	14	.25	14	.01	<2	<2	119	<5	.14	<5	134	67	1
MK41	.3	.21	263	<5	19	<10	1.65	<1	62	283	20	3.20	.01	9.82	874	1	.01	1058	.01	13	.12	5	<2	167	7	.01	<5	3	12	29
MK42	.1	.20	28	<5	103	<10	11.73	<1	17	100	17	3.85	.04	6.60	942	2	.01	108	.02	9	.24	6	<2	567	<5	.02	<5	94	58	5
MK43	.2	.14	211	<5	121	<10	13.89	<1	18	73	7	3.91	.04	7.19	981	1	.02	122	.01	10	.04	6	<2	740	<5	.01	<5	30	29	6
MK44	.1	.16	32	<5	518	<10	13.02	<1	6	58	15	3.58	.04	6.60	950	2	.01	29	.05	7	.12	7	<2	707	<5	.01	<5	42	28	2