2009

Gossan Resources Limited

G. Ryan Cooke P.Geo.

ASSESSMENT REPORT - SEPARATION RAPIDS, KENORA DISTRICT

OCTOBER 14, 2009

Location and Access

The property is located in NTS area 52L-7 SE and approximately 75 kms north of Kenora Ontario on the English River. It is located approximately 1 kilometre east of Avalon Rare Metals Ltd. Big Whopper Deposit. Access to the property is via the English River Road and the Big Whopper access Road. Access by float plane is available from the resort town of Minaki Ontario. Alternatively it is also accessible by boat from Separation Rapids Landing.

The physiography of the area is typical of the Pre-Cambrian shield with rocky outcrops interspersed with peat bogs and swamps. The overburden consists of glacial till and clay deposits. Much of the area of the claims is covered by forest consisting of small pines, alders, and poplars.

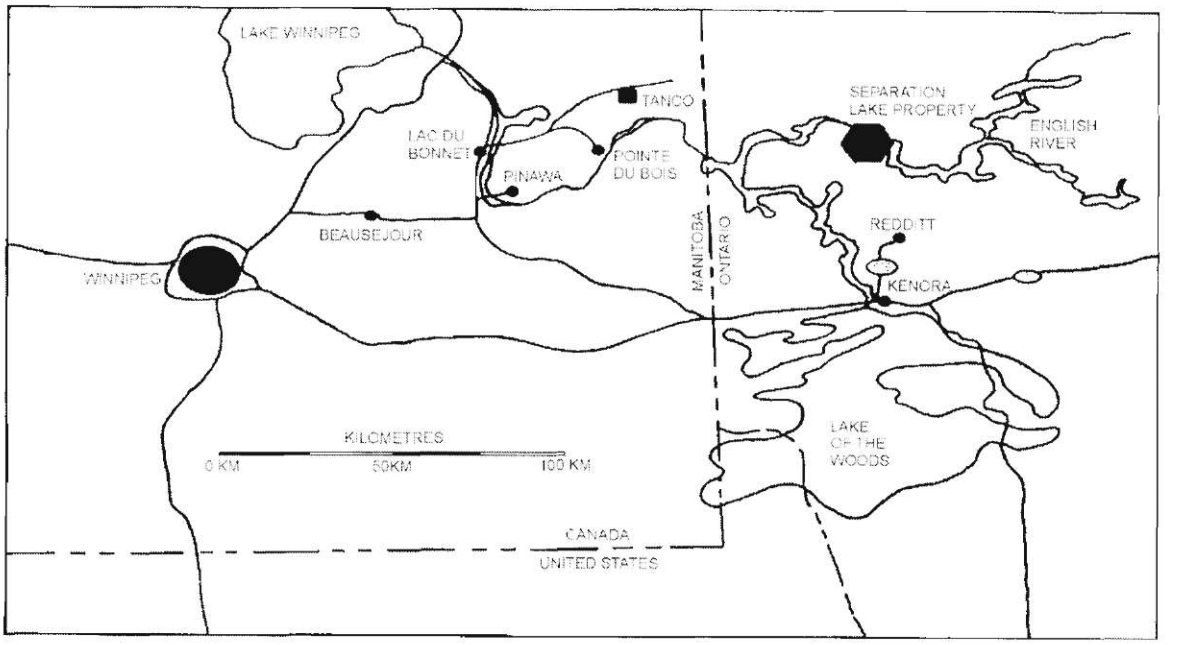


Figure 1: Property location

Property

The Property consists of 3 contiguous claims consisting of 27 claim units totalling 432 ha. The claims are wholly owned by Gossan Resources Ltd. Fig. 2 shows the claims and the local topography.

Claim #	Claim Sht.	Claim Sht. Name	NTS Area	Date Staked	Date Recorded	Hectares	Claim Units
4204994	G-2634	Paterson Lk	52L-7SE	4-Oct-05	18-Oct-05	192	12
3014350	G-2634	Paterson Lk	52L-7SE	17-Dec-05	10-Jan-06	224	14

4204790	G-2634	Paterson Lk	52L-7SE	18-May-06	25-May-06	16	1
Totals						432	27

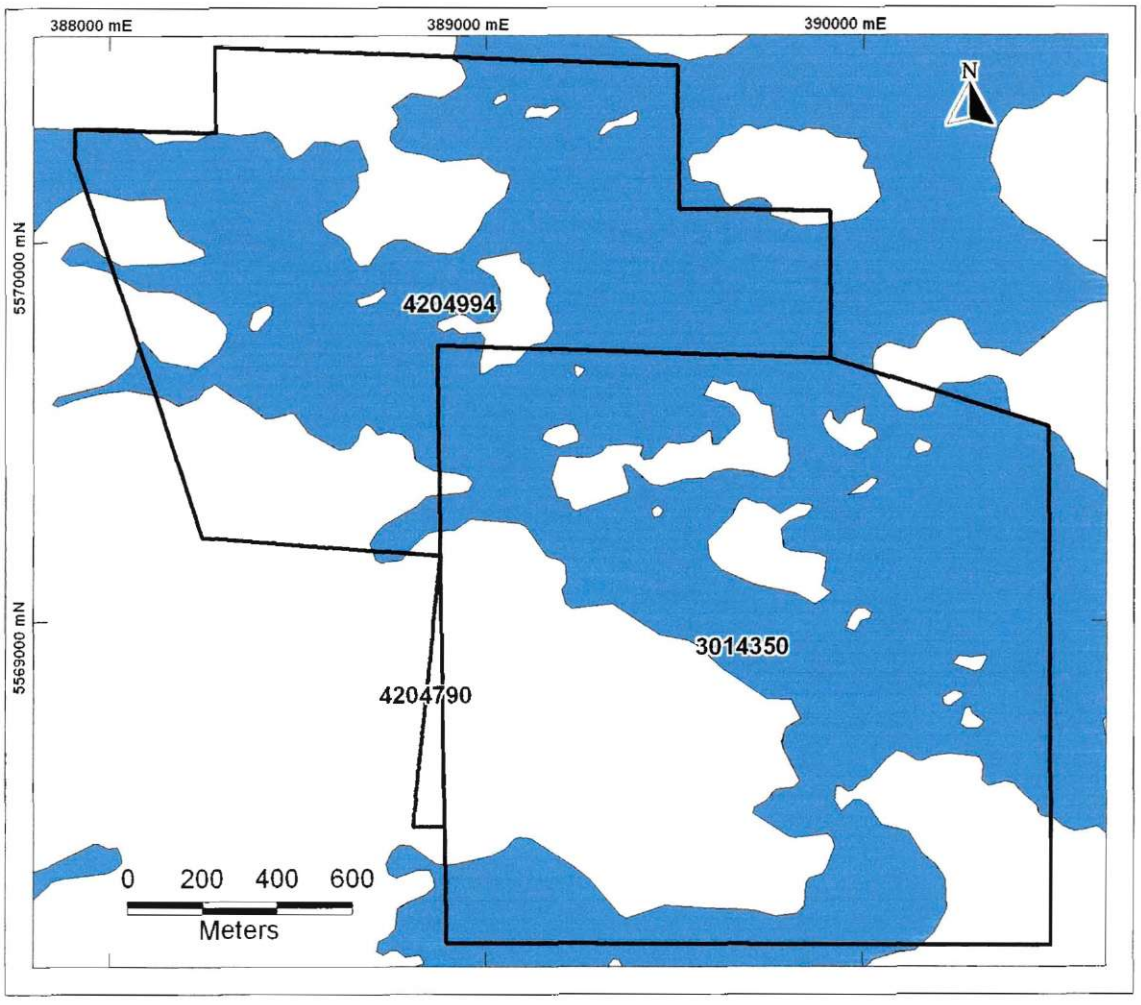


Figure 2: Claims

Property Topography:

The highest point on the property is on the west boundary on Line 185w at about 250n. From there it slopes down to the peat bog to the east. The Peat Bog is roughly rectangular in shape and it is about 400m in length. Soil depths tend to be very thin on the height of land but increase down slope toward the peat bog. The depth of overburden in the peat bog is not known.

Previous Work:

These three claims were originally the western most claims of a very much larger property that was held by Tanco Mining Corporation of Canada Limited in joint venture with Gossan

Resources Ltd. All of the most recent work done here was done by Tanco between 1996 and 2000. This work consisted of reconnaissance geological mapping, lithogeochemical sampling, and an Enzyme Leach soil geochemical survey. Tanco's interest in the property was transferred to Angus and Ross in 2002. Gossan Resources Ltd. acquired a 100% undivided interest in the property from Angus and Ross in 2006.

In 2007 Gossan Resources Ltd. had a grid cut over the property. That grid consisted of an east-west baseline with cross lines every 100m. The lines that would have crossed the peat bog in the north central part of the property were not cut. The lines were prospected and a second enzyme leach soil geochemical survey was conducted. Subsequent visits to the property in 2008 and 2009 by the author and Chris Pederson, a consulting geologist, revealed that the line cutting had been poorly done to the extent that lines and stations were, in places, incorrectly numbered and the chainage was inaccurate. It also revealed that significant outcrops that occurred between the lines had not been noted or sampled. Some of those outcrops included pegmatites that appeared to host lithium minerals, mainly lepidolite and petalite, mineralization that had been missed by the previous programs. These two previous programs did demonstrate that the most prospective part of the property was the northern half, that is, the area north of the baseline on claim 3014350.

Regional Geology

The Separation Rapids property occurs in the Separation Lake Greenstone Belt (Blackburn and Young, 1992) it is part of a package of metavolcanic rocks which occur discontinuously along the boundary of the English River and Winnipeg River sub-provinces of the Archean Superior Province. The belt constitutes the boundary zone between the high grade, metasediment dominated, English River Sub-province to the north and the Granite – tonalite dominated Winnipeg Sub – province to the south. The Separation Lake greenstone belt maybe an extension of the 2.74 Ga Bird River metavolcanic - metasedimentary belt to the west. This belt is known to host pegmatite fields such as the Greer Lake, Rush Lake, and Bernic Lake fields.

2009 Program

The 2009 program was undertaken to more completely explore the lithium bearing pegmatites that had been noted and sampled during the two visits made to the property by the author in the fall of 2008 and the spring of 2009.

The existing grid, with lines spaced at 100 m intervals, north of the baseline was refurbished and re-chained with stations every 25 meters. The baseline was then extended 185 meters to the west to the property boundary. New lines were then cut between the old lines such that the grid west of the central peat bog is now at 50 meter intervals. In all 1345 meters of new line was cut and 2950 meters of line was refurbished and re-chained.

Two experienced prospectors, David Galley and Kelvin LaDouceur, both of Thunder Bay, were employed to cut and refurbish the grid and thoroughly prospect that grid, including the areas between the lines, for additional pegmatite bearing outcrops and then to carry out the soil sampling survey. A graduate geologist, Tom Hildahl, was employed to map the property, under the supervision of the author, on the "new" grid including any new outcrops discovered by the prospecting team. The geologist also selected specific sites for channel samples. In all 10 channel samples were taken, each 0.9 m long. Twenty-eight (28) grab samples were taken by the prospectors and the geologist from outcropping pegmatites.

The prospecting team also took 173 soil samples that were submitted for Soil Gas Hydrocarbon determinations. This geochemical method was selected because the results are not dependent on the sample medium which meant that the peat bog, a potentially prospective area, could be sampled along with the regular soils from the remainder of the grid. This method also promised to look deeper and give a more specific result. The expenditures for this program are shown in Appendix A

Property Geology:

The area of new mapping, as shown on the attached geology maps, is dominated by rocks of the Separation Rapids Metavolcanic Belt. This unit consists of mafic to intermediate volcanics that display a foliation that trends about 100° and dips 72° to 88° degrees south. This unit is important because it is the host rock for all of the pegmatites that were mapped and sampled during this program.

Within the central portion of the metavolcanic unit there is a "zone" in which occur multiple pegmatite sill-like bodies that range in width from a few centimetres to more than 5 meters. This "zone" is designated on the property scale geology map as the "Pegmatite Zone". This "zone" is approximately 100m wide on the west edge of the property but it narrows to about 50m in width before it disappears under the peat bog to the east.

These pegmatites are all hosted by metavolcanics. The pegmatites all appear to be parallel to the strike and dip of the foliation of the enclosing metavolcanics. Thus the contacts appear to strike about 100° and dip 72° to 85°south. Most of the pegmatites are very narrow, a few centimetres to about a meter in thickness, and could not be individually mapped at the scale used here on the geology maps. Relative to the metavolcanics the wider or thicker pegmatites appear to be recessive weathering units such that it is rare for both contacts of most of the pegmatites to be exposed. This makes it difficult to estimate the actual width or thickness of individual pegamatites.

To the north the metavolcanics are in contact with the Separation Rapids Pluton, see Breaks and Tindle 1996 and 1997, which outcrops only in the extreme north western part of the grid and again in the extreme eastern part of the grid on the Shore of Separation Lake. This unit is

pegmatitic granite. On the property it is distinguished by centimetre sized garnets and it appears to consist of equal amounts of quartz, plagioclase feldspar and orthoclase feldspar.

The southern part of the mapped area is dominated by granites of the Winnipeg River Sub-province. This unit is also pegmatitic and described by Breaks and Tindle as a biotite granite and granodiorite. It was noted, during the mapping, to be distinguished by meter sized quartz, feldspar, clusters. Granodiorite was noted only in the extreme south east portion of the map area. The geology of the 2009 work area is shown in Figure 3 (see pocket).

Lithium Bearing Pegmatites:

There are at least 4 lithium bearing pegmatites within the "Pegmatite Zone" that may have a strike length greater than 25m and in one case more than 75 m. These pegmatites have been labelled, on the detailed geology map as, A, B, C, and D. The recessive nature of these pegmatites has meant that few contacts with the enclosing metavolcanics were observed. The width or thickness of these pegmatites, with one exception, could not be determined. The one exception to this was Pegmatite "B" where the north and south contacts were observed separately in adjacent outcrops. This pegmatite is at least 5m thick. The thickness of the others could not be determined but from their exposure in outcrop they are at least 4-5 meters wide and maybe much wider than that.

The strike length of these pegmatites is also a matter of speculation. Pegmatite "C" appears to be at least 75 meters long based on its exposure in three outcrops. Pegmatite "D" may be an easterly extension of pegmatite "C". Pegmatite "B" appears to be at least 25 meters long.

The pegmatites do not appear to be foliated except at the contacts where they grade into a "sugary" textured rock and appear weakly schistose with no apparent change in mineralogical composition. Boudins of pegmatite were also noted in several outcrops. It should be noted that the main pegmatites, that is "A", "B", and "C" all trend or strike easterly into the peat bog.

All four of these pegmatites are host to lithium mineralization. In particular Pegmatites A, B, and D displayed visible lepidolite and petalite mineralization. This has been confirmed by channel and grab sample assays. A channel sample from A returned 1.42% Li over 0.8m. Similarily a channel sample of Pegmatite B returned an assay of 0.86% Li over 0.9m. A grab sample, 155899, taken from the west end of Pegmatite C ran 0.8% Li which suggests that this pegmatite may carry important lithium minerals. One other sample, 155811, of this pegmatite taken from the sugary textured contact zone ran 225.4 ppm Li. A detail map of the geology of the Pegmatite Zone is attached as Figure 4 (see pocket).

Six samples of these pegmatites were submitted to Vancouver Petrographics for thin section determinations. The resulting report is attached in Appendix B

Channel Sampling:

Channel samples were taken from outcrops where lithium minerals were visible or suspected. In all ten channel samples were cut. Each sample is about 5cm wide and about 0.9m long. Of the ten samples five returned high grade or anomalous lithium and or tantalum values. One channel sample, 155807, taken from Pegmatite A assayed 1.42% Li over 0.9m. Channel sample 155808 from Pegmatite B assayed 0.86% Li over 0.9m. A channel sample, 155809, taken from a pegmatite boudin 25m west of 155808 assayed 0.76% Li over 0.9m. Channel sample 155815 taken from an outcrop on Line 125W at 225N near the western edge of the map area assayed 1.14% Li. This sample may possibly represent a westward continuation of Pegmatite C. A sixth sample that was taken from an outcrop located a few meters west of Line 100W and a few meters south of Line 250N assayed 841.7 ppm Li and 308.9 ppm Ta. The assay reports for both the channel samples and the prospecting grab samples from TSL Labs is attached as Appendix C.

Soil Sampling:

Soil samples were taken over the northern portion of the grid and all of the "Pegmatite Zone". In all 173 samples were taken. Previous soil sampling surveys on this property were submitted for Enzyme Leach determinations. The results of these surveys are incompatible with each other. That is they gave conflicting results. Thus repeating this type of survey was ruled out.

One of the problems is that the main pegmatite sills all trend into the peat bog where it would be difficult if not impossible to sample B or C horizon soils. In fact it became clear that it would not be possible to sample a consistent soil horizon over the entire area of the "Pegamatite Zone". The available soils vary from considerably over the area of interest. Thus it was necessary to use a geochemical method that was not dependent on sampling one consistent horizon. For this reason Soil Gas Hydrocarbon geochemistry which is not dependent on soil or media type was selected to be used here. The Soil Gas Hydrocarbon method also promised to give a more specific target. Because this type of survey is relatively new and quite different from other more conventional surveys the full report by Activation Labs explaining the system, theory, and the interpretation is included in Appendix D. The results are shown in Figure 5.

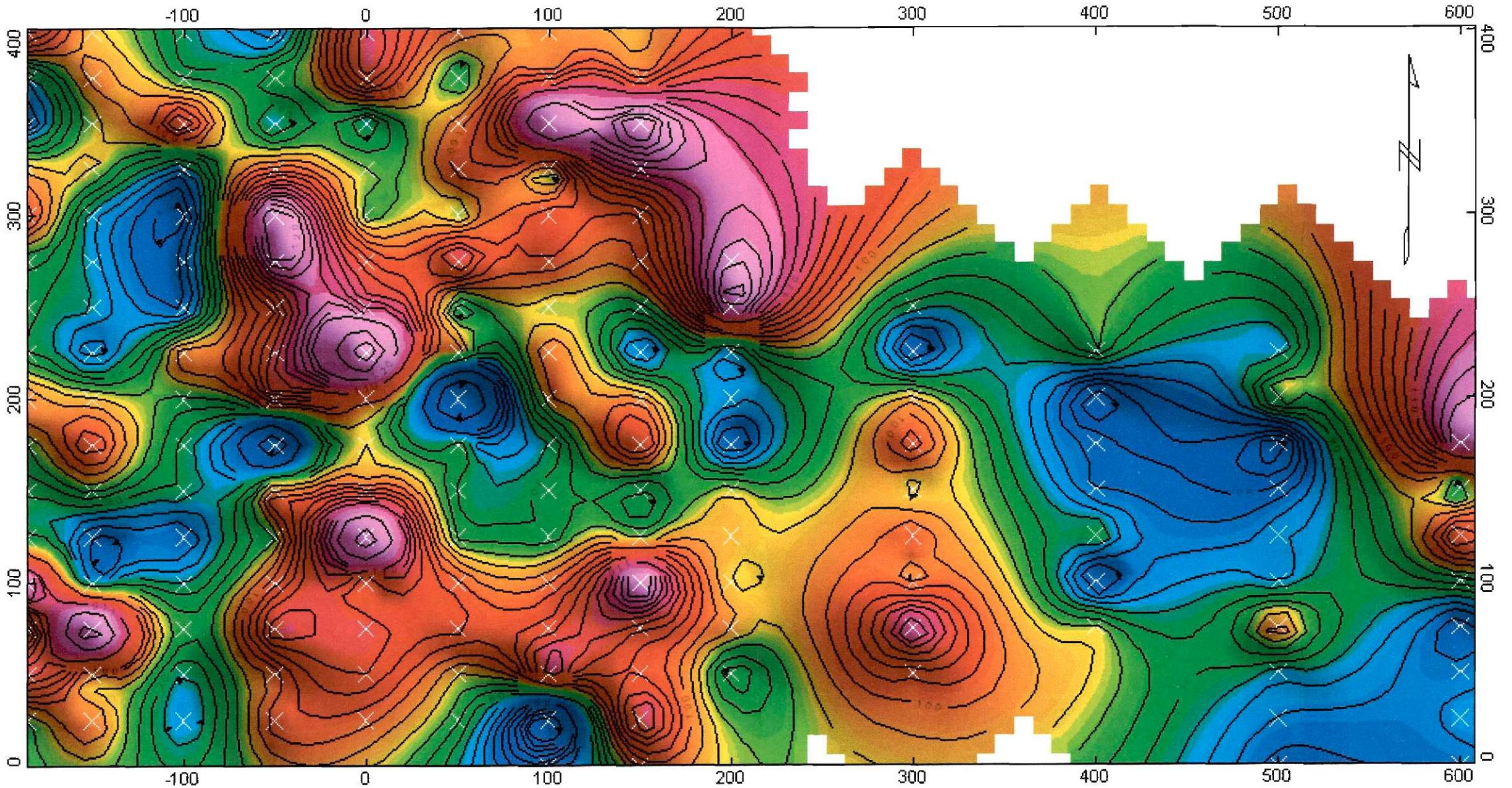


Figure 5: SGH Soil Survey Results

The survey results were encouraging in that it shows a lithium anomaly under the west end of the peat bog that is along the general strike of Pegmatites A, B, and D.

Conclusions:

1: Within the metavolcanic unit there is a zone in which the metavolcanics host numerous pegmatite sills that range in width (thickness) from a few centimetres to more than 5 meters.

2: Within the "Pegmatite Zone" there appear to be at least 3 and possibly 4 pegmatites that maybe 5 meters or more in thickness that also carry significant lithium minerals, petalite and lepidolite, and lithium assay values. The best assay came from a channel sample taken from "Pegmatite A" which returned 1.42% Li over 0.8m. All of these pegmatites appear to trend along strike (100m) to the east into the peat bog.

3: The Soil Gas Hydrocarbon survey shows a significant lithium anomaly under the west end of the peat bog and along the strike of the lithium bearing pegmatites. Activation Labs recommends this anomaly as a drill target based on their interpretation of the results.

Recommendations:

1: The next phase of exploration should be a drilling program. That program of at least 8 holes should be designed to test Pegmatites A, B, C, and D to determine their thickness and strike length plus down dip extensions as well as the lithium content. Two of those holes should test the Soil Gas Hydrocarbon anomaly in the peat bog.

2. If the drill program is successful then there should be some consideration of doing some overburden stripping in two areas; the area between Line 25E and 50E between 230N and195N and; between lines 125W and 75W and between 215N and 230N. This could give a better understanding of the geology of the pegmatites in question.

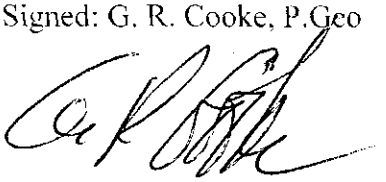
Certificate

I, George Ryan Cooke, residing at 8 Village Drive Ste Anne, Manitoba, Consultant Geologist for and Director of Gossan Resources Ltd. do hereby certify that:

1. The foregoing report is based on work done by Tom Hildahl and two other prospectors, all under my supervision between June 24, 2009 to July 16, 2009 . This report was written by me, Ryan Cooke.
2. I am a registered member of the Association of Professional Engineers and Geoscientists of Manitoba.
3. I graduated with a BA (major in Geology) from the University of New Brunswick in 1961.
4. I have worked in continuously mineral exploration from 1966 to the present.

October 14, 2009

Signed: G. R. Cooke, P.Geo



Appendix A

Expenditures

Date	Payee	Amount	Geology	Transportation, Accommodation and Food	Assays	Field & Related	Other
June 25, 2009	Days Inn Kenora	$349.20		$349.20			
June 30, 2009	Chris Pedersen	$1312.50	$1,155.00	$157.50			
June 30, 2009	Ryan Cooke	$1,522.50	$1,522.50				
July 6, 2009	Separation Lodge	$1,466.00					$1,466.00 (boat rental)
July 7, 2009	Separation Lodge	$590.00					$590.00 (boat rental)
July 11, 2009	Days Inn Kenora	$5,751.48		$5,751.48			
July 17, 2009	Thomas Hildahl	$7,875.00	$7,875.00				
July 15, 2009	Dave Galley	$5,801.25					$5,801.25 (linecutting/prospecting)
July 15, 2009	Dave Galley	$2,801.55				$2,801.55 (supplies)	
July 13, 2009	Kelvin Ladouceur	$5,801.25					$5,801.25 (linecutting/prospecting)
August 4, 2009	VISA	$952.97		$844.72 (truck rental)		$108.25 (gas)	
August 6, 2009	Ryan Cooke	$2093.74	$2093.74				
August 18, 2009	Greyhound	$92.15			$92.15 (shipping)		
August 20, 2009	TSL Laboratories	$1,226.45			$1,226.45		
September 1, 2009	Vancouver Petrographics	$1,337.70			$1,337.70		
September 2, 2009	Thomas Hildahl	$375.00	$375.00				
September 2, 2009	Ryan Cooke	$838.95	$838.95				
September 9, 2009	ActLabs	$9,445.80			$9,445.80		
September 14, 2009	TSL Laboratories	$177.45			$177.45		
October 8, 2009	Ryan Cooke	$2,807.96	$2,807.96				
		$52,618.90	$16,668.15	$7,102.90	$12,279.55	$2,909.80	$13,658.50

Appendix B

Vancouver Petrographics Report

Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V1M 3S3
PHONE: 604-888-1323 • FAX: 604-888-3642
email: vanpetro@vanpetro.com
Website: www.vanpetro.com

PETROGRAPHIC REPORT ON SIX PEGMATITE SAMPLES FROM NORTHWEST ONTARIO

Report for: Ryan Cooke, VP Exploration
Gossan Resources Limited
404-171 Donald Street
Winnipeg, MN R3C 1M4 (204) 943-1990

Invoice 090474

Aug.20, 2009.

SUMMARY: From Archean "pegmatite" near the boundary between the English River and Winnipeg River sub-provinces in northwestern Ontario, composed of albite, quartz, microcline, muscovite and local possible lithium bearing minerals (lepidolite and petalite?) that need confirmation by SEM and/or XRD, or possibly merely geochemical analysis to see if they show significant Li enrichment compared to other samples, plus accessory garnet-apatite?-topaz?-kyanite?, the latter two partly altered to fine-grained sericite-biotite-chlorite?-limonite. Capsule descriptions are as follows:

155808: weakly foliated, somewhat layered, quartz-plagioclase-Kspar-petalite?-lepidolite?-apatite? gneiss, with porphyroblastic Kspar/quartz, and minor alteration to secondary sericite/biotite/limonite.

155810: albite-quartz-muscovite gneiss with local porphyroblasts of Kspar (microcline?) associated with metamorphic "sweats" of coarser quartz, and rare garnet (?), but no obvious lithium phases.

155811: moderately well foliated (but not particularly sheared) albite-quartz-muscovite (minor sericite, chlorite?)-accessory garnet-Kspar-sphene-trace limonite gneiss. Local coarse quartz probably represents metamorphic "sweats". No Li-bearing phases were identified.

155893: weakly foliated (not particularly sheared) albite-quartz-garnet-accessory muscovite-(minor biotite, sericite, secondary biotite, Mg-chlorite?)-trace limonite gneiss with distinctive micrographic plagioclase-quartz intergrowths. No Li-bearing phases were identified.

155997: moderately foliated, somewhat layered, quartz-plagioclase-Kspar-petalite?-lepidolite?-apatite?-topaz?? gneiss, with porphyroblastic Kspar (microcline), and minor alteration to secondary sericite/biotite/lepidolite?/limonite (especially in petalite?).

Outcrop #7: weakly/moderately foliated albite-quartz-microcline-minor muscovite-relict kyanite? (altered to sericite/biotite, intergrown with muscovite)-rare garnet-trace apatite?-opaque gneiss, with local porphyroblastic feldspar (plagioclase and Kspar)

Detailed petrographic descriptions and photomicrographs are appended (on CD). If you have any questions regarding the petrography, please do not hesitate to contact me.

C.H.B. Leitch, P. Eng.

Craig H.B. Leitch, Ph.D., P. Eng. (250) 653-9158 craig.leitch@gmail.com
492 Isabella Point Road. Salt Spring Island. B.C. Canada V8K 1V4

155808: WEAKLY FOLIATED/LAYERED QUARTZ-ALBITE-KSPAR-PETALITE?-LEPIDOLITE?-APATITE? GNEISS (PORPHYROBLASTIC KSPAR, MINOR SERICITE)

Hand specimen shows pale grey-white (locally pale mauve), fine- to medium grained, weakly/moderately foliated gneissic rock with local white feldspar porphyroblasts up to about 1 cm in size. The rock is not magnetic, and shows no reaction to cold dilute HCl, but the porphyroblasts stain yellow for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Quartz	30%
Plagioclase (albite?)	20%
K-feldspar (mainly microcline?)	15%
Petalite (?)	15%
Mica (muscovite and/or lepidolite?)	15%
Apatite (?)	2-3%
Mica (secondary sericite/biotite?)	1-2%
Opaque (mainly limonite?)	<1%

This sample consists of porphyroblasts of K-feldspar (generally surrounded by quartz) in a weakly to moderately foliated matrix composed of <1 cm thick layers alternately rich in quartz, plagioclase and lesser Kspar, accessory apatite (?), or petalite (?) partly altered to sericite/ biotite and trace limonite and coarser mica (muscovite or possibly lepidolite?).

Kspar porphyroblasts have sub/euhedral outlines up to about 1 cm across (composed of interlocking euhedral crystals mostly <5 mm in diameter that are clouded in places by minute, <5 um inclusions of clay?). Locally visible "grid" twinning suggests it is likely microcline. Minor albite is contained within the Kspar as ribbon-like perthite inclusions mostly <0.1 mm thick. There is also minor alteration, especially near rims, to flakes of sericite mostly <25 microns in diameter.

Quartz surrounding the Kspar, or in adjacent layers, forms interlocking sub/anhedra up to about 2 mm in size, with minor strain indicated by weak undulose extinction and only minor sub-grain development, rare suturing of grain boundaries.

Plagioclase forms mainly subhedral, tabular crystals up to about 2 mm long, commonly oriented with long axes sub-parallel to the layering/weak foliation. Negative relief compared to adjacent or included quartz (inclusions are rounded subhedra mostly <0.15 mm) and extinction Y^010 up to 13 degrees suggests an albitic composition (An7-10); the crystals are unaltered.

The mineral tentatively identified as petalite (?) occurs in layers up to 4 mm thick, and is distinguished by distinct negative relief against quartz or plagioclase, low (first-order white/grey) birefringence, two unequal cleavages at ~114 degrees, large (positive?) 2V, and association with a mica that is pale mauve in hand specimen, suggestive of lepidolite (?), which forms mainly ragged colourless subhedral flakes <0.5 mm in thin section that are indistinguishable optically from muscovite. **However, X-ray diffraction would be necessary to positively identify both these potential Li-bearing phases**. The petalite (?) is commonly incipiently or partly altered along cleavages, fractures and borders to fine (<50 micron) subhedral flakes of colourless to brownish secondary biotite or sericite, in places associated with traces of opaque (probably limonite).

In places in the quartzo-feldspathic layers, rounded irregular to rarely subhedral crystals mostly <0.5 mm in size of a colourless mineral with distinctive strong positive relief against quartz are tentatively identified as apatite on the basis of poorly seen (?) negative uniaxial interference figure, but I am not confident of this identification, and it should also be subjected to XRD analysis.

In summary, this appears to be weakly foliated, somewhat layered, quartz-plagioclase-Kspar-petalite?-lepidolite?-apatite? gneiss, with porphyroblastic Kspar/quartz, and minor alteration to secondary sericite/biotite/limonite.

155810: WEAKLY/MODERATELY FOLIATED ALBITE-QUARTZ-MUSCOVITE GNEISS WITH COARSE PORPHYROBLASTIC KSPAR, RARE GARNET (?)

Hand specimen shows pale grey-white (locally pale greenish), fine- to medium grained, weakly/moderately foliated gneissic rock with local pinkish white feldspar porphyroblasts up to about 1 cm in size and rare small reddish garnets (?). The rock is not magnetic, and shows no reaction to cold dilute HCl, but the porphyroblasts partly stain yellow for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Plagioclase (albitic?)	45%
Quartz	35%
Mica (muscovite or phengite?)	10%
K-feldspar (partly microcline)	10%
Garnet	trace (hand specimen only)
Opaque (mainly limonite?)	trace

This sample consists essentially of an intergrowth of plagioclase and quartz plus lesser mica (all generally somewhat elongated or aligned in the plane of foliation; locally in somewhat coarser-grained segregations, the latter locally with porphyroblasts of K-feldspar). Rare garnet is inferred from the hand specimen, although not seen in thin section.

Kspar porphyroblasts have sub/euhedral outlines up to about 0.7 cm across (composed of interlocking euhedral crystals mostly <4.5 mm in diameter that contain very minor albite is as minute ribbon-like microperthite inclusions mostly <10 um thick. Locally visible "grid" twinning suggests the Kspar is partly microcline. There is very minor alteration, to scattered flakes of sericite mostly <50 microns in diameter.

Quartz surrounding the Kspar, or in adjacent layers, forms interlocking sub/anhedra up to about 2.5 mm in size, with moderate strain indicated by common undulose extinction, minor sub-grain development, and local suturing of grain boundaries.

Plagioclase forms mainly subhedral, tabular crystals up to about 3.5 mm long, commonly oriented with long axes sub-parallel to the layering/weak foliation. Weak negative relief compared to adjacent or included quartz (inclusions are rounded subhedra mostly <0.15 mm) and extinction Y^010 up to 12 degrees suggests an albitic composition (An8-10); the crystals are essentially unaltered. Small inclusions of quartz (mostly <0.15 mm in size) in plagioclase, and vice versa, are common around the edges of the crystals, but inclusions of mica are relatively rare.

Mica flakes (colourless in thin section, although pale greenish in hand specimen) are mostly euhedral or subhedral and <1.5 mm in diameter. The green colour in hand specimen might indicate a phengitic composition. Unless there is something else unusual about the composition of the mica in this sample, I do not see any Li-bearing phases present.

In summary, this appears to represent albite-quartz-muscovite gneiss with local porphyroblasts of K-feldspar (microcline?) associated with metamorphic "sweats" of coarser quartz, and rare garnet (?). There are no obvious lithium phases. The sample is not particularly sheared.

155811: MODERATELY WELL FOLIATED ALBITE-QUARTZ-MINOR MUSCOVITE (±SERICITE, CHLORITE?)-RARE GARNET-KSPAR-SPHENE-TRACE LIMONITE GNEISS

Hand specimen shows white (locally pale greenish, or reddish where traces of limonite are present), fine- to medium grained, moderately well foliated gneissic rock with local coarse, elongate ("sweat"?) quartz and widely scattered small pink garnets (?). The rock is not magnetic, and shows no reaction to cold dilute HCl, nor is there any yellow stain for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Plagioclase (albite)	65%
Quartz	25%
Muscovite, sericite	5-7%
Chlorite or clay/chlorite (?)	1%
Garnet	1%
K-feldspar (microcline)	1%
Sphene	<1%
Opaque (mainly limonite?)	<1%

This sample consists of strongly aligned lath-shaped plagioclase, lesser, somewhat flattened and elongated quartz, and minor mica (muscovite, trace sericite/chlorite) imparting a moderate foliation, with widely scattered garnet and accessory K-feldspar, sphene plus trace limonite.

Plagioclase forms mainly euhedral, lath-shaped to tabular crystals mostly <1.5 mm long, strongly oriented with long axes parallel to the layering/foliation. Distinct negative relief compared to adjacent or included quartz (inclusions are rounded subhedra mostly <0.35 mm) and extinction Y^010=14 degrees, Z^001=11 degrees indicates albite composition (An5); the crystals are essentially unaltered. Small inclusions of quartz (mostly <0.15 mm in size) are locally present in plagioclase, but not vice versa; inclusions of mica are relatively rare. Very minor K-feldspar forming sub/anhedra <0.25 mm in size occur interstitial to plagioclase and quartz ,with "grid" twinning characteristic of microcline.

Quartz intergrown with plagioclase, or in coarser discontinuous "sweats" along the foliation, forms interlocking sub/anhedra mostly <2.5 mm long (but in aggregates up to about 1 cm long), generally somewhat elongated in the plane of foliation (length:width ratios up to 3:1), but with only mild strain indicated by relatively weak undulose extinction, very minor sub-grain development, and rare suturing of grain boundaries. Uniaxial interference figures do not show separation of isogyres, confirming only mild strain.

Mica flakes (colourless in thin section, although slightly greenish in hand specimen) are mostly euhedral or subhedral and <1 mm in diameter. The green colour in hand specimen might indicate a slightly phengitic composition, or it may be due to minor chlorite (see below). Unless there is something else unusual about the composition of the mica in this sample, I do not see any Li-bearing phases present.

Locally, the place of the muscovite is taken by aggregates <0.5 mm across composed of fine-grained mica (subhedral, randomly oriented flakes mostly <20 microns in size) that appear to comprise both colourless sericite and very pale greenish chlorite (?). The latter has length-slow, first-order, somewhat bluish-grey birefringence. It and the sericite are associated with traces of red-brown, microcrystalline to amorphous opaque that is likely mostly limonite.

Rare garnet forms rounded sub/euhedral porphyroblastic crystals up to 1.5 mm in diameter, with pale reddish colour and complete isotropism. Accessory sphene forms slender sub/euhedral brownish crystals up to 1 mm long (aggregating to 1.5 mm) elongated in the plane of foliation.

In summary, this is moderately well foliated (but not particularly sheared) albite-quartz-muscovite (minor sericite, chlorite?)-accessory garnet-Kspar-sphene-trace limonite gneiss. Local coarse quartz probably represents metamorphic "sweats". No Li-bearing phases were identified.

155893: WEAKLY FOLIATED ALBITE-QUARTZ-GARNET-ACCESSORY MUSCOVITE-BIOTITE (SECONDARY SERICITE-BIOTITE-MG CHLORITE)-TRACE LIMONITE GNEISS

Hand specimen shows white (locally pale brownish, or reddish where traces of limonite are present), fine- to medium grained, mostly weakly foliated gneissic rock with local coarse, elongate ("sweat"?) quartz and scattered small pale pink garnets. The rock is not magnetic, and shows no reaction to cold dilute HCl, nor is there any yellow stain for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Plagioclase (albite)	70%
Quartz	20%
Garnet	5%
Biotite (relict primary, secondary?)	1-2%
Muscovite, sericite	1-2%
Mg-chlorite (?)	1%
Opaque (mainly limonite?)	<1%

This sample consists of mostly relatively weakly aligned tabular to equant plagioclase (commonly with micrographic quartz intergrowths), subordinate quartz and lesser, scattered garnet, associated with minor shreddy mica (muscovite, local biotite partly altered to sericite, secondary biotite or Mg-chlorite, trace limonite).

Plagioclase forms mainly sub/euhedral, tabular crystals up to 3.5 mm long with irregular terminations, weakly oriented with long axes parallel to the layering/foliation. Distinct negative relief compared to abundant, micrographic-textured inclusions of quartz (rounded/irregular anhedra mostly <0.25 mm long) and extinction Y^010=13 degrees, Z^001=11 degrees indicates albite composition (An5); the crystals are essentially unaltered. The inclusions of quartz are generally concentrated around the margins of the plagioclase crystals, with a "rapikivi" texture; inclusions of mica are rare. K-feldspar appears to be absent in this sample.

Quartz intergrown with plagioclase, or in local coarser crystals in discontinuous "sweats" along the foliation, forms interlocking sub/anhedra mostly <0.7 mm in diameter (aggregates up to about 5 mm long), generally not elongated in the plane of foliation. Only mild strain is indicated by relatively weak undulose extinction, very minor sub-grain development, and rare suturing of grain boundaries. Uniaxial interference figures do not show separation of isogyres, confirming only mild strain.

Scattered garnet forms rounded sub/euhedral porphyroblastic crystals up to 2.5 mm in diameter (aggregates to 5 mm), with pale reddish colour and complete isotropism. Inclusions of plagioclase and quartz, or rarely mica, are locally found in some crystals; the larger plagioclase inclusions contain micrographic quartz as in the adjacent matrix, suggestive of blastic growth of the garnets.

Mica flakes (colourless in thin section and hand specimen) are mostly euhedral or subhedral and <0.3 mm in diameter, or locally ragged relics with distinct brown pleochroism (former biotite) <0.2 mm in size. Locally, the place of the muscovite/biotite is taken by aggregates up to 0.35 mm across composed of fine-grained mica (subhedral, randomly oriented flakes mostly <30 microns in size) that mainly comprise colourless sericite or locally distinctly brownish secondary biotite (?) or rarely very pale greenish chlorite (?). The latter has length-fast, first-order, grey birefringence, indicative of Mg-chlorite (Fe:Fe+Mg, or F:M, ratio around 0.3?). It and the sericite are associated with traces of red-brown, microcrystalline to amorphous opaque that is likely mostly limonite, commonly near the garnet.

In summary, this is weakly foliated (not particularly sheared) albite-quartz-garnet-accessory muscovite-(minor biotite, sericite, secondary biotite, Mg-chlorite?)-trace limonite gneiss with distinctive micrographic plagioclase-quartz intergrowths. No Li-bearing phases were identified.

155997: FOLIATED/LAYERED ALBITE-QUARTZ-PETALITE?-LEPIDOLITE?-KSPAR-APATITE?-TOPAZ?? GNEISS (PORPHYROBLASTIC KSPAR, MINOR SERICITE, OPAQUE)

Hand specimen (similar to 155808) shows pale grey-white, fine- to medium grained, moderately foliated gneissic rock with local white feldspar porphyroblasts up to about 1 cm in size (local layers are pale violet around buff-pinkish cores, suggestive of lepidolite around petalite?). The rock is not magnetic, and shows no reaction to cold dilute HCl, but the porphyroblasts stain yellow for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Plagioclase (albite)	40%
Quartz	15%
Petalite (?)	15%
Mica (muscovite and/or lepidolite?)	15%
K-feldspar (mainly microcline?)	10%
Apatite (?)	1-2%
Mica (secondary sericite/biotite/lepidolite?)	1-2%
Unidentified	1-2%
Opaque (mainly limonite?)	<1%

This sample consists of porphyroblasts of K-feldspar (locally partly surrounded by quartz) in a weakly/moderately foliated matrix composed of up to 1 cm thick layers alternately rich in 1) quartz, plagioclase and lesser Kspar, accessory apatite (?) and unidentified, or 2) petalite (?) partly altered to sericite/ biotite/lepidolite?/trace limonite, and coarser mica (muscovite or possibly lepidolite?).

Plagioclase forms mainly subhedral, tabular crystals up to about 3 mm long, commonly oriented with long axes sub-parallel to the layering/weak foliation. Negative relief compared to adjacent or included quartz (rounded subhedra mostly <0.15 mm) and extinction Y^010 up to 16 degrees suggests albite composition (An0-5); relief is distinctly positive compared to Kspar that occurs as inclusions up to 0.35 mm across with "grid" twinning.

Quartz intergrown with plagioclase forms interlocking sub/anhedra up to about 2 mm in size (but in aggregates up to 3 mm long generally aligned sub-parallel to the foliation/layering), with minor strain indicated by weak undulose extinction and only minor sub-grain development, rare suturing of grain boundaries. Minor interstitial grid-twinned Kspar is mostly anhedral, <0.35 mm.

Kspar porphyroblasts have sub/euhedral outlines up to at least 1 cm across (composed of interlocking euhedral crystals mostly <5 mm in diameter that are clouded in places by minute, <5 um inclusions of clay?). Common "grid" twinning suggests it is mostly microcline. Minor quartz, albite and petalite (?) are contained within the Kspar as rounded inclusions mostly <0.2 mm in size. There is also minor alteration, especially on fractures, to flakes of sericite mostly <25 microns in diameter.

The mineral tentatively identified as petalite (?) occurs in layers up to 7 mm thick, and is distinguished by distinct negative relief against quartz, plagioclase and Kspar, low (first-order grey to white) birefringence, two unequal cleavages at ~114 degrees, large (positive?) 2V, and association with a mica that is pale mauve in hand specimen, suggestive of lepidolite (?),forming mainly ragged irregular subhedral flakes <0.5 mm (colourless in thin section) that are indistinguishable optically from muscovite. **However, X-ray diffraction would be necessary to positively identify both these potential Li-bearing phases**. The petalite (?) is distinguished by common incipiently alteration on cleavages, fractures and borders to fine (<50 micron) subhedral flakes of colourless to brownish or mauve secondary biotite/sericite/lepidolite?, in places associated with traces of opaque (probably mostly microcrystalline to amorphous limonite).

In places in the quartzo-feldspathic layers, rounded irregular to rarely subhedral crystals <0.65 mm long of a colourless mineral with distinctive strong positive relief are tentatively identified as apatite on the basis of poorly seen negative uniaxial interference figures; however, there are also similar sized, high relief crystals that appear to be biaxial positive (large 2V)- possibly topaz??

In summary, this appears to be moderately foliated, somewhat layered, quartz-plagioclase-Kspar-petalite?-lepidolite?-apatite?-topaz?? gneiss, with porphyroblastic Kspar (microcline), and minor alteration to secondary sericite/biotite/lepidolite?/limonite (especially in petalite?).

Outcrop #7: FOLIATED ALBITE-QUARTZ-MICROCLINE-MUSCOVITE-RELICT KYANITE?-MINOR GARNET-TRACE OPAQUE GNEISS, PLAGIOCLASE/KSPAR PORPHYROBLASTS

Hand specimen shows white (locally faintly brownish), fine- to medium grained, moderately foliated gneissic rock with local coarse, somewhat elongate ("sweat") quartz and white feldspar. The rock is not magnetic, and shows no reaction to cold dilute HCl, but there is local yellow stain for K-feldspar in the etched offcut. Modal mineralogy in thin section is approximately:

Plagioclase (albite)	65%
Quartz	20%
K-feldspar (mainly microcline?)	10%
Mica (muscovite, sericite)	2-3%
Unidentified (relict kyanite, altered to sericite/biotite?)	1-2%
Garnet	<1%
Apatite, opaque (sulfide?)	<<1% each

This sample consists mainly of relatively fine-grained, somewhat aligned (foliated) plagioclase, quartz and minor K-feldspar and mica, plus local concentrations of a ragged, relict unidentified mineral partly to largely replaced by fine-grained brownish sericite/biotite (?), and rare garnet, trace opaques.

Plagioclase generally forms sub- to locally euhedral tabular crystals mostly <3 mm long (rarely to 5 mm, and porphyroblastic aggregates with minor Kspar up to 1 cm across), commonly with long axes aligned sub-parallel to the foliation. Negative relief compared to quartz adjacent or included within the plagioclase, and extinction Y^010 up to 13 degrees, suggests a composition near An5-10 (albite). Inclusions of quartz are mostly rounded subhedra <0.15, but up to 0.5, mm in size. The plagioclase crystals only rarely show slight alteration to small flakes of sericite (muscovite) mostly <50 microns in size, or possibly clouding by clay (?) particles and/or fluid inclusions both mostly <5 microns in diameter. Locally quartz and albite form micrographic intergrowths.

Quartz occurs as ragged, somewhat irregular subhedral crystals up to 3.5 mm long (also locally with long axes sub-parallel to the foliation, and length:width ratios up to 4:1). Aggregates of quartz are locally up to 6 mm in size, also somewhat extended in the plane of foliation. Very weak undulose extinction, rare sub-grain development, and no obvious suturing of grain boundaries suggests relatively weak strain.

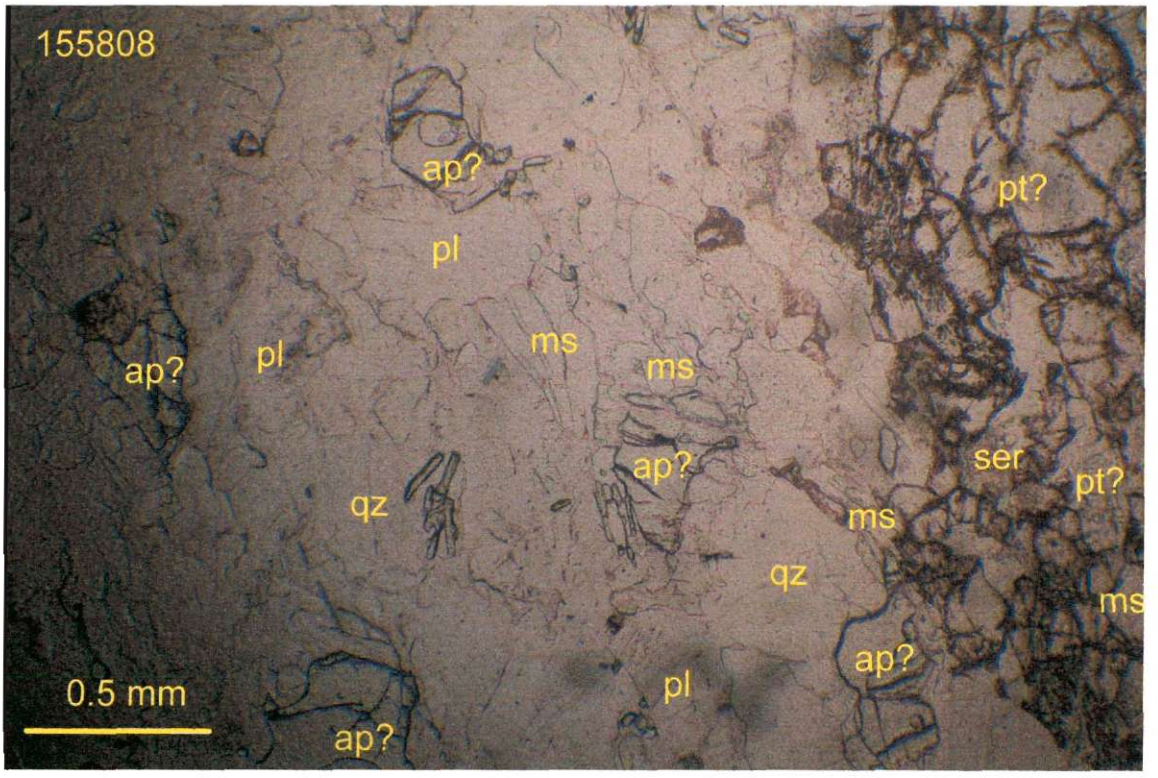
K-feldspar occurs as irregular-shaped sub/anhedral crystals up to 3.5 mm in diameter within the feldspar porphyroblasts, but generally <1.5 mm elsewhere in the sample. Prominent "grid" twinning indicates it is mostly microcline. It also only rarely shows traces of alteration (or inclusions of) sericite or muscovite.

Most mica is colourless, forming rounded-off subhedral crystals <0.75 mm in size that is probably muscovite, or finer-grained, possibly secondary flakes <50 microns in size. They are locally intergrown with the brownish alteration patches described below.

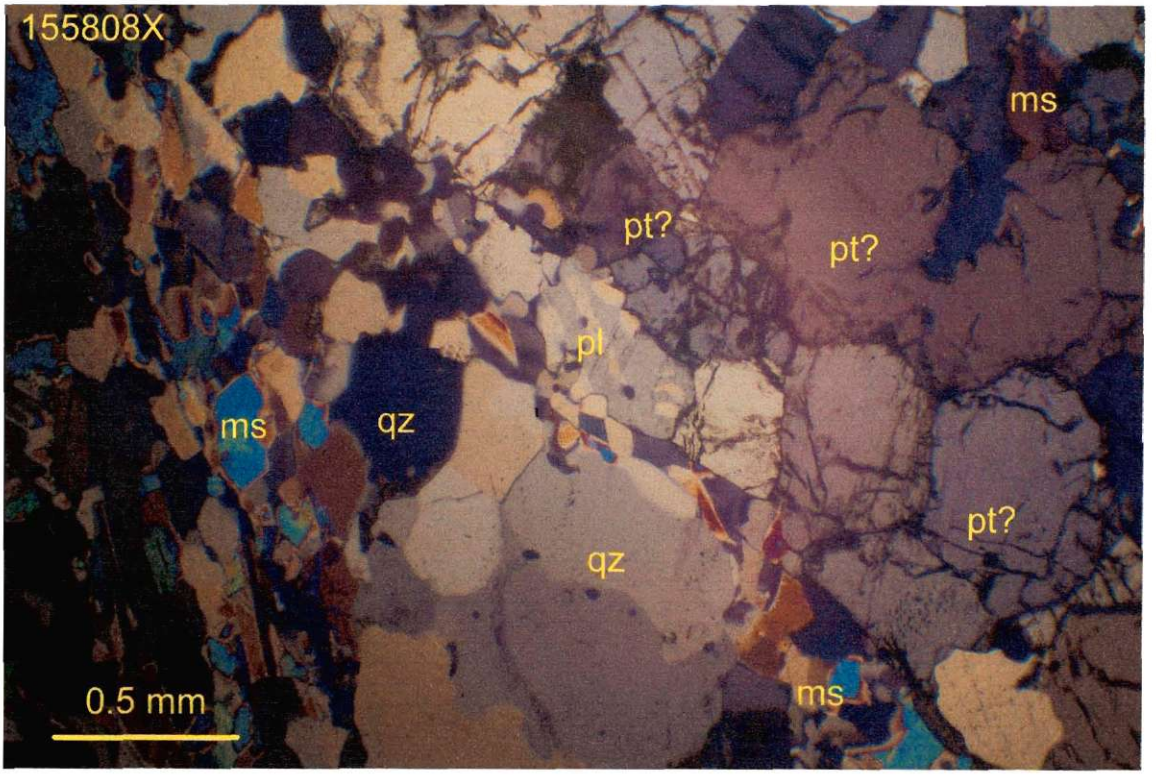
Patches of brownish-coloured mica (sericite and secondary biotite?) have corroded-looking, ragged irregular outlines up to almost 3 mm across that appear to replace former anhedral crystals of an unidentified mineral of similar size with low (first-order grey) birefringence, strong positive relief, and extinction at about 30 degrees to a prominently developed, closely spaced cleavage that is length-slow. These optical characteristics fit the mineral kyanite, but this is a tentative identification.

Rare garnets associated with the brownish patches have somewhat rounded, irregular subhedral outlines up to 1 mm in diameter, with prominent quartz inclusions<0.2 mm long arranged in concentric, "snowball" fashion rather than along the foliation, implying pre-tectonic growth. Rare apatite forms euhedral prisms <0.2 mm long; rare opaques <0.35 mm in size may be sulfides (?).

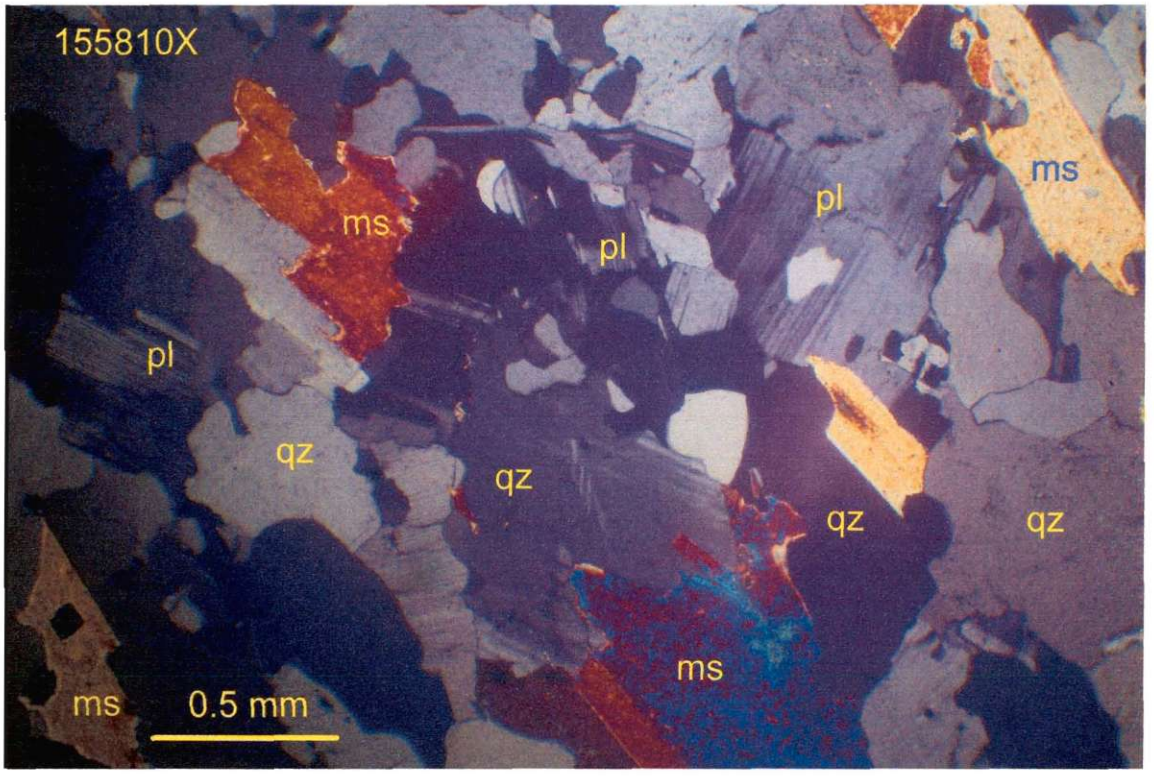
In summary, this appears to be weakly/moderately foliated albite-quartz-microcline-minor muscovite-relict kyanite? (altered to sericite/biotite, intergrown with muscovite)-rare garnet-trace apatite?-opaque gneiss, with local porphyroblastic feldspar (plagioclase and Kspar)



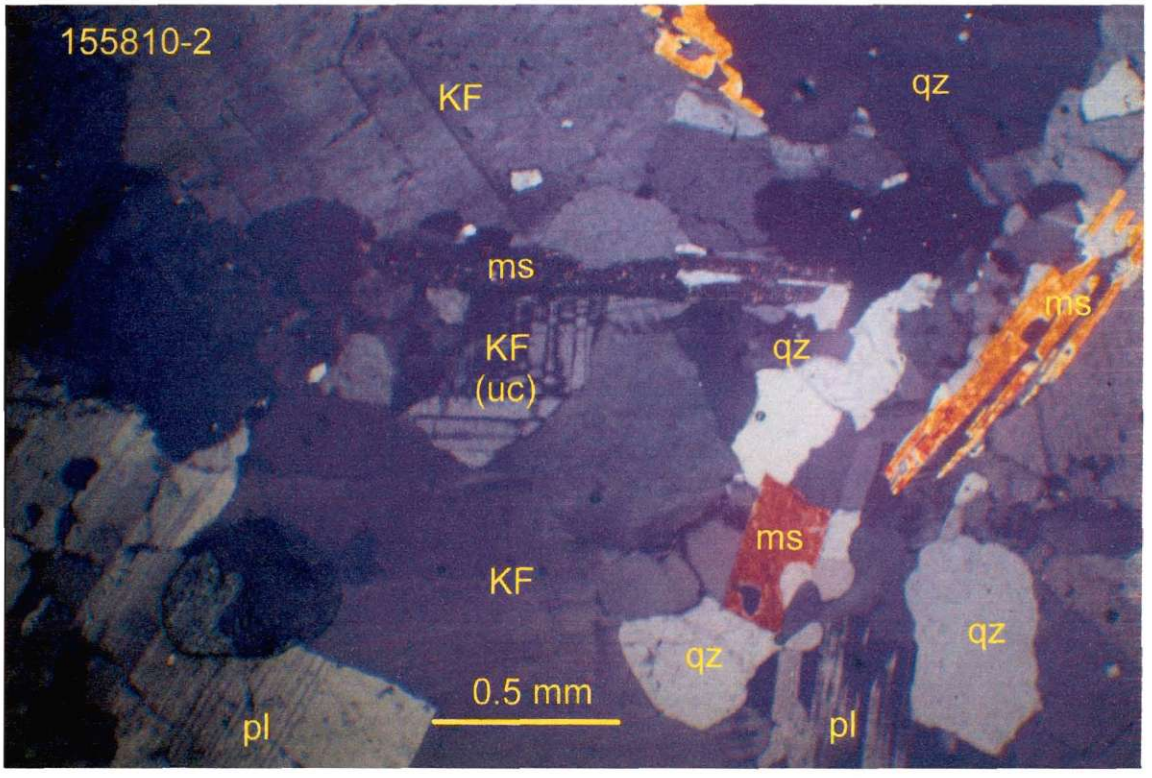
155808: Contrast between a layer containing mostly petalite? (pt?, with negative relief and commonly partly altered along cleavages to sericite/biotite/limonite) and minor mica (ms) that could be lepidolite (?), and a layer containing quartz (qz), plagioclase (pl), mica and a mineral tentatively identified as apatite (ap?). Transmitted plane light, field of view 3.0 mm.



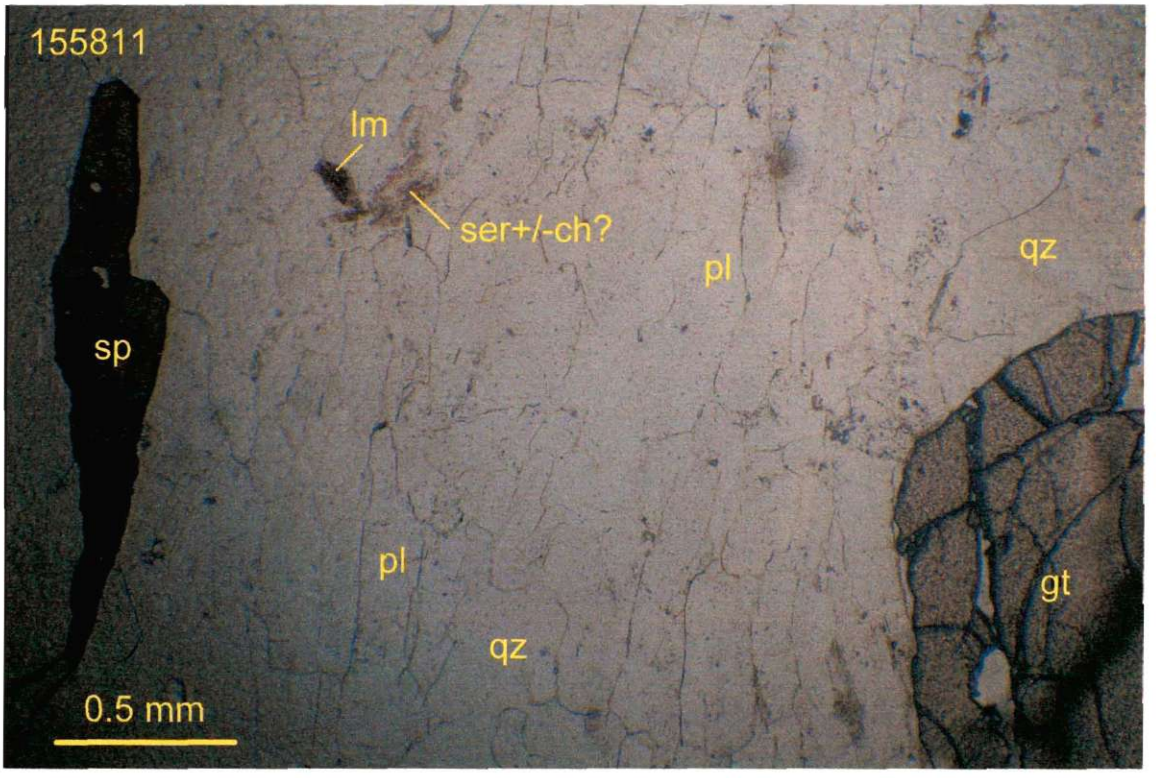
155808X: Contact between layers enriched in, respectively, petalite? (pt?) with two unequal cleavages (partly altered to dark sericite/biotite/limonite along the cleavages), quartz (qz) and plagioclase (pl), and mica (ms) that could be lepidolite (?). Transmitted light, crossed polars, field of view 3.0 mm wide.



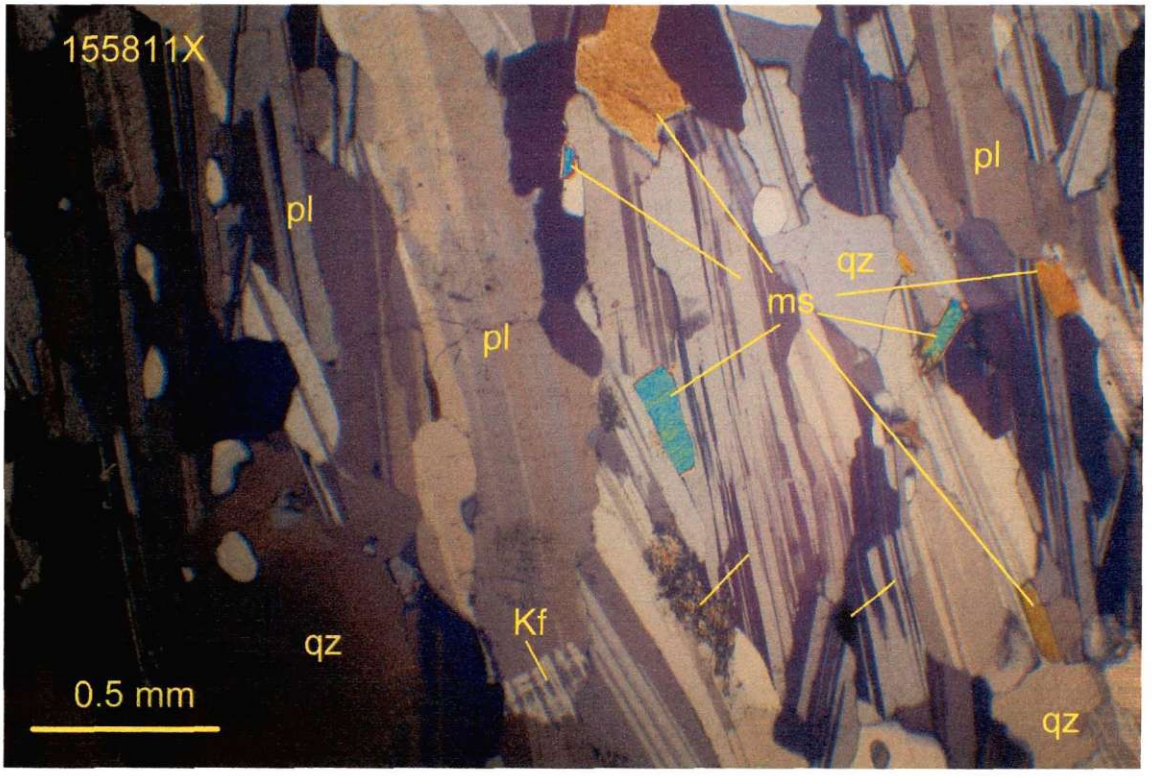
155810X: Weakly/moderately foliated plagioclase (pl, likely albite)-quartz (qz)-muscovite (ms) gneiss showing alignment of mica flakes. Transmitted light, crossed polars, field of view 3.0 mm wide.



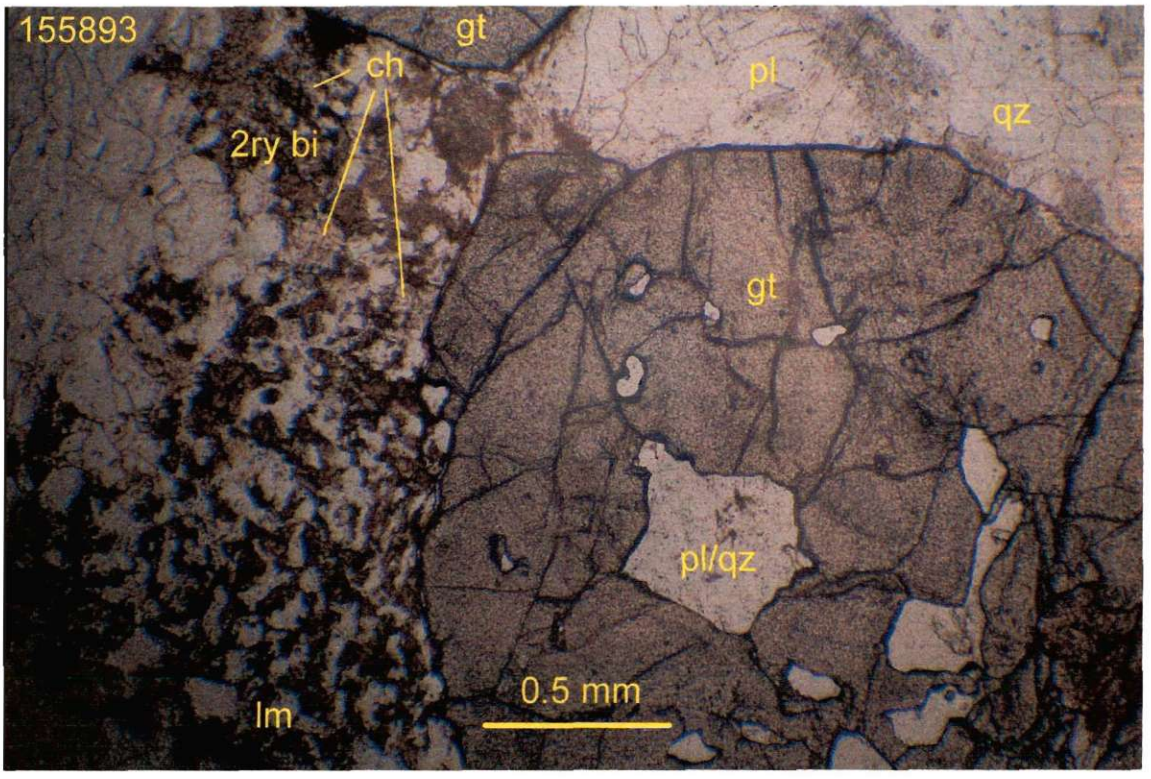
155810-2: Coarse porphyroblastic K-feldspar (KF, locally with "grid" twinning characteristic of microcline), plagioclase (pl, likely albitic), quartz (qz), and muscovite (ms) in metamorphic "sweats". Transmitted light, crossed polars, field of view 3.0 mm wide.



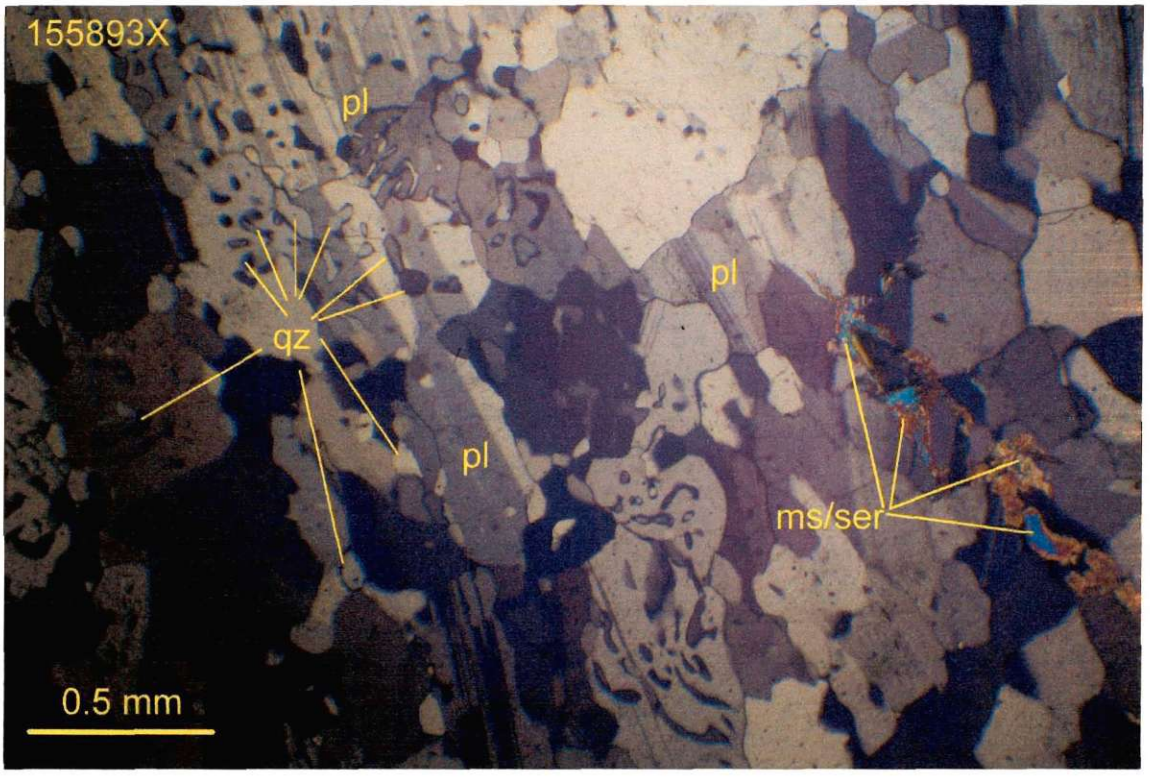
155811: Local garnet (gt) as rounded euhedral, somewhat fractured, faintly reddish crystals, and accessory sphene (sp) as euhedral brownish crystals elongated in plane of foliation imparted by plagioclase (pl) and quartz (qz) of the matrix, local sericite/chlorite (ser±ch) locally associated with trace limonite (opaque, lm). Transmitted plane light, field of view 3 mm.



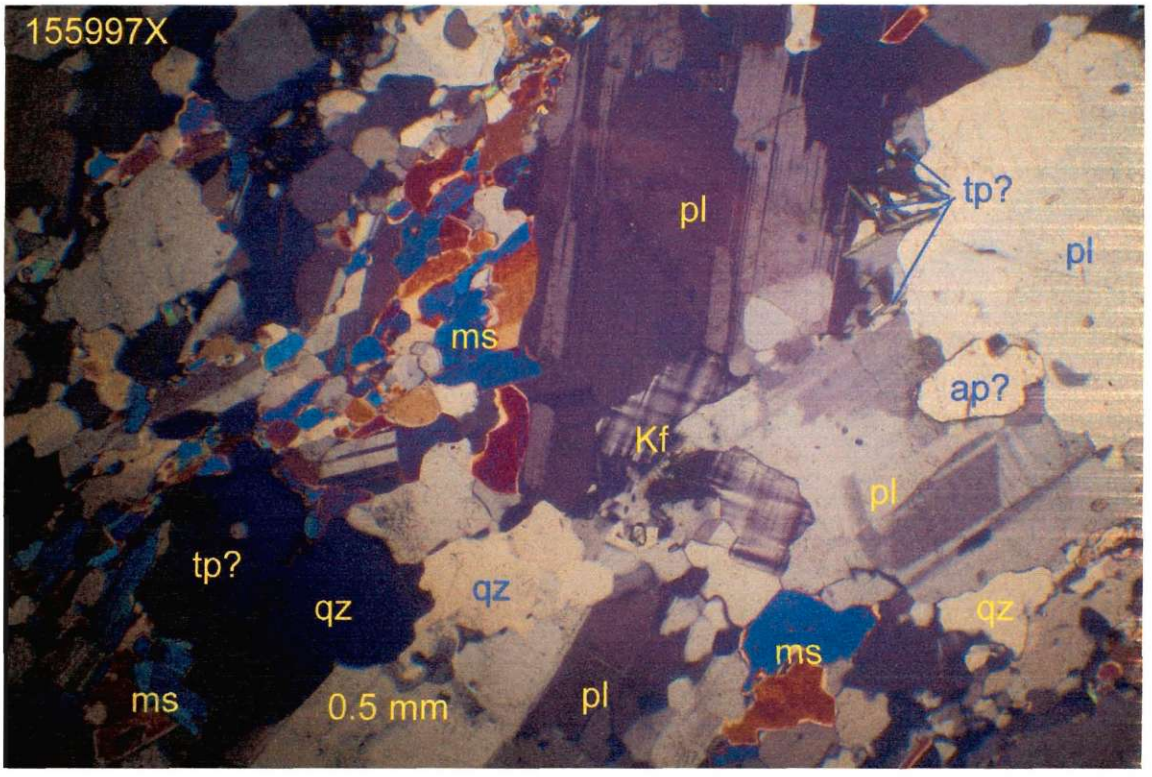
155811X: Strongly aligned, lath-shaped euhedral plagioclase (pl, likely albite) crystals with lesser quartz (qz) as rounded subhedral crystals, minor muscovite (ms) or locally sericite/chlorite (ser±ch), rare Kspar (Kf, grid twinned), trace opaque (limonite, lm?). Transmitted light, crossed polars, field of view 3.0 mm wide.



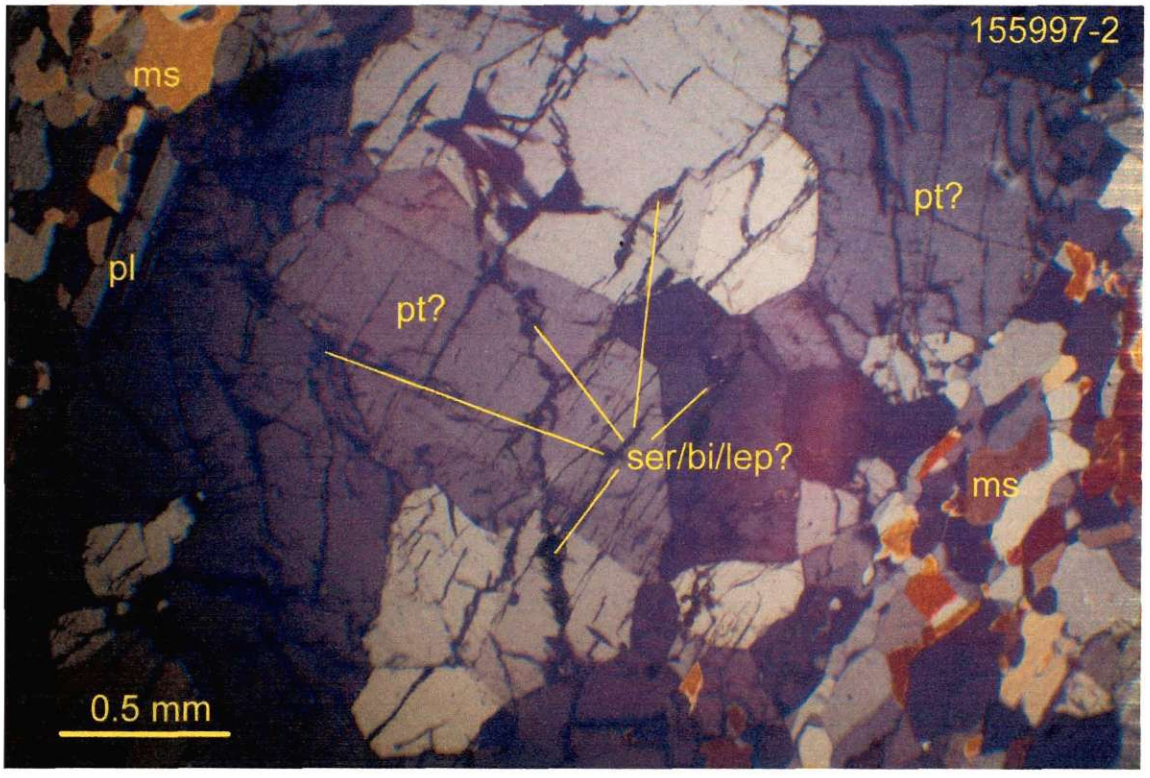
155893: Garnet (gt) with inclusions of plagioclase and quartz, rare mica, associated with brownish secondary biotite (2ry bi) and Mg-chlorite (ch) likely after former biotite, in matrix of plagioclase (pl) and quartz (qz). Transmitted plane light, field of view 3.0 mm wide.



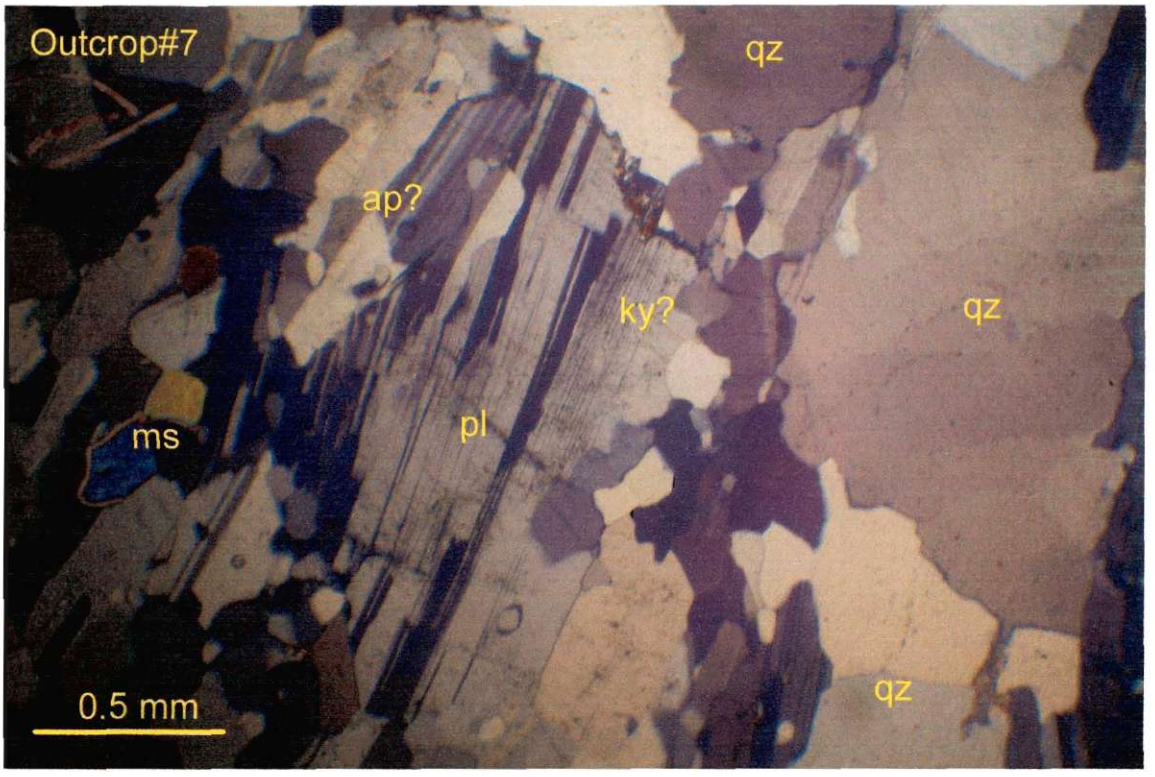
155893X: Plagioclase (pl, likely albite) with abundant micrographic inclusions of quartz (qz), weakly aligned to define foliation along which minor muscovite/sericite (ms/ser) is found. Transmitted light, crossed polars, field of view 3.0 mm wide.



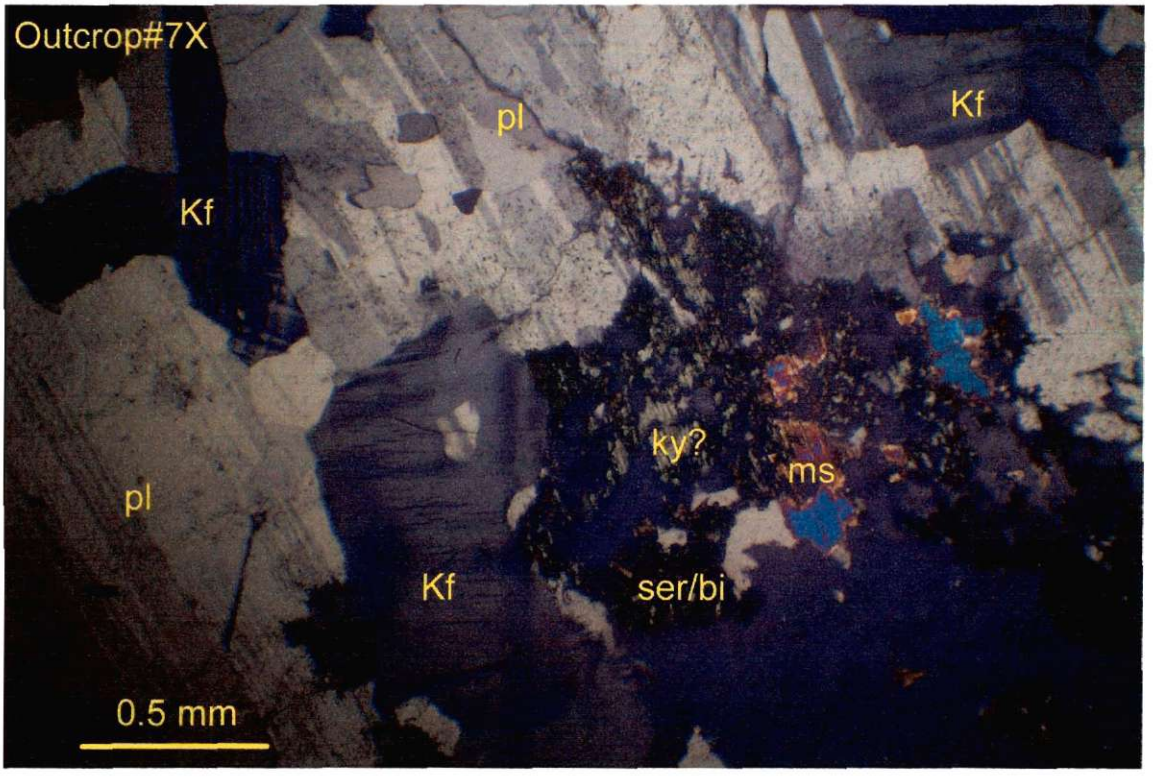
155997X: Foliated/layered gneiss composed of plagioclase (pl, likely albite), minor quartz (qz), "grid" twinned Kspar (Kf), mica (ms, muscovite or lepidolite?) and scattered rounded crystals of apatite? (ap?) and euhedral prismatic (length-slow) to subhedral rounded, possible topaz? (tp?). Transmitted light, crossed polars, field of view 3.0 mm wide.



155997-2: Layer of petalite? (pt?) showing unequal cleavage, partly altered to fine-grained sericite/biotite/lepidolite? along cleavage, flanked on both sides by mica (ms) that may be muscovite (or lepidolite?) and minor plagioclase (pl). Transmitted light, crossed polars, field of view 3.0 mm wide.



Outcrop#7: Moderately foliated felsic gneiss composed of ribboned quartz (qz) and somewhat aligned plagioclase (pl) plus local muscovite (ms) flakes, traces of kyanite? (ky?) and apatite? (ap?). Transmitted light, crossed polars, field of view 3.0 mm wide.



Outcrop#7X: Porphyroblastic feldspar (mainly albitic plagioclase, pl, lesser grid-twinned microcline, Kf) containing corroded relict porphyroblast of strongly cleaved, possible kyanite (ky?) intergrown with muscovite and partly altered to fine-grained sericite/biotite. Transmitted light, crossed polars, field of view 3.0 mm wide.

Overview of thin sections and offcuts (green semi-circles mark photomicrograph locations).

Appendix C

TSL Laboratory Reports

TSL LABORATORIES INC.

2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4
Tel: (306) 931-1033 Fax: (306) 242-4717

Gossan Resources Ltd
Attention: R. Cooke
Project:
Sample: 39 Rock

Report No: S34529
Date: August 20, 2009

MULTIELEMENT ICP-MS ANALYSIS

Multiacid Digestion

Element	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Hf	Ho	K
Sample	ppb	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
155801	<20	8.85	4.1	*	32.0	94.0	0.1	2.17	0.3	5.3	2.4	64.0	123.3	6.7	1.8	0.5	0.1	0.47	58.3	1.6	4.0	0.2	0.25
155802	<20	6.84	1.7	*	4.0	7.0	0.1	0.52	0.1	6.6	0.4	65.0	10.4	1.7	1.1	0.3	<0.1	0.34	38.0	1.7	3.1	0.1	0.13
155803	<20	9.69	4.5	<0.1	20.0	35.0	0.3	3.00	0.2	0.3	1.1	44.0	140.9	4.9	0.3	0.2	0.2	0.22	52.6	0.2	2.9	<0.1	0.17
155804	<20	6.20	0.8	<0.1	1.0	209.0	<0.04	0.33	0.1	3.0	0.5	71.0	10.8	2.5	1.3	0.2	<0.1	0.19	38.5	1.4	0.6	<0.1	0.59
155805	<20	8.16	7.4	<0.1	15.0	25.0	11.6	0.75	0.1	3.3	0.9	56.0	77.1	1.0	0.6	0.1	<0.1	0.42	42.6	1.1	0.6	<0.1	0.21
155806	<20	7.24	4.8	<0.1	3.0	52.0	<0.04	0.49	0.1	<0.02	0.2	63.0	5.4	1.9	<0.1	<0.1	<0.1	0.14	36.9	0.1	0.8	<0.1	0.06
155807	<20	7.30	14.0	<0.1	24.0	18.0	0.3	0.16	0.3	0.0	14.1	57.0	106.3	15.9	0.5	0.2	<0.1	0.20	30.2	0.4	0.1	<0.1	1.52
155808	<20	6.63	0.9	<0.1	11.0	65.0	3.4	0.12	0.1	0.1	13.0	48.0	75.6	12.1	0.3	<0.1	<0.1	0.13	51.0	0.3	0.6	<0.1	2.15
155809	<20	7.33	3.5	<0.1	43.0	92.0	0.3	0.14	0.1	<0.02	2.8	52.0	59.9	4.6	<0.1	<0.1	<0.1	0.11	37.7	<0.1	0.3	<0.1	1.12
155810	<20	7.44	2.6	<0.1	2.0	5.0	22.6	0.16	0.1	7.7	10.9	67.0	46.3	12.3	1.2	0.4	<0.1	0.67	42.3	1.4	0.8	0.1	3.45
155811	<20	6.35	1.3	<0.1	2.0	4.0	0.2	0.22	0.1	10.6	20.9	53.0	14.9	12.3	1.3	0.4	<0.1	0.28	40.9	2.1	6.1	0.1	0.61
155812	<20	7.80	19.3	<0.1	19.0	64.0	0.2	0.94	0.2	0.4	6.6	75.0	100.7	13.9	0.4	0.2	<0.1	0.67	47.8	0.3	1.2	<0.1	0.35
155813	<20	7.93	21.6	<0.1	19.0	81.0	0.1	1.03	0.2	0.4	11.5	63.0	89.6	21.3	0.4	0.2	<0.1	0.54	47.9	0.3	1.0	<0.1	0.37
155814	<20	8.48	3.1	<0.1	13.0	73.0	0.3	1.92	1.0	1.1	56.7	108.0	1123.7	68.8	1.0	0.5	0.1	2.23	49.3	0.7	1.7	0.2	0.97
155815	<20	6.56	2.1	<0.1	8.0	54.0	<0.04	0.12	0.1	<0.02	38.5	88.0	112.5	41.8	0.2	<0.1	<0.1	0.19	55.8	<0.1	0.9	<0.1	1.17
155816	<20	8.39	38.5	<0.1	18.0	99.0	0.2	1.83	0.6	2.2	15.2	89.0	223.4	31.5	0.6	0.3	0.1	1.70	58.7	0.6	1.1	0.1	0.42
155817	34.0	9.11	8.3	<0.1	39.0	32.0	1.3	9.74	0.2	3.0	45.8	222.0	12.7	79.4	1.6	0.8	0.4	4.81	22.7	1.1	0.8	0.3	0.17
155818	<20	6.21	<0.2	<0.1	9.0	57.0	1.0	0.15	0.1	<0.02	0.7	53.0	38.2	2.8	<0.1	<0.1	<0.1	0.15	48.7	<0.1	0.1	<0.1	0.98
155880	<20	7.70	1.7	<0.1	8.0	154.0	0.1	1.57	0.1	1.3	0.9	48.0	19.0	12.7	0.5	<0.1	<0.1	0.20	39.7	0.8	2.7	<0.1	0.15
155881	<20	5.81	<0.2	<0.1	15.0	69.0	6.3	0.15	0.1	0.1	0.3	53.0	61.4	2.5	0.2	<0.1	<0.1	0.14	47.6	<0.1	1.4	<0.1	1.44
155882	<20	6.78	1.3	<0.1	3.0	133.0	<0.04	0.31	0.1	1.2	0.4	55.0	12.7	1.8	0.3	<0.1	<0.1	0.21	42.6	0.4	4.5	<0.1	0.06
155883	<20	6.65	0.4	<0.1	16.0	69.0	3.5	0.09	0.1	<0.02	1.1	49.0	102.5	1.5	<0.1	<0.1	<0.1	0.18	46.6	<0.1	0.2	<0.1	2.04
155884	<20	6.08	0.6	<0.1	3.0	50.0	0.0	0.19	0.1	<0.02	<0.2	44.0	12.5	0.8	<0.1	<0.1	<0.1	0.09	36.5	<0.1	2.9	<0.1	0.11
155885	<20	7.27	1.4	<0.1	4.0	16.0	0.2	0.52	0.1	3.1	0.5	65.0	24.0	1.9	1.0	0.2	<0.1	0.31	44.5	1.1	1.5	<0.1	0.51
155886	<20	6.58	0.3	<0.1	21.0	72.0	0.0	0.10	0.1	0.0	0.2	50.0	51.6	0.4	<0.1	<0.1	<0.1	0.10	66.9	<0.1	3.2	<0.1	1.36
155887	<20	6.47	0.8	<0.1	1.0	18.0	0.1	0.12	<0.02	5.9	0.2	50.0	15.6	1.6	0.7	0.1	<0.1	0.27	48.1	1.4	2.1	<0.1	0.98
155888	<20	8.76	1.0	<0.1	11.0	128.0	0.2	1.95	0.1	0.6	1.5	54.0	55.3	4.8	0.4	0.2	0.1	0.35	51.7	0.5	2.1	<0.1	0.28
155888 Re	<20	8.62	0.8	<0.1	10.0	124.0	0.1	1.91	0.0	0.7	1.3	55.0	51.1	4.5	0.4	0.2	0.1	0.33	49.7	0.4	1.9	<0.1	0.28
155889	<20	6.55	1.2	<0.1	2.0	47.0	0.1	0.20	0.0	1.5	0.2	46.0	7.1	1.6	0.5	0.1	<0.1	0.15	40.5	0.7	1.4	<0.1	0.20
155890	<20	10.78	<0.2	<0.1	43.0	23.0	0.1	2.52	0.1	4.5	2.5	39.0	3.5	0.9	0.9	0.6	0.2	0.44	35.4	0.4	2.7	0.2	0.40
155891	<20	7.55	0.4	<0.1	73.0	3.0	0.4	0.18	<0.02	6.8	0.8	50.0	8.4	1.1	0.4	0.1	<0.1	0.48	24.6	0.5	0.1	<0.1	7.28
155892	150.0	7.69	<0.2	<0.1	794.0	3.0	0.2	2.62	0.1	82.1	12.2	121.0	10.0	29.3	2.0	1.0	0.9	2.80	19.2	3.1	3.4	0.4	1.36
155893	<20	7.39	2.9	<0.1	4.0	63.0	<0.04	0.62	0.2	<0.02	0.4	47.0	12.4	2.6	0.2	<0.1	<0.1	0.17	52.6	<0.1	0.7	<0.1	0.07
155894	<20	8.27	8.7	<0.1	21.0	53.0	0.1	1.50	0.1	7.8	1.6	61.0	83.0	5.4	0.8	0.2	0.1	0.38	48.0	1.3	2.2	<0.1	0.16
155895	<20	6.45	10.9	<0.1	10.0	81.0	0.1	0.78	0.4	0.2	1.7	67.0	89.3	4.8	0.7	0.4	<0.1	0.46	47.1	0.2	0.9	0.1	0.17

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

Signed: _____
Mark Acres - Quality Assurance

TSL LABORATORIES INC.
2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4
Tel: (306) 931-1033 Fax: (306) 242-4717

Gossan Resources Ltd
Attention: R. Cooke
Project:
Sample: 39 Rock

Report No: S34529
Date: August 20, 2009

MULTIELEMENT ICP-MS ANALYSIS
Multiacid Digestion

Element	Ag	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Hf	Ho	K
Sample	ppb	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
155896	<20	10.11	1.8	<0.1	28.0	18.0	0.9	2.14	0.2	1.5	2.8	45.0	19.7	2.5	0.9	0.3	<0.1	0.45	43.5	0.6	3.9	0.1	0.31
155897	<20	7.32	1.5	<0.1	3.0	203.0	<0.04	0.81	0.1	1.0	0.8	62.0	107.3	3.1	0.3	0.1	<0.1	0.27	69.9	0.3	1.6	<0.1	1.09
155898	<20	9.78	1.5	*	25.0	92.0	0.1	1.90	0.6	1.5	0.6	54.0	16.2	1.2	0.4	0.1	<0.1	0.14	57.8	0.5	1.1	<0.1	0.17
155899	<20	8.62	15.4	<0.1	61.0	44.0	0.2	0.08	0.5	0.2	0.4	67.0	247.1	2.1	1.3	0.5	<0.1	0.49	31.8	0.5	1.2	0.2	2.13
155900	<20	6.69	1.0	<0.1	3.0	117.0	<0.04	0.30	0.3	0.9	0.3	101.0	8.4	1.9	0.9	0.3	<0.1	0.25	42.8	0.3	1.8	0.1	0.19
155900 Re	<20	6.62	0.4	<0.1	3.0	115.0	<0.04	0.33	0.3	0.9	0.4	102.0	8.0	1.9	0.9	0.4	<0.1	0.25	39.6	0.3	1.5	0.1	0.17
STD OREAS24P	66.0	8.37	1.2	<0.1	294.0	1.0	<0.04	6.09	0.2	38.2	43.9	216.0	0.7	55.5	4.7	2.0	1.4	7.75	20.5	5.3	3.4	0.8	0.69
BLK	<20	<0.02	<0.2	<0.1	<1	<1	<0.04	<0.02	<0.02	<0.02	<0.2	<1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.02	<0.02	<0.1	<0.02	<0.1	<0.02
STD OREAS45P	342.0	6.98	10.6	<0.1	292.0	<1	0.2	0.30	0.3	49.8	114.8	1071.0	2.2	710.9	3.4	1.7	1.0	18.67	22.6	3.5	4.2	0.6	0.34
BLK	<20	<0.02	<0.2	<0.1	<1	<1	<0.04	<0.02	<0.02	<0.02	<0.2	<1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.02	<0.02	<0.1	<0.02	<0.1	<0.02
STD OREAS24P	51.0	8.74	1.1	<0.1	315.0	1.0	<0.04	5.97	0.2	44.4	46.9	203.0	0.8	55.9	5.1	2.5	1.7	7.74	20.0	5.4	3.8	1.0	0.73
STD OREAS45P	316.0	7.56	13.3	<0.1	312.0	<1	0.3	0.34	0.2	59.0	130.1	1110.0	2.1	759.1	3.6	1.8	1.1	19.68	24.4	3.8	4.1	0.8	0.38

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

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Mark Acres - Quality Assurance

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Gossan Resources Ltd
Attention: R. Cooke
Project:
Sample: 39 Rock

Report No: S34529
Date: August 20, 2009

MULTIELEMENT ICP-MS ANALYSIS

Multiacid Digestion

Element	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb	Sc	Sm	Sn	Sr	Ta	Tb	Th
Sample	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
155801	2.0	271.6	0.1	0.30	470.0	0.2	5.77	141.2	2.4	8.4	0.198	5.3	0.7	295.5	<0.04	0.2	1.3	1.7	15.5	51.0	218.2	0.4	8.0
155802	1.9	76.4	0.1	0.07	902.0	0.4	5.88	146.1	4.2	2.4	0.020	3.4	0.9	74.5	<0.04	0.1	0.2	2.5	11.4	10.0	68.0	0.3	8.3
155803	0.3	203.1	<0.1	0.08	53.0	0.1	5.64	86.8	0.5	3.5	0.157	4.1	<0.1	185.0	<0.04	0.4	0.7	0.2	40.7	118.0	446.1	<0.1	2.1
155804	1.0	145.6	<0.1	0.02	254.0	0.6	5.05	26.6	1.7	2.7	0.102	1.3	0.5	477.7	<0.04	0.0	<0.1	1.3	19.4	4.0	24.6	0.3	2.1
155805	1.3	160.1	<0.1	0.06	431.0	0.2	6.52	87.1	2.3	2.1	0.021	4.7	0.5	206.9	<0.04	1.0	0.5	1.3	7.6	26.0	63.6	0.2	3.6
155806	0.1	79.9	<0.1	<0.02	19.0	0.4	6.67	16.4	0.1	2.1	0.033	1.8	<0.1	18.5	<0.04	0.4	0.2	<0.1	2.6	17.0	20.4	<0.1	0.6
155807	0.1	>2000.0	<0.1	0.02	1348.0	0.2	1.65	17.8	0.2	1.5	0.028	2.3	<0.1	1748.6	<0.04	0.4	0.2	0.3	21.0	11.0	17.7	<0.1	0.8
155808	0.1	>2000.0	<0.1	0.04	2183.0	0.4	2.72	43.0	0.2	1.9	0.030	2.4	<0.1	>2000.0	<0.04	0.1	<0.1	0.2	51.3	60.0	54.1	<0.1	3.1
155809	<0.1	>2000.0	<0.1	0.02	445.0	0.2	3.29	24.8	<0.1	1.3	0.022	2.9	<0.1	1966.9	<0.04	0.4	<0.1	<0.1	28.6	22.0	35.6	<0.1	1.6
155810	2.7	379.5	<0.1	<0.02	420.0	0.5	3.61	93.6	3.8	1.9	0.021	6.2	1.0	1968.7	<0.04	0.5	2.4	1.7	98.3	1.0	18.9	0.2	5.3
155811	3.1	225.4	0.2	0.02	1635.0	0.2	5.64	121.6	5.6	1.5	0.009	3.0	1.4	397.9	<0.04	0.1	0.8	3.1	54.4	3.0	54.6	0.3	7.4
155812	0.4	246.0	<0.1	0.26	1010.0	0.4	5.55	25.6	0.3	6.9	0.032	2.8	<0.1	558.9	<0.04	0.4	2.6	0.1	17.6	18.0	44.3	<0.1	2.3
155813	0.3	271.2	<0.1	0.24	782.0	0.1	5.58	24.4	0.4	7.6	0.035	3.2	<0.1	503.0	<0.04	0.4	2.2	0.3	15.0	20.0	43.6	<0.1	2.6
155814	0.6	841.7	<0.1	0.95	657.0	0.4	5.14	129.2	1.4	29.5	0.253	3.5	0.2	>2000.0	<0.04	0.3	10.6	0.5	46.8	95.0	308.9	0.1	3.1
155815	<0.1	>2000.0	<0.1	0.05	1999.0	0.3	2.31	13.1	<0.1	2.1	0.029	0.9	<0.1	>2000.0	<0.04	0.2	<0.1	<0.1	67.6	2.0	12.2	<0.1	1.1
155816	1.1	379.7	<0.1	0.79	424.0	0.4	5.30	39.9	1.5	25.1	0.058	3.8	0.3	1292.8	<0.04	0.3	7.0	0.5	25.3	29.0	65.6	0.1	4.0
155817	1.4	180.8	0.2	2.41	1540.0	0.2	2.06	29.8	2.7	75.2	0.023	1.8	0.5	96.5	<0.04	0.4	25.2	0.9	18.9	70.0	30.5	0.2	1.5
155818	<0.1	1445.2	<0.1	<0.02	1052.0	0.4	5.21	43.3	<0.1	1.0	0.021	1.9	<0.1	>2000.0	<0.04	0.1	<0.1	<0.1	29.6	5.0	31.4	<0.1	4.8
155880	0.5	86.9	<0.1	0.06	56.0	0.2	5.46	63.9	0.9	<0.1	0.056	3.1	0.3	76.2	<0.04	0.2	0.3	0.6	3.0	38.0	70.1	0.1	2.4
155881	0.1	>2000.0	<0.1	0.03	1596.0	0.4	3.87	14.6	0.1	1.5	0.034	1.7	<0.1	>2000.0	<0.04	0.1	0.7	0.2	36.3	51.0	13.3	<0.1	1.4
155882	0.4	85.3	<0.1	<0.02	659.0	0.2	6.60	124.5	1.1	1.4	0.032	2.9	0.2	10.2	<0.04	0.1	0.2	0.4	18.8	8.0	268.6	<0.1	7.5
155883	<0.1	>2000.0	<0.1	0.05	1701.0	0.4	2.21	24.9	<0.1	1.5	0.017	1.5	<0.1	>2000.0	<0.04	0.1	<0.1	<0.1	54.9	57.0	28.3	<0.1	0.9
155884	<0.1	79.5	<0.1	<0.02	68.0	0.1	6.83	77.1	<0.1	0.9	0.037	2.1	<0.1	228.2	<0.04	0.1	<0.1	<0.1	10.6	9.0	139.2	<0.1	2.8
155885	1.1	235.0	<0.1	0.04	245.0	0.4	6.03	102.1	2.0	2.2	0.028	4.5	0.4	604.8	<0.04	0.2	0.9	1.1	48.4	11.0	46.4	0.2	6.3
155886	0.1	606.2	<0.1	<0.02	2156.0	0.2	5.47	15.8	0.2	1.1	0.027	0.9	<0.1	>2000.0	<0.04	0.1	<0.1	<0.1	42.3	5.0	9.0	<0.1	2.2
155887	1.9	181.6	<0.1	<0.02	385.0	0.4	5.70	29.9	3.4	1.4	0.022	2.4	0.8	820.3	<0.04	0.1	0.9	2.1	49.6	1.0	7.3	0.2	7.0
155888	0.3	137.1	<0.1	0.11	87.0	0.1	5.72	92.1	0.8	3.4	0.257	2.3	0.1	233.4	<0.04	0.1	0.7	0.4	18.1	62.0	266.6	<0.1	2.6
155888 Re	0.3	139.6	<0.1	0.11	87.0	0.2	5.89	95.3	0.7	3.7	0.250	2.4	0.1	215.4	<0.04	0.1	0.7	0.4	17.2	61.0	258.0	<0.1	2.8
155889	0.6	36.6	<0.1	<0.02	93.0	0.4	6.93	103.9	0.9	1.2	0.017	1.9	0.3	119.2	<0.04	0.1	0.2	0.7	4.7	3.0	127.6	0.1	2.6
155890	2.4	20.4	0.2	0.15	194.0	0.1	6.56	17.4	1.5	6.0	0.006	17.7	0.5	70.9	<0.04	0.0	1.8	0.3	2.2	70.0	3.2	0.1	5.8
155891	2.8	20.7	<0.1	0.05	117.0	0.4	2.42	34.1	3.0	1.3	0.010	37.5	0.8	698.7	<0.04	0.0	3.7	0.9	5.9	18.0	4.2	<0.1	3.7
155892	37.3	134.9	0.1	1.01	580.0	1.6	3.22	9.2	27.4	22.7	0.097	18.0	7.7	209.4	<0.04	0.0	6.2	3.6	1.6	581.0	0.4	0.3	12.6
155893	<0.1	106.2	<0.1	0.03	1694.0	0.4	6.29	13.1	0.2	1.1	0.024	1.9	<0.1	38.7	<0.04	0.2	0.1	<0.1	3.0	15.0	21.9	<0.1	2.1
155894	2.8	176.8	<0.1	0.14	157.0	0.2	5.61	37.0	3.6	3.2	0.038	4.6	1.1	240.1	<0.04	0.5	1.4	1.6	3.9	33.0	26.0	0.2	8.0
155895	0.3	335.1	0.2	0.15	3161.0	0.4	4.61	11.8	0.3	5.5	0.018	2.5	<0.1	395.6	<0.04	0.2	1.9	0.1	8.9	21.0	39.4	<0.1	3.0

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

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Multiacid Digestion

Element	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb	Sc	Sm	Sn	Sr	Ta	Tb	Th
Sample	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
155896	0.7	152.5	0.1	0.22	1006.0	0.1	6.44	66.2	0.9	6.6	0.007	5.0	0.3	233.7	<0.04	0.2	1.8	0.5	5.8	55.0	45.0	0.2	6.2
155897	0.5	>2000.0	<0.1	0.06	1752.0	0.5	4.01	23.7	0.6	2.8	0.098	1.6	0.2	>2000.0	<0.04	0.1	0.3	0.4	55.1	59.0	47.7	<0.1	4.5
155898	0.8	431.7	<0.1	<0.02	283.0	0.2	5.89	49.3	0.6	1.6	0.130	3.9	0.2	188.2	<0.04	0.2	0.1	0.5	14.0	62.0	116.3	0.1	1.3
155899	0.2	>2000.0	0.1	0.03	5874.0	0.5	2.93	9.2	0.2	1.8	0.031	2.2	<0.1	>2000.0	<0.04	0.8	1.2	0.1	43.2	8.0	25.4	0.2	1.3
155900	0.3	85.1	0.1	<0.02	2674.0	0.3	5.35	30.8	0.4	0.6	0.015	1.9	<0.1	93.1	<0.04	0.1	0.2	0.2	12.6	7.0	30.9	0.1	1.8
155900 Re	0.3	80.8	0.1	<0.02	2669.0	0.3	5.41	29.0	0.4	2.3	0.014	1.7	0.1	99.5	<0.04	0.1	0.3	0.2	13.1	7.0	30.9	0.1	1.7
STD OREAS24P	18.7	8.0	0.2	4.19	1196.0	1.5	2.40	21.4	21.0	151.3	0.142	2.9	4.7	22.4	<0.04	0.1	20.1	4.3	1.7	419.0	1.0	0.7	2.5
BLK	<0.1	<0.1	<0.1	<0.02	<2	<0.05	<0.002	<0.04	<0.1	<0.1	<0.001	<0.02	<0.1	<0.1	<0.04	<0.02	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1
STD OREAS45P	24.7	15.1	0.2	0.22	1319.0	2.0	0.08	20.9	22.5	372.1	0.046	21.6	5.8	25.9	<0.04	0.8	65.9	4.1	2.4	34.0	1.2	0.6	9.0
BLK	<0.1	<0.1	<0.1	<0.02	<2	<0.05	<0.002	<0.04	<0.1	<0.1	<0.001	<0.02	<0.1	0.6	<0.04	<0.02	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1
STD OREAS24P	20.8	8.7	0.3	4.22	1186.0	1.5	2.43	22.8	22.0	143.0	0.160	3.5	5.5	26.9	<0.04	0.1	20.2	4.5	1.9	411.0	1.1	0.9	3.2
STD OREAS45P	28.2	16.0	0.3	0.23	1394.0	2.2	0.08	22.4	22.9	378.8	0.057	26.5	6.7	29.8	<0.04	1.0	72.3	4.2	3.0	40.0	1.1	0.7	10.9

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

Signed: _____
Mark Acres - Quality Assurance

Gossan Resources Ltd
Attention: R. Cooke
Project:
Sample: 39 Rock

TSL LABORATORIES INC.
2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4
Tel: (306) 931-1033 Fax: (306) 242-4717

Report No: S34529
Date: August 20, 2009

MULTIELEMENT ICP-MS ANALYSIS

Multiacid Digestion

Element	Ti	Tm	U	V	W	Y	Yb	Zn	Zr
Sample	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
155801	0.016	<0.1	4.4	8.0	2.5	8.9	1.0	30.3	32.2
155802	0.004	<0.1	6.2	2.0	1.9	5.2	0.8	35.1	32.7
155803	0.009	<0.1	3.9	4.0	2.9	1.4	0.1	3.8	13.8
155804	0.002	<0.1	0.7	1.0	1.4	6.6	0.5	35.2	5.0
155805	0.012	<0.1	3.2	6.0	1.2	2.6	0.2	72.1	5.1
155806	0.002	<0.1	0.5	<1	0.3	0.2	<0.1	49.3	5.9
155807	0.005	<0.1	1.0	1.0	1.0	3.0	0.4	31.1	0.9
155808	0.005	<0.1	0.8	<1	6.5	1.3	0.1	53.6	5.8
155809	0.014	<0.1	0.8	<1	0.9	0.2	<0.1	11.9	1.9
155810	0.006	<0.1	5.3	<1	4.5	7.0	0.7	59.4	12.3
155811	0.002	0.1	4.3	1.0	2.3	7.6	1.3	43.7	67.3
155812	0.029	<0.1	1.5	15.0	1.5	2.3	0.3	22.5	11.9
155813	0.024	<0.1	1.6	12.0	1.5	2.1	0.2	17.9	8.3
155814	0.145	<0.1	4.7	70.0	2.8	4.8	0.5	26.5	10.6
155815	0.004	<0.1	2.0	1.0	2.1	0.8	<0.1	88.9	7.7
155816	0.094	<0.1	1.5	49.0	2.2	3.3	0.4	28.2	10.0
155817	0.231	0.1	1.2	132.0	1.9	9.0	1.0	78.7	9.7
155818	0.003	<0.1	1.1	1.0	2.3	0.3	<0.1	19.8	1.8
155880	0.004	<0.1	1.6	2.0	0.9	1.8	<0.1	10.2	17.2
155881	0.003	<0.1	0.7	1.0	3.5	1.1	<0.1	23.2	9.9
155882	0.002	<0.1	4.4	1.0	4.0	1.7	0.1	1.6	33.2
155883	0.002	<0.1	0.5	<1	4.4	0.3	<0.1	32.1	1.7
155884	<0.001	<0.1	1.9	<1	0.8	0.3	<0.1	2.0	20.6
155885	0.003	<0.1	1.1	<1	4.2	4.1	0.3	23.2	17.4
155886	0.002	<0.1	2.0	<1	2.0	0.5	<0.1	32.9	25.5
155887	0.002	<0.1	1.7	1.0	2.4	3.0	0.2	36.6	25.4
155888	0.009	<0.1	2.9	5.0	1.6	2.5	0.1	8.9	15.3
155888 Re	0.009	<0.1	2.9	5.0	1.6	2.4	0.2	11.5	14.0
155889	0.002	<0.1	1.3	<1	1.2	2.1	0.1	7.4	11.3
155890	0.018	0.1	3.7	5.0	0.3	5.0	1.4	21.9	49.7
155891	0.034	<0.1	2.0	1.0	0.7	1.2	0.2	17.2	1.6
155892	0.332	0.1	3.9	55.0	0.6	10.0	1.0	63.8	133.9
155893	0.003	<0.1	0.9	<1	0.3	1.3	0.1	4.2	6.8
155894	0.018	<0.1	1.6	8.0	0.5	3.1	0.4	10.8	20.6
155895	0.016	0.1	0.9	8.0	0.8	6.1	1.2	8.0	7.5

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

Signed: _____
Mark Acres - Quality Assurance

Gossan Resources Ltd
Attention: R. Cooke
Project:
Sample: 39 Rock

TSL LABORATORIES INC.
2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4
Tel: (306) 931-1033 Fax: (306) 242-4717

Report No: S34529
Date: August 20, 2009

MULTIELEMENT ICP-MS ANALYSIS

Multiacid Digestion

Element	Ti	Tm	U	V	W	Y	Yb	Zn	Zr
Sample	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
155896	0.021	<0.1	5.3	11.0	1.1	4.5	1.1	21.4	48.9
155897	0.010	<0.1	1.4	3.0	3.2	2.2	0.2	98.1	13.7
155898	<0.001	<0.1	3.6	<1	0.8	3.3	0.3	5.9	8.3
155899	0.002	<0.1	0.7	<1	1.7	8.4	0.9	15.6	10.4
155900	0.001	<0.1	2.8	2.0	0.5	6.0	0.9	4.6	13.5
155900 Re	0.001	<0.1	2.8	1.0	0.4	6.2	0.9	4.8	13.7
STD OREAS24P	1.067	0.2	0.6	162.0	0.5	21.9	1.8	124.5	144.6
BLK	<0.001	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.2	<0.2
STD OREAS45P	1.015	0.2	2.1	265.0	1.1	13.0	1.7	147.7	157.7
BLK	<0.001	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.2	<0.2
STD OREAS24P	1.032	0.3	0.8	159.0	0.5	24.3	1.9	122.5	142.7
STD OREAS45P	1.016	0.2	2.6	260.0	1.0	15.7	1.6	150.5	160.6

A 0.25 g sample is digested with HClO4, HNO3, HCl, HF and diluted to 10 mls with DI H2O.

Signed: _____
Mark Acres - Quality Assurance

TSL LABORATORIES
#2 – 302 48th Street · Saskatoon, SK · S7K 6A4
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CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM Gossan Resources Ltd.
404 - 171 Donald Street
Winnipeg, MB R3C 1M4

REPORT No.
S34986

SAMPLE(S) OF 10 Rock Pulp

INVOICE #:55146
P.O.:

R. Cooke
Project:

Original Report S34529. Assay on over-range values from ICP

	Li %
155807	1.42
155808	.86
155809	.76
155814	.10
155815	1.14
155818	.19
155881	.50
155883	.95
155897	.30
155899	.80

COPIES TO: R. Cooke
INVOICE TO: Gossan Resources - Winnipeg

Sep 14/09

SIGNED

Mark Acres - Quality Assurance

Appendix D

Activation Laboratories – Soil Gas Hydrocarbon Report

SGH – SOIL GAS HYDROCARBON
Predictive Geochemistry

for

GOSSAN RESOURCES LIMITED

"SEPARATION RAPIDS PROJECT"

September 7, 2009

Dale Sutherland, Eric Hoffman

Activation Laboratories Ltd

INTERPRETATION OF SGH SOIL DATA

EXPLORATION FOR: *"RARE ELEMENT PEGMATITE"* FORMATION

Workorder: A09-4394

1336 Sandhill Drive • Ancaster, ON • L9G 4V5 • Tel: (905) 648-9611 • Fax: (905) 648-9613 • Toll Free: 1-888-ACTLABS

E-mail: dalesutherland@actlabsint.com • Web Site: www.actlabs.com

SOIL GAS HYDROCARBON (SGH) GEOCHEMISTRY - OVERVIEW

SGH is a deep penetrating geochemistry that involves the analysis of surficial samples from over potential mineral or petroleum targets. The analysis involves the testing for 162 hydrocarbon compounds in the C5-C17 carbon series range applicable to a wide variety of sample types. SGH has been successful for delineating targets found at over 500 metres in depth. Samples of various media have been successfully analyzed such as soil (any horizon), drill core, rock, peat, lake-bottom sediments and even snow. The SGH analysis incorporates a very weak leach, essentially aqueous, that only extracts the surficial bound hydrocarbon compounds and those compounds in interstitial spaces around the sample particles. These are the hydrocarbons that have been mobilized from the target depth. SGH is unique and should not be confused with other hydrocarbon tests or traditional analyses that measure C1 (Methane) to C5 (Pentane) or other gases. SGH is also different from soil hydrocarbon tests that thermally extract or desorb all of the hydrocarbons from the whole soil sample. This test is less specific as it does not separate the hydrocarbons and thus does not identify or measure the responses as precisely. These tests also do not use a forensic approach to identification. The hydrocarbons in the SGH extract are separated by high resolution capillary column gas chromatography to isolate, confirm, and measure the presence of only the individual hydrocarbons that have been found to be of interest from initial research and development and from performance testing in two Canadian Mining Industry Research Organization (CAMIRO) projects (97E04 and 01E02).

Over the past 12+ years of research, Activation Laboratories Ltd. has developed an in-depth understanding of the unique SGH signatures associated with different commodity targets. Using a forensic approach we have developed target signatures or templates for identification, and the understanding of the expected geochromatography that is exhibited by each class of SGH compounds. In 2004 we began to include an SGH interpretation report delivered with the data to enable our clients to realize the complete value and understanding of the SGH results in the shortest time frame and provide the benefit from past research sponsored by Actlabs, CAMIRO, OMET and other projects.

SGH has attracted the attention of a large number of Exploration companies. In the above mentioned research projects the sponsors have included (in no order): Western Mining Corporation, BHP-Billiton, Inco, Noranda, Outokumpu, Xstrata, Cameco, Cominco, Rio Algom, Alberta Geological Survey, Ontario Geological Survey, Manitoba Geological Survey and OMET. Further, beyond this research, Activation Laboratories Ltd. has interpreted the SGH data for over 400 targets from clients since January of 2004. In both CAMIRO research projects over known mineralization and in exploration projects over unknown targets, SGH has performed exceptionally well. As an example, in the first CAMIRO research project that commenced in 1997 (Project 97E04), there were 10 study areas that were submitted blindly to Actlabs. These study sites were selected since other inorganic geochemistries were unsuccessful at illustrating anomalies related to the target.

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SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Although Actlabs was only provided with the samples and their coordinates, SGH was able to locate the blind mineralization with exceptional accuracy in 9 of the 10 surveys. SGH has recently been very successful in exploration and discovery of unknown targets e.g. Golden Band Resources drilled an SGH anomaly and discovered a significant vein containing "visible" gold. (www.goldenbandresources.com)

Sample Type and Survey Design: It is highly recommended that a ***minimum*** of 50 sample "locations" is preferred to obtain enough samples into background areas on both sides of small suspected targets (wet gas plays, Kimberlite pipes, Uranium Breccia pipes, veins, etc.). SGH is not interpreted in the same way as inorganic based geochemistries. SGH must have enough samples over both the target and background areas in order to fully study the dispersion patterns or geochromatography of the SGH classes of compounds. Based on our minimum recommendation of at least 50 sample locations we further suggest that all samples be evenly spaced with about one-third of the samples over the target and one-third on each side of the target in order for SGH to be used for exploration. Targets other than gas plays, pipes, dykes or veins usually require additional samples to represent both the target and background areas.

SGH has been shown to be very robust to the use of different sample types even "within" the same survey or transect. Research has illustrated that it is far more important to the ultimate interpretation of the results to take a complete sample transect or grid than to skip samples due to different sample media. The most ideal natural sample is still believed to be soil from the "Upper B-Horizon", however excellent results can also be obtained from other soil horizons, humus, peat, lake-bottom sediments, and even snow. The sampling design is suggested to use evenly spaced samples from 15 metres to 200 metres and line spacing from 50 metres to 500 metres depending on the size and type of target. A maximum 4:1 ratio is suggested, however, larger orientation surveys have also been successful. Ideally even large grids should have one-third of the samples over the target and two-thirds of the samples into anticipated background areas. This will allow the proper assessment of the SGH geochromatographic vectoring and background site signature levels with minimal bias. Individual samples taken at significant distances from the main survey area to represent background are not of value in the SGH interpretation as SGH results are not background subtracted. Samples can be drip dried in the field and do not need special preservation for shipping and has been specifically designed to avoid common contaminants from sample handling and shipping. SGH has also been shown to be robust to cultural activities even to the point that successful results and interpretation has been obtained from roadside right-of-ways.

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SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

Sample Preparation and Analysis: Upon receipt at Activation Laboratories the samples are air-dried in isolated and dedicated environmentally controlled rooms set to 40°C. The dried samples are then sieved. In the sieving process, it is important that compressed air is not used to clean the sieves between samples as trace amounts of compressor oils "may" poison the samples and significantly affect some target signatures. At Activation Laboratories a vacuum is used to clean the sieve between each sample. The -60 mesh sieve fraction (<250 microns, although different mesh sizes can be used at the preference of the exploration geologist) is collected and packaged in a Kraft paper envelope and transported from our sample preparation building to our analytical building on the same street in Ancaster Ontario. Each sample is then extracted, separated by gas chromatography, and then analyzed by mass spectrometry using customized parameters enabling the highly specific detection of the 162 targeted hydrocarbons at a reporting limit of one part-per-trillion (ppt). This trace level limit of reporting is critical to the detection of these hydrocarbons that, through research, have been found to be related at least in part to the breakdown and release of hydrocarbons from the death phase of microbes directly interacting with a deposit at depth. The hydrocarbon signatures are directly linked to the deposit type which is used as a food source. The hydrocarbons that are mobilized and metabolized by the microbes are released in the death phase of each successive generation. Very few of the hydrocarbons measured are actually due to microbe cells, or hydrocarbons present or formed in the genesis of the deposit or from anthropogenic contamination. The results of the SGH analysis is reported in raw data form in an Excel spreadsheet as "semi-quantitative" concentrations without any additional statistical modification.

Mobilized Inorganic Geochemical Anomalies: It is important to note that SGH is essentially "blind" to any inorganic content in samples as only organic compounds as hydrocarbons are measured. Thus inorganic geochemical surface anomalies that have migrated away from the mineral source, and thus may be interpreted and found to be a false target location, is not detected and does not affect SGH results. This fact is of great advantage when comparing the SGH results to inorganic geochemical results. If there is agreement in the location of the anomalies between the organic an inorganic technique, such as Enzyme Leach, a significant increase in confidence in the target location can be realized. If there is no agreement or a shift in the location of the anomalies between the techniques, the inorganic anomaly may have been mobilized in the surficial environment.

The Nugget Effect: As SGH is "blind" to the inorganic content in the survey samples, any concern of a "nugget effect" will not be encountered with SGH data. A "nugget effect" may be of a concern for inorganic geochemistries from surveys over copper, gold, lead, nickel, etc. type targets.

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SOIL GAS HYDROCARBONS (SGH) GEOCHEMISTRY – OVERVIEW

SGH Interpretation Report: All SGH submissions must be accompanied by relative or UTM coordinates so that we may ensure that the sample survey design is appropriate for use with SGH, and to provide an SGH interpretation with the results. In our interpretation procedure, we separate the results into 19 SGH sub-classes. These classes include specific alkanes, alkenes, thiophenes, aromatic, and polyaromatic compounds. Note that none of the SGH hydrocarbons are "gaseous" at room temperature and pressure. The classes are then evaluated in terms of their geochromatography and for coincident compound class anomalies that are unique to different types of mineralization. Actlabs uses a six point scale in assigning a rating of similarity of the SGH signatures found in the submitted survey to signatures previously reviewed and researched from known case studies over the same commodity type. Also factored into this rating is the appropriateness of the survey and amount of data/sample locations that is available for interpretation. This rating scale is described in detail in the following section.

SGH RATING SYSTEM (Example for VMS type targets)

To date SGH has been found to be successful in the depiction of buried mineralization for Gold, Nickel, VMS, SEDEX, Uranium, Polymetallic, and Copper, as well as for Kimberlites. SGH data has developed into a dual exploration tool. From the interpretation, a vertical projection of the predicted location of the target can be made as well as a statement on the rating of the comparability of the identification of the anticipated target type to that from known case studies, e.g. if the client anticipates the target to be of a Volcanic Massive Sulphide (VMS) type, what is the rating or comparability that the target signature is similar to the case studies conducted at the Hanson Lake VMS deposit in Saskatchewan, the South Gilmour VMS deposit in New Brunswick or the Cross Lake VMS deposit in Ontario.

- A rating of "6" is the highest or best rating, and means that the SGH classes most important to describing a VMS related hydrocarbon signature are all present and consistently vector to the same location with well defined anomalies. To obtain this rating there also needs to be other SGH classes that when mapped lend support to the predicted location.
- A rating of "5" means that the SGH classes most important to describing a VMS signature are all present and consistently describe the same location with well defined anomalies. The SGH signatures may not be strong enough to also develop additional supporting classes.
- A rating of "4" means that the SGH classes most important to describing a VMS signature are mostly present describing the location with well defined anomalies. Supporting classes may also be present.

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SGH RATING SYSTEM (continued)

- A rating of "3" means that the SGH classes most important to describing a VMS signature are mostly present and describe the same location with fairly well defined anomalies. Some supporting classes may or may not be present.
- A rating of "2" means that some of the SGH classes most important to describing a VMS signature are present but a predicted location is difficult to determine. Some supporting classes may be present
- A rating of "1" is the lowest rating, and means that one of the SGH classes most important to describing a VMS signature is present but a predicted location is difficult to determine. Supporting classes are also not helpful.

- The SGH rating is directly and significantly affected by the survey design. Small data sets, especially if <50 sample locations, or transects/surveys that are geographically too short **will automatically receive a lower rating no matter how impressive an SGH anomaly might be**. When there is not enough sample locations to adequately review the SGH class geochromatography, or when the sample spacing is inadequate, or if the spacing is highly variable such that it biases the interpretation of the results, then the confidence in the interpretation of any geochemistry is adversely affected. The SGH rating is not just a rating of the agreement between the SGH pathfinder classes for a particular target type; it is a rating of the overall confidence in the SGH results from this particular survey. The interpretation is only based on the SGH results without any information from other geochemical, geological or geophysical information unless otherwise specified.

SGH DATA QUALITY

- **Reporting Limit:** The SGH Excel spreadsheet of results contains the raw unaltered concentrations of the individual SGH compounds in units of "part-per-trillion" (ppt). The reporting of these ultra low levels is vital to the measurement of the small amounts of hydrocarbons now known to be leached/metabolized and subsequently released by dead bacteria that have been interacting with the ore at depth. To ensure that the data has a high level of confidence, a "reporting limit" is used. The reporting limit of 1 ppt actually represents a level of confidence of approximately 5 standard deviations where SGH data is assured to be "real" and non-zero. Thus in SGH the use of a reporting limit automatically removes site variability and there is no need to further background subtract any data as the reporting limit has already filtered out any site background effects. Thus we recommend that all data that is equal to or greater than 2 ppt should be used in any data review. It is important to review all SGH data as low values that may be the centre of halo anomalies and higher values as apical anomalies or as halo ridges are all important.

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SGH DATA QUALITY (continued)

- **Laboratory Replicate Analysis:** A laboratory replicate is a sample taken randomly from the submitted survey being analyzed and are not unrelated samples taken from some large stockpile of bulk material. In the Organics laboratory an equal portion of this sieved sample, or pulp, is taken and analyzed in the same manner using the Gas Chromatography/Mass Spectrometer. The comparison of laboratory replicate and field duplicate results for chemical tests in the parts-per-million or even parts-per-billion range has typically been done using an absolute "relative percent difference (RPD)" statistic which is an easy proxy for error estimation rather than a more complete analysis of precision as specified by Thompson and Howarth. An RPD statistic is not appropriate for SGH results as the reporting limit for SGH is **1 part-per-trillion**. Further, **SGH is a semi-quantitative technique** and was not designed to have the same level of precision as other less sensitive geochemistries as it is only used as an exploration tool and not for any assay work. SGH is also designed to cover a wide range of organic compounds with an unprecedented 162 compounds being measured for each sample. In order to analyze such a wide molecular weight range of compounds, sacrifices were made to the variability especially in the low molecular weight range of the SGH analysis. The result is that the first fifteen SGH compounds or the first page of the Excel spreadsheet is expected to exhibit more imprecision than the other 147 compounds. An SGH laboratory replicate is a large set of data for comparison even for just a few pairs of analyses. Precision calculations using a Thompson and Howarth approach should only be used for estimating error in individual measurements, and not for describing the average error in a larger data set. In geochemical exploration geochemists seek concentration patterns to interpret and thus rigorous precision in individual samples is not required because the concentrations of many samples are interpreted collectively. For these reasons recent and independent research at Acadia University in Canada promote that a percent Coefficient of Variation (%CV) should be used as a universal measurement of relative error in all geochemical applications. As SGH results are a relatively large data set for nearly all submissions, %CV is a better statistic for use with SGH. By using %CV, the concentration of duplicate pairs is irrelevant because the units of concentration cancel out in the formation of the coefficient of variation ratio. For SGH, the %CV is calculated on all values ≥ 2 ppt. These values are averaged and represent a value for each pair of replicate analysis of the sample. All of the %CV values for the replicates are then averaged to report one %CV value to represent the overall estimate of the relative error in the laboratory sub-sampling from the prepared samples, and any instrumental variability, in the SGH data set for the survey. Actlabs' has successfully addressed the analytical challenge to minimize analytical variability for such a large list of compounds. Thus as SGH is also interpreted as a signature and is solely used for exploration and not assay measurement, the data from SGH is **"fit for purpose"** as a geochemical exploration tool.

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SGH DATA QUALITY (continued)

- **Historical SGH Precision:** In the general history of geochemistry, studies indicate that a large component of total measurement error is introduced during the collection of the initial sample and in sub-sampling, and that only a subordinate amount of error in the result is introduced during preparation and analysis. A historical record encompassing many projects for SGH, having a wide variety of sample types, geology and geography, shows that the consistency and precision for the analysis of SGH is excellent with an overall precision of 6.6% Coefficient of Variation (%CV). When last calculated, this number has a range having a maximum of 10% CV and a minimum of 3% CV in a population made up of a total of some 400 targets interpreted since June of 2004 which has encompassed a wide variety of sample types as soils, peat, etc. in over 32,000 samples. When field duplicates have been revealed to us, we have found that the precision of the field duplicates are in the range of about 9 to 12 %CV. As SGH is interpreted using a combination of compounds as a chemical "class" or signature, the affect of a few concentrations that may be imprecise in a direct comparison of duplicates is not significant. Further, projects that have been re-sampled at different times or seasons are expected to have different SGH concentrations. The SGH anomalies may not be in exactly the same position or of the same intensity due to variable conditions that may have affected the dispersion of different pathfinder classes. However, the SGH "signature" as to the presence of the specific mix of SGH pathfinder classes will definitely still exist, and will retain the ability to identify and vector to the same target location.

- **LABORATORY MATERIALS BLANK – QUALITY ASSURANCE (LMB-QA):**

The Laboratory Materials Blank Quality Assurance measurements (LMB-QA) shown in the SGH spreadsheet of results are matrix free blanks analyzed for SGH. These blanks are not standard laboratory blanks as they do not accurately reflect an amount expected to be from laboratory handling or laboratory conditions that may be present and affect the sample analysis result. The LMB-QA measurements are a pre-warning system to only detect any contamination originating from laboratory glassware, vials or caps. As there is no substrate to emulate the sample matrix, the full solvating power of the SGH leaching solution, effectively a water leach, is fully directed at the small surface area of the glassware, vials or caps. In a sample analysis the solvating power of the SGH leaching solution is distributed between the large sample surface area (from soil, humus, sediments, peat, till, etc.) and the relatively small contribution from the laboratory materials surfaces. The sample matrix also buffers the solvating or leaching effect in the sample versus the more vigourous leaching of the laboratory materials which do not experience this buffering effect. Thus the level of the LMB-QA reported is biased high relative to the sample concentration and the

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LABORATORY MATERIALS BLANK – QUALITY ASSURANCE (LMB-QA): (cont.)

actual contribution of the laboratory reagents, equipment, handling, etc. to the values in samples is significantly lower. This situation in organic laboratory analysis only occurs at such extremely low part-per-trillion (ppt) measurement levels. This is one of the reasons that SGH uses a reporting limit and not a detection limit. The 1 ppt reporting limit used in the SGH spreadsheet of raw concentration data is 3 to 5 times greater than a detection limit. The reporting limit automatically filters out analytical noise, the actual LMB-QA, and most of the sample survey site background. This has been proven as SGH values of 1 to 3 parts-per-trillion (ppt) have very often illustrated the outline of anomalies directly related to mineral targets. Thus all SGH values greater than or equal to 1 or 2 ppt should be used as reliable values for interpretations.

The LMB-QA values thus should not be used to background subtract any SGH data. The LMB-QA values are only an early warning as a quality assurance procedure to indicate the relative cleanliness of laboratory glassware, vials, caps, and the laboratory water supply at the ppt concentration level. Do not subtract the LMB-QA values from SGH sample data.

SGH INTERPRETION – GOSSAN RESOURCES LIMITED - A09-4349 "SEPARATION RAPIDS PROJECT."

- This report is based on the SGH results from the analysis of a total of 173 samples. This project area is composed of a grid of 13 parallel lines with the main area having 16 samples per line spaced at 50 metres. An extension to the east had 5 transects, 100 metres apart with 50 metre sample spacing. The entire gird is approximately 800 metres by 400 metres.

- The number of samples submitted for this project is **adequate to use SGH as an exploration tool**. This ensures that the review and interpretation of the complete geochromatographic signatures from the entire set of SGH pathfinder classes of hydrocarbons.

- This interpretation has been conducted without any knowledge of sample descriptions, geochemical results, or geophysical results that the client may have. Sample location coordinates were made available to enable this interpretation report.

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SGH INTERPRETION – GOSSAN RESOURCES LIMITED - A09-4349 "SEPARATION RAPIDS PROJECT"

- **The overall precision of the SGH analysis for this survey was excellent** as demonstrated by 12 different pairs of soil samples taken from this survey, each used for laboratory replicate analysis. The average Coefficient of Variation (%CV) using the method by Thompson and Howarth, of these replicate results for this project was 6.6% which represents an excellent level of analytical performance.

- Activation Laboratories Ltd. has not previously analyzed a target based on a rare element suite of Li, Cs, Ta, Rb and Be. We thus reviewed this data for potentially a new SGH signature that we will designate as for a Rare Element Pegmatite type target. Other SGH signatures or interpretive templates have been defined through the research conducted using naturally occurring surficial samples since 1997 on previously analyzed case studies, especially from the two Canadian Mining Industry Research Organization projects (CAMIRO 97E04 & 01E02) which are applicable to a wide variety of commodities.

- The plan and 3D view maps on page 12 and 13 show the most definitive SGH class of compounds. This class combined with the results from other moderately heavy molecular weight classes of SGH compounds together form quite a unique signature and may possibly depict a rare-earth pegmatite type target. The data is mapped with a Kriging trending algorithm set in the GeoSoft Oasis Montaj mapping software

- The SGH class of compounds illustrated on page 12 indicates the presence of a "nested halo anomaly". Note that this map is made up of the summation of the measurements from several SGH compounds and is thus more robust than a map for a single compound. Several other pathfinder classes, from the SGH soil sample data, were readily detectable in this submission. These other classes of compound supported and confirmed the nested halo anomaly shown as the solid black oval on the map on page 12. The nested halo anomaly is very indicative of the presence of a strong REDOX cell formation. The small central apical anomaly, nested within the halo anomaly, is an indication of the centre of the REDOX cell according to today's accepted electrochemical cell models.

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- After review of the SGH pathfinder class maps, the SGH results suggest a **"rating of 5.0"** within the solid black oval drawn on the map on page 12 in relation to the possible presence of a target with a new type of SGH signature, potentially a Rare-Element Pegmatite. This rating is based on a scale of 6.0, with a value of 6.0 being the best. This rating usually represents the similarity of these SGH results with other case studies over a similar and known target, however this is a first review for a target containing these rare elements, **thus the rating was reduced by 1.0**. The rating of 5.0 thus recognizes the excellent agreement between several SGH classes of compounds which usually only occurs with very highly rated targets through the use of this SGH geochemistry.

- The best vertical drill location, based only on the SGH data, would be at the centre of the REDOX cell as indicated by the apical anomaly within the black oval on the map on page 12 that directly coincides with the centre of the halo anomaly is several other SGH classes of compounds. Note that vertical drilling may not be the best method of exploration of this anomaly.

- The client should use a combination of these SGH results and its report with additional geochemical, geophysical, and geological information to possibly obtain a more confident and precise target location.

- The degree of confidence in the SGH ratings only starts to be "good" at a level of 4.0 on the scale of 6.0.

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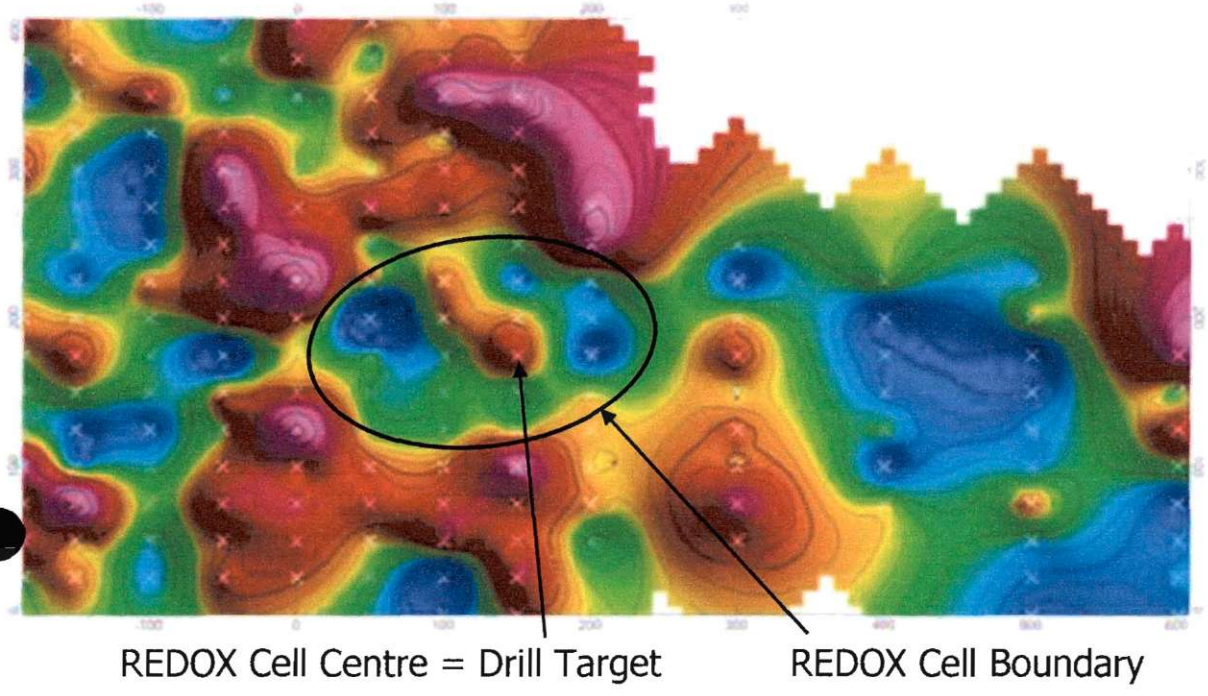
SGH INTERPRETION – GOSSAN RESOURCES LIMITED - A09-4349 "SEPARATION RAPIDS PROJECT"

SGH CLASS MAP



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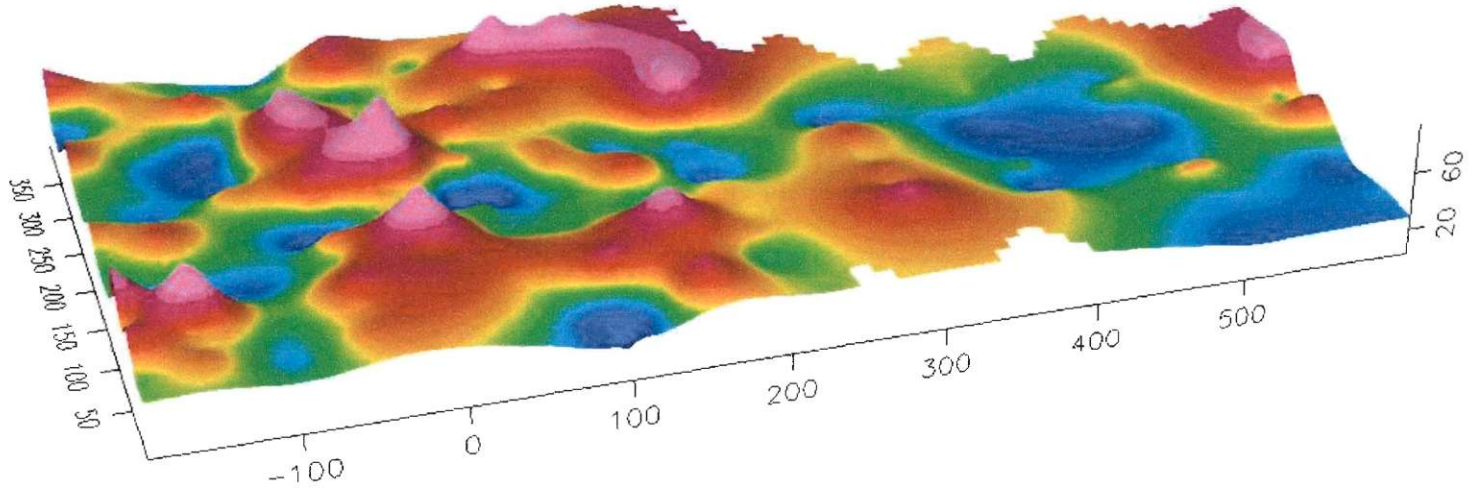
SGH INTERPRETION – GOSSAN RESOURCES LIMITED - A09-4349 "SEPARATION RAPIDS PROJECT"

SGH CLASS MAP



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Cautionary Note Regarding Assumptions and Forward Looking Statements

The statements and target rating made in the Soil Gas Hydrocarbon (SGH) interpretive report or in other communications may contain certain forward-looking information related to a target or SGH anomaly.

Statements related to the rating of a target are based on comparison of the SGH signatures derived by Activation Laboratories Ltd. through previous research on known case studies. The rating is not derived from any statistics or other formula. The rating is a subjective value on a scale of 0 to 6 relative to the similarity of the SGH signature reviewed compared to the results of previous scientific research and case studies based on the analysis of surficial samples over known ore bodies. No information on other geochemistries, geophysics, or geology is usually available as additional information for the interpretation and assignment of a rating value unless otherwise stated. The rating does not imply ore grade and is not to be used in mineral resource estimate calculations. References to the rating should be viewed as forward-looking statements to the extent that it involves a subjective comparison to known SGH case studies. As with other geochemistries, the implied rating and anticipated target characteristics may be different than that actually encountered if the target is drilled or the property developed.

Activation Laboratories Ltd. may also make a scientifically based reference in this interpretive report to an area that might be used as a drill target. Usually the nearest sample is identified as an approximation to a "possible drill target" location. This is based only on SGH results and is to be regarded as a guide based on the current state of this science.

Unless stated, Activation Laboratories Ltd. has not physically observed the exploration site and has no prior knowledge of any site description or details. Actlabs makes general recommendations for sampling and shipping of samples. Unless stated, the laboratory does not witness sampling, does not take into consideration the specific sampling procedures used, season, handling, packaging, or shipping methods. The majority of the time, Activation Laboratories Ltd. has had no input into sampling survey design. Where specified Activation Laboratories Ltd. may not have conducted sample preparation procedures as it may have been conducted at the client's assigned laboratory. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ scientifically which may impact the associated interpretation and target rating from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

In general, any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance are not statements of historical fact. These "scientifically based educated theories" should be viewed as "forward-looking statements".

Readers of this interpretive report are cautioned not to place undue reliance on forward-looking information. Forward looking statements are made based on scientific beliefs, estimates and opinions on the date the statements are made and the interpretive report issued. The Company undertakes no obligation to update forward-looking statements or otherwise revise previous reports if these beliefs, estimates and opinions, future scientific developments, other new information, or other circumstances should change that may affect the analytical results, rating, or interpretation.

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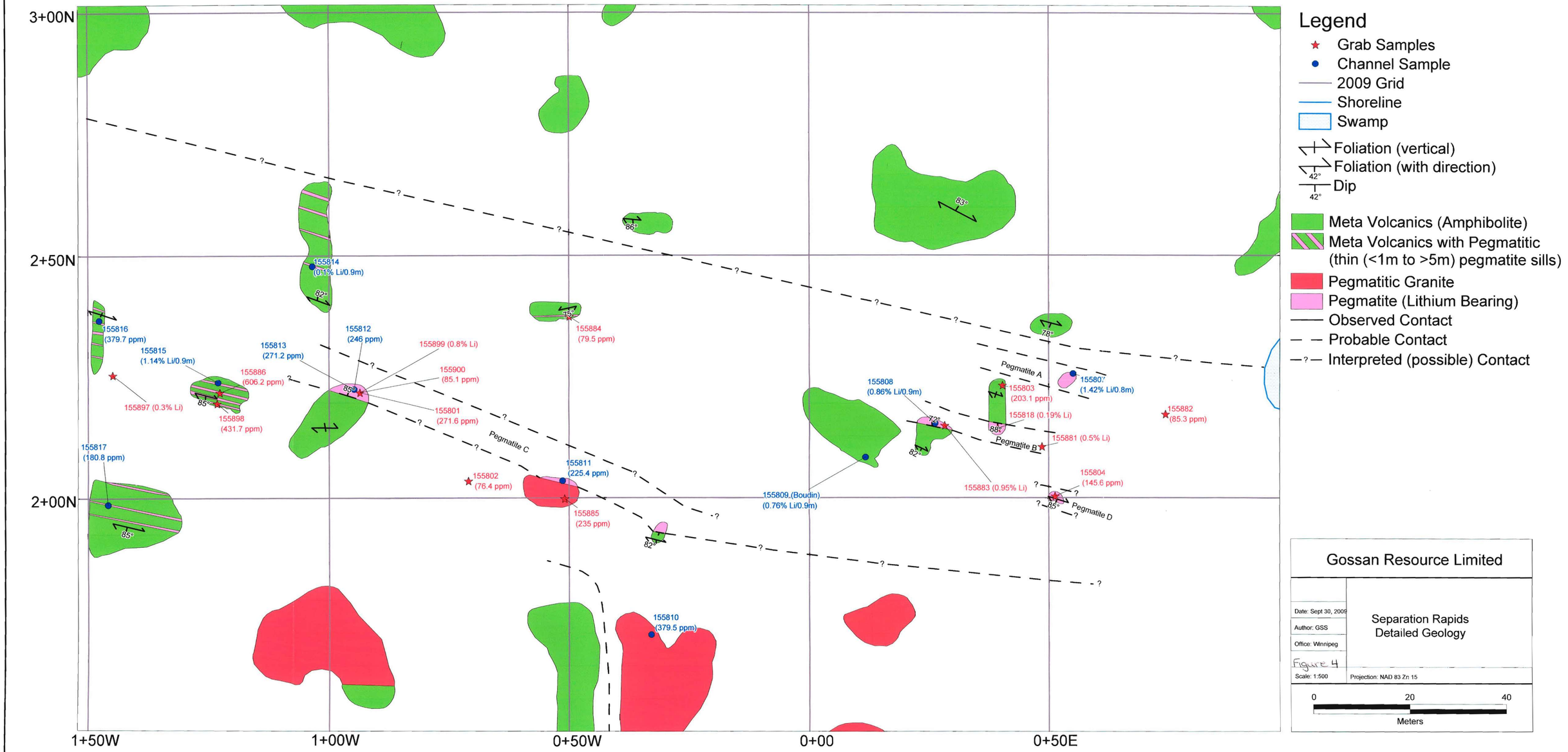


Legend

- Grab Samples
- Channel Sample
- 2009 Grid
- Shoreline
- Swamp
- Foliation (vertical)
- Foliation (with direction)
- 42° Dip
- Meta Volcanics (Amphibolite)
- Meta Volcanics with Pegmatitic (thin (<1m to >5m) pegmatite sills)
- Pegmatitic Granite
- Pegmatite (Lithium Bearing)
- Observed Contact
- Probable Contact
- Interpreted (possible) Contact

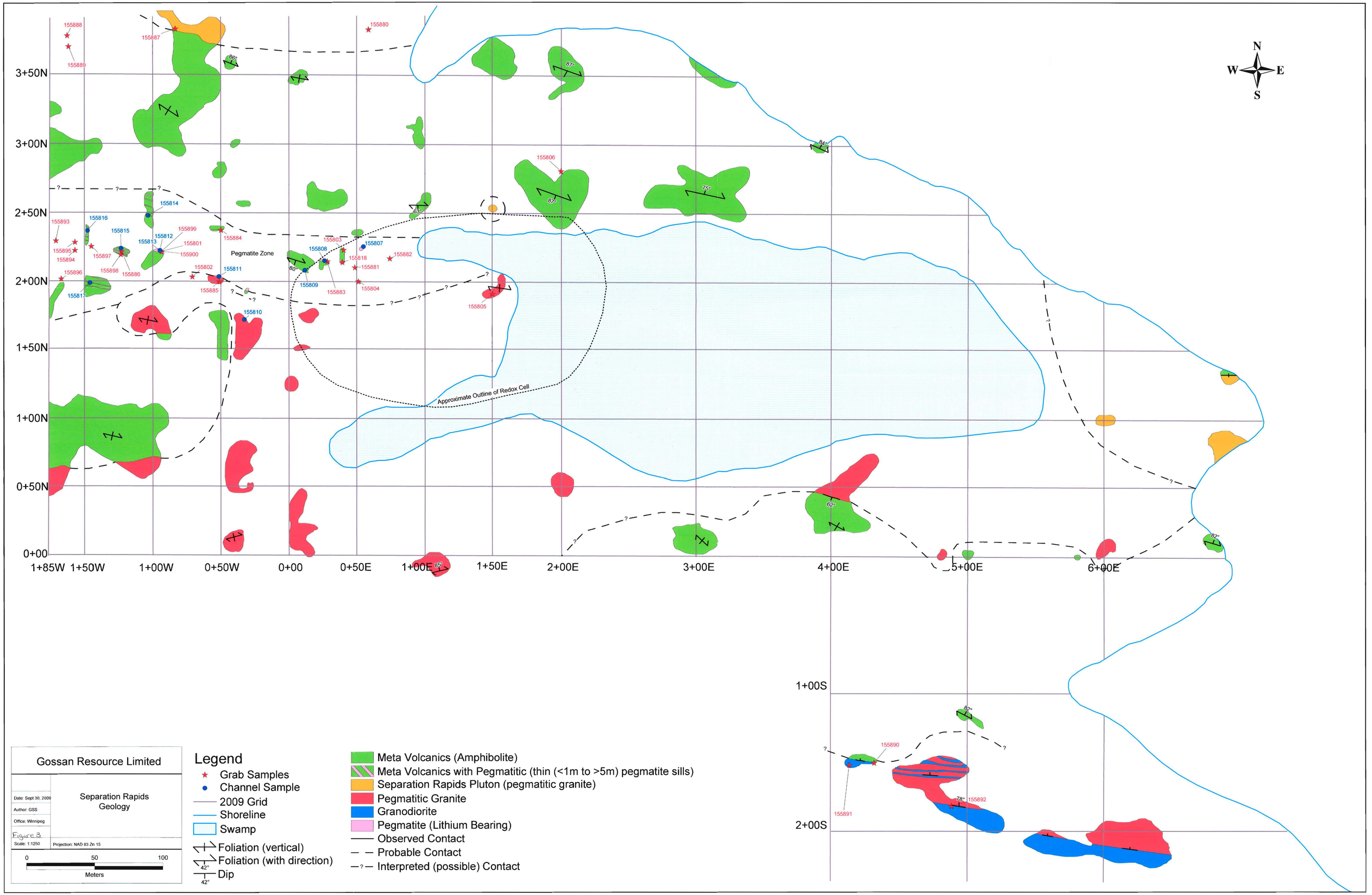
Gossan Resource Limited

Date: Sept 30, 2009
Author: GSS
Office: Winnipeg
Figure 4
Scale: 1:500

Separation Rapids
Detailed Geology

Projection: NAD 83 Zn 15

0 20 40
Meters



Gossan Resource Limited

Separation Rapids Geology

Date: Sept 30, 2009
Author: GSS
Office: Winnipeg
Figure 3
Scale: 1:1250
Projection: NAD 83 Zn 15

0 50 100
Meters

Legend

- Grab Samples
- Channel Sample
- 2009 Grid
- Shoreline
- Swamp
- Foliation (vertical)
- Foliation (with direction) 42°
- Dip 42°

- Meta Volcanics (Amphibolite)
- Meta Volcanics with Pegmatitic (thin (<1m to >5m) pegmatite sills)
- Separation Rapids Pluton (pegmatitic granite)
- Pegmatitic Granite
- Granodiorite
- Pegmatite (Lithium Bearing)
- Observed Contact
- Probable Contact
- Interpreted (possible) Contact