

LONGFORD EXPLORATION

services

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2013 Geological and Geochemical Survey Report Rosie Project

Claim Names:
Rosie 1 – 32 and Rosie 99 - 283

Grant Numbers:
YD90897-YD90928 and YE33531-YE33715

NTS: 115G/09

Latitude 61° 37' N Longitude 138° 04' W

Whitehorse Mining District

Field Work Conducted August 12 to August 14, 2013

**Registered Owner: Longford Exploration Services
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April 30, 2014

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Introduction

The Rosie Project is located 58 kilometers north of Destruction Bay and is composed of 217 mineral claims under the Yukon Quartz Mining Act.

The Rosie Claim Group is host to a highly prospective epithermal gold target indicated by regional stream geochemical surveys and outcrops of highly silicified altered quartz feldspar porphyry near the top of the Ruby Range batholith. The altered outcrops, originally discovered in 2010 by the Yukon Geological Survey are likely the result of a high sulphidation epithermal system. Silicification and potassic alteration in the outcrop are indicative of the type of high-sulphidation, epithermal style mineralization found above and adjacent to deeper porphyry systems. The silicic alteration is likely the result of highly acidic fluids infiltrating the host rock.

The Rosie Claim Group is highly prospective for epithermal gold in quartz stockworks. The regional geology is favorable for epithermal and porphyry style mineralization in the upper portions of the Ruby Range batholith and Rhyolite Creek Volcanic-Plutonic Complex. Regional stream sediment geochemistry data displays anomalous gold values associated with one or more of copper, molybdenum, arsenic, mercury and antimony. Recent work by the Yukon Geological Survey suggests a strong similarity between this portion of the Coast Belt of Southwest Yukon and the prospective Juneau Gold Belt of Alaska.

Longford Explorations 2013 exploration program consisted of three days of geological mapping focused in the northern portion of the claim and 25 whole rock geochemical samples. The contact between the Snowcap Assemblage to the west and the Rhyolite Creek Volcanic complex to the east was refined and is considered anastomosing with a north-south trend. The presence of porphyritic rhyolite dykes of varying width were confirmed within the Snowcap Assemblage as well as cross cutting intrusive rocks to the south. A number of rock samples display strong silicification and kaolinite alteration with other unidentified clays, which are considered indicative of an intrusion related – epithermal system. The highest gold assay from the 2013 program returned 6 ppb Au from a mineralized quartz vein within the volcanic complex. The presence of the silica – kaolinite alteration assemblage, combined with the presence of porphyritic rhyolite dykes and the volcanic complex provide considerable evidence for potential for a high sulphidation epithermal system.

Summary of Previous Investigations

The area surrounding the Rosie Claim Group has been intermittently explored since 1892 but prospecting in the Ruby Range was not established until approximately 1903 when Silver City (or Kluane) was settled at the eastern end of Kluane Lake and became the center of mining activity in the region.

The Haines Road developed in 1944 improved access in and brought on an exploration boom, although no lode mining production is known from the immediate project area. Placer mining features prominently in the creeks located south of the Rosie Claim Group with intermittent production from Fourth of July, Gladstone, Twelfth of July, Ruby and Cultus Creeks.

A number of regional programs focused on the Ruby Range from 1966 through 1986 which exposed a number of showings. In the northern portion of the Rosie Claim Group, the Tyrell

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(MINFILE 115G075) porphyry Cu-Mo-Au prospect is located on an eastern tributary to Tyrell Creek. Geological information is limited but it is believed that quartzite, schist, meta-conglomerate and metagrit are intruded by a stock of alaskite of what was at the time known as the Early Tertiary Nisling Range Suite. The occurrence occurs near the contact between the metamorphic rocks and the stock. The claims were staked by Conwest in 1970 to cover silt anomalies discovered during a regional geochemical sampling program.

Other historical mineral occurrences in the surrounding area suggest that prospects formerly thought to represent Casino-style copper-molybdenum-gold porphyry style mineralization are now believed to be associated with the upper-most and younger fractionated portion of the Ruby Range batholith.

Historical regional aeromagnetic data, although fairly coarse, tends to support the exploration potential of the Rosie Claim Group and regional airborne magnetometer data flown by the Geological Survey of Canada released July 14th, 2011 corroborates the targeting of this property.

The most recent and detailed exploration program on the Rosie property was completed by Solomon Resources in 2011, who staked portions of the property in 2009 and 2010. The field program consisted of geological mapping and geochemical exploration surveys, including 72 stream sediment samples and 420 soil samples. The geological survey initially focused on an outcrop of strongly silicified quartz-feldspar porphyry and it quickly became apparent that the initial showing was part of a much larger epithermal gold target on the property. Mapping also focused on the eastern portion of the property where the contact between the porphyritic rhyolite and the Ruby Range batholith is present and is host to a historic copper – molybdenum - gold occurrence (MINFILE 115G075).

The geochemical surveys outlined a number of anomalous targets on the property that warrant future investigation. A pronounced soil geochemical anomaly is present in the north central portion of the property where the contact of the rhyolite porphyry and quartz-mica schists is present. Values up to 37 ppb Au and 942 ppm As occur in this anomaly covering 1.5 km by 1.0 km on the ridge top with moderately elevated gold stream sediment values in the surrounding drainages.

Anomalous soil geochemical values, up to 32 ppb Au, occur near the contact of the rhyolite porphyry with the intrusive stock in the southeastern portion of the property. Isolated peaks coincide with a porphyritic dyke swarm, directly west of the strongly silicified porphyry outcrop and moderately elevated gold stream sediment values drain this ridge to the west.

In the central portion of the property a subtle soil geochemical anomaly is present in the vicinity of the breccia contact with the intrusive body. This anomaly remains open to the north and contains Au values up to 5 ppb and As values up to 99 ppm.

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List of Claims

Longford Exploration Services owns 100% of the Rosie Claim Group which was acquired from Solomon Resources.

Table 1: Claims for Renewal

Claims for renewal		Ownership	Expiry Date
Claim name	Grant number		(Current)
Rosie 1 - 32	YD90897-YD90928	Longford Exploration Services Limited	2014/11/11
Rosie 99 - 283	YE33531-YE33715	Longford Exploration Services Limited	2014/11/11

Longford Exploration President and CEO James Rogers filed an Application to Group Mineral Claims (YQMA Form 12) in respect of these claims on April 30, 2014.

Physiography and Location

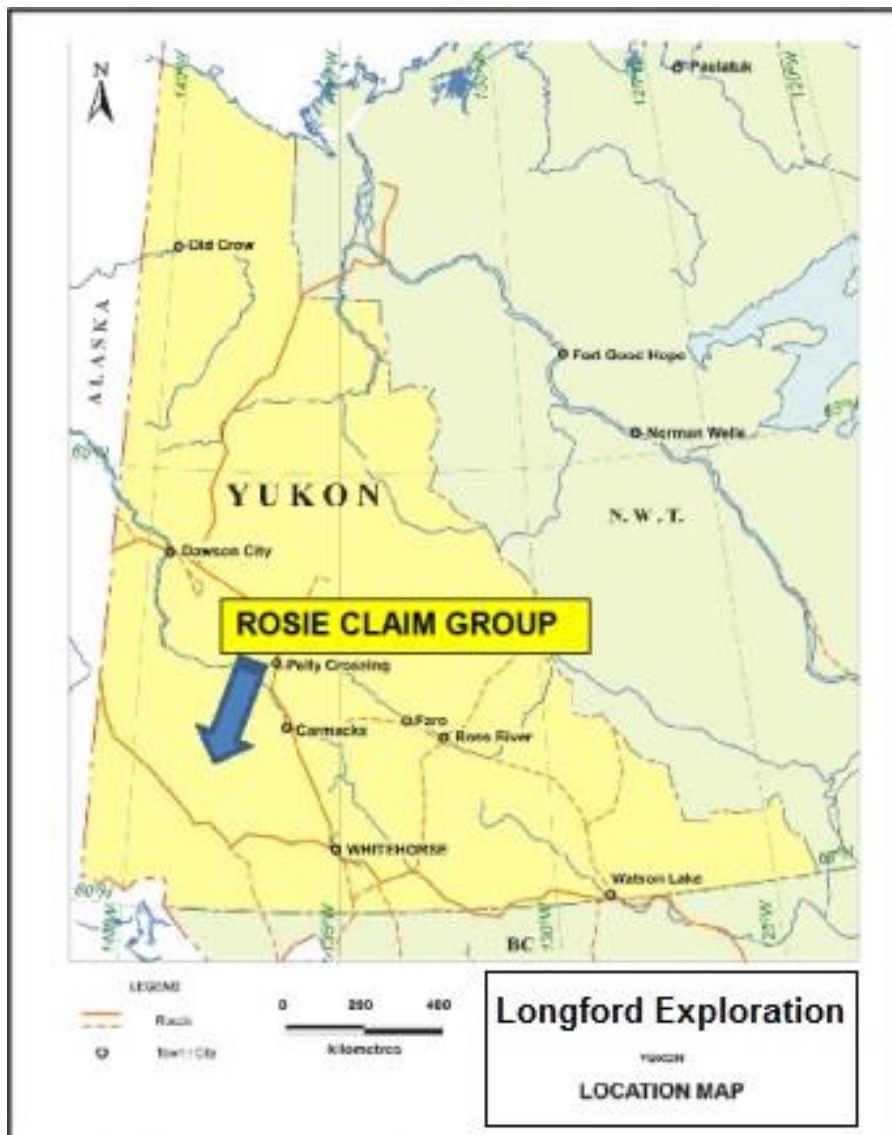


Figure 1: Location Map

The Rosie Claim Group is located approximately 58 kilometers north of Destruction Bay and 107 kilometers northwest of the village of Haines Junction from which the Haines Highway extends 250 kilometers south to the deep-water port of Haines, Alaska. The Alaska Highway is approximately 58 kilometers to the south of the project area.

The Rosie Claim Group includes the easterly tributaries of Tyrell Creek as well as the two kilometer length of Tyrell Lake which provides an ideal staging ground for exploration activity supported by float plane.

Airstrips are located at Haines Junction, Silver City and Burwash Landing and charter helicopter and fixed wing service is available at Haines Junction and seasonally at Silver City.

Commercial accommodation is available in Destruction Bay, Haines Junction and Silver City, and the former remains the best venue for staging exploration in the project area.

The forest cover of this area is light, with tree line at approximately 4000 feet elevation. Black spruce, white spruce, balsam, poplar and white poplar dominate the forested slopes; alder willow and sub-alpine flora are found at and above the timberline.

The project area has a dry continental climate. Summers are short and hot with temperatures up to 30 degrees Celsius; winters are severe with short daylight hours and temperatures down to -40 degrees Celsius.

Geological Setting

Israel, Murphy, Bennett, Mortensen and Crowley (2011) published a comprehensive review of the geology and mineral potential of the Kluane Schist, the Ruby Range batholith and the Yukon-Tanana terrane in southwestern Yukon. This is the first major recent geological synthesis conducted of this area. (Figures 2, 3 and 4)

The dominant regional geological feature is the Ruby Range Batholith, a plutonic complex comprised of quartz diorite, tonalite and granodiorite with lesser amounts of diorite, gabbro and granite. The base of the Ruby Range batholith is dominated by strongly to moderately foliated quartz-diorite and the batholith becomes more felsic up-section to the north culminating in voluminous amounts of quartz feldspar porphyry.

The Rhyolite Creek Volcano-Plutonic complex refers to the youngest, porphyritic phase of the Ruby Range Batholith and its volcanic equivalents, the latter of which consist of intermediate volcanic flows, breccia and tuff, flow-banded rhyolite and felsic tuff with rare mafic flows, breccia and tuff. Where volcanic rocks are mafic to intermediate in composition, the breccias are almost always found at the base; where the volcanic rocks are felsic they are commonly associated with quartz porphyritic intrusions and a domelike architecture.

Rocks formerly known as the Aishihik Lake Metamorphic Belt, the Nisling Terrane and the Aishihik Metamorphic Suite were found to be correlative (although more strongly metamorphosed) than rocks of the Snowcap and Finlayson Assemblages of the Yukon Tanana Terrane along strike to the northwest. The Yukon-Tanana Terrane structurally overlies the Ruby Range Batholith and locally occurs as isolated roof pendants. The terrane consists of psammitic schist, quartzite, marble, garnet amphibolite and rare metaplutonic rocks. In the vicinity of the Rosie Claim Group rocks of the Yukon-Tanana terrane take on a higher degree of metamorphism, possibly lying within the dynamothermal aureole of the Early Jurassic Aishihik batholith. Yukon-Tanana terrane in this area comprises quartz-muscovite-garnet schist interlayered with carbonaceous quartzite, garnet amphibolite and thick beige to white weathering marble units. The structurally highest rocks in Yukon-Tanana terrane consist of coarse-grained, quartz-rich 'grits' and grey weathering carbonaceous quartzite.

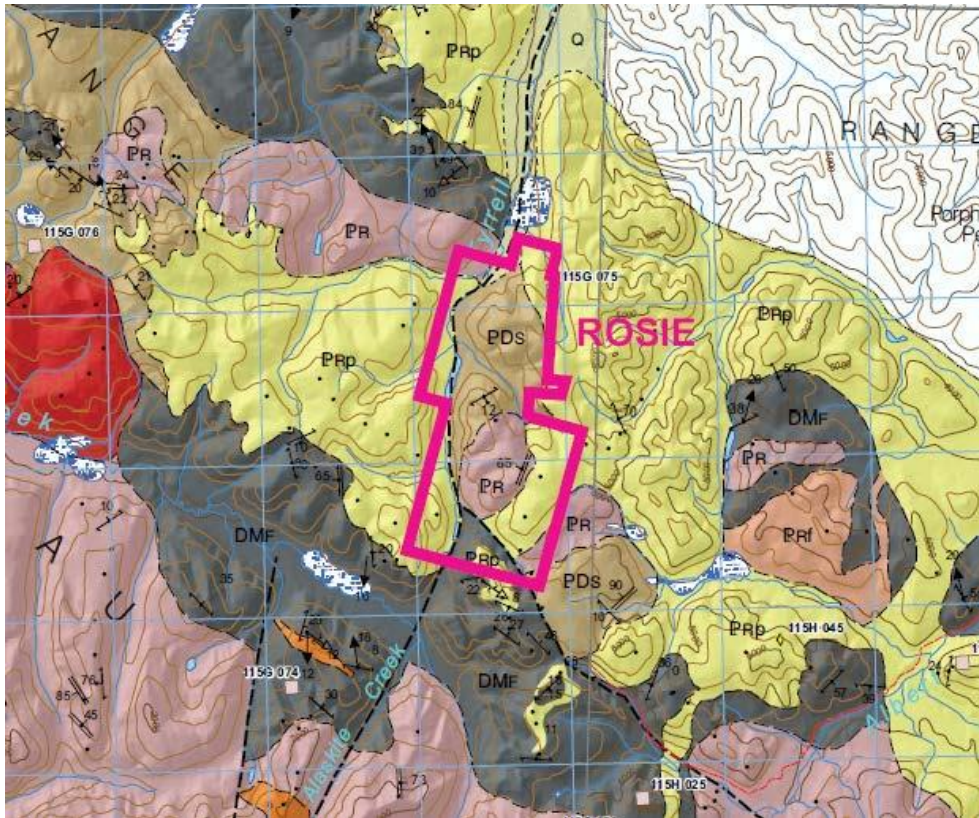


Figure 2: Regional Geological Setting (After Israel, S., Cobbett, R., Westberg, E., Stanley, B. and Hayward, N., 2011. Preliminary bedrock geology of the Ruby Ranges, southwest Yukon (Parts of NTS 115G, 115H, 115A and 115B) (1:150 000 scale), Yukon Geological Survey Open File 2011-2.) Note MINFILE 115G075 at the northeastern corner of the claim group.

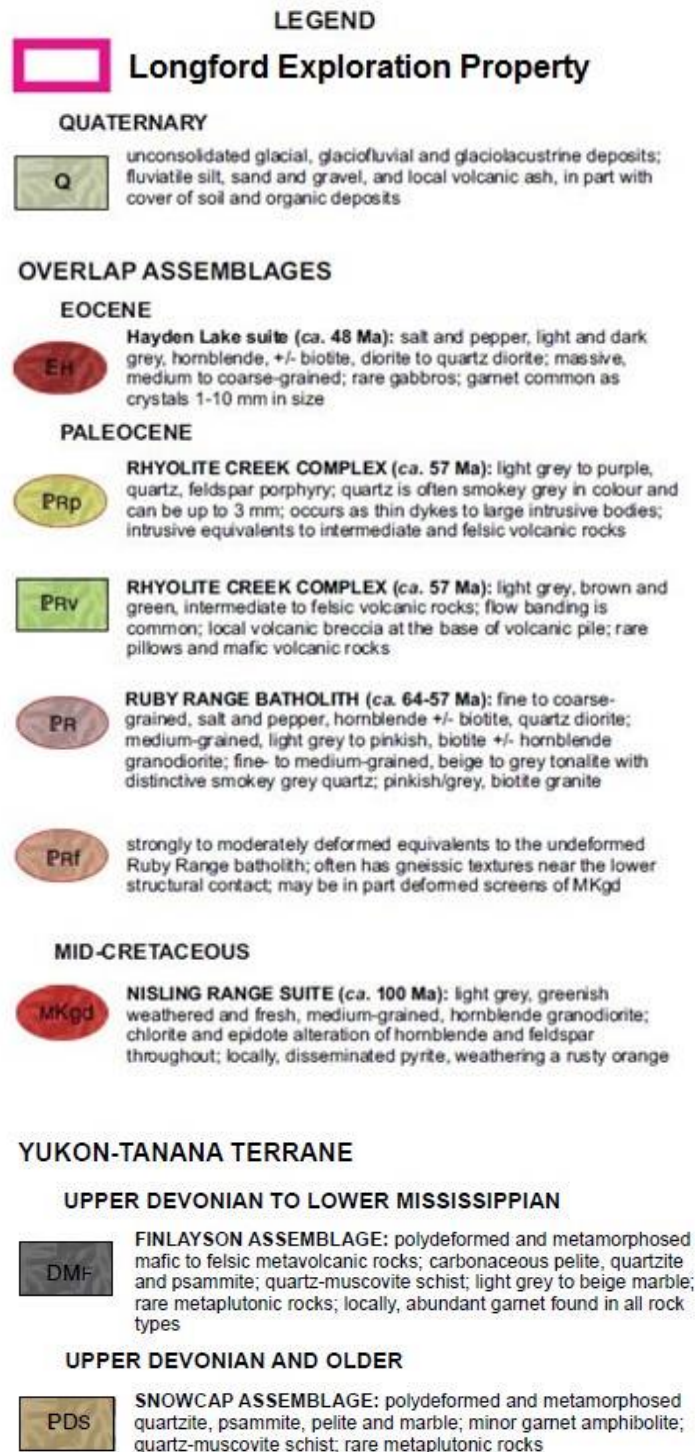


Figure 3: Geological Legend (After Israel, S., Cobbett, R., Westberg, E., Stanley, B. and Hayward, N., 2011. Preliminary bedrock geology of the Ruby Ranges, southwest Yukon (Parts

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of NTS 115G, 115H, 115A and 115B) (1:150,000 scale), Yukon Geological Survey Open File 2011-2.)

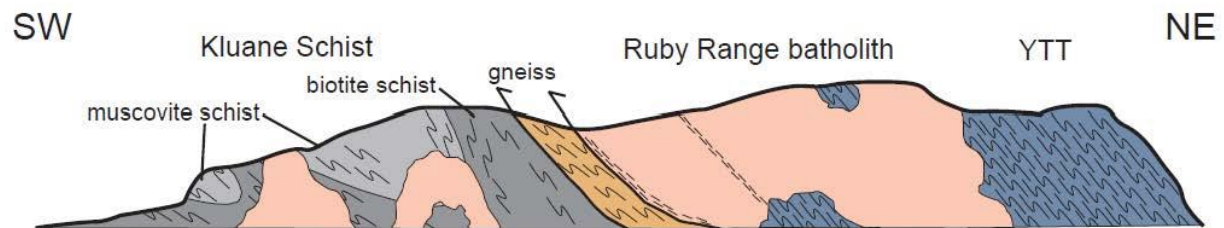


Figure 4: Structural cross-section through the Coast Belt (From Israel et al 2010)



Figure 5: Rosie Claim Group View South (Highly silicified altered quartz feldspar porphyry at the top of the Ruby Range batholith, likely the result of a high sulphidation epithermal system.)

Work Program: Geological and Geochemical Survey

The 2013 field program was carried out on the property from August 12 – 14, 2013 and consisted of geological mapping, prospecting and a geochemical survey, followed by thin section petrography performed in Burnaby, BC. Field personnel included Longford Exploration President James Rogers, and field assistant Julia Marsh. Field work was staged out of a fly camp on the property with helicopter access provided by Trans North Helicopters out of Haines Junction.

Geological Survey

Geological mapping was focused in the northern portion of the claim which hosts an outcrop of highly silicified quartz-feldspar porphyry, discovered by the Yukon Geological Survey in 2011. Much of the northern portion of the claim is underlain by quartz mica schist and quartz feldspar phyrlic rhyolite.

Israel et al (2011) noted with respect to this outcrop:

“Silica ± potassic alteration was observed at the plutonic-volcanic transition in the upper part of the batholith. This alteration has the appearance of high sulphidation, epithermal style mineralization, found above and adjacent to deeper porphyry systems. The silica alteration is likely the result of highly acidic, low pH fluids infiltrating the host rock, dissolving everything but the silica.”



Figure 6: Massive Silicification of Rhyolite Creek Quartz - Feldspar Porphyry (Photo Courtesy Yukon Geological Survey)

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In addition to this newly discovered silicified zone, other discrete targets exist on the Rosie Claim Group. The contact of the Rhyolite Creek complex with the Ruby Range Batholith and Devonian Snowcap Assemblage on the eastern bank of Tyrell Creek encompasses an historic copper-molybdenum gold mineral occurrence and other targets in the northwest and southwest portions of the property include regional stream sediment geochemical anomalies in both the Rhyolite Creek complex and Ruby Range intrusives.

The Geological Map completed from 2013 mapping and 2011 mapping performed by Solomon Resources appears as Figure 7.

Porphyritic rhyolite of the Rhyolite Creek Volcano-Plutonic Complex underlie most of the eastern portions of the Rosie claims, and locally exhibits a fresh green or pink/purple matrix, generally containing smoky quartz crystals (1-3mm) and/or K-feldspar and plagioclase crystals (2 mm to 5 cm and generally seen within the green matrix) ± biotite or apatite. Weathering is red to dark brown with rare clay alteration of porphyritic crystals. The porphyritic rhyolite generally displays flow banding along the contact with the Ruby Range Batholith and in rare cases spiracles indicating rapid cooling. Areas of bleached rhyolite (creamy orange to grey-white, rare pinkish tint) form north-south trending dykes which appear to cross cut the fresh rhyolite porphyry and igneous body and bear a strong relationship to local hydrothermal breccia. These could possibly be hydrothermal vents or large scale joint sets. The bleached rhyolite contains iron-stained vugs with a completely bleached matrix, locally displaying silicification with rare manganese staining and quartz crystals.

Psammite, pelite, quartz-mica schist and graphitic schist of the Upper Devonian Snowcap Assemblage underlies the northwestern portion of the Rosie Claim Group and locally appears to be intruded by and crosscut by rocks of the Ruby Range Batholith and Rhyolite Creek Complex. The schist generally weathers to a red-brown or red-dark grey colour, and contains many small (1-2mm) and few large (1-5cm) quartz veins, some of which have been weathered and iron-stained. Outcrops display multi-level folds and crenulations. The contact between the Snowcap Assemblage and the Rhyolite Creek Volcanic Complex in the northern portion of the claim is anastomosing with a strong north-south trend.

The intrusive rocks of the Ruby Range Batholith underlie the south-central portions of the Rosie claims with sparse outcroppings in the north. Locally, the intrusive rocks vary from fine to coarse grained biotite granite to granodiorite. Hornblende is often seen within the granite, generally in coarse-grained variations and in rare occasions tourmaline is observed. Quartz veins are a minor occurrence but often contain sulphides (generally arsenopyrite) and/or chlorite. Areas of weathering or alteration seem to have both tectonic (brecciated contacts) and hydrothermal characteristics (re-mineralization). Iron-stained vugs are often seen in weathered areas. Where the intrusive unit is seen in contact with the rhyolite unit there is generally a fine-grained and silicified contact zone of green- or blue-grey coloration.

Although it was not mapped in 2013, a tectonic breccia mapped in 2011 by Solomon Resources is present along the northernmost contact of the Ruby Range Batholith and schist of the Snowcap Assemblage. The breccia is most likely due to the igneous intrusive, but may also be in part related to volcanic intrusive. Locally, two variations are present: the first displays a light coloured matrix with uneven clasts and the second displays a dark, biotite/chlorite matrix containing clasts of the first variation. Clasts are generally uneven and unaltered, consisting of a wide variety of rock type (schist, granite, etc.) and surfaces locally weather to a dark red-brown colour, but remain quite fresh elsewhere.

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Two unpolished thin sections were created by Vancouver Petrographics with petrographic analyses completed by Jeremy Hanson, one of the authors of the report. The first section was taken from a sample of highly silicified quartz feldspar porphyry (Figure 6) and the second from an unaltered quartz feldspar phyric rhyolite. Thin section petrography on the highly silicified quartz feldspar porphyry verified that the rock is intensely brecciated by silica and clay which forms a stock work of 0.5 mm creamy white silica + clay veinlets, occupying up to 40% of the rock. The remainder of the rock is intensely pervasively silica altered, leaving relict phenocrysts unidentifiable. Thin section petrography on the second sample concluded the unaltered rhyolite was composed of a glassy, weakly devitrified, microcrystalline quartz groundmass (50%) with 5% euhedral fine grained magnetite. K-feldspar phenocrysts (15%) are 2 – 10 mm euhedral crystals, plagioclase phenocrysts (15%) form 1 – 8 mm euhedral – anhedral weakly clay altered crystals, quartz phenocrysts (10%) form 1 – 3 mm euhedral crystals and hornblende phenocrysts (10%) are 2 – 5mm, euhedral, strongly altered crystals.

Geochemical Survey

Longford Exploration field crews conducted a geochemical survey in the northern portion of the Rosie claim in 2013 which encompasses 25 whole rock geochemical samples.

Each sample consisted of approximately 2 kilograms of rock taken from an outcrop, placed in a sample bag and sealed, then taken and analyzed at Acme Labs in Vancouver, B.C.

Rock sample locations are shown in Figure 8 and the gold, silver, arsenic, copper, mercury, molybdenum and nickel analyses appear in Figures 9, 10, 11, 12, 13, 14 and 15 (Appendix A).

The analytical data is summarized in Appendix B with the Certificate of Analyses.

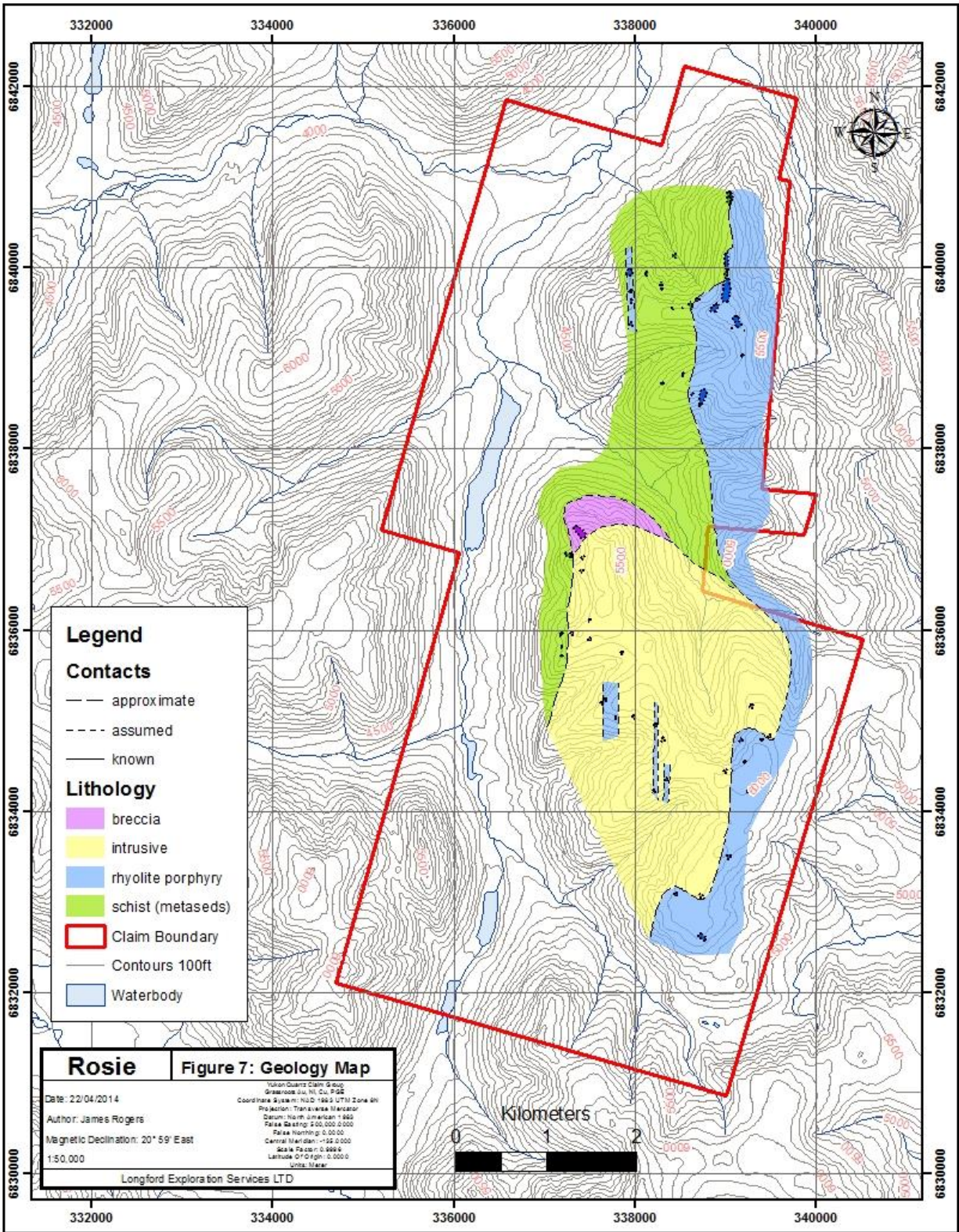


Figure 7: Geological Map of the Rosie Claim

Interpretation and Conclusions

Time constraints limited fieldwork for this project to 3 days of mapping focused in the northern section of the property and 25 rock samples.

Geological mapping concentrated in the northern section of the Rosie claim outlined a number of important geological characteristics. Firstly, the contact between the Rhyolite Creek Volcanic Complex and the Snowcap Assemblage was refined and is considered to be anastomosing with a general north-south trend. The presence of porphyritic rhyolite dykes was confirmed in the northern section of the property. The dykes vary in thickness, intrude both the Snowcap Assemblage to the west and fresh unaltered intrusive rocks to the east, and are generally sub parallel to the Snowcap – Rhyolite Creek Volcanic Complex contact.

A number of samples taken from the northern section of the property display intense pervasive silicification and kaolinite alteration with other unidentified clay minerals. The presence of this alteration assemblage is indicative of an intrusion related - high sulphidation epithermal system. This type of alteration assemblage may form widespread zones in the upper parts of some porphyry systems and as well as more restricted alteration halos around high sulphidation epithermal deposits. The presence of porphyritic rhyolite dykes in the Snowcap Assemblage and the Rhyolite Creek Volcanic Complex provide the correct geologic setting for the development of these types of deposits. The rock sample which returned the highest Au assay (6 ppb) was taken from a mineralized quartz vein within the Rhyolite Creek Volcanic Complex. Other notable assay values include 35 ppm As, 109 and 106 ppm Cu, 32 ppm Ni.

More detailed mapping is warranted in the northern section of the Rosie claim, focusing on alteration minerals, porphyritic dykes, quartz veins and structures. A study combining orientations of dykes, veins and structures may lead to the targeting of a deeper source with the potential for stronger mineralization.

The 2013 field program was unable to touch on the southern portion of the Rosie property, however recommendations from Rogers (2011) remain pertinent to the advancement of the project and are summarized as follows.

Elevated gold soil geochemical values up to 32 ppb appear near the contact of the rhyolite porphyry with the intrusive stock in the southeastern portion of the claim group, and isolated peaks appear to coincide with the porphyritic dyke swarm just west of the silicified porphyry outcrop that first drew attention to this property. Moderately elevated gold stream sediment values drain this ridge to the west and this area should be explored in detail in the 2014 season.

A more pronounced soil geochemical anomaly appears in the north central portion of the property, where the rhyolite porphyry is in direct contact with the quartz-mica schist and locally appears as north trending dykes in the schist. Values up to 37 ppb Au and 942 ppm As occur in an anomaly covering 1.5 km by 1.0 km on the ridge top with moderately elevated gold stream sediment values in surrounding drainages. This area presents a more compelling target for the 2014 field season, and should be prioritized for follow-up.

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A subtle yet compelling soil geochemical anomaly appears in the vicinity of the breccia contact with the intrusive body in the central portion of the property where Au values up to 5 ppb and As values up to 99 ppm occur in a zone open-ended to the north. This area will require a more detailed look in 2014

The results of the 2011 field program suggest that the 2014 field program should include the establishment of soil geochemical grids over the three discreet soil geochemical anomalies identified herein, with sample spacing of 25 meters and 50 meters on lines oriented east-west for a total of 1200 soil samples.

Detailed mapping of the breccia zone and the northernmost geochemical anomaly is recommended, with further prospecting traverses to be made in the vicinity of the original exposure of the silicified rhyolite porphyry and the Tyrell MINFILE occurrence in the northern portion of the property. Provision should be made for 100 rock samples for assay. Depending on results of these inquiries, contingency planning might contemplate trenching late in the 2014 field season.

A budget of \$ 66,500 is proposed for this follow-up program.

Table 2: Proposed Budget for follow-up program.

Item	Notes	Cost
Supervising Geologist	5 days @ 750	3750.00
Project Geologist	15 days @ 400	6000.00
Project Supervisor	15 days @ 350	4750.00
Field Assistant	30 days @ 300	9000.00
Helicopter Support	15 Hr @ 2200	33000.00
Food and Consumable Supplies	20 days @ 150	3000.00
Accommodation	Camp and Commercial	3000.00
Analytical - Soils	1200 @ \$25	3000.00
Analytical - Rocks	100 @ \$100	1000.00
	TOTAL	66,500.00

Statement of Qualifications

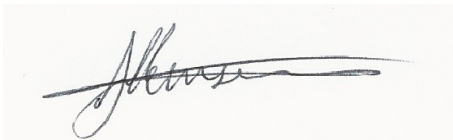
I, Jeremy Hanson of Surrey, British Columbia do hereby certify that I:

1. am a graduate of Simon Fraser University, Burnaby, British Columbia with a Bachelor of Science (Honours with distinction) in Earth Sciences, 2013.
2. am a member of the Geological Association of Canada
3. have worked in the mineral exploration industry since 2010 in northern Ontario and British Columbia.
4. am an exploration geologist with Longford Exploration Services Limited.
5. am a co-author of the report titled, “2013 Geochemical and Geological Exploration Program Rosie Property”, dated: April 30, 2014.
6. am independent of the property owner, Longford Exploration Services and do not have an interest in the property.

Dated at Surrey, BC, this 4th day of April 30, 2014.

Respectfully submitted,

Longford Exploration Services Limited



Jeremy Hanson, BSc (Hons)
March 4, 2014

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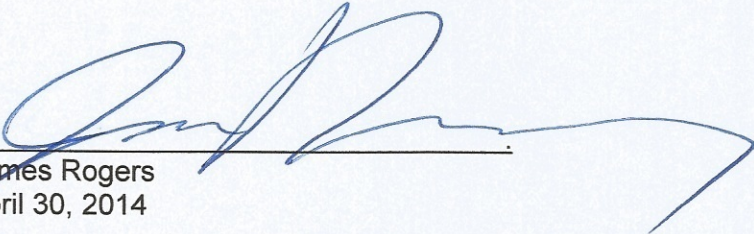
I, James Rogers of Burnaby, British Columbia do hereby certify that I:

1. am attending Simon Fraser University, Burnaby, British Columbia and am currently enrolled in the Bachelor of Science-Economic Geology Program with an expected graduation of 2015.
2. am a student member of the Geological Association of Canada
3. am a student member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. have been employed in the mineral exploration industry as a geological technician, geologist assistant, project manager and president in Yukon, British Columbia, Quebec and Rwanda since 2007.
5. am the President and CEO of Longford Exploration Services Limited.
6. am a co-author of the report titled, "2013 Geochemical and Geological Exploration Program Rosie Property", dated: April 30, 2014.

Dated at Burnaby, BC, this 4th day of April 30, 2014.

Respectfully submitted,

Longford Exploration Services Limited


James Rogers
April 30, 2014

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Statement of Expenditures

An Application for a Certificate of Work was filed at Whitehorse Mining Recorder 2011 allocating \$21,867.00 in work to the renewal of these claims.

Table 3: Statement of Expenditures

Item	Notes			Cost
Project Manager	J. Rogers	Aug10-22	13 days @360/day	\$ 4,680.00
Field Assistant	J. Marsh	Aug10-19	10 days at \$250/day	\$ 2,500.00
Helicopter Support	Trans North Haines Junction			\$ 5,262.60
Food and Consumable Supplies	Food for crew in support of program, cooking gas, sample bags etc.			\$ 895.97
Accommodation	Camp and Commercial	Aug10-Aug22		\$ 1,278.25
Analytical	Acme Analytical			\$ 750.18
Report Preparation	Jeremy Hanson	Figure Preparation		\$ 6,500.00
		Map Making		
	James Rogers	Data Compilation including historic		
		Writing/editing		
		Formatting		
			TOTAL	\$ 21,867.00

Selected References

Colpron, M., 2006. Tectonic assemblage map of Yukon-Tanana and related terranes in Yukon and northern British Columbia (1:1,000,000 scale); Yukon Geological Survey, Open File 2006-1.

Israel, S., Cobbett, R., Westberg, E., Stanley, B. and Hayward, N., 2011. Preliminary bedrock geology of the Ruby Ranges, southwest Yukon (Parts of NTS 115G, 115H, 115A and 115B) (1:150 000 scale), Yukon Geological Survey Open File 2011-2.

Israel, S., Murphy, D., Bennett, V., Mortensen, J. and Crowley, J., 2011. New insights into the geology and mineral potential of the Coast Belt in southwestern Yukon. In: Yukon Exploration and Geology 2010, K.E. MacFarlane, L.H. Weston and C. Relf (eds.), Yukon Geological Survey, p. 101-12

Appendix A.

Sample Location and Assay Maps

Figure 8: Sample and Traverse Locations

Figure 9: Au Assays

Figure 10: Ag Assays

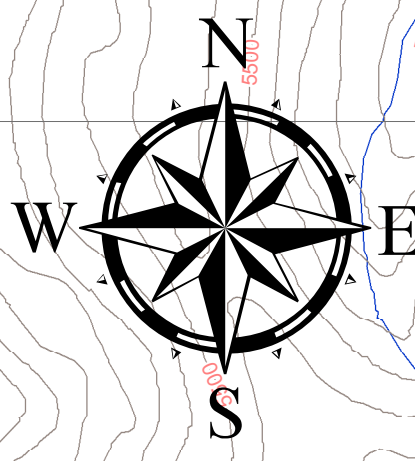
Figure 11: As Assays

Figure 12: Cu Assays

Figure 13: Hg Assays

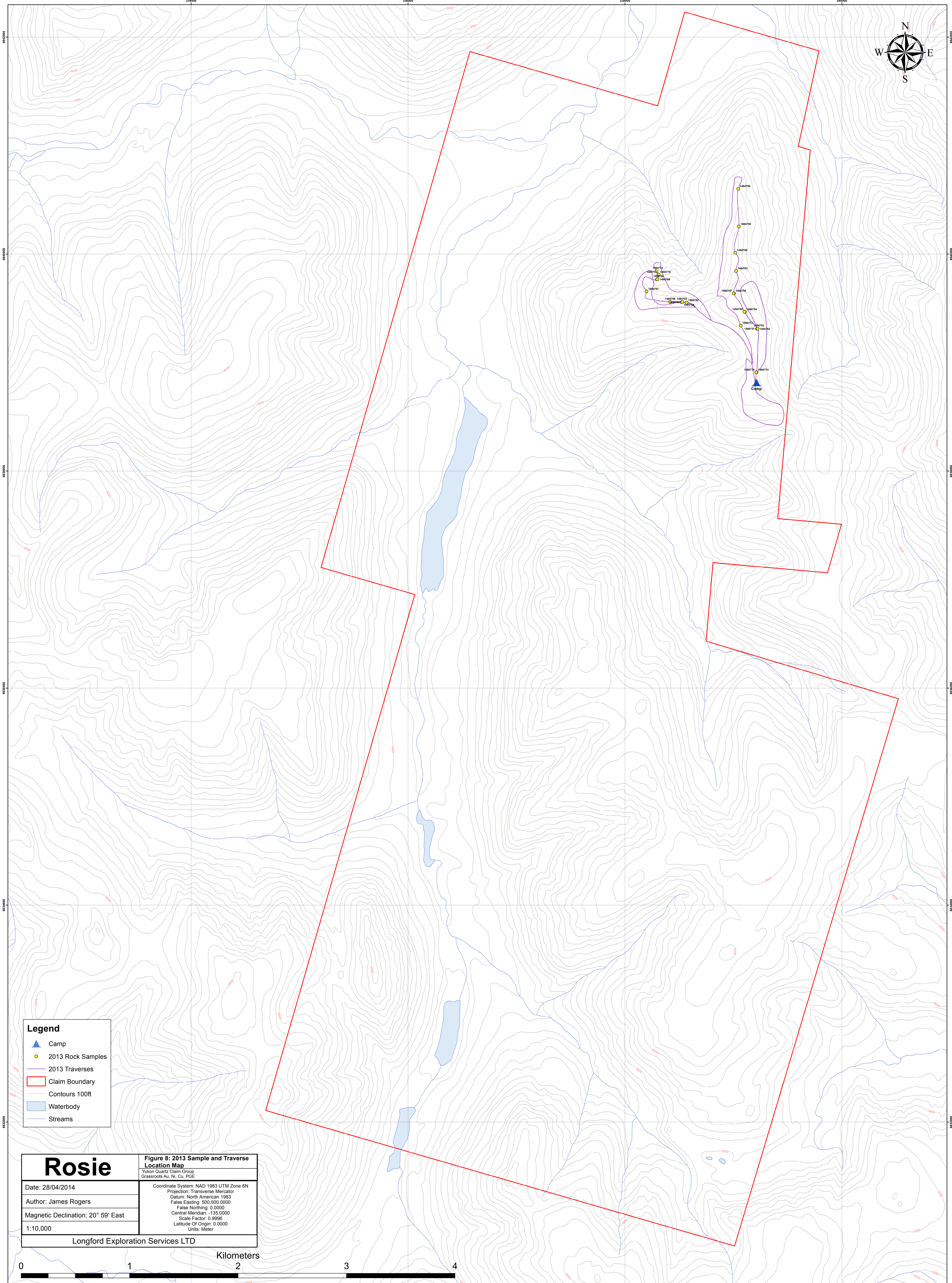
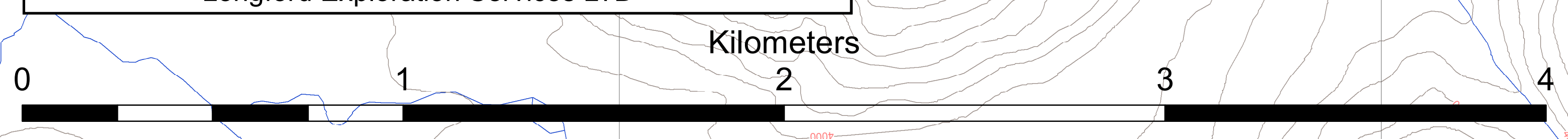
Figure 14: Mo Assays

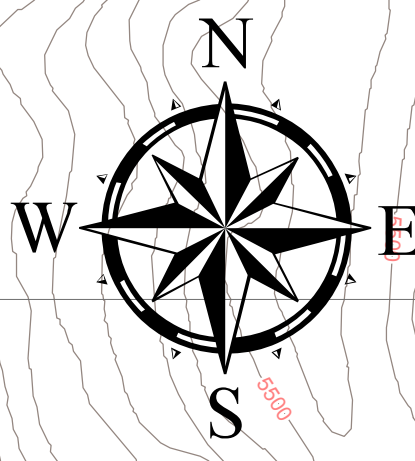
Figure 15: Ni Assays



- Legend**
- Camp
 - 2013 Rock Samples
 - 2013 Traverses
 - Claim Boundary
 - Contours 100ft
 - Waterbody
 - Streams

Rosie	Figure 8: 2013 Sample and Traverse Location Map
	Yukon Quartz Claim Group Greasebrook Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.0000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 28/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	





Geochemical Legend

2013 Samples Au ppb

- Au ppb
- >3
 - 3-4
 - 4-5
 - 5-6

2011 Soil Sample

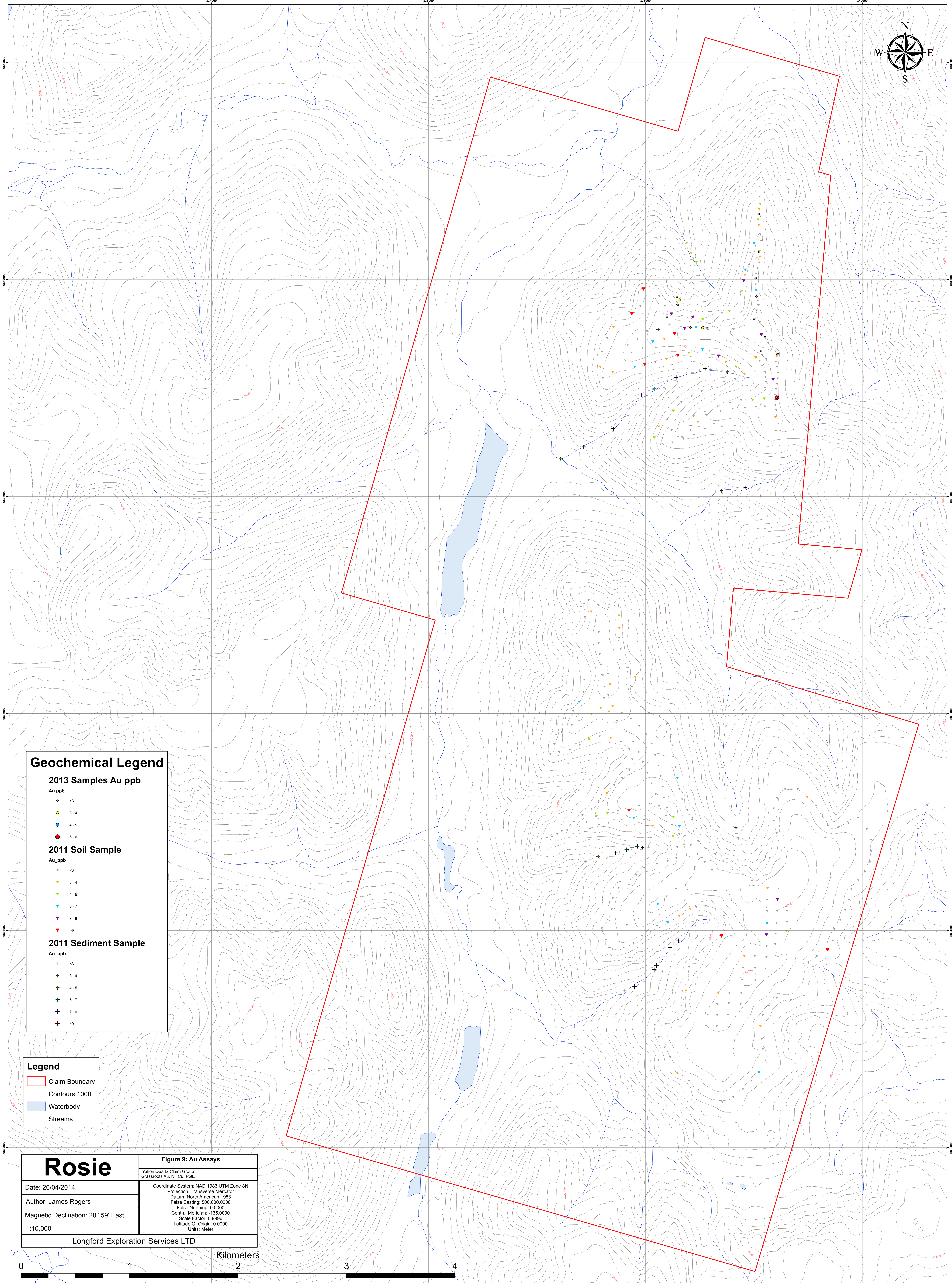
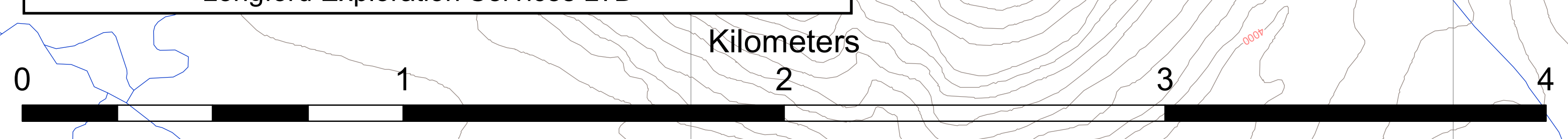
- Au_ppb
- <3
 - 3-4
 - 4-5
 - 5-7
 - 7-9
 - >9

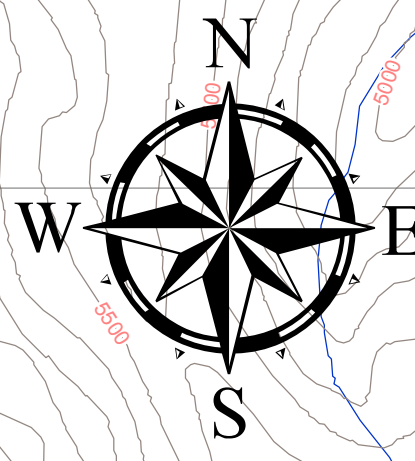
2011 Sediment Sample

- Au_ppb
- <3
 - 3-4
 - 4-5
 - 5-7
 - 7-9
 - >9

- #### Legend
- Claim Boundary
 - Contours 100ft
 - Waterbody
 - Streams

<h1>Rosie</h1>	Figure 9: Au Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.0000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	





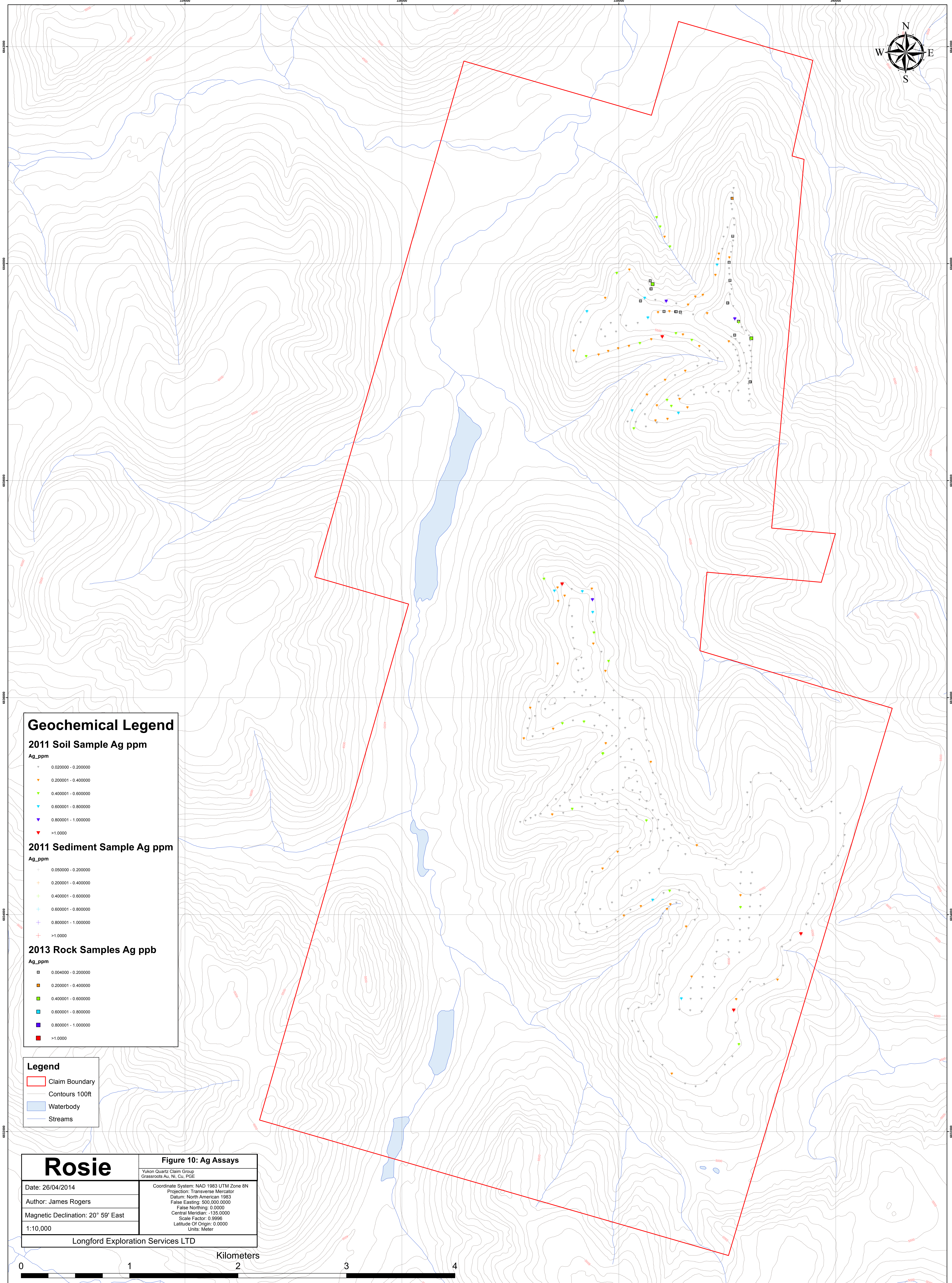
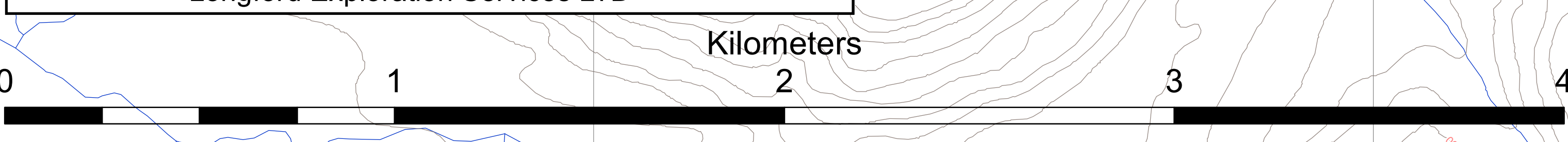
Geochemical Legend

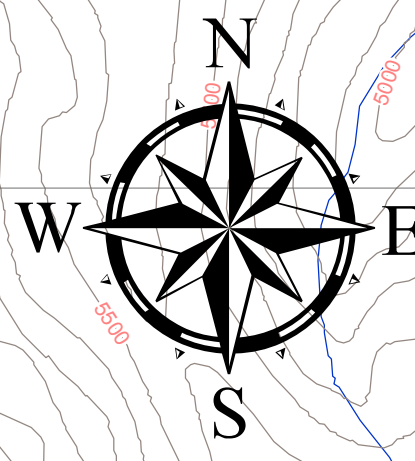
- 2011 Soil Sample Ag ppm**
Ag_ppm
- 0.020000 - 0.200000
 - 0.200001 - 0.400000
 - 0.400001 - 0.600000
 - 0.600001 - 0.800000
 - 0.800001 - 1.000000
 - >1.0000
- 2011 Sediment Sample Ag ppm**
Ag_ppm
- 0.050000 - 0.200000
 - 0.200001 - 0.400000
 - 0.400001 - 0.600000
 - 0.600001 - 0.800000
 - 0.800001 - 1.000000
 - >1.0000
- 2013 Rock Samples Ag ppb**
Ag_ppm
- 0.004000 - 0.200000
 - 0.200001 - 0.400000
 - 0.400001 - 0.600000
 - 0.600001 - 0.800000
 - 0.800001 - 1.000000
 - >1.0000

- Legend**
- Claim Boundary
 - Contours 100ft
 - Waterbody
 - Streams

Rosie	Figure 10: Ag Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.000000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000

Longford Exploration Services LTD





Geochemical Legend

2011 Soil Sample As ppm

As_ppm

- 0.400000 - 5.000000
- 5.000001 - 10.000000
- 10.000001 - 50.000000
- 50.000001 - 100.000000
- 100.000001 - 200.000000
- 200.000001 - 1000.000000

2011 Sediment Sample As ppb

As_ppm

- 1.800000 - 5.000000
- 5.000001 - 10.000000
- 10.000001 - 50.000000
- 50.000001 - 100.000000
- 100.000001 - 200.000000
- 200.000001 - 1000.000000

2013 Rock Samples As ppm

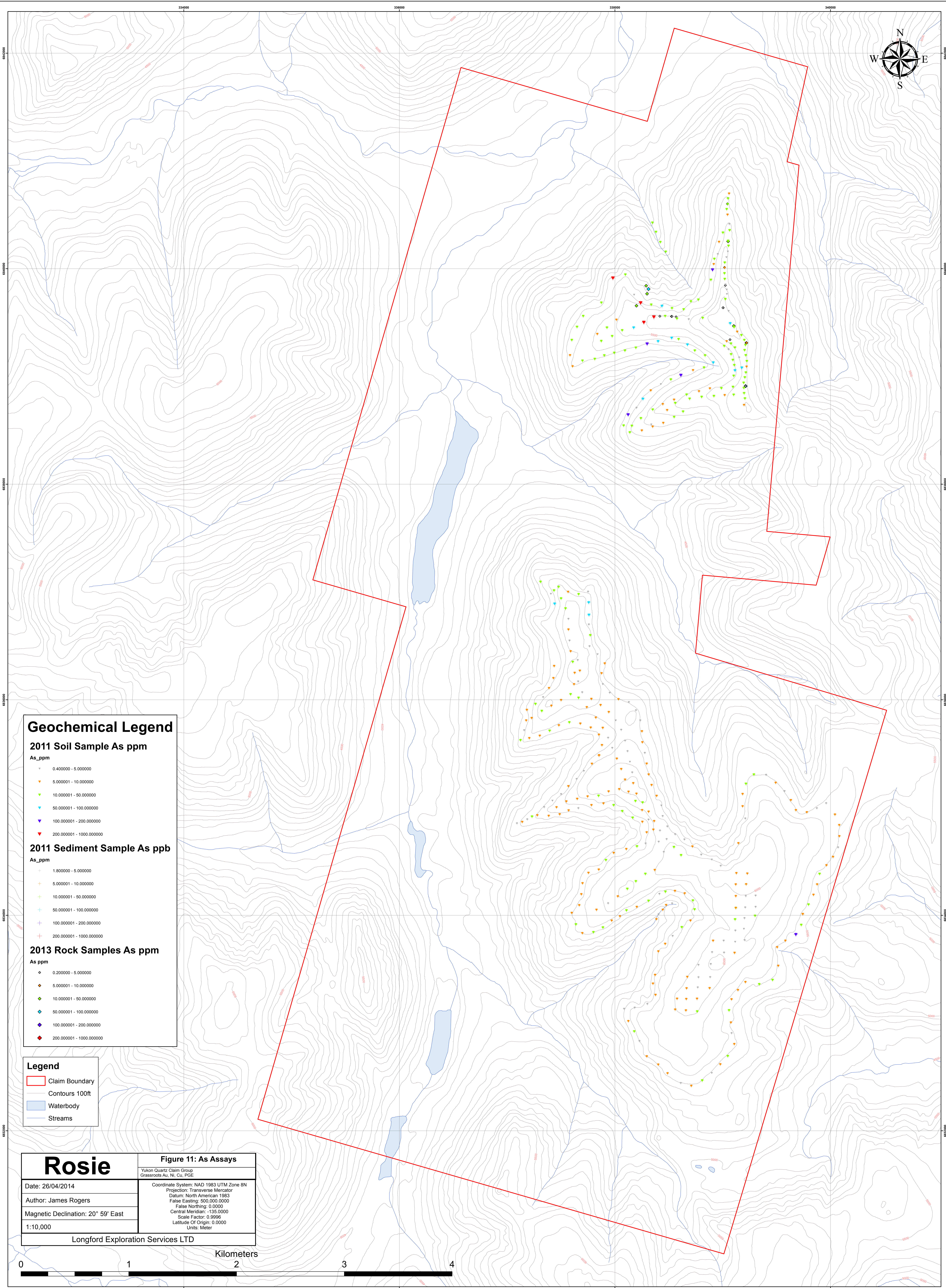
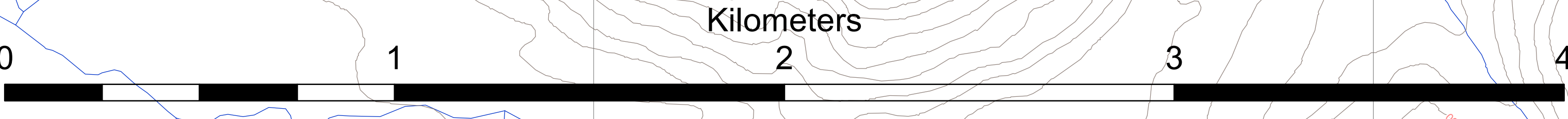
As ppm

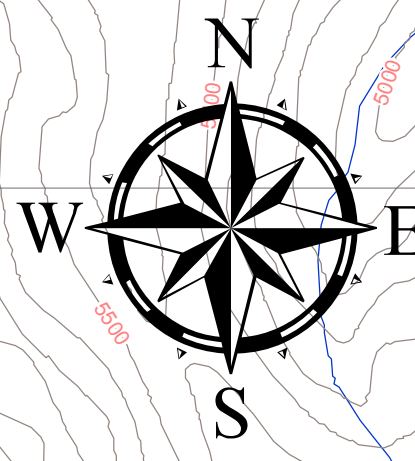
- 0.200000 - 5.000000
- 5.000001 - 10.000000
- 10.000001 - 50.000000
- 50.000001 - 100.000000
- 100.000001 - 200.000000
- 200.000001 - 1000.000000

Legend

- Claim Boundary
- Contours 100ft
- Waterbody
- Streams

<h1>Rosie</h1>	Figure 11: As Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.000000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	





Geochemical Legend

2011 Soil Sample Cu ppm

Cu_ppm

- <20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- >100

2011 Sediment Sample Cu ppm

Cu_ppm

- <20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- >100

2013 Rock Samples Cu ppm

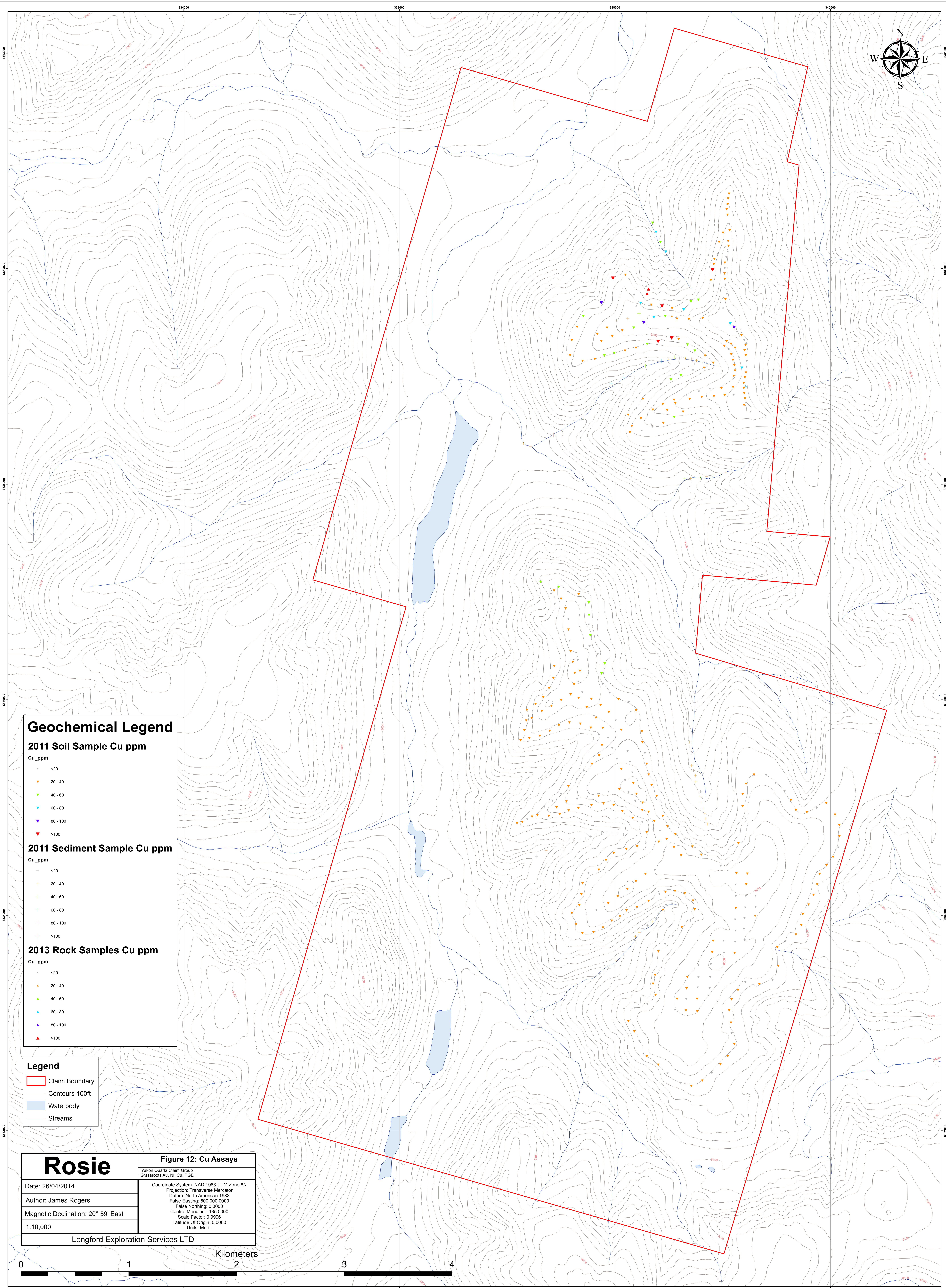
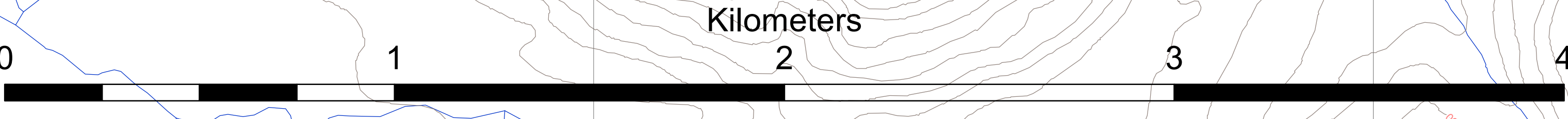
Cu_ppm

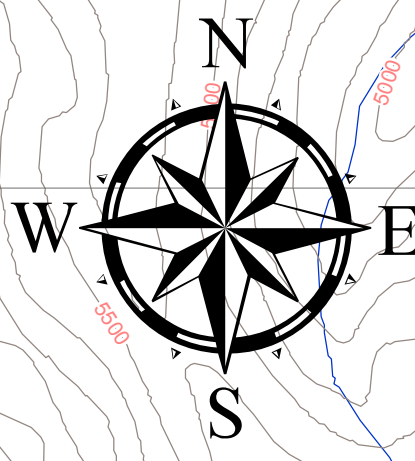
- <20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- >100

Legend

- Claim Boundary
- Contours 100ft
- Waterbody
- Streams

Rosie	Figure 12: Cu Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.0000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	



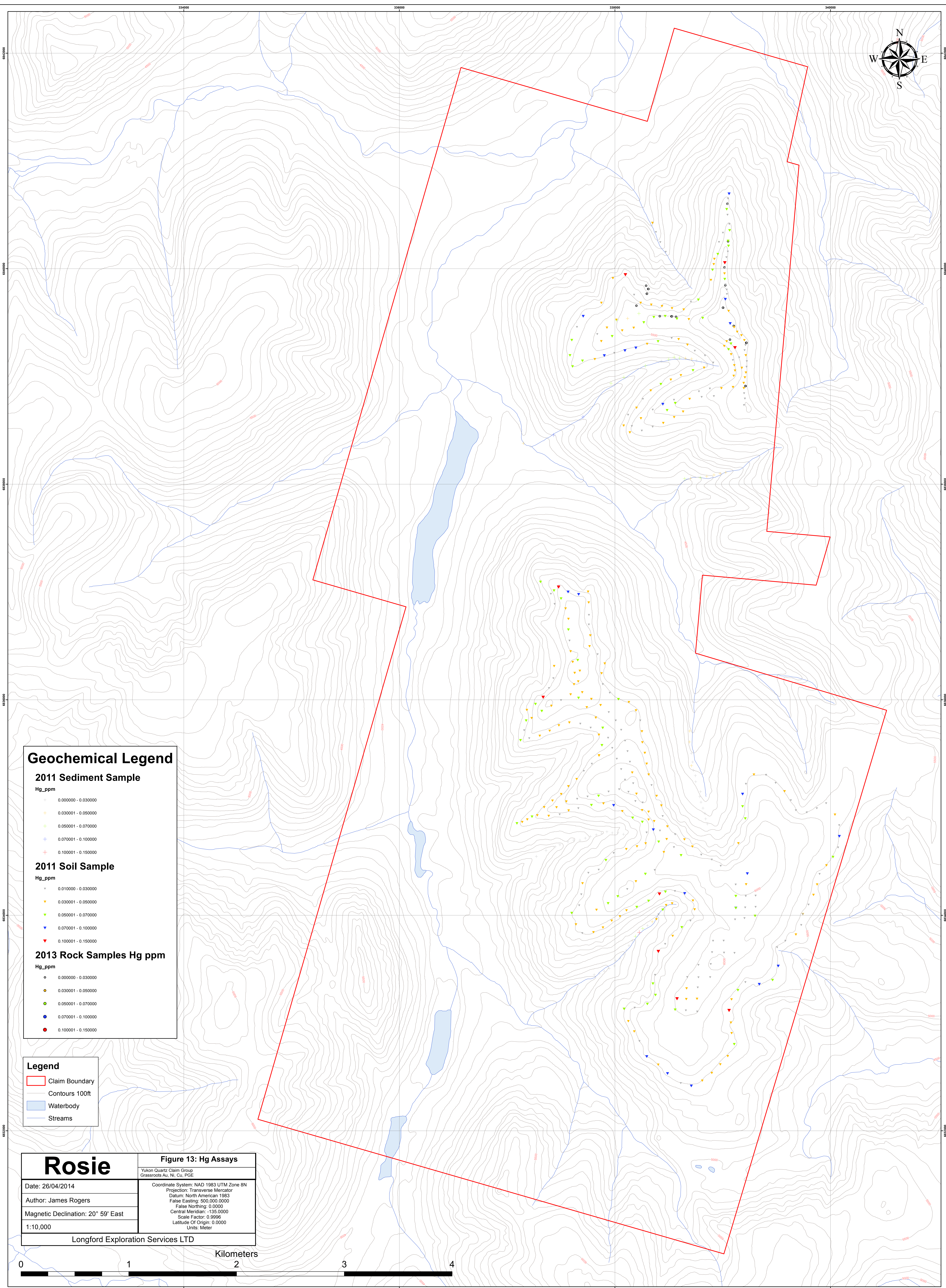
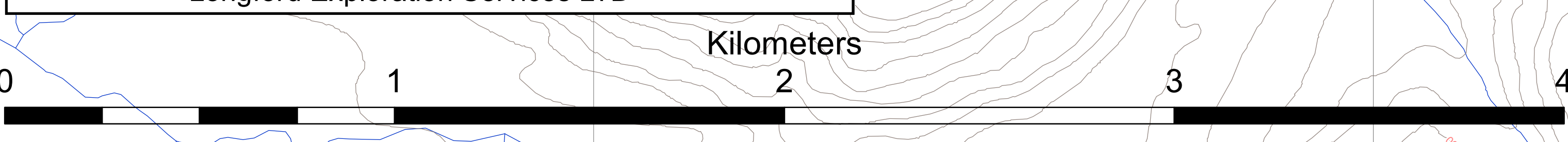


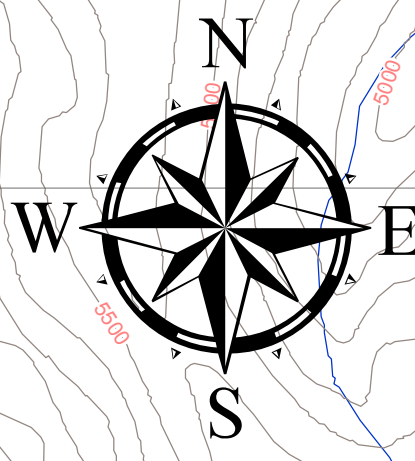
Geochemical Legend

- 2011 Sediment Sample**
Hg_ppm
- 0.000000 - 0.030000
 - 0.030001 - 0.050000
 - 0.050001 - 0.070000
 - 0.070001 - 0.100000
 - 0.100001 - 0.150000
- 2011 Soil Sample**
Hg_ppm
- 0.010000 - 0.030000
 - 0.030001 - 0.050000
 - 0.050001 - 0.070000
 - 0.070001 - 0.100000
 - 0.100001 - 0.150000
- 2013 Rock Samples Hg ppm**
Hg_ppm
- 0.000000 - 0.030000
 - 0.030001 - 0.050000
 - 0.050001 - 0.070000
 - 0.070001 - 0.100000
 - 0.100001 - 0.150000

- Legend**
- Claim Boundary
 - Contours 100ft
 - Waterbody
 - Streams

Rosie	Figure 13: Hg Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.00000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	





Geochemical Legend

2011 Soil Sample Mo ppm

Mo_ppm

- <5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25

2011 Sediment Sample Mo ppm

Mo_ppm

- <5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25

2013 Rock Samples Mo ppm

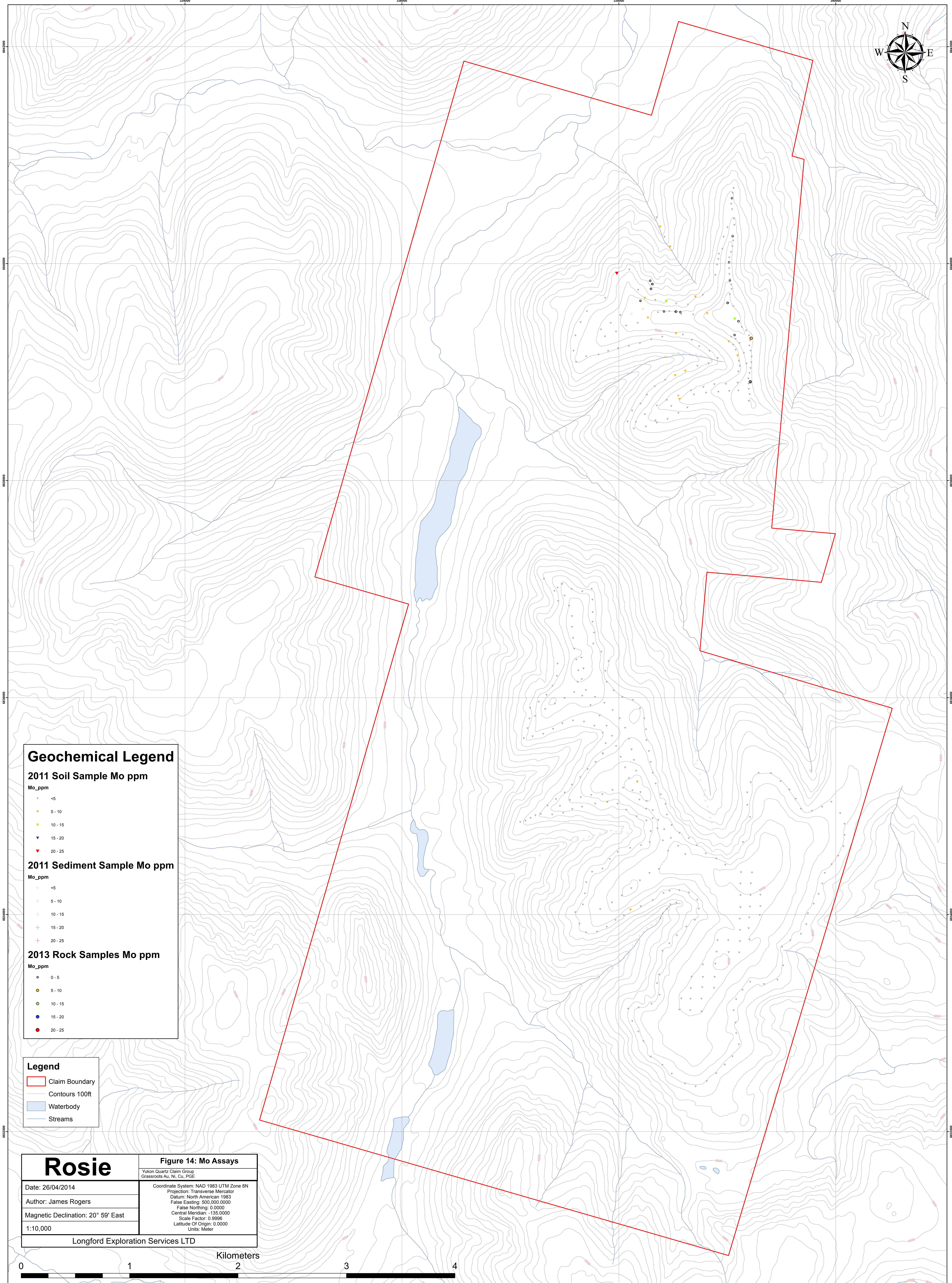
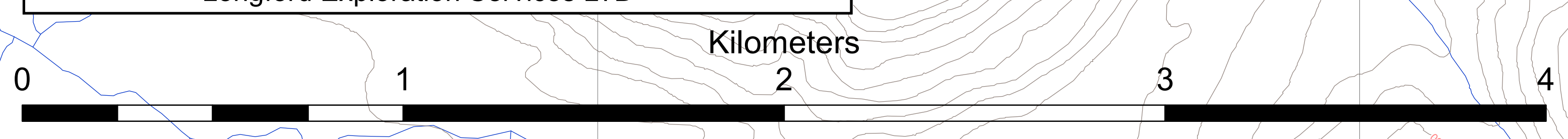
Mo_ppm

- 0 - 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25

Legend

- Claim Boundary
- Contours 100ft
- Waterbody
- Streams

Rosie	Figure 14: Mo Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.0000 Central Meridian: 135,0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	



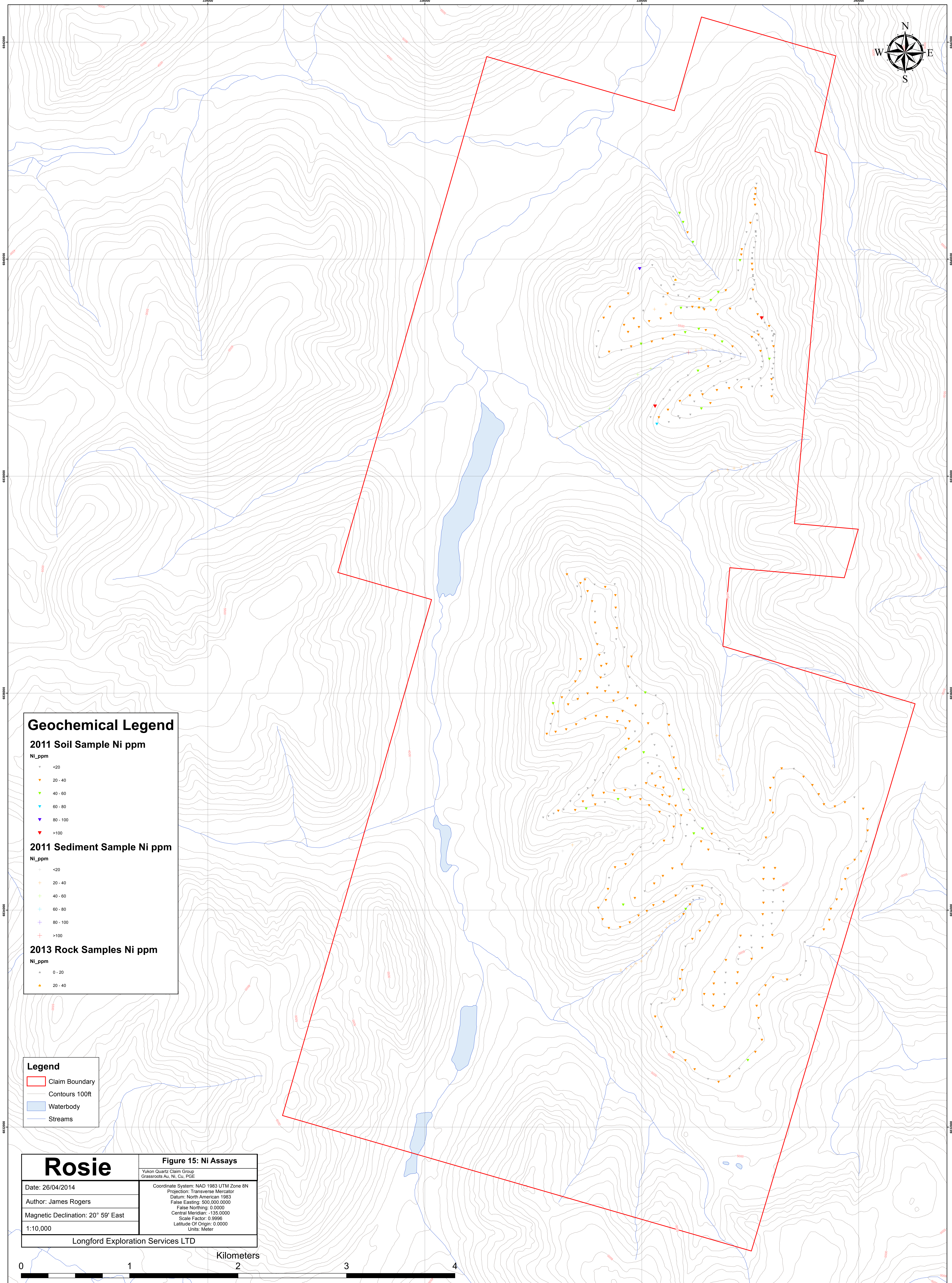
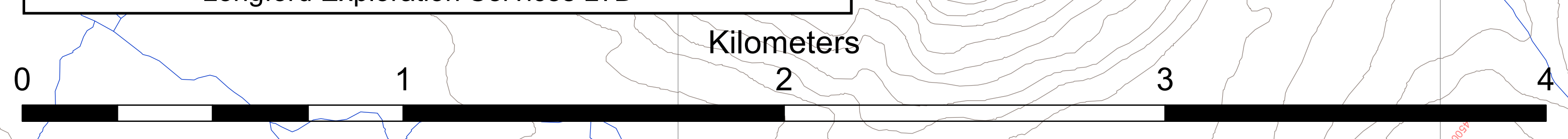


Geochemical Legend

- 2011 Soil Sample Ni ppm**
Ni_ppm
- <20
 - 20 - 40
 - 40 - 60
 - 60 - 80
 - 80 - 100
 - >100
- 2011 Sediment Sample Ni ppm**
Ni_ppm
- <20
 - 20 - 40
 - 40 - 60
 - 60 - 80
 - 80 - 100
 - >100
- 2013 Rock Samples Ni ppm**
Ni_ppm
- 0 - 20
 - 20 - 40

- Legend**
- Claim Boundary
 - Contours 100ft
 - Waterbody
 - Streams

Rosie	Figure 15: Ni Assays
	Yukon Quartz Claim Group Grassroots Au, Ni, Cu, PGE
	Coordinate System: NAD 1983 UTM Zone 8N Projection: Transverse Mercator Datum: North American 1983 False Easting: 500,000.0000 False Northing: 0.0000 Central Meridian: -135.0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter
	Date: 26/04/2014 Author: James Rogers Magnetic Declination: 20° 59' East 1:10,000
Longford Exploration Services LTD	



Appendix B.

Analytical Data



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Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
6970 Napier Street
Burnaby BC V5B 2C4 CANADA

Submitted By: James Rogers
Receiving Lab: Canada-Whitehorse
Received: August 16, 2013
Report Date: August 30, 2013
Page: 1 of 2

CERTIFICATE OF ANALYSIS

WHI13000305.1

CLIENT JOB INFORMATION

Project: ROSIE
Shipment ID:
P.O. Number
Number of Samples: 25

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	25	Crush, split and pulverize 250 g rock to 200 mesh			WHI
1F02-1F08	25	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAN

SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Longford Exploration Services Ltd.
6970 Napier Street
Burnaby BC V5B 2C4
CANADA

CC: Julia Marsh



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
 PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
 6970 Napier Street
 Burnaby BC V5B 2C4 CANADA

Project: ROSIE
 Report Date: August 30, 2013

Page: 2 of 2

Part: 1 of 2

CERTIFICATE OF ANALYSIS

WHI13000305.1

Method	Analyte	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	MDL	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
		0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
1494751	Rock	0.84	3.86	2.56	20.48	64.7	112	0.8	0.8	344	0.78	6.1	2.1	0.3	7.7	2.7	0.19	0.43	0.22	6	0.03	
1494752	Rock	1.27	7.47	2.16	20.24	78.7	53	0.8	0.7	71	2.25	8.1	0.8	2.2	8.7	2.3	0.14	0.36	0.18	6	0.02	
1494753	Rock	2.49	6.41	12.24	21.02	93.4	180	1.2	0.5	147	1.86	9.3	1.1	1.7	7.6	4.3	0.25	0.39	0.50	13	0.05	
1494754	Rock	1.92	1.85	8.51	3.51	11.1	136	3.6	0.5	35	0.86	33.8	0.7	3.0	2.1	13.4	0.04	1.68	0.10	7	0.01	
1494755	Rock	1.08	4.18	9.84	10.45	3.8	118	1.9	0.1	31	0.53	19.9	0.4	1.8	0.3	1.3	0.02	0.59	0.05	2	<0.01	
1494756	Rock	1.81	1.36	2.11	14.67	81.6	45	1.7	1.7	305	1.54	1.1	1.7	0.7	10.6	7.1	0.20	0.06	<0.02	5	0.31	
1494757	Rock	1.22	2.19	1.95	30.68	171.4	243	0.4	<0.1	38	0.86	0.2	4.2	1.9	12.1	1.7	0.33	0.07	0.45	<2	0.09	
1494758	Rock	1.21	0.48	12.60	30.44	160.3	189	0.6	0.1	39	0.75	4.6	1.3	1.5	11.0	3.4	0.06	0.05	0.04	<2	0.05	
1494759	Rock	1.72	0.43	15.71	5.66	55.5	41	19.2	8.9	251	2.67	34.6	1.4	0.8	11.6	4.7	0.14	0.16	0.20	22	0.24	
1494760	Rock	1.27	0.06	1.16	0.65	1.4	4	0.9	0.3	31	0.28	1.0	<0.1	1.6	0.1	<0.5	<0.01	0.17	<0.02	<2	<0.01	
1494761	Rock	1.28	0.18	0.52	14.68	60.9	32	0.7	0.8	232	1.25	0.2	1.5	1.6	11.3	11.4	0.07	0.04	<0.02	<2	0.21	
1494762	Rock	0.99	0.71	14.80	1.89	17.9	54	3.3	0.5	68	0.69	2.7	0.3	2.1	0.4	2.4	0.02	1.02	0.06	8	0.03	
1494763	Rock	1.39	0.36	1.79	21.77	147.2	152	9.3	1.6	189	0.90	4.3	2.4	0.5	14.6	3.9	0.32	2.32	0.10	<2	0.04	
1494764	Rock	0.92	0.34	10.11	3.54	28.5	88	7.9	1.1	38	0.81	3.7	0.5	0.8	1.6	1.4	0.07	0.88	0.04	7	0.02	
1494765	Rock	1.09	0.58	27.22	6.17	147.5	19	32.2	5.2	109	2.49	3.6	2.1	3.2	10.1	4.7	0.08	0.58	0.12	44	0.08	
1494766	Rock	1.61	1.17	2.27	29.57	24.0	83	0.8	0.1	35	0.47	3.2	1.6	0.8	6.5	2.4	0.05	0.25	0.20	<2	0.02	
1494767	Rock	1.26	0.54	11.92	23.67	30.9	59	3.6	0.5	34	0.63	27.1	1.5	0.5	4.9	7.1	0.04	2.29	0.35	<2	0.02	
1494768	Rock	0.82	1.15	2.81	14.69	169.7	118	1.8	0.4	333	1.15	5.0	1.5	0.8	8.1	2.1	0.30	0.77	0.31	<2	0.03	
1494769	Rock	1.33	3.34	109.5	21.31	301.3	130	14.6	3.0	389	5.80	26.2	1.9	1.6	7.9	2.2	0.69	5.34	0.29	<2	0.03	
1494770	Rock	0.80	0.80	16.38	1.78	17.8	87	8.7	2.1	61	0.47	4.9	0.2	1.2	0.2	0.9	0.04	0.73	<0.02	<2	<0.01	
1494771	Rock	1.11	2.11	105.7	6.36	95.8	406	32.7	9.9	162	2.05	55.1	1.2	3.6	3.5	4.8	0.16	5.35	0.24	32	0.03	
1494772	Rock	1.13	0.67	17.51	1.66	8.5	94	5.5	1.0	28	1.01	17.6	0.2	1.6	0.7	3.9	<0.01	0.65	0.03	4	<0.01	
1494773	Rock	1.45	2.09	2.87	11.70	31.4	87	2.5	0.5	41	0.31	0.6	1.1	0.7	8.2	1.9	0.11	0.07	0.27	3	0.02	
1494774	Rock	1.57	5.69	65.03	3.91	24.5	459	11.0	3.3	36	1.52	50.2	0.5	6.0	0.3	6.4	0.39	1.19	0.09	3	<0.01	
1494775	Rock	1.27	0.55	2.49	13.51	90.2	26	1.4	1.6	291	1.67	0.9	1.5	0.4	10.0	8.7	0.28	0.08	<0.02	4	0.13	



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Acme Analytical Laboratories (Vancouver) Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
 PHONE (604) 253-3158

Client: **Longford Exploration Services Ltd.**
 6970 Napier Street
 Burnaby BC V5B 2C4 CANADA

Project: ROSIE
 Report Date: August 30, 2013

Page: 2 of 2

Part: 2 of 2

CERTIFICATE OF ANALYSIS

WHI13000305.1

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Pd	Pt	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb	
MDL	0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	10	2	
1494751	Rock	0.018	23.4	1.2	<0.01	54.0	0.001	<1	0.35	0.052	0.11	<0.1	3.3	0.06	<0.02	9	<0.1	0.04	1.4	<10	<2
1494752	Rock	0.011	15.2	0.9	0.01	44.7	0.001	<1	0.48	0.053	0.13	<0.1	3.7	0.05	<0.02	<5	<0.1	<0.02	2.1	<10	<2
1494753	Rock	0.010	35.4	1.3	<0.01	40.2	0.001	<1	0.26	0.114	0.04	<0.1	3.6	0.03	0.04	<5	0.4	<0.02	2.1	<10	2
1494754	Rock	0.035	13.6	5.2	0.02	68.5	<0.001	3	0.19	0.005	0.11	<0.1	2.0	0.09	0.04	9	0.3	0.09	1.8	<10	<2
1494755	Rock	0.005	3.8	2.6	<0.01	14.0	<0.001	<1	0.04	0.003	0.01	<0.1	0.2	<0.02	<0.02	9	0.3	0.14	0.4	<10	<2
1494756	Rock	0.022	28.7	1.7	0.12	74.0	0.047	<1	0.62	0.060	0.13	0.1	2.4	0.03	<0.02	<5	<0.1	<0.02	7.8	<10	<2
1494757	Rock	<0.001	33.9	1.2	<0.01	6.4	0.006	<1	0.34	0.073	0.16	0.2	0.3	0.07	<0.02	<5	<0.1	<0.02	3.4	<10	<2
1494758	Rock	0.023	11.4	1.2	<0.01	29.7	<0.001	<1	0.31	0.056	0.16	<0.1	0.5	0.06	<0.02	5	<0.1	<0.02	3.0	<10	<2
1494759	Rock	0.089	38.5	21.9	0.60	128.0	0.119	<1	1.41	0.028	0.70	<0.1	3.1	0.27	<0.02	17	<0.1	<0.02	4.5	<10	<2
1494760	Rock	<0.001	<0.5	1.7	<0.01	2.4	<0.001	<1	0.03	0.003	<0.01	<0.1	0.1	<0.02	<0.02	<5	<0.1	<0.02	0.2	<10	<2
1494761	Rock	0.016	50.3	1.2	0.06	22.0	0.001	<1	0.62	0.049	0.18	<0.1	1.6	0.06	<0.02	<5	<0.1	<0.02	3.5	<10	<2
1494762	Rock	0.021	2.1	3.5	0.05	29.7	0.001	<1	0.18	0.003	0.03	<0.1	0.5	<0.02	<0.02	<5	1.0	0.03	0.6	<10	<2
1494763	Rock	0.006	19.4	0.7	0.04	82.6	0.003	<1	0.53	0.049	0.10	<0.1	0.3	0.05	<0.02	9	<0.1	<0.02	6.3	<10	8
1494764	Rock	0.013	5.0	4.8	0.09	33.1	0.004	<1	0.28	0.006	0.05	<0.1	0.4	0.03	<0.02	8	0.2	<0.02	1.0	<10	<2
1494765	Rock	0.044	28.9	26.5	0.52	184.6	0.057	<1	1.41	0.011	0.44	<0.1	2.0	0.23	<0.02	<5	<0.1	0.05	4.3	<10	<2
1494766	Rock	0.005	16.0	1.2	<0.01	24.5	0.005	<1	0.27	0.065	0.10	<0.1	0.2	0.05	<0.02	18	<0.1	<0.02	1.6	<10	<2
1494767	Rock	0.009	11.8	1.8	<0.01	66.2	0.005	<1	0.53	0.060	0.11	<0.1	0.3	0.07	0.04	<5	0.1	<0.02	1.7	<10	<2
1494768	Rock	<0.001	53.5	0.9	0.01	18.9	<0.001	<1	0.25	0.072	0.11	<0.1	0.3	0.03	<0.02	7	0.1	<0.02	1.0	<10	<2
1494769	Rock	0.008	5.8	1.1	0.02	49.5	<0.001	<1	0.61	0.048	0.11	<0.1	0.6	0.09	<0.02	<5	0.3	<0.02	1.7	<10	<2
1494770	Rock	0.001	0.8	1.6	0.02	2.8	<0.001	<1	0.05	0.002	0.01	<0.1	0.2	<0.02	<0.02	5	0.4	<0.02	0.3	<10	<2
1494771	Rock	0.009	17.4	17.6	0.39	122.4	0.004	<1	0.72	0.004	0.17	<0.1	1.7	0.09	0.10	<5	2.8	0.23	3.2	<10	<2
1494772	Rock	0.006	7.4	3.1	<0.01	41.1	<0.001	<1	0.08	0.011	0.04	<0.1	0.4	<0.02	0.04	9	0.8	<0.02	0.7	<10	<2
1494773	Rock	0.002	16.0	1.2	<0.01	60.1	0.002	<1	0.43	0.073	0.12	<0.1	0.2	0.05	<0.02	5	<0.1	0.03	3.0	<10	<2
1494774	Rock	0.019	2.2	3.4	<0.01	11.1	<0.001	<1	0.06	0.001	0.02	0.1	0.4	0.02	<0.02	23	1.1	0.28	0.7	<10	<2
1494775	Rock	0.027	35.2	1.5	0.14	37.1	0.008	<1	0.73	0.051	0.18	<0.1	2.3	0.04	<0.02	<5	<0.1	<0.02	6.3	<10	<2

QUALITY CONTROL REPORT

WHI13000305.1

Method	WGHT	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%		
MDL	0.01	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01		
Pulp Duplicates																						
1494752	Rock	1.27	7.47	2.16	20.24	78.7	53	0.8	0.7	71	2.25	8.1	0.8	2.2	8.7	2.3	0.14	0.36	0.18	6	0.02	
REP 1494752	QC		7.56	2.11	20.97	79.7	57	0.6	0.7	70	2.17	8.0	0.8	0.7	8.9	2.1	0.13	0.35	0.17	6	0.02	
1494759	Rock	1.72	0.43	15.71	5.66	55.5	41	19.2	8.9	251	2.67	34.6	1.4	0.8	11.6	4.7	0.14	0.16	0.20	22	0.24	
REP 1494759	QC		0.38	15.86	5.77	56.6	47	20.5	8.8	253	2.66	35.0	1.5	0.8	12.1	4.5	0.09	0.17	0.20	22	0.23	
Core Reject Duplicates																						
1494769	Rock	1.33	3.34	109.5	21.31	301.3	130	14.6	3.0	389	5.80	26.2	1.9	1.6	7.9	2.2	0.69	5.34	0.29	<2	0.03	
DUP 1494769	QC		3.36	108.7	21.04	296.4	136	14.1	3.2	385	5.74	26.1	1.9	<0.2	7.9	2.1	0.61	5.60	0.28	<2	0.03	
Reference Materials																						
STD DS9	Standard		12.28	108.4	127.1	321.9	1863	40.3	7.5	511	2.36	25.3	2.8	113.5	6.2	71.0	2.26	5.53	6.42	41	0.72	
STD DS9 Expected			12.84	108	126	317	1830	40.3	7.6	575	2.33	25.5	2.69	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	
BLK	Blank		<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<2	<0.01
Prep Wash																						
G1-WHI	Prep Blank		0.07	3.22	3.60	45.5	16	2.7	4.2	546	2.02	1.1	1.9	0.6	5.7	53.8	0.02	<0.02	0.06	38	0.47	
G1-WHI	Prep Blank		0.04	3.46	3.52	40.6	15	2.0	3.5	512	1.90	4.1	1.9	1.1	5.7	53.8	<0.01	<0.02	0.06	36	0.49	

QUALITY CONTROL REPORT

WHI13000305.1

Method		1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Ti	S	Hg	Se	Te	Ga	Pd	Pt
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppb	ppb
MDL		0.001	0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	10	2
Pulp Duplicates																					
1494752	Rock	0.011	15.2	0.9	0.01	44.7	0.001	<1	0.48	0.053	0.13	<0.1	3.7	0.05	<0.02	<5	<0.1	<0.02	2.1	<10	<2
REP 1494752	QC	0.011	15.3	0.6	0.01	43.9	<0.001	<1	0.46	0.051	0.12	<0.1	4.0	0.05	<0.02	<5	0.2	<0.02	1.9	<10	<2
1494759	Rock	0.089	38.5	21.9	0.60	128.0	0.119	<1	1.41	0.028	0.70	<0.1	3.1	0.27	<0.02	17	<0.1	<0.02	4.5	<10	<2
REP 1494759	QC	0.095	40.1	21.0	0.60	133.7	0.123	<1	1.43	0.028	0.71	<0.1	2.9	0.29	<0.02	<5	<0.1	<0.02	4.9	<10	<2
Core Reject Duplicates																					
1494769	Rock	0.008	5.8	1.1	0.02	49.5	<0.001	<1	0.61	0.048	0.11	<0.1	0.6	0.09	<0.02	<5	0.3	<0.02	1.7	<10	<2
DUP 1494769	QC	0.008	6.4	1.3	0.02	50.4	<0.001	<1	0.63	0.056	0.12	<0.1	0.8	0.10	<0.02	18	<0.1	<0.02	2.1	<10	<2
Reference Materials																					
STD DS9	Standard	0.084	13.1	115.2	0.62	302.1	0.110	1	0.97	0.083	0.39	3.2	2.6	5.17	0.17	208	5.1	5.23	4.2	154	359
STD DS9 Expected		0.0819	13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	2.5	5.3	0.1615	200	5.2	5.02	4.59	120	350
BLK	Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	11	<0.1	<0.02	<0.1	<10	<2
Prep Wash																					
G1-WHI	Prep Blank	0.077	12.2	5.5	0.52	167.8	0.124	<1	0.91	0.078	0.48	<0.1	2.3	0.34	<0.02	<5	<0.1	<0.02	5.0	<10	2
G1-WHI	Prep Blank	0.072	11.8	4.1	0.48	158.5	0.117	<1	0.90	0.085	0.46	0.1	2.4	0.29	<0.02	<5	<0.1	<0.02	4.2	<10	<2