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MISTANGO RIVER RESOURCES INC

# Drilling Report

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Sackville Property, 2014-2015

Ilian Iliev, MSc, PGeo

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## **Introduction and Summary**

The Sackville Property is located west of Thunder Bay, near Kakabeka Falls along the Shebandowan Archean-aged greenstone volcanic belt. Exploration in the area started in 1956. Boulders of massive sulphide were found on the Property in 1996 by local prospectors-the Stares brothers. Subsequent exploration was carried by Cumberland Resources. RJK Exploration Ltd. started exploring the Property in 1999. The work done consisted of IP, VTEM, airborne magnetic surveys, soil and till sampling as well as several drilling phases in 2000, 2002 and 2004. More drilling and further exploration was completed by GLR Resources and RJK Exploration in 2009-2010. Mistango River Resources carried out till and soil sampling and trenching during 2011-2012.

This report describes assessment work for a two phase drilling program carried out by Mistango River Resources Inc. Phase 1 was performed between October 28<sup>th</sup> and December 18<sup>th</sup>, 2014 and Phase 2 between May 10<sup>th</sup> and June 19<sup>th</sup>, 2015. The work being assessed consists of diamond drilling, core logging and assaying. Phase 1 consisted of five diamond drill holes, amounting to a total length of 754m (Table 3) distributed between claims 4253691 and 4244452 (Tables 3, 5, 6 and 7). Phase 2 consisted of three diamond drill holes and extension of last DDH from Phase 1 (SK-14-05), totaling 507m in length on claims 4244451 and 4544452 (Tables 4, 8, 9, 10). The drilling in both phases aimed to investigate previously unexplored IP, VTEM, airborne magnetic survey, and geochemical soil anomalies associated with favourable geology and taking into consideration paleo-ice flow direction and alignment with massive sulphide boulder train. Work on planning the drill program started as early as February 2014. Eight potential targets were identified out of which four were considered primary. Site field trip was made in September 2014. During the field trip the primary targets were further assessed, based on geology and access. Outcrop grab samples were collected from some primary drill targets and submitted for analysis. More grab samples were collected and analyzed during the drilling in both phases.

## **Location and Access**

The Sackville Property is located approximately 25 km west of Kakabeka Falls, ON and about 50 km west of Thunder Bay, Ontario. The Property could be accessed all year round through Boreal Road, west of HWY 590. There are several logging roads within the Property

## **Property Claims**

The Sackville Property consists of 14 leased contiguous claims. The claims, units, hectares and townships are listed in Table 1 below and displayed in Figure 1.

Township	Claim	Units	Hectares
Sackville	4219074	13	208
Sackville	4219075	16	256
Sackville	4244451	14	224
Sackville	4244452	16	256
Sackville	4244453	16	256
Sackville	4244454	16	256
Aldina	4244456	6	96
Aldina	4244457	8	128
Aldina	4262671	16	256
Aldina	4262672	16	256
Aldina	4262673	16	256
Aldina	4262674	6	96
Sackville	4253691	12	192
Aldina	4262831	14	224

*Table1. List of claims.*

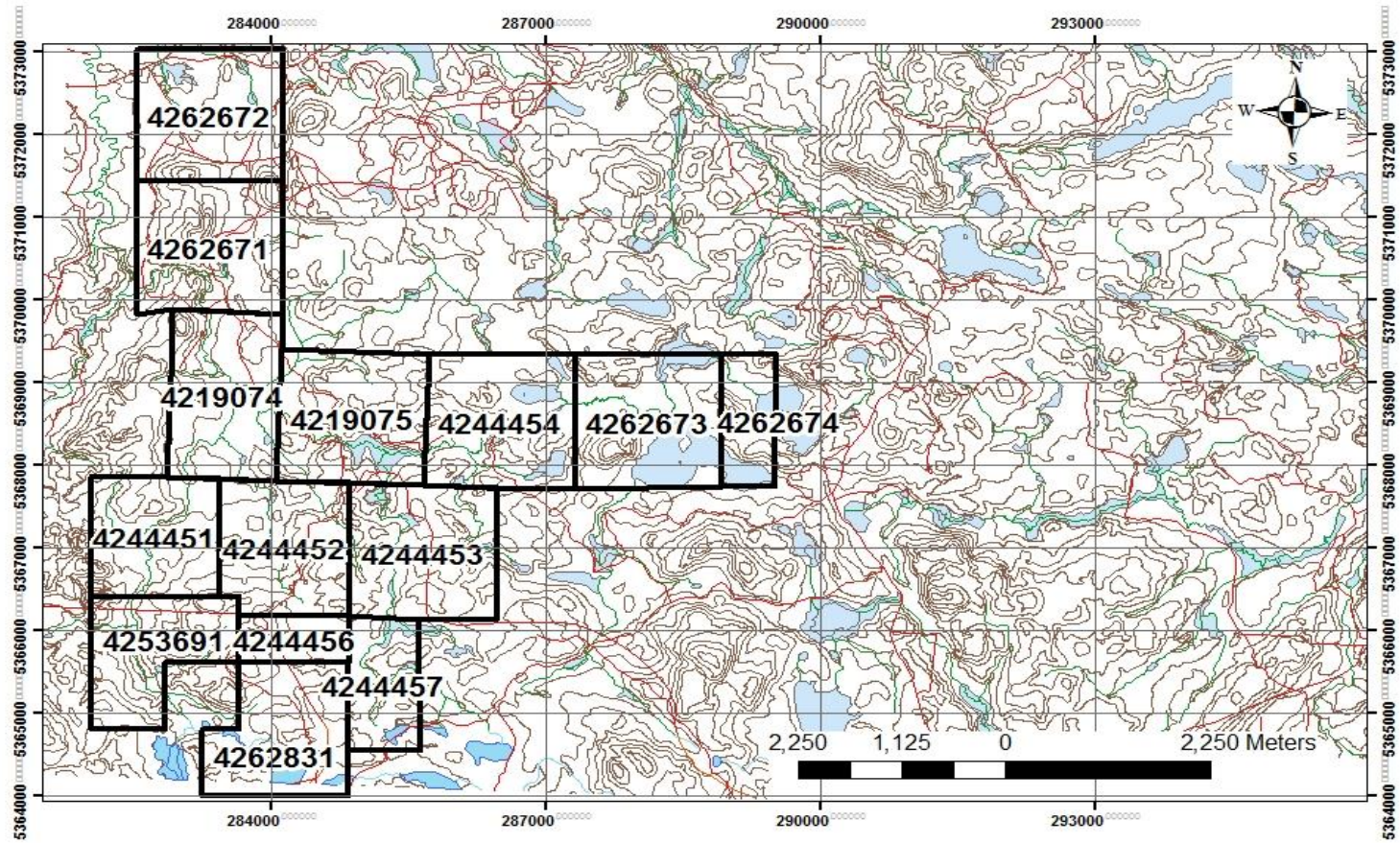


Figure 1. Property boundary and claims map.

## **Glacial Geology**

The sequence of events which occurred during the latest stages of continental glaciation in the vicinity of Thunder Bay is not entirely discernible from deposits and features within the area. The Pleistocene history proposed for the region by Burwasser (1977) and earlier authors (Zoltai, 1963), suggests a retreating ice margin in the vicinity of Thunder Bay approximately 12,400 years ago. Re-advance of the Superior lobe was recorded approximately 11,500 years ago (Burwasser, 1977). Partial dissolution of the Superior and Hudson Bay was re-established approximately 11,000 years ago, although the Superior basin was not entirely free of ice until sometime after 10,000 years ago. Based on glacial striae direction, the whole ice mass (known as the Patrician ice) was subdivided in the region of Thunder Bay into the Hudson Bay (ice advancing from Lake Nipigon) and Superior lobes (ice pushing west from Lake Superior). Ice directions varied between 170° and 215° for the Patrician ice (Bajc, 1999), while younger striae suggest a Superior ice mass trend of 295°-315° (Burwasser, 1977).

The average glacial striation direction at the Sackville Property is 185° (Fig.2), as measured by the author on multiple outcrops. The timing of the deposition of the Sackville massive sulphide mineralized boulders is not known, but they form a N-S depositional trend identical with the ice flow direction measured on site. This later fact, suggests that those boulders likely originated to the north of their deposition sites.

## **Property Geology**

The Property geology has largely been interpreted from property scale geological mapping carried out by GLR Resources and RJK Resources, OGS geological township maps and airborne magnetic survey conducted by RJK Resources. Further interpretation of the Property's geology has been provided by Botrell, 2003 and Perry and Sharpley, 2010. The Sackville Property is located within the Shebandowan Archean-aged greenstone belt. Volcanic cycles part of the Property lithology consist of a lower sequence of tholeiitic basalt and basaltic-andesite flows, including magnesium-rich komatiites and an upper sequence of andesite, dacite, and rhyolite (calc-alkalic) flows (Perry and Sharpley, 2010). This bi-modal volcanic cycle is accompanied by abundant mafic sills and differentiated gabbro-anorthosite plutons. Stratigraphic units are near-vertical, with apparent dip of about 75-80° to the N (as measured in core). These units are locally unconformably overlain, by sedimentary and volcanic rocks and locally interlayered with iron formation (Fig.2). Mistango River Resources carried out an extensive trenching program during 2011-2012, which was aimed at confirming lithological units and identifying possible mineralization, proximal to IP anomalies (Table 2). Additionally, a number of whole rock analyses on outcrop samples were completed. The trenching revealed bi-modal mafic with locally felsic to pyroclastic-felsic units, banded iron formation and localized intrusive mafic-ultramafic lithology (Table2, Fig.4)

## **Scope of Work**

Work on identifying and evaluation of previously unexplored targets on the Sackville Property started in February 2014. Glacial geology interpretation and careful selection of previously known IP, soil geochemistry and VTEM anomalies located up-ice from massive sulphide-rich boulder train (Fig.3) was



used to single out drill targets. As a result 8 targets were selected. Criteria used for target selection include short strike length of anomalies (used to rule out formational IP anomalies and identify potential non-formational ones), amalgamation of different anomalies in a single target (such as VTEM, soil geochemical, IP, resistivity) and favourable geology (felsic-to-intermediate lithology). Figure 3 shows the eight preliminary targets with the corresponding IP, VTEM and soil anomalies. All targets are up-ice (based on average 185° azimuth of glacial striae measured on site) from mineralized boulder train (Figures 3 and 4).

Four targets were selected as primary (Targets 1, 2, 7 and 6) and three (T1,2 and 7) were drilled off in 2014 during Phase 1 of the program, based on additional evaluation of potential strike length, geology and presence of more than one anomaly within the target (Fig. 4). Target 1 (T1) was chosen as a primary target due to combination of relatively high Zn soil values (up to 1570 ppm), IP and short length VTEM anomalies, direct correlation up-ice with mineralized boulder train and presence of rhyolite with pyroclastic fragments at a nearby trench (TR9). Target 2 (T2) was also given high priority due to its location within a felsic horizon interlayered with iron formation and thus presenting similar lithological association with known bi-modal mafic deposits, such as the Geco Deposit. Target 7 (T7) was also prioritized and later drilled, based on relatively short IP anomaly strike length and being within the northern part of more or less the same inferred felsic horizon as T1. Target 6 (T6) was chosen due to its location within a parallel to other targets felsic horizon and short strike length. As a result of these target selections 5 DDH were proposed and planned using IP survey pseudo-sections as part of Phase 1.

Phase 2 of the program concentrated on investigating previously unexplored short length AEM anomaly trends (DDH's SK-15-06 and SK-15-07) along strike of the Target 1 mineralized felsic horizon and IP 29 anomaly, previously intercepted by SK-14-05 and SK-14-03 (Fig.5). Another AEM trend, which was drilled in 2005 and returned anomalous Zn, Ag and Au assays was investigated by DDH SK-15-08 (Fig. 5). Numerous grab samples were collected and analyzed with regards to rock type and alteration.

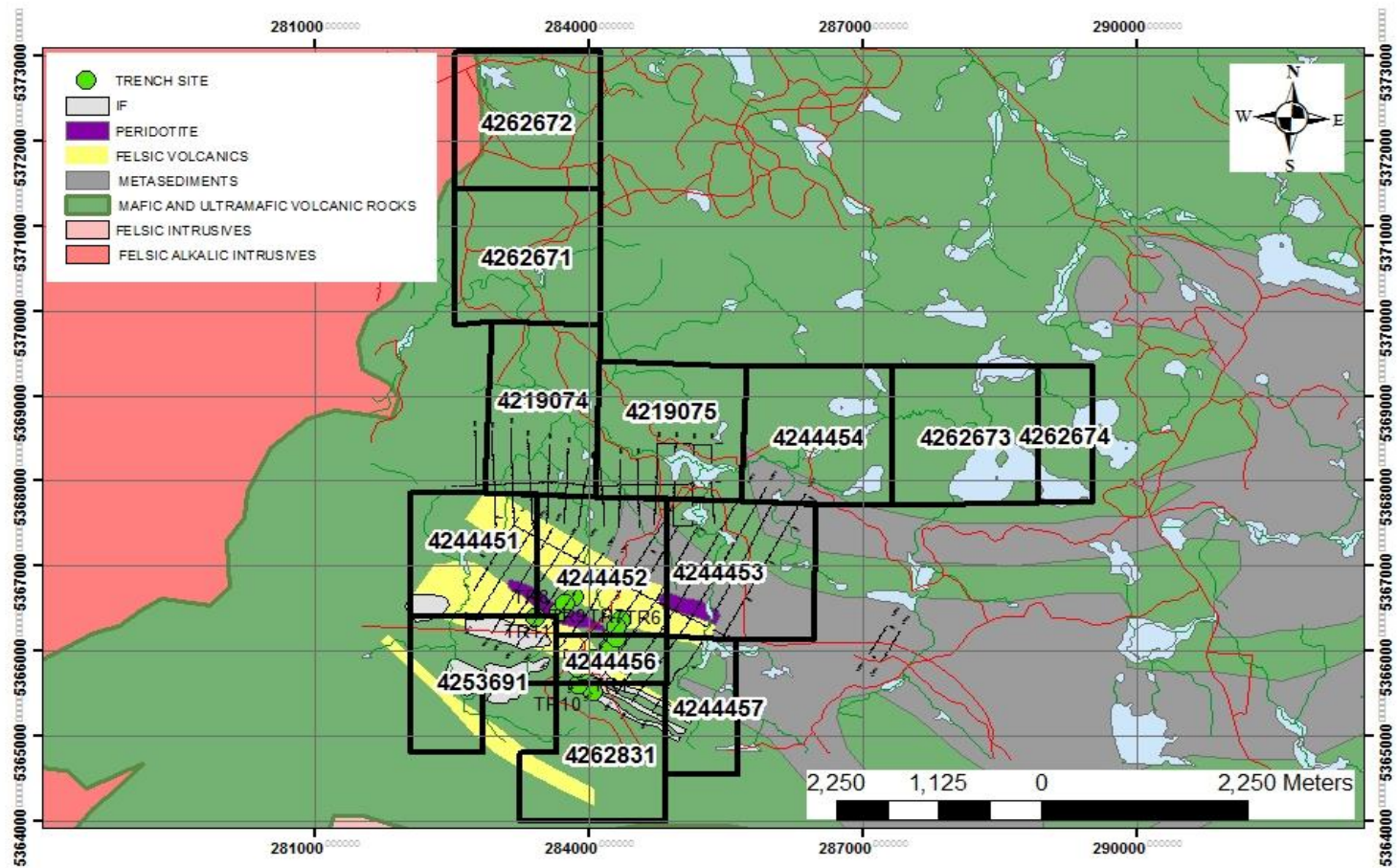


Figure 2. Property Geology.

TRENCH	EASTING	NORTHING	GRIDE	GRIDN	COMMENTS
TR1	283951	5365772	1600	1550	IP 37, Target 5 (T5). Cherty iron formation
TR2	284050	5365920	1600	925	IP 36, Target 4 (T4). Felsic volcanic rock.
TR3	283899	5365800	1550	1550	IP 37, Target 5 (T5). Cherty iron formation.
TR4	284230	5366043	1600	650	IP 34. Felsic-to-intermediate volcanic bedrock with localized intermediate intrusive phase to the north, trace of pyrite.
TR5	284048	5365523	1800	1150	IP 37, Target 5 (T5). Banded iron formation, located south of T5 and south of felsic horizon.
TR6	284306	5366159	1600	600	IP 33. East of TR7, exposing some felsic volcanic, with trace very fine disseminated pyrite.
TR7	284278	5366184	1600	575	IP 33. Felsic volcanics and intrusives. Rhyolite in eastern part of trench. Granite with porphyry rhyolite phase in the western part of trench.
TR8	283434	5366395	800	825	IP 35, Target 2 (T2). Cherty BIF weakly-to-locally strongly magnetic.
TR9	283845	5366636	1000	275	IP 29, Target 1 (T1). Quartz-eye rhyolite with pyroclastic fragments, patchy pyrrhotite. Visible gossan at surface.
TR10	283890	5365600	1600	1150	IP 37, Target 5 (T5). Banded iron formation, located south of T5 and south of felsic horizon.
TR11	283688	5366459	1000	680	IP 32. Peridotite bedrock.
TR12	283755	5366559	1000	550	IP 29, Target 1 (T1). Basalt and gabbro bedrock
TR13	284361	5366370	1600	375	IP 29, Target 1 (T1). Sulphidized, gossanous, cherty banded iron formation.
TR14	284309	5366289	1600	375	IP 29, Target 1 (T1). Contact between quartz-feldspar porphyry and locally pyroclastic rhyolite.

Table 2. Summary of trench lithology.





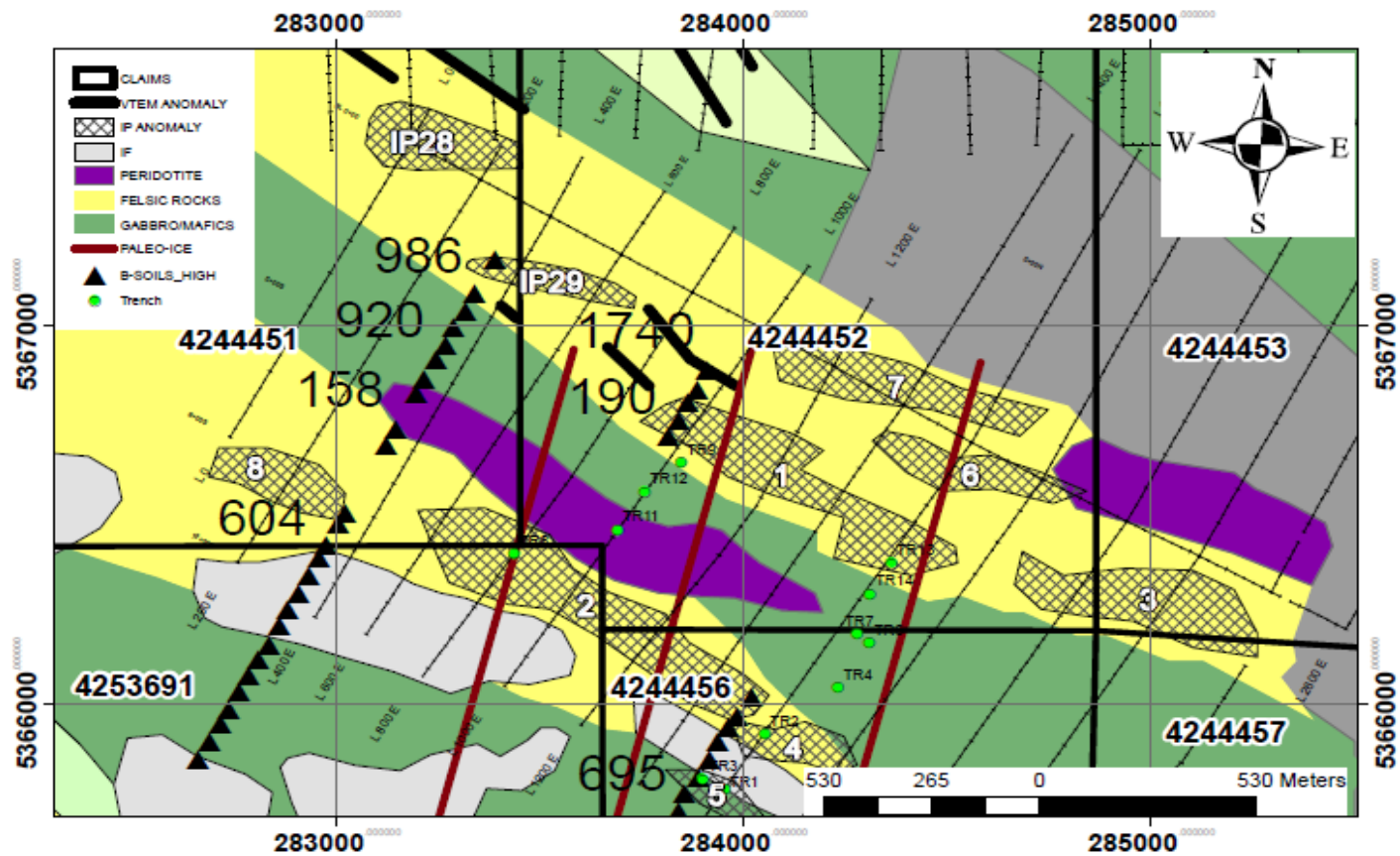


Figure 4. Drill targets displayed with corresponding geology, IP, VTEM and high Zn soil anomalies, trench sites also shown (TR1-14).

## **Drilling**

**Phase 1** drilling on the Sackville Property for the 2014 exploration program began on October 28<sup>th</sup> and finished on December 18<sup>th</sup>. Additional related work (core moving and storing, water line maintenance, core logging) continued to the end of December 2015. All DDH were drilled by Huard Drilling Ltd. of Haileybury, ON using BTW-sized drill rods. The assaying was carried out by Swastika Laboratories Ltd., Activation Laboratories Ltd., and Accurassay Laboratories.

During the 2014 drilling program, five diamond drill holes (DDH) were completed to a total length of 754m (Table 3, Fig. 5, 6, 7, 8, 9 and 10). The purpose of the drilling was to attempt to intersect the source of the high grade massive sulphide boulder train. Four drill targets were prioritized out of eight initial targets located directly up-ice from expected paleo-ice flow direction (inferred from glacial striations measurements proximal to sites), based on the presence of IP, VTEM, high Zn soil values and favourable geology.

Hole SK-14-01 was started on November 5<sup>th</sup> and finished on November 8<sup>th</sup>, 2014. This DDH aimed to investigate Target 2 (T2, IP 35, Fig. 3 and 4) on grid line 900E at 950S (Fig. 5 and 6). It was a pilot hole to test for strata dip orientation and was abandoned due to being drilled down-dip at depth of 101m. The hole intersected one lithological unit (gabbro) and did not intersect any mineralization of interest (Fig. 7, lithological log in Appendix).

Hole SK-14-02 was started on November 9<sup>th</sup> and finished on November 11<sup>th</sup>, 2014. This hole was drilled normal to apparent dip (about 75°N) to a length of 101m and tested Target 2 (T2, IP 35, IP 30, Fig. 3 and 4) on grid line 800E at 765S (Fig. 5 and 6). The hole intersected fine-grained cherty sediments, banded iron formation and peridotite (Fig. 8 and lithological log in Appendix). The IP chargeability anomaly was caused by the presence of iron formation. No mineralization of interest was intersected.

Hole	Easting	Northing	Azimuth	Dip	Length	Purpose	Remarks
SK-14-01	283471	5366300	30	-45	101	Testing Target 2, IP 35 and MAG	Line 9+00E 9+50S, drilled grid north. Abandoned, drilled grid north, down-dip within gabbro. Started on November 5 <sup>th</sup> , finished on November 8 <sup>th</sup> .
SK-14-02	283456	5366300	210	-45	101	Testing Target 2, IP 35, IP 34 and MAG	Line 8+00E 7+65S, drilled grid south. Started on November 9 <sup>th</sup> , finished Nov. 11 <sup>th</sup> . IP caused by Magnetite IF.
SK-14-03	284130	5366419	210	-45	200	Testing Target 1 IP 29, IP 30 and parallel felsic horizons	Line 12+00E 2+00S, drilled grid south. Started on November 13 <sup>th</sup> , finished on November 18 <sup>th</sup> . Apparent dip 75 - 80 degrees N. Chargeability anomaly caused by carbonaceous silicified argillite horizons (43-44.7m; 155.35-159.7m) with up to 20% pyrite-pyrrhotite locally and locally mineralized basaltic-andesite (87-11.8m, up to 15% pyrite-pyrrhotite locally). Bi-modal volcanic lithology.
SK-14-04	284130	5366716	210	-45	152	Testing Target 7, IP 28 and VTEM and next stratigraphy horizon	Line 12+00E 0+40N, drilled grid south. Started on November 18 <sup>th</sup> , finished on November 22 <sup>th</sup> . Apparent dip of strata 65N. Lithology mostly comprised of agglomerate. IP caused by carbonaceous silicified sediment horizons at 62-71m and graphitic argillite at 130-130.7m.
SK-14-05	283873	5366691	30	-45	200	Testing Target 1, IP 29 and VTEM and high soil	Line 10+00E 3+60S, drilled grid north, down-dip. Started on November 29 <sup>th</sup> , finished on December. 18 <sup>th</sup> . Apparent dip of lithology is 70-75N. IP caused by silicified carbonaceous argillite horizons with 5-20% sulphides (10-11.7m; 149.7-152.1m; 190.5-191.5m). Mostly basaltic-andesite lithology.

Table 3. Summary of DDH drilled during the 2014 drill program.





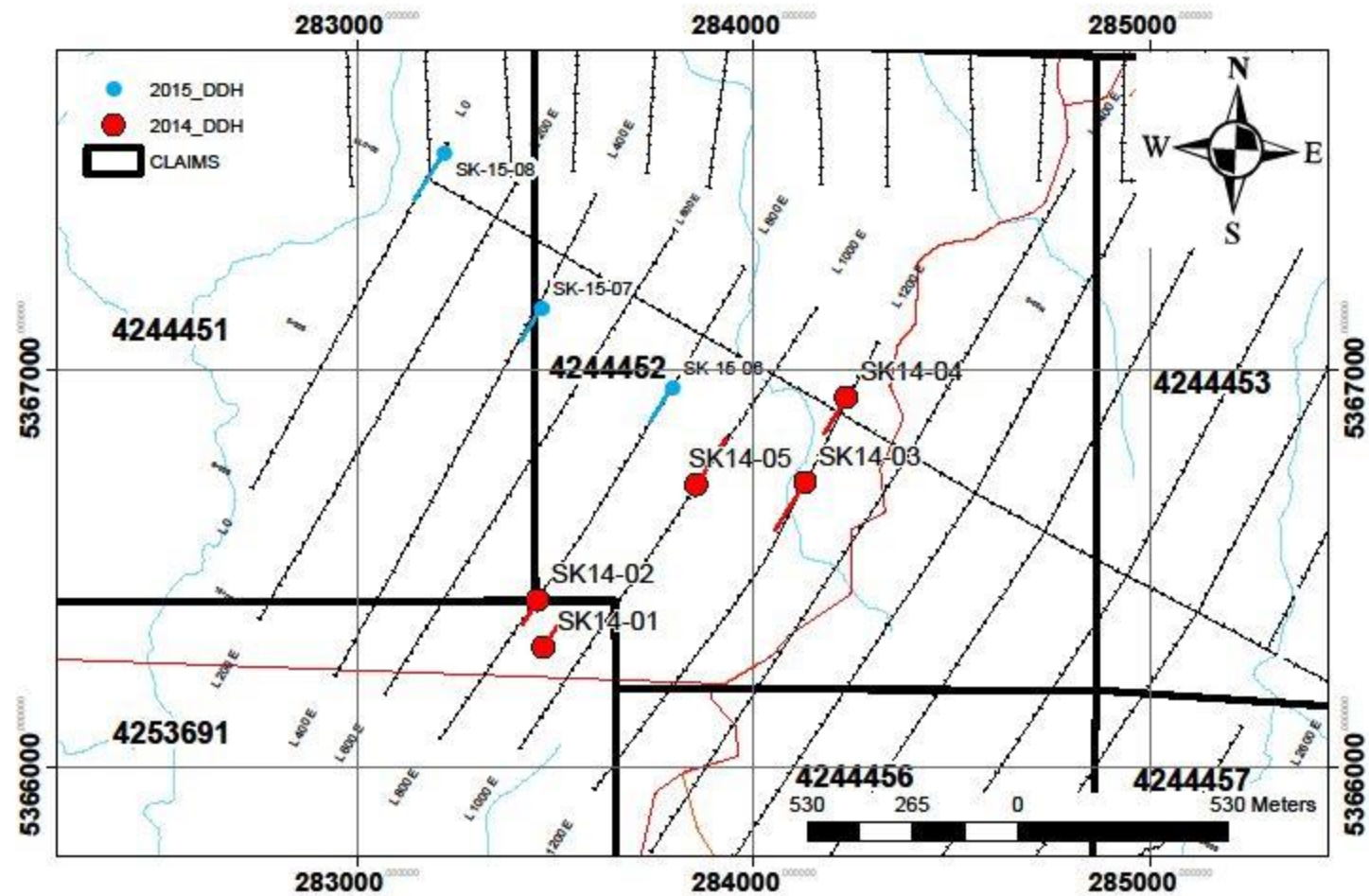


Figure 6. Drill plan showing DDH collar locations and trace of projection of holes on local grid and claim boundaries.

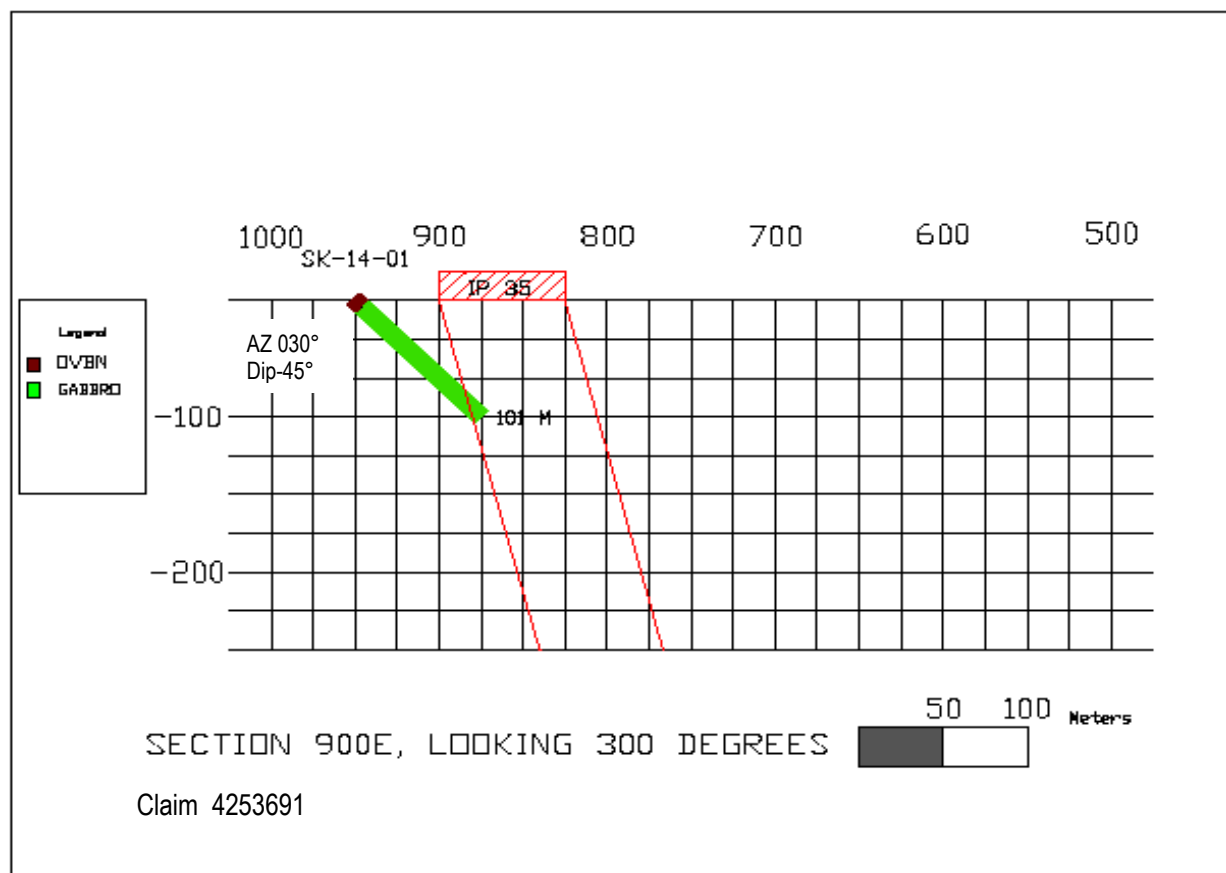


Figure 7. Cross-section of SK-14-01 displaying intersected lithology and down-dip projection of IP anomaly.

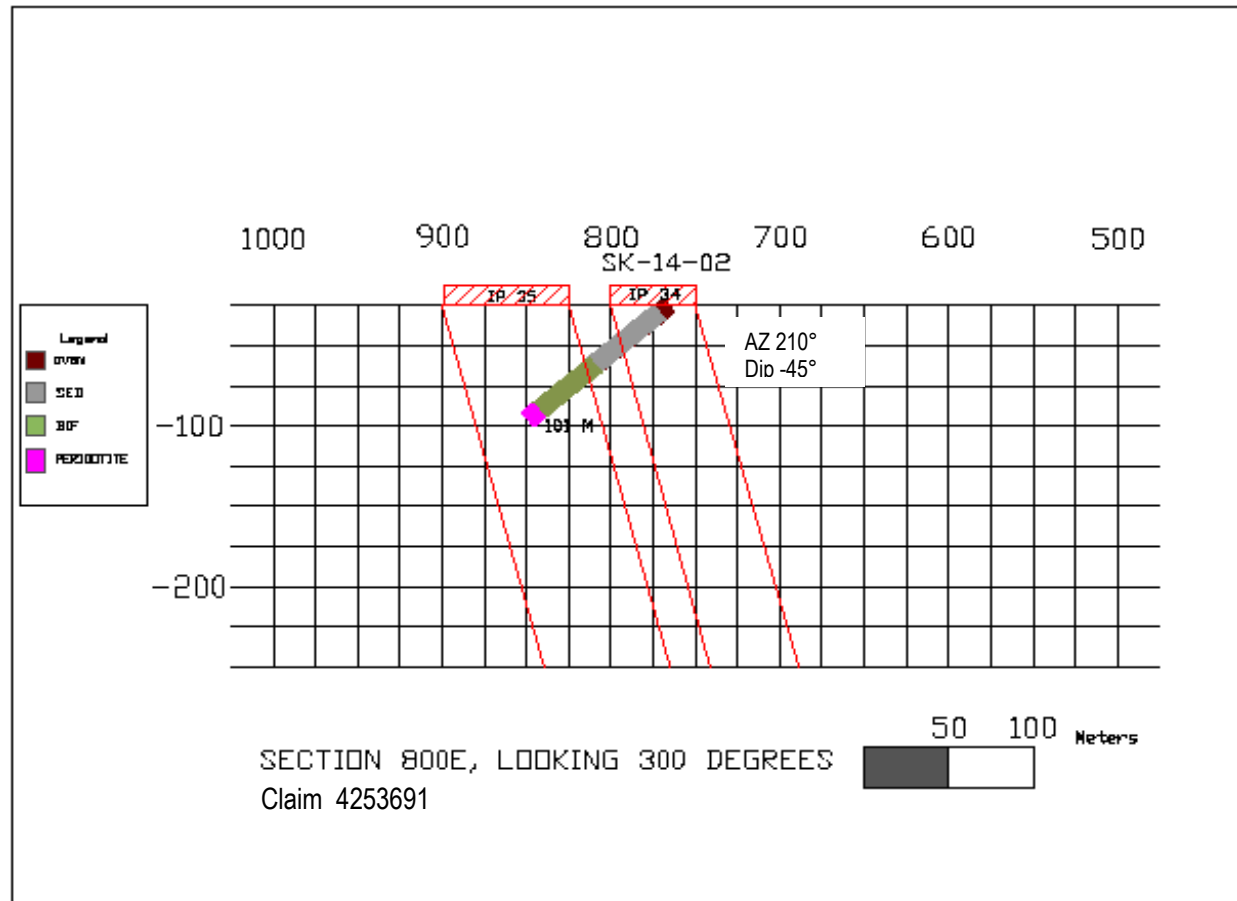


Figure 8. Cross-section of SK-14-02 along grid line 800E showing the lithological units and down-dip projection of IP anomalies.

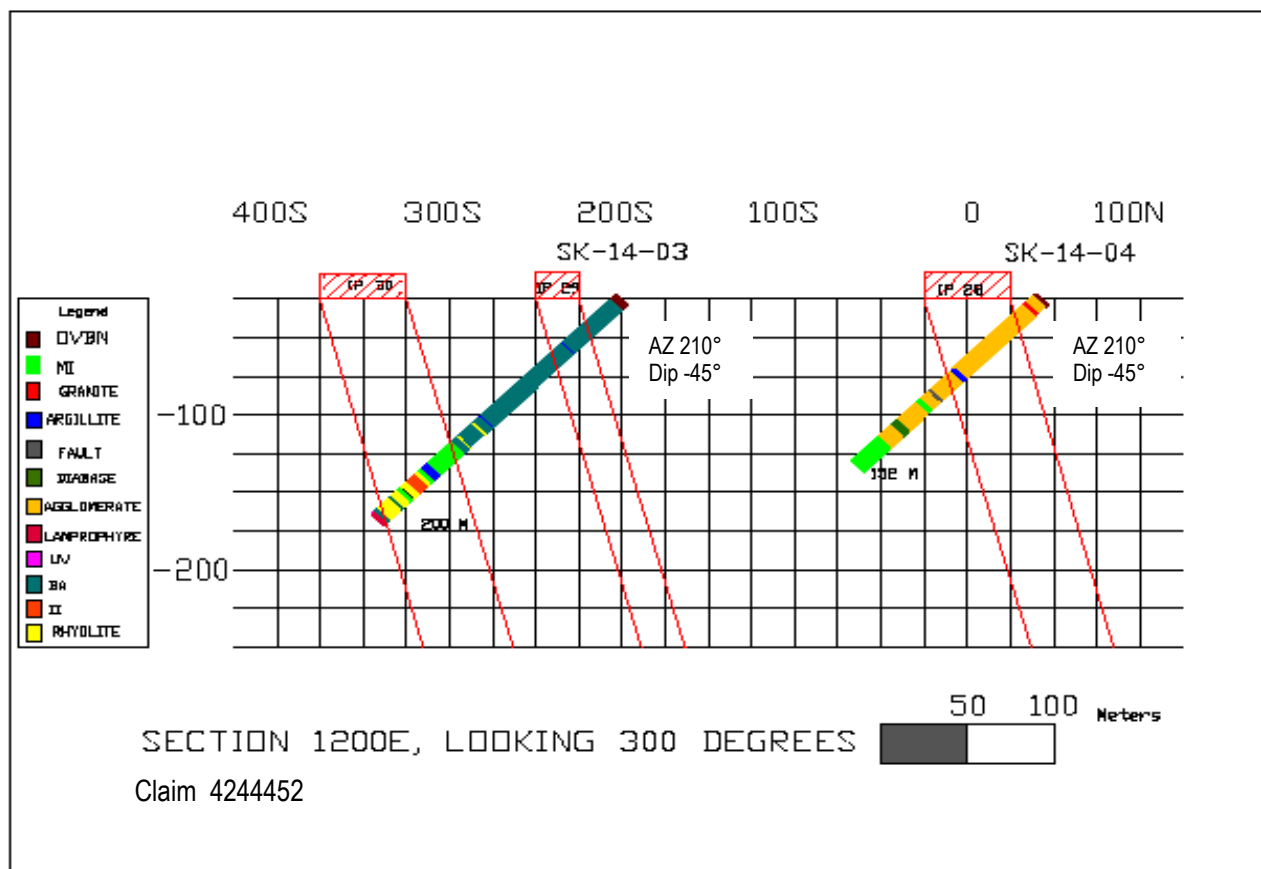


Figure 9. Cross-section of SK-14-03 and SK-14-04 along grid line 1200E, showing intersected lithological units and down-dip projection of IP anomalies.

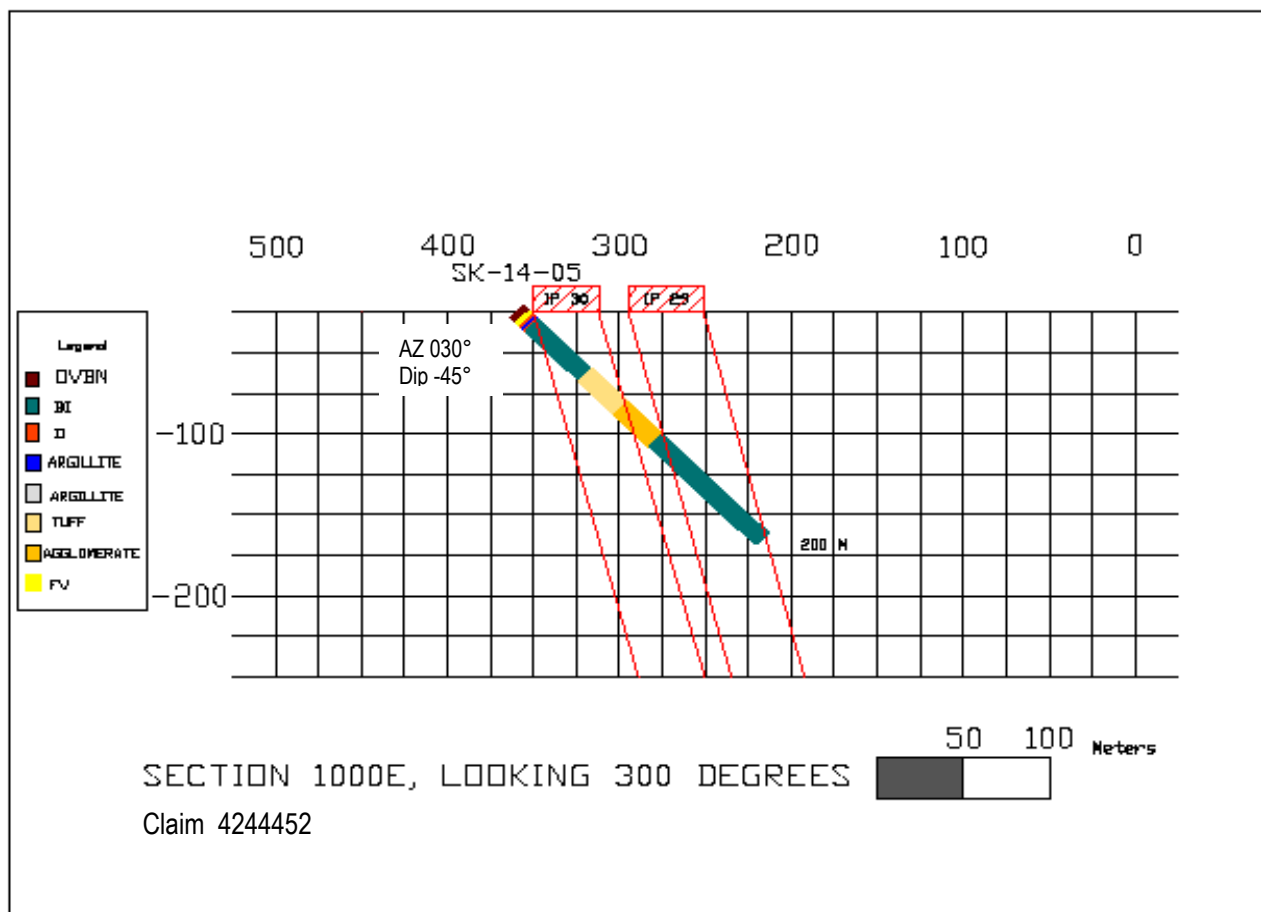


Figure 10. Cross-section of SK-14-05 along line 1000E with lithology and down-dip projection of IP anomalies.

Hole SK-14-03 was started on November 13<sup>th</sup> and finished on November 18<sup>th</sup>, 2014. The hole tested the eastern part of Target 1 (T1, IP 29, IP 30, Fig. 3 and 4) and investigated IP and VTEM parallel felsic horizon (Fig. 5). The hole was drilled normal to the apparent dip of the stratigraphy, which was calculated from core measurements to be 75-80° to the north. The hole was stopped at 200 m depth after intersecting all identified IP anomalies at depth. The IP anomalies were caused by carbonaceous highly silicified sediment (argillite) containing up to 20% sulphides locally (43-44.7m and 155.35-159.7m) and moderately mineralized basaltic-andesite (87-111.8m, up to 15 % pyrite-pyrrhotite locally). The hole intersected bi-modal mafic-to-intermediate (basaltic-andesite) and lesser felsic volcanic lithology interlayered with localized carbonaceous silicified sediment (lithological log in Appendix). Slightly mineralized rhyolite (~3% pyrite-pyrrhotite) was encountered from 185.2-186.8m. The hole ended in chloritized ultramafic volcanic rock (Fig. 9). Thirty one half-core samples were taken and analyzed for Au, Ag, Zn, Cu and Pb. The samples returned slightly anomalous, but non-economic values (sample log in Appendix).

Hole SK-14-04 was started on November 18<sup>th</sup> and finished on November 22<sup>nd</sup>, 2014. This DDH investigated IP 28, Target 7 located within the next inferred felsic horizon to the north on grid line 1200E at 040N (Fig. 3, 4 and 5). The apparent dip of the stratigraphy was calculated from core angle measurements to be 65° to the north. The hole was drilled normal to the dip direction of the stratigraphy to a depth of 152 m. SK-14-04 intersected a wide agglomerate unit interlayered with localized argillite and mafic intrusives towards the end of the hole (Fig. 9 and lithological log in Appendix). Chargeability anomalies were caused by carbonaceous argillite hosting a fault zone (68-71m) and graphitic fault from 130-130.7m. One half-core sample was assayed for Au, Ag, Zn, Cu and Pb returning anomalous, but not economic base metal values (assay log in Appendix).

Hole SK-14-05 was started on November 29<sup>th</sup> and was finished on December 18<sup>th</sup>. The hole tested IP 29 and IP 30 within Target 1, VTEM and high Zn soil anomalies on local grid line 1000E at 360S (Fig. 3, 4 and 5). This DDH was drilled down-dip to the west of topographically inferred N-S fault. Core angle measurements suggest that the strata dips at 70-75° to the north. The hole went through bi-modal volcanic units, mostly basaltic-andesite interlayered with lesser agglomerate, felsic volcanics and sediments (Fig. 10 and lithological log in Appendix). IP anomalies were caused by silicified mineralized argillite (10-11.7m, up to 20% pyrrhotite), carbonaceous argillic selvages in basaltic-andesite (21.9m-22.1m, up to 20% pyrite) and more mineralized argillite at 149.7-152 m (up to 20% pyrite) and again from 190.5 m to 191.5 m. The hole was stopped at 200 m depth due to intersection of all identified IP targets. 143 half-core samples were assayed for Au, Ag, Zn, Cu and Pb. The assays returned anomalous Zn, Cu and Pb values, much higher than in the rest of the other holes with sample M18302 containing 1890 ppm Zn and 155 ppm Cu (assay log in the Appendix and assay certificate A15-00441 in the Appendix). The hole contained visual sphalerite and 5-15% sulphides locally. A whole rock sample was analyzed for major and trace elements allowing for classification of some rock types (basaltic-andesite) and also providing data for plotting CCPI and Ishigawa index diagrams as well as Y/Zr and Ba/Sr ratios.

**Phase 2** of the drilling program started on May 9<sup>th</sup> and finished on June 19<sup>th</sup>, 2015. All DDH were drilled by Huard Drilling Ltd. of Haileybury, ON using BTW-sized drill rods. The assaying was carried out by Swastika Laboratories Ltd., Activation Laboratories Ltd., and Accurassay Laboratories.

During the 2015 drilling program, three diamond drill holes (DDH) and an extension of SK-14-05 were completed to a total length of 507m (Table 4, Fig. 5, 6, 11, 12 and 13). Phase 2 attempted to investigate previously unexplored AEM trends to the East and North of 2014 drill targets, some of which correlate with IP anomalies and mineralized trends intercepted by SK-14-05 and SK-14-03 (IP 29). One such trend,

located East of Target 1 and along strike of a favourable rhyolite horizon was assessed by DDH SK-15-06. Another AEM trend associated with the weaker IP 28 was drilled by SK-15-07. The reasoning behind this strategy being that highly anomalous IP chargeability values drilled in previous targets were attributed to carbonaceous or graphitic horizons instead of lithologies typically associated with known VMS occurrences. The last DDH of Phase 2 (SK-15-08) investigated a different AEM trend to the North-East of 2014 targets that was previously drilled with encouraging results during 2005-2006 exploration program (Hava, J., 2006: Report on the 2005-2006 Drilling Program, Stares Project).

Hole SK-15-06 was started on May 10<sup>th</sup> and stopped on May 14<sup>th</sup>, 2015 at 149m depth. Angle to core axis observed while logging the core reveals a very steep lithology dip of 75°S-90°. This DDH aimed to investigate AEM trend in the eastern extent of IP 29 and to the East of Target 1 (Fig. 3, 4, 5 and 6) on grid line 800E at 150S. The hole intersected two mineralized pyrite-pyrrhotite (Py and Po) horizons within silicified carbonaceous argillite and agglomerate units (Fig. 11 and log in Appendix), which explains the AEM and IP anomalies. Mineralization within the agglomerate locally reached 20% and appears to be controlled by the increased porosity of the unit but fails to reach any appreciable base or precious metal content.

Hole SK-15-07 was started on May 16<sup>th</sup> and finished on May 21<sup>th</sup>, 2015. DDH collar was located on line 400E 125S and the hole was stopped at 143m depth (Fig. 5, 6 and 12, log in Appendix). Angle to core axis suggests a very steep lithology with apparent dip of 75°N-90°. This DDH investigated a weaker part of IP 29, proximal to an AEM trend to the South (Fig. 3). All previously drilled IP targets were highly anomalous, but did not return any significant findings. Therefore a new approach was tried with SK-15-07 attempting to test weaker IP's for base metal mineralization. The hole did not intersect any significant mineralization or alteration, but did go through a weakly mineralized rhyolite horizon. This weak mineralization was intercepted deeper than in some previous DDH's (121.1-134.5m) likely because



of large scale folding evident from plan view chargeability anomaly layout and could explain the cause of the weaker IP signature.

DDH SK-15-08 tested a different AEM trend and IP anomaly (IP 28) previously investigated during 2005-2006 drilling (Fig. 3 and 4). Hole SC05-08 drilled in 2005 returned 1426 ppm Zn, 183 ppm Ag and 4 ppb Au (Hava, 2006). DDH SK-15-08 was drilled in the same AEM trend and IP anomaly as SC05-08 and attempted to verify or expand its findings. A wide unit of strongly mineralized rhyolite tuff (~40% Py and lesser Po) was observed (77.6-104m) in SK-15-08, however the mineralization appears to be structural rather than VMS in origin (Fig. 13, log in Appendix). This is due to the fact that all sulphides were located on the contact between mafic-felsic units in a permeable host (tuff). A grab core sample was analyzed with whole rock XRF and various diagrams plotted with the purpose of identifying rock type and alterations associated with known VMS deposits. These diagrams included TAS, Ishikawa index- chlorite-carbonate-pyrite index (CCPI) plot, Ba/Sr plot (Fig. 14, 15 and 16). , According to Large et al. (2001), some of the important exploration geochemical vectors are sodium depletion ( $\text{Na}_2\text{O}$  less than 0.5%, should give a halo of up to 1km for large deposits), CCPI- Ishikawa Index, and Ba/Sr. We didn't find any significant sodium depletion in core grab sample WR-8-84 ( $\text{Na}_2\text{O}$ =2.99%, Certificate 196201542411 in Appendix ), collected from hole SK-15-08 at 84m depth, where most of the mineralization was located. Furthermore a CCPI-Ishikawa index plot of the same sample places it in the least alteration box, which doesn't signify any appreciable alteration to be associated to known VMS deposits (Fig. 15 and 17). Ba/Sr ratio plot for the same sample is 1.43, where it should be >25 at 100m depth, to signify significant hanging-wall hydrothermal alteration about 100m away from mineralization (Fig 16). The TAS diagram clearly identifies the sample as dacite, although it visually appears as rhyolite tuff (Fig 14).

Hole	Easting	Northing	Azimuth	Dip	Length	Purpose	Remarks
SK-15-06	283795	5366957	210	-45	149	Testing AEM trend, the extent of IP29 and adjacent high soil trend.	Line 8+00E 1+50S, drilling grid south. Started on May 10 <sup>th</sup> , finished on May 14 <sup>th</sup> 2015. Litho apparent dip varies from 75S to 90. AEM anomaly caused by mineralized, cherty argillite (35.7-37.4m-7% Py) and mineralized agglomerate (68-75m, up to 20% Py+Po).
SK-15-07	283466	5367158	210	-45	143	Testing weaker AEM trend and weaker part of IP 29 and hoigh soil trend.	Line 4+00E 1+25S, drilled grid south. Started on May 16th, finished May 21st, 2015. The hole did not intercept any significant mineralization, but went through and extensive rhyolite horizon (121.1-134.5m). AEM likely caused by moderately magnetic UM lithology. Apparent dip varies from 80S to 90.
SK-15-08	283220	5367548	210	-45	199.3	Testing northern AEM trend within IP 28 and well within the felsic horizon.	Line 0+00E 0+75N, drilled grid south. Started on June 12th and finished on June 19, 2015. Significant mineralization distributed in argillite (76.4-77.6m-15 Py+Po) and rhyolite tuff (77.6-104-locally up to 40%Py, less Po). Mineralization appears to be structurally controlled by contact between felsic-mafic units. Bi-modal lithology.

Table 4. Summary of DDH drilled during the 2015 program.

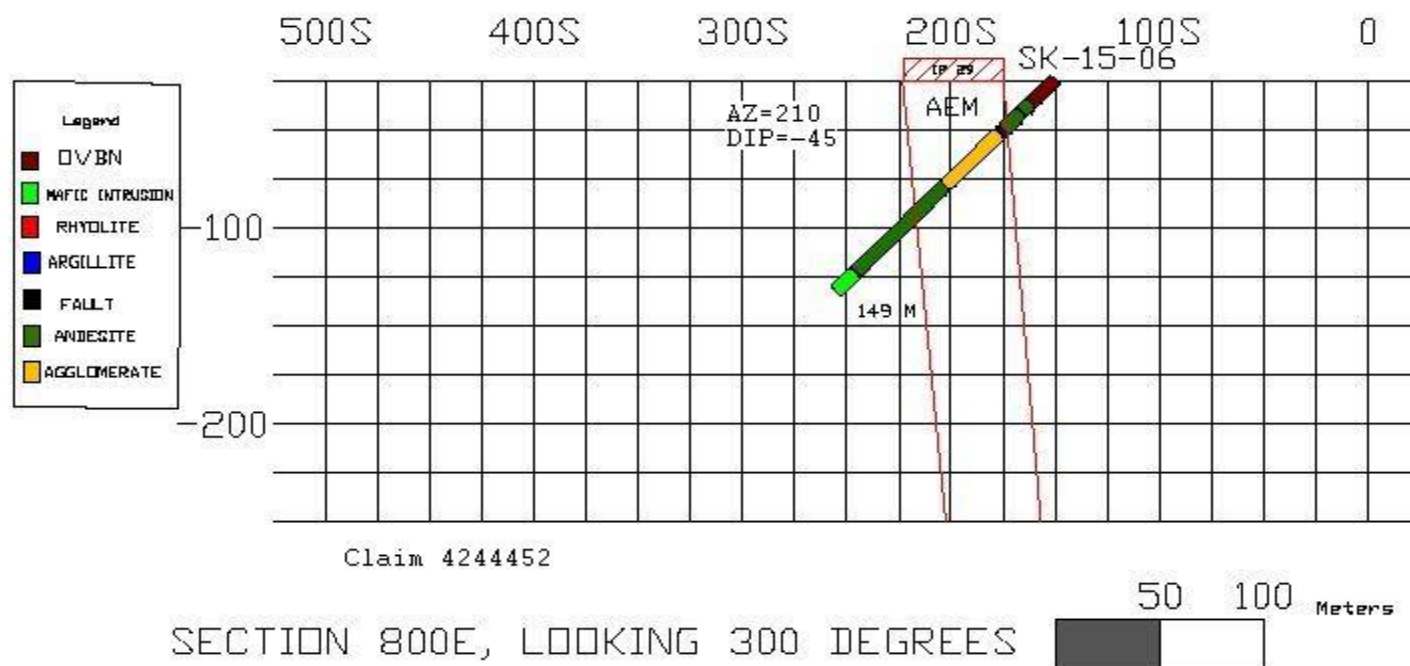


Figure 11. Cross-section of SK-15-06 along line 800E with lithology and down-dip projection of IP anomalies.

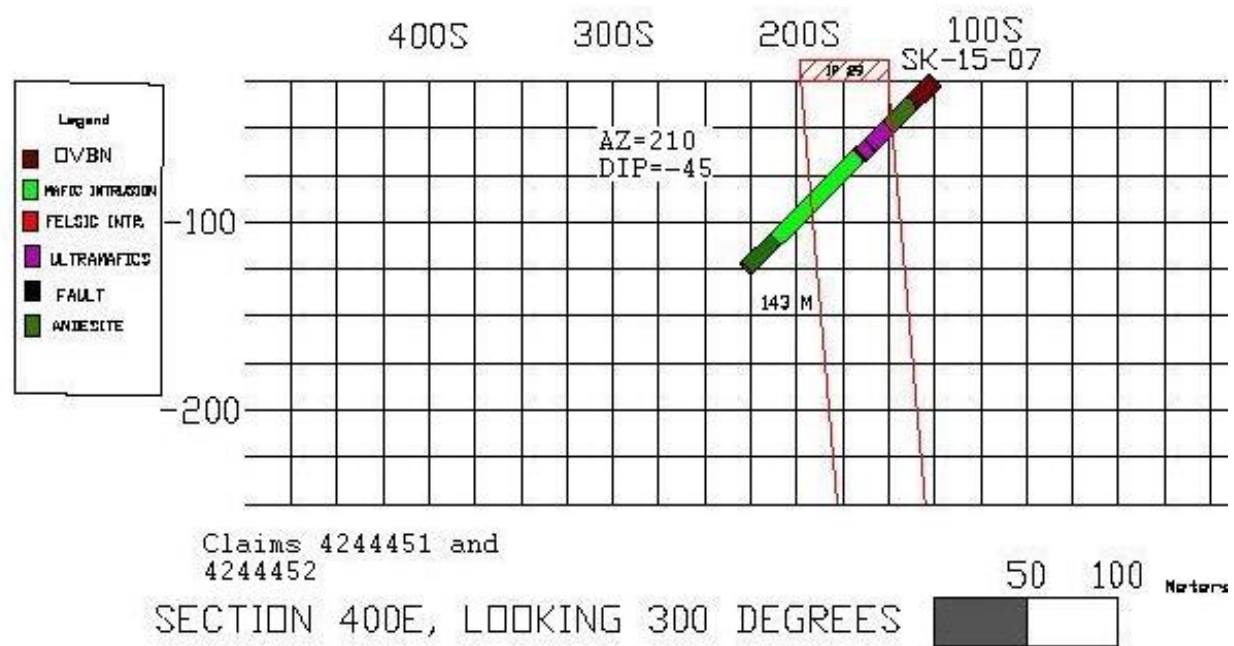


Figure 12. Cross-section of SK-15-07 along line 400E with lithology and down-dip projection of IP anomalies.

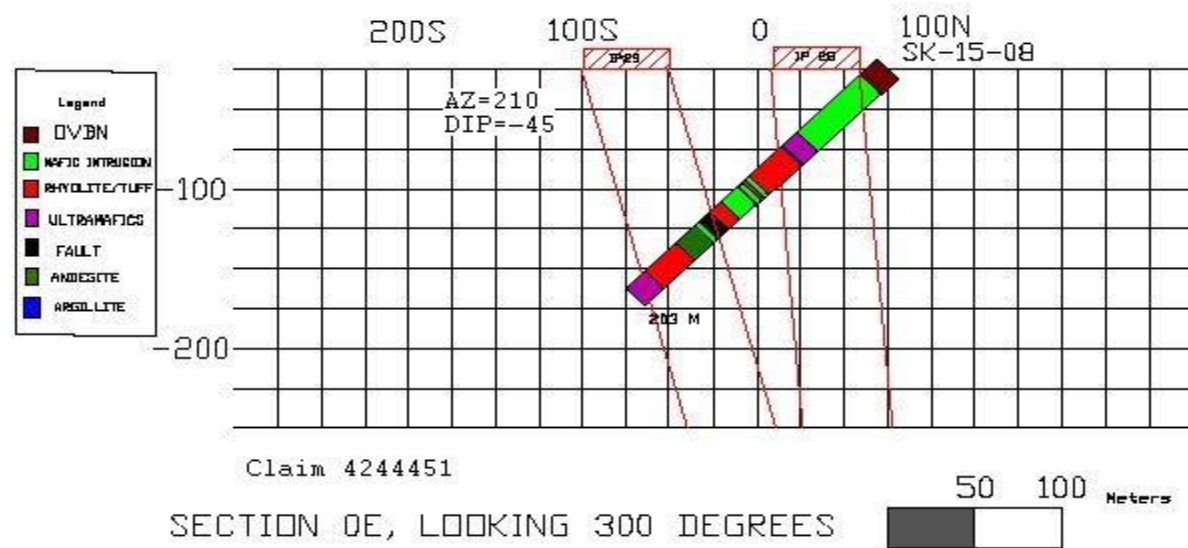


Figure 13. Cross-section of SK-15-08 along line OE with lithology and down-dip projection of IP anomalies.

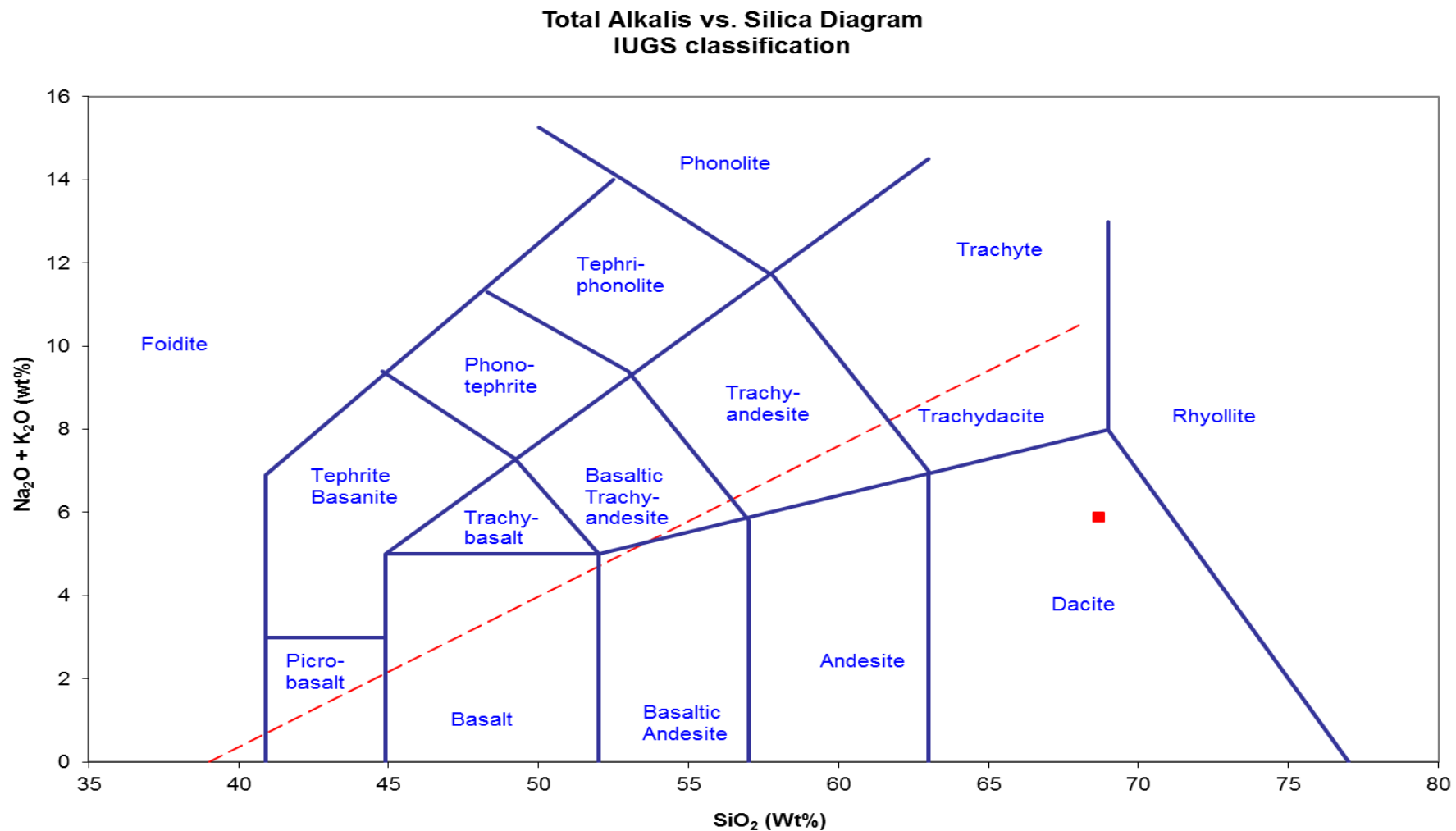


Figure 14. Total alkalis vs. silica diagram. Sample WR-8-84 plots in the dacite-rhyolite field. Visually, rock type is rhyolite tuff.

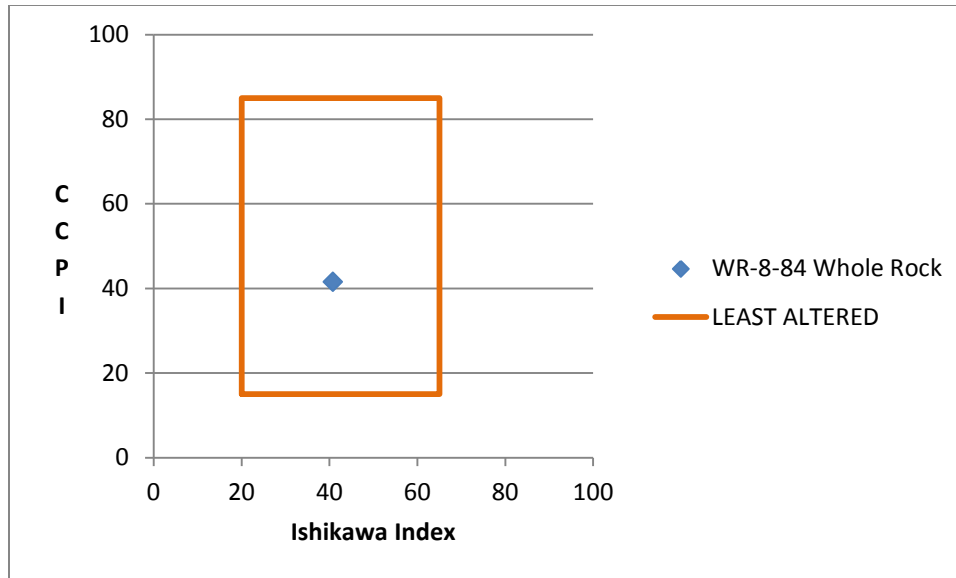


Figure 15. Sample WR-8-84 does not display any significant VMS associated alteration.

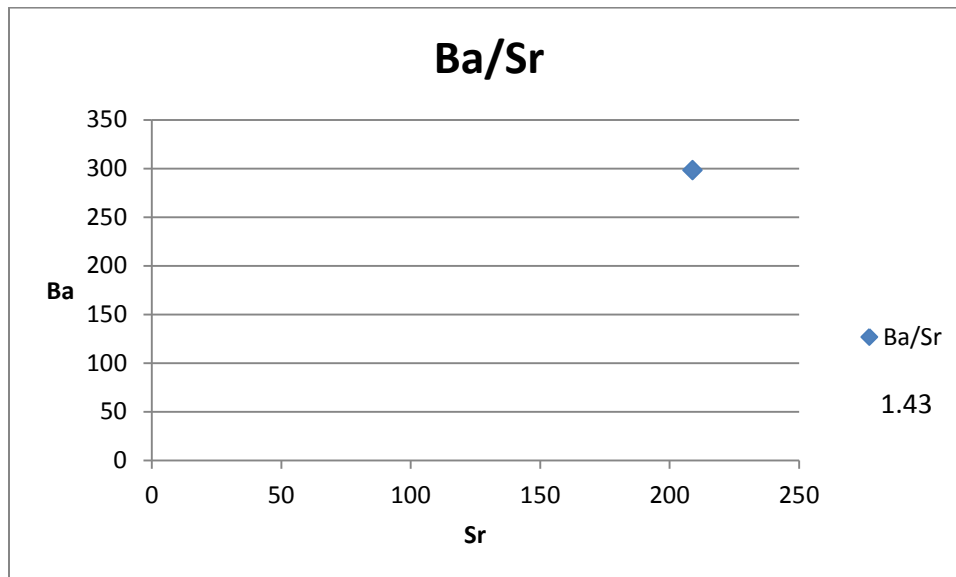


Figure 16. BA/Sr plot for sample WR-8-84. Note that according to Large et al. (2001), values should be >25 at 100m depth to identify any significant VMS alteration. Value for WR-8-84 is 1.43.

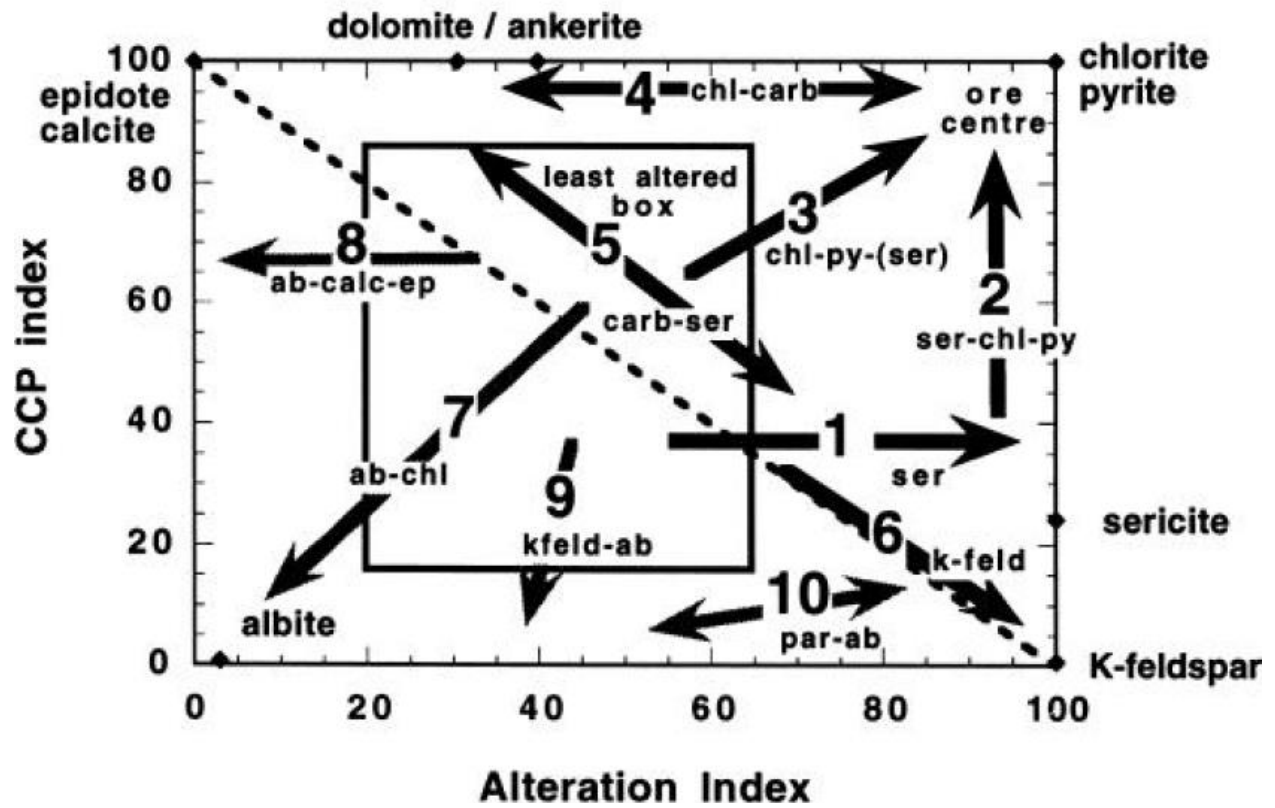


Figure 17. Ishikawa and CPP indices diagram for alteration associated with for VMS deposits. After Large et al. (2001).



## **Dates and Cost of Work**

Planning for the Sackville Property drill program started in February 2014. A field visit was carried out in September evaluating the drilling targets, collecting outcrop grab samples, identifying favourable geology exposed in trench sites and outcrops. Phase 1 drilling started on October 28<sup>th</sup> and finished on December 18<sup>th</sup>, 2014, but related work continued to the end of December. Phase 2 drilling started on May 10<sup>th</sup> and finished on May 19<sup>th</sup>, 2015. The drilling for both phases was carried out by Huard Drilling Ltd. of Haileybury, ON . Assaying for the 2014-2015 Program was split between Swastika Laboratories Ltd., Activation Laboratories Ltd. and Accurassay Laboratories.

Total drilling cost for Phase 1 was \$70,176, out of which \$45, 396 was the net cost of drilling and \$24,780 was related cost (float, mobilizing, moves, supplies etc.). Detailed summary of Phase 1 drilling cost is outlined in Table 5.

As part of Phase 1, a total of 175 half-core samples were assayed from January 13<sup>th</sup>, 2015 to January 27<sup>th</sup>, 2015 in addition to one whole rock sample analysis and a number of grab samples analyzed during 2014 at a combined cost of \$6,935 and additional \$625 for core cutting (Table 6).

Equipment rental for the period September 1<sup>st</sup>-October 31<sup>st</sup>, 2014 was at a cost of \$9,159 and additional supplies and labor for the period of September 25<sup>th</sup>-October 31<sup>st</sup>, 2014 were at a cost of \$51,098 (Table 7).

Travel cost related to the drilling and site visits for the period September 23<sup>rd</sup>-December 18<sup>th</sup>, 2014 came to \$5,748 and food and lodging expenses for the period September 23<sup>rd</sup>-December 23<sup>rd</sup>, 2014 was \$8,110 (Table 7).

Phase 1 work cost was distributed between two claims (4244452 and 4253691) based on meters drilled on each claim. The amount of work performed on 4244452 sums up to \$109,868 and the amount of work performed on 4253691 amounts to \$41, 983 (Table 11).

The all-inclusive cost for the 2014 exploration program is \$151,851.

Total drilling cost for Phase 2 was \$32,977.1, out of which \$25,575 was the net cost and \$7,402.1 was additional related expense. Detailed breakdown of drilling expenditure per claim is outlined in Table 8.

Assaying and analysis cost for core samples and grab samples in Phase 2 was \$3915.7 (Table 9). Additional expenses such as food and lodging, labour, rentals and miscellaneous amounted to \$29,236.16 (Table 10).

Phase 2 expenditures were distributed between 2 claims: 4244451 and 4244452. Total exploration cost for claim 4244451 was \$40,155.37. Total exploration cost for claim 4244452 was \$25,973.59. The combined cost for both claims during 2015 exploration program was \$66,128.96 (Table 11).

Hole	Cost	Meters	Additional expenses	Claim	Cost per Claim Drilling	Cost Per Claim Combined
SK14-01	6060	101		4253691		
SK14-02	6060	101	10000	4253691	12120	22120
SK14-03	12150	200	6910	4244452		
SK14-04	9126	152	4120	4244452		
SK14-05	12000	200	3750	4244452	33276	48056
Totals	45396	754	24780		45396	70176

*Table 5. List of Phase 1 DDH and associated meterage, cost and claim number.*

Hole	Certificate	Cost Au	Cost BM	Claim
SK-14-05	14-1745	7		4244452
SK-14-05	15-00195	50		4244452
SK-14-05	15-016, A15-0044	980	784	4244452
SK-14-05	15-017, A15-0044	1000	800	4244452
SK-14-05	15-018, A15-0044	880	704	4244452
SK-14-03; SK-14-05	15-019, A15-0044	640	512	4244452
SK-14-04	15-073, A15-0044	20	16	4244452
CORE CUTTING		625		4244452
SOIL SAMPLES	A14-06924		331	4244452
GRAB SAMPLES	A14-08605		211	4244452
TOTALS		4202	3358	7560

*Table 6. Phase 1 assay and core cutting costs.*

Travel	5748
Food and Lodging	8110
Labour	51098
Equipment Rental	9159
Totals	74115
Added cost for claim 4253691	19862.8
Added cost for claim 4244452	54252.2

*Table 7. Phase 1 travel, food, lodging and additional costs.*

Hole	Cost	Meters	Additional Expenses	Claim	Cost per Claim Drilling	Cost per Claim Combined
SK-15-05	756	12		4244452		
SK-15-06	4840	149	3672.1	4244452		
SK-15-07	3180	47.66	746.66	4244452	8776	13194.76
SK-15-07	6360	95.34	1493.34	4244451		
SK-15-08	10439	203	1490	4244451	16799	19782.34
Totals	25575	507	7402.1		25575	32977.1

Table 8. List of Phase 2 DDH and associated meterage, cost and claim number.

Hole	Certificate	Cost Au	Cost ICP	Claim	Total per Claim
SK-15-06	15-1245/A15-03836	360	432	4244452	792
SK-15-08	201542410	Combined with ICP	2722.5	4244451	
Grab Samples	201541898		23.7	4244451	
Grab Samples	A15-03287		200	4244451	
Grab Samples	201542411		177.5	4244451	3123.7
Total Cost		360	3555.7		3915.7

Table 9. Assays and sample analysis cost for Phase 2 drilling.

Travel, Food and Lodging	4599.42
Equipment Rental	3342.07
Labour	20450
Miscellaneous	844.67
Added cost for claim 4244451	17249.33
Added cost for claim 4244452	11986.83
Totals	29236.16

*Table 10. Phase 2 food, travel and some additional costs.*

Phase	CLAIM	Cost	Total
Phase 1	4244452	109868	151851
	4253691	41983	
Phase 2	4244451	40155.37	66128.96
	4244452	25973.59	

*Table 11. Phase 1 and 2 per claim total exploration cost.*

## **Conclusions and Recommendations**

The 2014-2015 Sackville Property drilling program was instrumental in greatly improving knowledge about the Property geology and its association with geophysical and geochemical anomalies. Notably, key lithological units were identified and their alteration assemblages evaluated with respect to known vectors for VMS mineralization. Furthermore different IP, VTEM and high Zn soil anomalies aligned with massive sulphide boulder train based on inferred paleo-ice flow direction were evaluated with regards to geology.

Most, if not all of the drilled target anomalies appear to be structurally controlled in nature based on their proximity to lithological contacts and porous host rocks (agglomerate). Key alteration indicators of numerous core grab samples such as Ishikawa Index vs CPPI, Ba/Sr ratio, sodium depletion, show no significant association with known VMS alteration vectors. However, such geochemical vectors are often accurate on a hundreds of meters to a kilometer scale and it is the author's opinion that while they are an important tool in VMS deposits exploration, their use is somewhat limited for initial target generation, where geophysics and soil geochemistry play a more important role.

Based on the outcome of the 2014-2015 drilling program the following recommendations for future work could be suggested:

1. More outcrop grab samples should be collected proximal to selected IP anomalies targets and analyzed for known vectors for VMS mineralization and proper rock type classification.
2. Soil samples along line 1600N at 900 and 1200S close to the eastern extent of T2 (IP35) and western part of T4 (IP 36) show high Zn values of 1790 and 695 ppm respectively. Drilling showed predominantly iron formation lithology in the eastern part of T2, but the horizon has been previously mapped as felsic volcanics, so it they could be interlayered. Furthermore T4

appears to be non-formational and of small strike length. If, budget allows it these targets should be drilled and if any outcrops are present near the targets, representative samples should be collected and analyzed for major and trace elements and assayed for base metal content.

3. Target 6 (IP 28) is located within the same felsic horizon as T1 and T7 and also appears to be non-formational. It is also located up-ice from massive sulphide boulder train. If budget allows it this target should be drilled, given the anomalous Zn values encountered in SK-14-05 and in order to complete the evaluation of this lithological horizon.
4. Along line 1600E, 575S there is a large stripped rhyolite bedrock patch-Trench 7 (with associated intrusive phase), that is close to a high Zn soil values (up to 1070 ppm) and is slightly south from the weaker and non-formational appearing IP 32. This target is also located within a SGH anomaly contour. Given the favourable rock type and the presence of numerous anomalous soil Zn values, this target should be further investigated and drilled if possible.
5. Along lines 3900W from 1200N to 1950N and 3600W from 900N to 1100N of the old grid there are anomalously high soil Zn values (up to 1420 ppm). Numerous samples were collected in the vicinity during Phase 2 of the drilling, but further investigation is recommended. This site is outside of the current IP survey, therefore additional outcrop sampling and mapping should be carried out (if outcrops are present nearby).



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Ilian Iliev, MSc, PGeo  
CONSULTING GEOLOGIST  
2249 Seton Crescent  
Burlington, ON  
L7L 6Y4  
TEL: (416)706-1622

#### **CERTIFICATE OF AUTHOR**

I Ilian Iliev, MSc, PGeo do hereby certify that:

1. I am currently not employed with Mistango River Resources. I currently reside at:

2249 Seton Crescent  
Burlington, ON  
L7L 6Y4

2. I graduated with a Master of Science degree in Geology from the University of Western Ontario in 2011

3. I am registered as a practicing member (Professional Geoscientist) of the Association of Professional Geoscientists of Ontario (APGO) with registration number 2523.

4. I have worked as a geologist for over 4 years since graduation from University.  
I have been directly involved in exploration for base metals, gold, and iron ore in Canada.

**Dated this 25<sup>th</sup> Day of November, 2015 in the City of Burlington, Ontario.**

**“signed”**

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**Ilian Iliev, MSc, PGeo**

## Appendix

### Lithological Core Logs

<b><i>Mistango River Resources Inc.</i></b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION: SACKVILLE Township, Ontario</b>
<b>DDH</b>	<b>SK-14-01</b>	<b>5366300</b>	<b>N</b>	<b>DRILL COMPANY: HUARD DRILLING</b>
<b>Az</b>	<b>30.00</b>	<b>283471</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 16</b>	<b>E</b>	<b>850.00</b>
<b>E.O.H:</b>	<b>101.00</b>	<b>NAD 83</b>	<b>N</b>	<b>-950.00</b>
<b>Elev.:</b>				<b>Start: November 01, 2011; End: November 04, 2011</b>
<b><i>From</i></b>	<b><i>To</i></b>	<b><i>Rock Type</i></b>	<b><i>Code</i></b>	<b><i>Description</i></b>
0.00	4.00	OVBD	OBN	casing left in hole
4.00	101.00	Gabbro	GBR	Hard, competent, non-magnetic, massive phaneritic, locally ophitic, subhedral, orthopyroxene gabbro (norite). Localized increased quartz content, but remains mafic throughout. Crystal size becomes fine-to-locally aphanitic, close to EOH. Localized shearing at 50DTCA, but predominantly massive. Numerous calcite stringers angles are very shallow, suggesting drilling is down-dip, but overall difficult to get a sense of the dip due to the massive nature of the rock. Trace to 3-4% pyrite locally. EOH.
101.00	EOH			

<b>Mistango River Resources Inc.</b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION:</b> Sackville Township, Ontario
<b>DDH</b>	<b>SK-14-02</b>	<b>5366419</b>	<b>N</b>	<b>DRILL COMPANY:</b> HUARD DRILLING
<b>Az</b>	<b>210.00</b>	<b>283456</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 16</b>	<b>E</b>	<b>800.00</b>
<b>E.O.H:</b>	<b>101.00</b>	<b>NAD 83</b>	<b>N</b>	<b>-765.00</b>
<b>Elev.:</b>				<b>Start: November 09, 2011; End: November 11, 2014</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	8.40	OVBD		Granite boulder
8.40	58.20	Sediment	SED	This is a very lean BIF. Non-magnetic. Locally fine-to-very coarse, poorly sorted, sub-angular-to-medium rounded, massive-to-moderately bedded wacke with localized jasper/hematization.
58.20	93.20	BIF	BIF	Fine-to-medium grained cherty siltstone interbedded with very fine chert and hematite-magnetite beds (contain localized sulphides). Bedding is at about 60DTCA. Localized folding with limbs at shallow angles to core axis. Strongly magnetic.
93.20	101.00	Peridotite	PR	Phaneritic peridotite with olivine phenocrysts. (Could be olivine gabbro). Very weakly magnetic.
101.00	EOH			EOH

## ***Mistango River Resources Inc.***

<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION:</b> Sackville Township, Ontario
<b>DDH</b>	<b>SK-14-03</b>	<b>5366716</b>	<b>N</b>	<b>DRILL COMPANY:</b> Huard Drilling
<b>Az</b>	<b>210.00</b>	<b>284130</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>16</b>	<b>E</b>	<b>1200.00</b>
<b>E.O.H:</b>	<b>200.00</b>	<b>NAD 83</b>	<b>N</b>	<b>-200.00</b>
<b>Elev.:</b>				<b>Start: November 13, 2014; End: November 18, 2014</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	5.00	OVBD		<b>Very blocky core, MV (mafic volcanic)</b>
5.00	43.30	Basaltic Andesite	BA	Hard, competent, locally weakly magnetic, locally brecciated (flow breccia locally-after 54m), moderately carbonatized (calcite), locally weakly chloritic (chloritic seams at 54-57m, but possibly locally throughout), strongly siliceous(throughout), weakly hematized (oxidized pyrite, but also hair line hematite stringers locally, limonite on fractures close to surface) intermediate volcanic rock. Pyrite content varies, but in more mineralized intervals it averages 5-10%, with lesser pyrrhotite. Pyrite content starts to increase after 41m.
43.30	44.70	Argillite	ARG	Pervasively silicified carbonaceous sediment. Brecciation and argillic seams appear after 43.3m and the core becomes carbonaceous after 44.2 to 44.7m (this is a small cherty lens). Pervasively silicified. Up to 20% sulphides (about 10% average) in the argillic lens (mostly botryoidal pyrite, with some hematite and less pyrrhotite).
44.70	87.00	Basaltic Andesite	BA	Back to andesite as described above. The texture becomes gradually coarser below 83m, with more intrusive looking localized intervals, but overall still mostly volcanic.
87.00	111.80	Basaltic Andesite	BA	Silicified and mineralized mafic-to-intermediate volcanics. Another zone of increased mineralization (botryoidal-to-semi massive selvages of pyrite+pyrrhotite <15% locally) starts at 87 to 100.6m, with pyrrhotite appearing after 95m, associated with increased silicification. Flow breccia observed locally at 104.5m and 107.4m.
111.80	112.60	Rhyolite	RY	Short unit of rhyolite/cryptocrystalline chert? (~5% pyrite).
112.60	117.70	Basaltic Andesite	BA	This is a heterogeneous unit comprised of weakly-to-moderately silicified phaneritic-to-locally aphanitic felsic volcanics.
117.70	118.90	Rhyolite	RY	Quartz-eye porphyry (feldspar and quartz phenocrysts in aphanitic siliceous groundmass) rhyolite.
118.90	129.60	Basaltic Andesite	BA	Fine phaneritic-to-locally aphanitic, massive, locally weakly silicified, weakly carbonatized felsic volcanics.

129.60	130.95	Rhyolite	RY	Quartz-eye rhyolite. Hard, competent, non-magnetic, porphyry (qtz and feldspar phenocrysts in very fine qtz groundmass) rhyolite. About 3% botryoidal pyrite on average.
130.95	135.00	Porphyry B Andesite	BA	This unit is comprised of intermediate porphyry rock, with predominantly ferro-mag mineral content, but also contains up to ~20%qtz and feldspar phenocrysts. Groundmas is fine phaneritic. Sheared and faulted from 133.5-135, (~30DTCA).
135.00	155.35	Mafic Intrusives	MI	Gabbroic mafic intrusives. Small chert/rhyolite interval from 144-144.5m (very fine, black and siliceous).
155.35	159.70	Argillite	ARG	Very fine, black, finely banded (~50DTCA), chert. <5% pyrite on average.
159.70	163.00	Mafic Intrusives	MI	Mafic intrusives. Phaneritic, massive, locally weakly silicified, weakly carbonatized mafic intrusion.
163.00	164.50	Rhyolite	RY	Porphyry rhyolite:feldspar and quartz-eye phenocrysts in very fine siliceous groundmass.
164.50	172.00	Intermediate Intrusives	II	Intermediate intrusive rock. Predominantly silica-chlorite groundmass, but with higher content of feldspar and quartz. Some intervals are granodioritic. Localized brown, siliceous, intrusive xenoliths and small xenoliths of rhyolite porphyry.
172.00	173.40	Rhyolite	RY	Rhyolite porphyry. Feldspar and quartz phenocrysts in aphanitic siliceous groundmass. Small mafic intrusive xenoliths after 173m.
173.40	176.00	Mafic Intrusives	MI	Predominantly mafic intrusives, interlayered with localized rhyolite porphyry.
176.00	176.90	Mafic Intrusives	MI	Fine grained mafic dyke.
176.90	179.80	Rhyolite	RY	Heterogeneous lithological unit comprised of predominantly rhyolite porphyry interlayered with localized segments of mafic dyke.
179.80	185.20	Basaltic Andesite	BA	Fine phaneritic, competent, chloritic mafic-to-intermediate volcanics (could be fine grained intermediate intrusive).
185.20	186.80	Rhyolite	RY	Creamy-to-locally brown, locally banded (~50DTCA), locally porphyritic (feldspar phenocrysts in aphanitic quartz groundmass from 185.5 to 185.9m and again close to lower contact), rhyolite. This unit is mineralized with about 3% pyrite+pyrrhotite (blebs of botryoidal pyrite and localized finer pyrrhotite). Pyrrhotite is visible toward lower contact, but localized magnetism suggests it is likely present locally throughout. This zone is most likely responsible for the second IP anomaly at depth.

186.80	196.00	Basaltic Andesite	BA	<b>Green, hard, competent, non-magnetic intermediate unit. The texture is porphyritic from upper contact to 187.5m with abundant large plagioclase phenocrysts in finer, but still phaneritic ferro-mag groundmass (weak shearing at 50DTCA). From 187.5m to 188 another banded rhyolite raft. Below the rhyolite xenolith, the texture becomes finer phaneritic and continues to get finer toward lower contact, along with border line mafic-to-intermediate rock composition. Leucoxene appears below 192.3m to lower contact. Weak shearing throughout.</b>
196.00	198.70	Chloritized Ultramafics	CUV	<b>Soft, magnetic, chloritized ultramafic volcanic rock.</b>
198.70	199.80	Lamprophyre	LAMP	<b>Lamprophyric dyke: phaneritic, pervasively Biotitized.</b>
199.80	200.00	Chloritized Ultramafics	CUV	<b>Back to chloritized ultramafics. EOH</b>
200.00	EOH			

## ***Mistango River Resources Inc.***

<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION: Sackville Township, Ontario</b>
<b>DDH</b>	<b>SK-14-04</b>	<b>5366930</b>	<b>N</b>	<b>DRILL COMPANY: Huard Drilling</b>
<b>Az</b>	<b>210.00</b>	<b>284235</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 17</b>	<b>E</b>	<b>1200.00</b>
<b>E.O.H:</b>	<b>152.00</b>	<b>NAD 83</b>	<b>N</b>	<b>40N</b>
<b>Elev.:</b>				<b>Start: November 19, 2014; End: November 22, 2014</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	2.00	OVBD		
2.00	8.00	Agglomerate	AGL	Grey-green, very hard, polymictic agglomerate. Angular felsic porphyritic fragments, as well as intermediate and more mafic fragments in highly silicified groundmas. Shear fabric is locally observable at about varying from 30-45 DTCA. Strong fracturing close to surface with limonite alteration.
8.00	11.00	Granite	GRT	Pink, hard, phaneritic, sheared granite (30 DTCA).
11.00	62.00	Agglomerate	AGL	Back to grey-green, hard, locally strongly silicified, polymictic agglomerate. Clast very from porphyry and aphanitic felsic, to intermediate-to-phaneritic mafic within felsic-to-intermediate groundmass. The clasts are comprised of angular-to-subangular fragments and well rounded bombs and range from 2-3cm to >10cm. Localized rhyolite bands (~50cm width). This interval is weakly mineralized with pyrrhotite. Localized pyrrhotite clasts a few cm in size. Hard to estimate avr % due to logging conditions.
62.00	66.70	Argillite	ARG	Black-to-dark brown, highly silicified, massive (or very finely laminated, could not determine due to logging conditions) sediment.
66.70	68.00	Agglomerate	AGL	Intermediate monomictic agglomerate with hematized felsic-intermediate angular and rounded clasts (bombs?) within mafic-to-intermediate phaneritic matrix.
68.00	71.00	Fault Zone	FZ	FZ is defined by blocky core and localized gouge as well as strong veining (fine qtz-cal stringers cross cut bedding). FZ is hosted within brown carbonaceous argillite. Bedding is at 60 DTCA.
71.00	87.50	Agglomerate	AGL	Back to agglomerate as described above.
87.50	89.30	Mafic Intrusives	MI	Gradual transition into green, hard porphyritic (plag phenocrysts) mafic intrusion.
89.30	95.50	Agglomerate	AGL	Felsic-to-locally intermediate agglomerate, with mainly rhyolitic clasts and phaneritic groundmass. Sharp contacts. Phaneritic quartz-dyke.
95.50	98.90	Diabase	DIA	About 6% fine-to-locally coarse pyrite throughout.



98.90	115.10	Agglomerate	AGL	Grey-green, hard agglomerate. Groundmass is phaneritic intermediate, locally silicified, clasts are angular-to-locally rounded and predominantly felsic in composition. This unit is weakly carbonatized.
115.10	119.60	Sediment	SED	Grey-to-black, fine-to-coarse grained, poorly sorted, medium thickly bedded (60DTCA) grey wacke. Coarse grained close to upper contact, with interlayered sand and mud beds then becomes finer deeper into the interval. Becomes carbonaceous from 118-119m, then silicified proximal to lower contact. 2-3% diagenic pyrite on average.
119.60	130.00	Agglomerate	AGL	This is a complicated lithological unit, that contains mostly agglomerate interlayered with grey wacke and argillite smaller units (122.5m). Bedding in sedimentary component is ~60 DTCA.
130.00	130.70	Graphite	GRA	Graphitic argillite within a small fault (graphitic gouge). Bedding is at 60-65 DTCA. ~10% Pyrite.
130.70	152.00	Mafic Volcanics	MV	Green, hard, phaneritic-to-locally aphanitic flow breccia (locally brecciated). EOH.
152.00	EOH			

<b>Mistango River Resources Inc.</b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION:</b> Sackville Township, Ontario
<b>DDH</b>	<b>SK-14-05</b>	<b>5366710</b>	<b>N</b>	<b>DRILL COMPANY:</b> Huard Drilling
<b>Az</b>	<b>30.00</b>	<b>283857</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 17</b>	<b>E</b>	<b>1000.00</b>
<b>E.O.H:</b>	<b>200.00</b>	<b>NAD 83</b>	<b>N</b>	<b>360.00</b>
<b>Elev.:</b>				<b>Start: November 29, 2014; End: December 14, 2014</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	5.00	OVBD		2m casing, various felsic/mafic boulders.
5.00	8.00	Felsic Volcanics	FV	Felsic-to intermediate, silicified volcanics. Qtz-eye locally visible.
8.00	10.00	Intermediate Intrusive	II	Intermediate, fine grained mineralized intrusion Contact all broken off and not recognizable.
10.00	11.70	Argillite	ARG	Black, very hard, silicified, carbonaceous sediment. This unit is highly mineralized with parallel to bedding pyrrhotite selvages (up to 20%). Bedding is at ~30 DTCA (drilling down-dip). This could be responsible for some of the northern IP spike.
11.70	12.60	Intermediate Intrusive	II	Intermediate-to-mafic Intrusives. Phaneritic texture, comprised of significant plagioclase and ferro-mag minerals. Contains about 5% pyrrhotite visible on fractures. Upper and lower contacts at about 35 degrees).
12.60	56.00	Basaltic Andesite	BA	Whole rock shows this to be basaltic andesite. Dark grey felsic-to-intermediate volcanics. This interval is silicified and very hard, mostly aphanitic, but also with coarser phaneritic intervals showing Qtz-eye and feldspars. Localized banding (15.9m) at 30 DTCA. Banding appears after 51m with coarser texture, flow breccia 74-77, but also noted locally. This interval is moderately mineralized with about 3% pyrite on average and up to 10% pyrite visible on some fractures (at 16.5m). Calcite stringers visible locally, but intensify after 16.5m. Quartz-calcite-feldspar vein from 17.5-17.8m with weak localized hematization (hematized stringers locally). Mineralized argillic seams at 21.9m (~15-20% Py, 20cm long, 30dtca bedding). Slight foliation (30DTCA) after 37m with increased silica content.
56.00	85.70	Tuff	T	Grey-brown, very hard, weakly magnetic, finely bedded-to-laminated (~30DTCA), strongly silicified tuff. Carbonaceous close to upper contact. Locally weakly carbonaceous. Not sure if this interval is pyroclastic or sedimentary. 2-3% medium-to-coarse pyrite.
85.70	113.30	Agglomerate	AGL	Grey-green, very hard, silicified, rhyolitic agglomerate. Numerous, intermediate-to-felsic, mostly sub-angular-to-well rounded intrusive fragments, set in fine, but still phaneritic groundmass. Not sure if this is agglomerate or sedimentary conglomerate.

113.30	149.70	Basaltic Andesite	BA	Back to weakly chloritized, locally weakly hematized (qtz-cal-hem stringers and veinlets, locally feldspatic) massive-to-locally banded (30DTCA), locally brecciated (flow breccia), basaltic andesite, with localized pyroclastic fragments. 2-3% fine-to-coarse botryoidal pyrite throughout. Non-magnetic-to-locally very weakly magnetic.
149.70	152.10	Argillite	ARG	Lens of strongly silicified carbonaceous, mineralized (~20% Py) sediment. Bedding (foliation?) is at 30DTCA.
152.10	190.50	Basaltic Andesite	BA	Back to grey-dark green, locally weakly chloritized very siliceous massive-to-locally brecciated basaltic andesite. Numerous qtz-cal+/-pyrite (1-2% very fine pyrite) stringers throughout, most oriented at 30DTCA.
190.50	191.50	Argillite	ARG	Sharp upper and lower contacts at 30DTCA. Black, very hard, non-magnetic, pervasively silicified, very fine grained, bedded (30DTCA), strongly mineralized carbonaceous, altered sediment. Pyrite forms stringers locally parallel to bedding, but also large, rounded aggregates and stringers that cross-cut bedding. (~20%).
191.50	200.00	Basaltic Andesite	BA	From 191.5 to 194m the andesite likely contains some altered sedimentary material and it is also strongly mineralized (~15% Py), brecciated and banded (30DTCA). Mineralization is comprised of locally botryoidal stringers parallel to bedding and also hair line very fine abundant stringers in all directions, but numerous are oriented at 0 DTCA. After 194m the andesite becomes more massive with very fine sphalerite stringers locally (194 and 195.5m). Pyrite content increases again after 197m (~10%). Last 20cm of the hole change into rhyolitic tuff.
200.00	EOH			

<b>Mistango River Resources Inc.</b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION: SACKVILLE Township, Ontario</b>
<b>DDH</b>	<b>SK-15-06</b>	<b>5366957</b>	<b>N</b>	<b>DRILL COMPANY: HUARD DRILLING</b>
<b>Az</b>	<b>210.00</b>	<b>283795</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 16</b>	<b>E</b>	<b>800.00</b>
<b>E.O.H:</b>	<b>149.00</b>	<b>NAD 83</b>	<b>N</b>	<b>-150.00</b>
<b>Elev.:</b>				<b>Start: May 10, 2015; End: May 14, 2015</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	16.40	OVBD	OBN	Boulders of intermediate volcanic composition
16.40	22.10	Andesite	AND	Grey, hard, intermediate volcanic rock, displaying flow banding and flow brecciation, locally agglomeritic, aphanitic, to-locally medium grained. Banding varies from 40 to 50DTCA. Non-magnetic.
22.10	23.10	Intermediate Intrusive	II	Sharp upper and lower contacts at 75DTCA. Hard, phaneritic, light grey-to-tan, sheared (~30DTCA) dyke of intermediate composition.
23.10	35.40	Andesite	AND	Back to the same unit as described above. Non-magnetic-to-locally weakly magnetic. Banding is variable: 60 DTCA @ 25.2m and 33.2m, 50 DTCA@26.7m, 45DTCA@27.7m, 70DTCA@28.4m. Localized carbonate+/-sericite+/-qtz stringers parallel to banding. Oxidized pyrite and sericite on fracture planes close to lower contact. Stronger sericite from 34m to 34.4m, the core has lighter color and much stronger brecciation. Pyrite becomes noticeable close to lower contact (~4%, fine disseminated) and is locally oxidized to limonite visible in fracture planes and in fine hairline stringers.
35.40	35.70	Fault Zone	FZ	Brittle FZ is hosted in graphitic argillite and is defined by graphitic gouge, secondary silicification, blocky, carbonatized, bracciated core.
35.70	37.40	Argillite	ARG	Black-to-dark grey, very hard, silicified, carbonatized, bedded-to-locally laminated (50 DTCA av.), mineralized sediment. Selvages of medium grained pyrite, locally forming aggregates, which are locally oxidized within fracture planes. Pyrite content averages 7%. This unit is locally weakly magnetic.

37.40	68.00	Agglomerate	AGL	Hard, grey, magnetic (increases after 47m) banded, andesitic agglomerate. Clasts are sub-angular and vary in size from 1-2 cm to 10 cm, but core close to upper contact is more massive. The agglomerate shows banding with predominant orientation of 40 DTCA. Sericite is visible throughout often with silica sealing spaces around clasts and forming selvages parallel to banding. This interval is mineralized with about 6% sulphide content on average, but locally exceeding 10%. Sulphides are comprised of pyrite and lesser pyrrhotite and possibly sphalerite. The pyrite forms stringers and selvages and locally aggregates. Pyrrhotite forms small bronze colored, magnetic botryoidal aggregates. Fine grained, soft brown alteration, noticeable throughout, which locally has brown streak, but locally is chalky could be sphalerite. Sulphides are locally oxidized in fractures. Sericite forms haloes around sulphides locally.
68.00	75.00	Agglomerate	AGL	This is the same rock type as in the previous interval, but strongly mineralized. Hard, competent, moderately magnetic, banded (45DTCA av)andesitic agglomerate. Mineralized throughout with up to 20% Py+Po locally (69.5-70.1m). Sericite visible locally and in fractures. Patches of brown soft mineral associated with the sulphides with chalky streak.
75.00	136.40	Andesite	AND	Gradual change into grey, hard, locally magnetic, massive, weakly carbonatized (calcite stringers and veinlets throughout) very weakly mineralized locally (tr to 2-3% locally, mostly Py, but also Po patches with Py rims) andesite. Localized qtz and cal.stringers. Core angle is very shallow at 30 DTCA avr., but locally it is steeper (45DTCA@123.7). Patches of andalusite(?).
136.40	137.20	Rhyolite	RY	75DTCA upper and lower contacts. Grey, hard, quartz-eye, banded (45DTCA@136.6m)fragmented rhyolite. Non-magnetic.

137.20	149.00	Mafic Intrusion	MI	Dark grey, hard, locally weakly magnetic, fine-grained, phaneritic, locally weakly chloritized (observable on fracture planes) mafic intrusion. Fine sericite flakes noted locally. This interval is weakly mineralized averaging approximately 2% coarse Py locally. In the last 3m run before EOH, sulphide content increase to 7% locally, comprised of fine pyrite stringers and semi-massives Po bands and aggregates locally. Fine chlorite on numerous fractures. EOH.
149.00	EOH			

<b>Mistango River Resources Inc.</b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION: SACKVILLE Township, Ontario</b>
<b>DDH</b>	<b>SK-15-07</b>	<b>5367158</b>	<b>N</b>	<b>DRILL COMPANY: HUARD DRILLING</b>
<b>Az</b>	<b>210.00</b>	<b>283466</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 16</b>	<b>E</b>	<b>400.00</b>
<b>E.O.H:</b>	<b>143.00</b>	<b>NAD 83</b>	<b>N</b>	<b>-125.00</b>
<b>Elev.:</b>				<b>Start: May 16, 2015; End: May 21, 2015</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
0.00	17.00	OVBD	OBND	Mixed boulders of volcanic and sedimentary origin.
17.00	35.40	Andesite	AND	Grey, hard, massive, non-magnetic, weakly chloritized, moderately silicified intermediate volcanic rock. Localized qtz stringers and abundant calcite stringers throughout. Calcite stringers suggest core angles from 15 to 40DTCA (30 DTCA@ 21.3m, 40DTCA@23.2-24m, 20DTCA@28.5m, 15DTCA@ 29.4m), most likely attributed to large scale folds in the lithology. Weakly mineralized~1% Py on average, but locally higher.
35.40	48.80	Ultramafic volcanic	UM	Gradual contact. Intervals of UM interlayered with andesite noted from 30.9m. This suggests drilling is along contact. Grey-green, soft, moderately magnetic, chloritized and talcose, massive ultramafic volcanic rock. Core axis angle is 40DTCA (45.6m) and 30DTCA (46.4m) defined by localized chlorite selvages. Non-mineralized.
48.80	49.20	Mafic Intrusion	MI	Dark grey, hard, fine grained, phaneritic, mafic dyke.
49.20	56.00	Ultramafic Intrusive	UM	Green, soft-to-moderately hard, chloritized, phaneritic, massive UM intrusive, which also could be a high Mg mafic unit. Core axis angle is 50DTCA@52.7m.
56.00	57.20	Fault Zone	FZ	Minor slip, characterized by qtz filled brecciation, secondary silicification, localized gouge and blocky core.

57.20	121.10	Mafic Intrusion	MI	Dark grey, hard, phaneritic, weakly chloritized (visible on fractures) mafic intrusive rock. Pyrite becomes notable after 66m forming fine stringers filling hairline fractures (1-2% locally). Numerous qtz-cal stringers and veinlets. Core axis angle is difficult to determine due to the massive texture, but it is 45DTCA@65.3, 50DTCA@65.8m, 60DTCA@70.7m and 45DTCA80.8m and 103.5m. Open fols hinges noted at 104.9m and 105.4m at 20DTCA. Chill margin and brecciated contact zone start at about 115 m characterized by brecciation, infill veining (cal+qtz), appearance of glomerophyric saussuritized plagioclase phenocrysts, significant reducing of grain size and high levels of silicification (possibly short intervals of interlayered rhyolite).
121.10	134.50	Rhyolite	RY	Shallow angle contact(~20DTCA) with flow banded (45DTCA@122.7m and 123.9m, 50DTCA@132.8m), quartz eye, locally fragmented, locally brecciated, pink-to-off white, very hard, non-magnetic, locally porphyritic (133.3m) rhyolite. Intense qtz veining locally. Intervals of interlayered altered MI (129m-132.4m). Non-mineralized. Core axis angle suggests this unit dips sub-vertically or about 85 degrees to the north. Lower contact zone is porphyritic.
134.50	142.40	Andesite	AND	50DTCA contact marked by cal+qtz veinlet. Light grey, massive, aphanitic-to- fine grained phaneritic hard, non magnetic, volcanic or very fine grained intrusive rock of intermediate composition. Calcite stringers throughout, oriented at 50DTCA (135m). Border line volcanic-intrusive. Selvages of sericite locally (140m). Tr-to1%coarse Py locally.
142.40	143.00	Felsic Dyke	DK	30DTCA contact with very coarse phaneritic, intermediate, biotitized dyke. Abundance of biotite and localized muscovite throughout. EOH.
143.00	EOH			



<b>Mistango River Resources Inc.</b>				
<b>SACKVILLE PROPERTY</b>		<b>UTM</b>		<b>GRID LOCATION: SACKVILLE Township, Ontario</b>
<b>DDH</b>	<b>SK-15-08</b>	<b>5367548</b>	<b>N</b>	<b>DRILL COMPANY: HUARD DRILLING</b>
<b>Az</b>	<b>210.00</b>	<b>283220</b>	<b>E</b>	<b>GRID: DI Virtual:</b>
<b>DIP</b>	<b>-45.00</b>	<b>ZONE 16</b>	<b>E</b>	<b>0.00</b>
<b>E.O.H:</b>	<b>199.30</b>	<b>NAD 83</b>	<b>N</b>	<b>75.00</b>
<b>Elev.:</b>				<b>Start: June 12, 2015, Finished: June19, 2015</b>
<b>From</b>	<b>To</b>	<b>Rock Type</b>	<b>Code</b>	<b>Description</b>
<b>0.00</b>	<b>14.00</b>	<b>Overburden</b>	<b>OVBN</b>	Blocky core comprised of different boulders of mostly intermediate volcanic and intrusive composition. Localized weak oxidation.
<b>14.00</b>	<b>64.80</b>	<b>Mafic Intrusion</b>	<b>MI</b>	Grey, hard, locally very weakly magnetic medium-to-fine phaneritic-to-locally aphanitic, weakly chloritized mafic-to-intermediate intrusive (localized volcanic intervals) rock. Locally silicified (~23-24m), with localized calcite+/-qtz stringers throughout. Limonite on fractures close to surface. Pyrite stringers and selvages at 24.7m and 25m, 40.2m, 40.5m. About 2-3% Py locally mostly as stringers associated with cal-qtz stringers, but also disseminated in places. Localized weak banding in the more aphanitic and silicified intervals (23.7m,) is oriented at ~50DTCA and 40DTCA (31.8m). Hematite appears in calcite veinlets close to lower contact.
<b>64.80</b>	<b>76.40</b>	<b>Ultramafic Intrusion</b>	<b>UM</b>	Gradual compositional change into increased ferro-mag mineral content, which becomes more apparent after a minor brittle fault (recognized as the contact). Dark green, soft, weakly magnetic, fine-phaneritic, chloritized, talcose, weakly serpentinized ultramafic intrusive (peridotite). Localized calcite stringers throughout. Not mineralized, with occasional very fine pyrite stringers. The rock becomes more competent and visible limited plagioclase appears proximal to lower contact after 75m, signifying transition back mafic composition.

76.40	77.60	Argillite	ARG	Sharp upper contact @55DTCA. Highly irregular lower contact @20DTCA. Dark grey, very hard, magnetic, laminated-to-finely bedded, silicified, carbonaceous argillite. Calcite+/-qtz stringers throughout. The argillite is mineralized with up to 15% Po+Py, forming selvages and stringers concordant with bedding.
77.60	104.00	Rhyolite Tuff	RY	Irregular upper contact@20DTCA. Creammy-to-tan, very hard, locally magnetic, silicified, locally bleached (~78.6-79.6m), sericitic, banded (55DTCA@79.1m, 50DTCA@79.7m)-to-locally more massive, locally moderately hematized (86-86.7m) lapilli tuff. Sericite is observable on numerous fractures and in core. Pervasive silicification. This interval is highly mineralized with selvages and stringers mostly concordant to bedding, locally forming aggregates and nodes. Two semi-massive zones with up to 40-50% locally Py and less Po (83.55m-83.85m and 86.15m-86.8m). Sulphide content gradually reduces toward lower contact. Rhyolitic intervals interlayered with tuffaceous rock become more apparent towards lower contact. Localized interlayered small intervals of mafic intrusives become noticable close to lower contact.
104.00	107.00	Mafic Intrusive	MI	Faulted off contact. Dark green, competent, fine phaneritic, non-magnetic, weakly silicified mafic intrusive rock (diabase). Small lense of interlayered rhyolite.
107.00	109.60	Rhyolite	RY	Faulted contact with tan-to-pink, hard, non-magnetic, incompetent (the entire interval is on and off brittally faulted, with strong brecciation and very fine chloritic and sericitic gouge filling the fractures ~20DTCA trend throughout, noticeable mostly close to upper contact) banded rhyolite (50DTCA@107.8m). Weak sericite and locally chlorite alteration. Trace of very fine pyrite.
109.60	112.70	Mafic Intrusive	MI	Faulted off contact. First ~1m of core is blocky with abundant hairline fractures and slickensides notable on certain fractures. Very fine grained, moderately hard, non-magnetic, mafic dyke.

112.70	113.70	Rhyolite	RY	~40DTCA sharp contact with minor gouge, signifying a slip. Tan-to-pink, hard, non-magnetic, banded to-massive (~50DTCA113.2m), weakly chloritic and sericitic rhyolite. Weakly mineralized~2% fine and nodular pyrite. We are possibly drilling down the contact between the rhyolite and MI since it changes so often between the two.
113.70	126.60	Mafic Intrusive	MI	Irregular contact. Dark green, competent, very weakly magnetic, carbonatized (abundant cal+/-qtz stringers and veinlets throughout), weakly chloritized, locally glomerophyric (saussuritized plag from upper contact to about 122m) diabase dyke. Non-mineralized.
126.60	135.50	Rhyolite	RY	45DTCA sharp contact. Tan-to-pink, hard, non-magnetic, aphanitic banded (55DTCA@128.3m, 45DTCA@131.1m45DTCA@132.3m) rhyolite. The rock contains abundant chlorite stringers sealing small fractures trending in the opposite direction of banding at 50DTCA@131.85m and 40DTCA@133.2m and 45DTCA@133.35. Trace of pyrite throughout, but up to 4% Py in aggregates after 134m to lower contact.
135.50	136.30	Mafic Intrusion	MI	Sharp contact at 45DTCA.Back to MI as described above. Shearing defined by shallow angle calcite stringers throughout.
136.30	144.50	Fault Zone	FZ	Ductile-brittle fault defined by strong shearing followed by blocky core, abundant calcite-qtz stringers sealing fractures (trending at shallow angles ~20DTCA), secondary silicification, healed breccia, chloritic gouge (142.2-144m). The fault is hosted within the same fine grained MI unit above. Non-mineralized with localized rhyolitic xenoliths.

144.50	148.00	Mafic Volcanic	MV	Texture becomes aphanitic after the FZ signifying a transition into mafic, soft (weakened by shearing), weakly carbonatized (cal stringers throughout), moderately chloritic mafic volcanic. The unit displays shearing at 50DTCA 146.2m, 45DTCA@147.6m. Due to high degree of chloritization, this unit likely has increased Mg content and could be a high Mg basalt or low Mg komatiite. Chloritization and incompetency could be resultant of the strong shearing and proximity to FZ above.
148.00	163.00	Basaltic Andesite	BA	Sharp, irregular contact. Dark grey, aphanitic, hard, weakly carbonatized (cal. stringers) and weakly silicified (throughout), weakly chloritic (chloritic selvages filling in healed fractures or adjacent to calcite stringers) mafic-to-intermediate volcanic rock. This rock is moderately silicified and amphibolitized (tremolite crystals visible below 158m) and could also be classified as AMPHIBOLITE. This interval is locally mineralized (155-156.7m) by pyrite bloom filling fractures and locally forming selvages and aggregates ~5% Py. There is also localized trace of fine disseminated pyrite. Foliation varies from 45DTCA (156m), to 60DTCA (149m) to 55DTCA (153.2m).
163.00	188.14	Rhyolite	RY	Shallow well defined contact at 20 DTCA. Light grey, very hard, non-magnetic, locally tuffaceous (163-164.5m), aphanitic, locally weakly sericitic (168.7-169.8m) banded, locally brecciated (on and off, intensifies 176.7-178.2m) and agglomeratic, locally cherty rhyolite. Agglomerate intervals noted at 164m and 165.3m. Exhalative smoky chert from 165.5m to 167m and 173-176m. Banding is visible throughout and varies (50DTCA@163.5m, 60DTCA@165.2m, 20DTCA@164.4m, 50DTCA@168m, 30DTCA@168.5m, 50DTCA@175m and 185.6m). Calcite-qtz stringers are noted throughout trending at right angles to banding, possibly signifying a proximity to fold axis. This interval is weakly locally mineralized by about 1% fine Py forming aggregates visible on fractures.

<b>188.14</b>	<b>199.30</b>	<b>ULTRAMAFIC INTRUSIVES</b>	<b>UM</b>	Well defined contact@~40DTCA. Strong silicification and chill margin (aphanitic texture) to about 191m. Dark green, moderately hard (very hard close to upper contact), phaneritic (after 191m), sheared (55DTCA@192.7m and 45@194.5m, non-magnetic, chloritized and moderately silicified (strongly silicified close to upper contact), weakly carbonatized (numerous calcite stringers and veinlets cross-cutting foliation) ultramafic intrusive rock. Mostly non-mineralized, except for small interval b/n 197.5-197.7m containing 25% pyrite in the form of wide selvages and aggregates within a calcite veinlet. EOH.
<b>199.30</b>	<b>EOH</b>			

## Sample Core Logs

DDH	Rock	Sample#	% Sul	From	To	m	Au g/t	Au g/t	Ag g/t	Cu g/t	Zn g/t	Pb g/t	Mo g/t	CERTIFICATE
SK-14-03	BA	M18472	7	41.00	42.00	1.00	0.01		< 0.2	227.00	70.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18473	5	42.00	43.00	1.00	< 0.01		< 0.2	123.00	52.00	< 2	< 1	15-019; A15-00441
SK-14-03	ARG	M18474	10	43.00	44.00	1.00	< 0.01		< 0.2	155.00	128.00	< 2	< 1	15-019; A15-00441
SK-14-03	ARG	M18475	10	44.00	44.50	0.50	0.01		< 0.2	126.00	1020.00	4.00	2.00	15-019; A15-00441
SK-14-03	ARG	M18476	15	44.50	44.80	0.30	0.02		0.60	192.00	279.00	7.00	1.00	15-019; A15-00441
SK-14-03	BA	M18477	5	44.80	45.50	0.70	< 0.01		< 0.2	107.00	45.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18478	TR	45.50	46.00	0.50	< 0.01		< 0.2	108.00	35.00	< 2	1.00	15-019; A15-00441
SK-14-03	BA	M18479	2	46.00	47.00	1.00	< 0.01		< 0.2	123.00	36.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18480	2	47.00	48.00	1.00	< 0.01	< 0.01	< 0.2	90.00	38.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18482	2	48.00	48.90	0.90	0.01		< 0.2	125.00	32.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18483	TR	92.00	93.00	1.00	< 0.01		< 0.2	92.00	73.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18484	2	93.00	94.00	1.00	< 0.01		< 0.2	123.00	67.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18485	2	94.00	95.00	1.00	< 0.01		< 0.2	85.00	69.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18486	3	95.00	96.00	1.00	0.01		< 0.2	161.00	90.00	< 2	1.00	15-019; A15-00441
SK-14-03	BA	M18487	7	96.00	96.30	0.30	< 0.01		< 0.2	148.00	92.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18488	15	96.30	96.90	0.60	< 0.01		< 0.2	118.00	96.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18489	15	96.90	97.40	0.50	0.01		0.20	182.00	106.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18492	15	97.40	98.00	0.60	< 0.01		< 0.2	89.00	112.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18493	5	98.00	99.00	1.00	< 0.01	< 0.01	< 0.2	89.00	75.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18494	10	99.00	100.00	1.00	< 0.01		< 0.2	70.00	72.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18495	5	100.00	100.50	0.50	< 0.01		< 0.2	262.00	40.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18496	TR	182.00	183.00	1.00	0.01		< 0.2	123.00	31.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18497	TR	183.00	184.00	1.00	< 0.01		< 0.2	128.00	28.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18498	TR	184.00	185.10	1.10	< 0.01		< 0.2	46.00	45.00	< 2	2.00	15-019; A15-00441
SK-14-03	RY	M18499	0	185.10	186.00	0.90	< 0.01		< 0.2	49.00	45.00	< 2	2.00	15-019; A15-00441
SK-14-03	BA	M18500	3	186.00	186.40	0.40	< 0.01		< 0.2	46.00	18.00	< 2	2.00	15-019; A15-00441
SK-14-03	BA	M18502	1	186.40	187.00	0.60	< 0.01		< 0.2	67.00	32.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18503	3	187.00	188.00	1.00	< 0.01		< 0.2	65.00	37.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18504	1	188.00	189.00	1.00	< 0.01	< 0.01	< 0.2	128.00	31.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18505	3	189.00	190.00	1.00	< 0.01		< 0.2	73.00	38.00	< 2	< 1	15-019; A15-00441
SK-14-03	BA	M18506	TR	190.00	190.50	0.50	< 0.01		< 0.2	88.00	38.00	< 2	< 1	15-019; A15-00441

DDH	Rock	Sample#	% Sul	From	To	m	Au g/t	Ag g/t	Cu g/t	Zn g/t	Pb g/t	Mo g/t	CERTIFICATE
SK-14-04	AGL	M18507	0	105.00	106.00	1.00	< 0.01	< 0.2	92.00	51.00	76.00	1.00	15-073; A15-00441

DDH	Rock	Sample#	% Sul	From	To	m	Au g/t	Au g/t	Ag g/t	Cu g/t	Zn g/t	Pb g/t	Mo g/t	CERTIFICATE
SK-14-05	ARG	M18301	15	10.00	11.00	1.00	0.02		0.20	160.00	703.00	9.00	2.00	15-016; A15-00441
SK-14-05	ARG	M18302	15	11.00	11.70	0.70	0.01		0.30	155.00	1890.00	12.00	5.00	15-016; A15-00441
SK-14-05	ll	M18304	1	11.70	12.60	0.90	< 0.01		< 0.2	92.00	62.00	5.00	< 1	15-016; A15-00441
SK-14-05	BA	M18305	tr	12.60	13.00	0.40	< 0.01		< 0.2	103.00	31.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18306	5	13.00	13.60	0.60	< 0.01		< 0.2	105.00	33.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18307	5	13.60	14.00	0.40	< 0.01		< 0.2	121.00	25.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18308	5	14.00	15.00	1.00	< 0.01		< 0.2	86.00	27.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18309	1	17.00	17.50	0.50	< 0.01		< 0.2	76.00	44.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18311	1	17.50	17.90	0.40	< 0.01	< 0.01	< 0.2	54.00	34.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18312	2	17.90	18.60	0.70	< 0.01		< 0.2	85.00	37.00	< 2	1.00	15-016; A15-00441
SK-14-05	BA	M18313	1	18.60	19.60	1.00	< 0.01		< 0.2	75.00	34.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18314	1	19.60	20.00	0.40	< 0.01		< 0.2	180.00	39.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18315	3	20.00	21.00	1.00	< 0.01		< 0.2	125.00	42.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18316	1	21.00	21.60	0.60	< 0.01		< 0.2	89.00	49.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18317	15	21.60	22.10	0.50	< 0.01		< 0.2	335.00	126.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18319	8	21.10	23.00	1.90	< 0.01		< 0.2	123.00	40.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18320	3	50.00	51.00	1.00	< 0.01		< 0.2	143.00	47.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18321	1	51.00	51.50	0.50	< 0.01		< 0.2	43.00	62.00	< 2	< 1	15-016; A15-00441
SK-14-05	BA	M18322	tr	51.50	52.00	0.50	< 0.01		< 0.2	42.00	51.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18324	1	83.00	84.00	1.00	< 0.01	< 0.01	< 0.2	100.00	117.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18325	1	84.00	85.00	1.00	< 0.01		< 0.2	113.00	126.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18326	2	85.00	85.70	0.70	0.01		0.30	169.00	111.00	7.00	2.00	15-016; A15-00441
SK-14-05	AGL	M18327	1	85.70	86.00	0.30	< 0.01		0.30	76.00	201.00	5.00	3.00	15-016; A15-00441
SK-14-05	AGL	M18328	2	86.00	87.00	1.00	< 0.01		< 0.2	24.00	65.00	3.00	1.00	15-016; A15-00441
SK-14-05	AGL	M18329	5	87.00	88.00	1.00	< 0.01		< 0.2	72.00	57.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18331	6	88.00	89.00	1.00	< 0.01		< 0.2	54.00	40.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18332	5	89.00	90.00	1.00	< 0.01		< 0.2	53.00	46.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18333	5	90.00	91.00	1.00	< 0.01		< 0.2	127.00	44.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18334	4	91.00	92.00	1.00	< 0.01		< 0.2	76.00	46.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18335	3	92.00	93.00	1.00	< 0.01	< 0.01	0.40	66.00	273.00	11.00	2.00	15-016; A15-00441
SK-14-05	AGL	M18336	5	93.00	94.10	1.10	0.01		0.40	108.00	400.00	12.00	2.00	15-016; A15-00441
SK-14-05	AGL	M18337	2	94.10	95.00	0.90	0.01		< 0.2	56.00	140.00	6.00	2.00	15-016; A15-00441

SK-14-05	AGL	M18338	6	95.00	96.00	1.00	< 0.01		< 0.2	28.00	114.00	5.00	< 1	15-016; A15-00441
SK-14-05	AGL	M18341	1	96.00	97.00	1.00	< 0.01		< 0.2	40.00	184.00	6.00	3.00	15-016; A15-00441
SK-14-05	AGL	M18342	1	97.00	98.00	1.00	< 0.01		< 0.2	49.00	169.00	4.00	2.00	15-016; A15-00441
SK-14-05	AGL	M18344	TR	98.00	99.00	1.00	< 0.01		< 0.2	77.00	138.00	3.00	1.00	15-016; A15-00441
SK-14-05	AGL	M18345	TR	99.00	100.00	1.00	< 0.01		< 0.2	109.00	59.00	< 2	< 1	15-016; A15-00441
SK-14-05	AGL	M18346	TR	100.00	101.00	1.00	< 0.01		< 0.2	62.00	38.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18347	6	68.00	69.00	1.00	< 0.01		< 0.2	174.00	70.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18348	7	69.00	69.70	0.70	< 0.01	0.01	< 0.2	300.00	82.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18349	7	69.70	70.00	0.30	< 0.01		0.20	190.00	63.00	2.00	< 1	15-016; A15-00441
SK-14-05	T	M18351	9	70.00	71.00	1.00	< 0.01		< 0.2	171.00	75.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18352	5	71.00	72.00	1.00	< 0.01		< 0.2	127.00	62.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18353	5	72.00	73.00	1.00	< 0.01		< 0.2	125.00	87.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18354	3	73.00	74.00	1.00	< 0.01		2.60	1120.00	338.00	118.00	108.00	15-016; A15-00441
SK-14-05	T	M18355	5	74.00	75.00	1.00	< 0.01		< 0.2	118.00	85.00	< 2	1.00	15-016; A15-00441
SK-14-05	T	M18356	6	75.00	76.00	1.00	< 0.01		< 0.2	196.00	81.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18357	5	76.00	77.00	1.00	< 0.01		< 0.2	183.00	107.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18358	1	77.00	78.00	1.00	< 0.01		< 0.2	126.00	110.00	< 2	< 1	15-016; A15-00441
SK-14-05	T	M18361	2	78.00	79.00	1.00	< 0.01		< 0.2	168.00	86.00	< 2	< 1	15-017; A15-00441
SK-14-05	T	M18362	1	79.00	80.00	1.00	< 0.01		< 0.2	122.00	82.00	< 2	< 1	15-017; A15-00441
SK-14-05	T	M18363	3	80.00	81.00	1.00	< 0.01		< 0.2	149.00	68.00	< 2	< 1	15-017; A15-00441
SK-14-05	T	M18364	1	81.00	82.00	1.00	< 0.01		< 0.2	71.00	62.00	< 2	< 1	15-017; A15-00441
SK-14-05	T	M18365	4	82.00	83.00	1.00	< 0.01		< 0.2	184.00	87.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18366	3	113.00	114.00	1.00	< 0.01		< 0.2	64.00	39.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18367	4	114.00	115.00	1.00	< 0.01		< 0.2	85.00	41.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18368	5	115.00	116.00	1.00	< 0.01		2.70	1150.00	338.00	119.00	109.00	15-017; A15-00441
SK-14-05	BA	M18369	3	116.00	117.00	1.00	< 0.01		< 0.2	164.00	32.00	< 2	3.00	15-017; A15-00441
SK-14-05	BA	M18371	5	117.00	118.00	1.00	< 0.01	< 0.01	< 0.2	56.00	24.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18372	3	118.00	119.00	1.00	< 0.01		< 0.2	49.00	23.00	< 2	1.00	15-017; A15-00441
SK-14-05	BA	M18373	5	119.00	120.00	1.00	< 0.01		< 0.2	73.00	36.00	< 2	1.00	15-017; A15-00441
SK-14-05	BA	M18374	tr	120.00	121.00	1.00	< 0.01		< 0.2	20.00	53.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18375	6	121.00	122.00	1.00	< 0.01		< 0.2	116.00	51.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18376	5	122.00	123.00	1.00	< 0.01		< 0.2	134.00	53.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18377	6	123.00	124.00	1.00	< 0.01		< 0.2	217.00	52.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18378	8	124.00	125.00	1.00	< 0.01		< 0.2	137.00	76.00	< 2	1.00	15-017; A15-00441
SK-14-05	BA	M18381	2	125.00	126.00	1.00	< 0.01		< 0.2	157.00	60.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18382	6	126.00	127.00	1.00	< 0.01	0.01	< 0.2	101.00	65.00	< 2	< 1	15-017; A15-00441



SK-14-05	BA	M18383	tr	127.00	127.60	0.60	< 0.01		< 0.2	151.00	67.00	< 2	2.00	15-017; A15-00441
SK-14-05	BA	M18384	1	127.60	128.00	0.40	< 0.01		< 0.2	64.00	45.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18385	1	128.00	129.00	1.00	< 0.01		< 0.2	86.00	100.00	9.00	< 1	15-017; A15-00441
SK-14-05	BA	M18386	3	129.00	130.00	1.00	< 0.01		< 0.2	122.00	39.00	2.00	< 1	15-017; A15-00441
SK-14-05	BA	M18387	4	130.00	131.00	1.00	< 0.01		< 0.2	162.00	86.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18388	5	131.00	132.00	1.00	< 0.01		< 0.2	115.00	56.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18389	6	132.00	132.90	0.90	< 0.01		< 0.2	151.00	69.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18391	1	132.90	133.70	0.80	< 0.01		< 0.2	59.00	49.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18392	4	133.70	134.00	0.30	< 0.01		< 0.2	63.00	62.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18393	4	134.00	135.00	1.00	< 0.01	< 0.01	< 0.2	93.00	65.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18394	1	135.00	136.00	1.00	< 0.01		< 0.2	78.00	71.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18395	2	136.00	137.00	1.00	< 0.01		< 0.2	105.00	88.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18396	4	137.00	138.00	1.00	< 0.01		< 0.2	119.00	86.00	< 2	1.00	15-017; A15-00441
SK-14-05	BA	M18397	5	138.00	139.00	1.00	< 0.01		< 0.2	119.00	107.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18398	6	139.00	140.00	1.00	< 0.01		< 0.2	129.00	105.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18401	4	140.00	141.00	1.00	< 0.01		< 0.2	176.00	98.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18402	2	141.00	142.00	1.00	< 0.01		< 0.2	108.00	94.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18403	5	142.00	143.00	1.00	< 0.01		< 0.2	82.00	59.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18404	5	143.00	144.00	1.00	< 0.01		< 0.2	97.00	81.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18405	3	144.00	145.00	1.00	< 0.01	< 0.01	< 0.2	110.00	103.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18406	5	145.00	146.00	1.00	< 0.01		< 0.2	95.00	109.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18407	3	146.00	147.00	1.00	< 0.01		< 0.2	142.00	99.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18408	2	147.00	148.00	1.00	< 0.01		< 0.2	117.00	89.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18409	4	148.00	149.00	1.00	< 0.01		< 0.2	149.00	76.00	< 2	1.00	15-017; A15-00441
SK-14-05	BA	M18411	1	149.00	149.70	0.70	< 0.01		< 0.2	67.00	88.00	< 2	< 1	15-017; A15-00441
SK-14-05	ARG	M18412	20	149.70	150.20	0.50	< 0.01		0.20	460.00	219.00	3.00	< 1	15-017; A15-00441
SK-14-05	ARG	M18413	8	150.20	151.00	0.80	< 0.01		< 0.2	214.00	89.00	< 2	< 1	15-017; A15-00441
SK-14-05	ARG	M18414	2	151.00	152.00	1.00	< 0.01		< 0.2	198.00	106.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18415	5	152.00	153.00	1.00	< 0.01		< 0.2	136.00	72.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18416	4	153.00	154.00	1.00	< 0.01	< 0.01	< 0.2	182.00	61.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18417	3	154.00	155.00	1.00	< 0.01		< 0.2	106.00	59.00	< 2	< 1	15-017; A15-00441
SK-14-05	BA	M18418	5	155.00	156.00	1.00	< 0.01		< 0.2	73.00	60.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18421	4	156.00	157.00	1.00	< 0.01		< 0.2	109.00	109.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18422	1	157.00	158.00	1.00	< 0.01		< 0.2	187.00	63.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18423	3	167.00	167.70	0.70	< 0.01		< 0.2	72.00	65.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18424	8	167.70	168.00	0.30	< 0.01		< 0.2	253.00	146.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18425	8	168.00	169.00	1.00	< 0.01		< 0.2	93.00	84.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18426	8	169.00	170.00	1.00	< 0.01		< 0.2	146.00	71.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18427	3	170.00	171.00	1.00	< 0.01		< 0.2	146.00	122.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18428	1	171.00	172.00	1.00	< 0.01		< 0.2	177.00	138.00	< 2	< 1	15-018; A15-00441

SK-14-05	BA	M18429	2	172.00	173.00	1.00	< 0.01	< 0.01	< 0.2	147.00	105.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18431	3	173.00	174.00	1.00	< 0.01		< 0.2	141.00	99.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18432	1	174.00	175.00	1.00	< 0.01		< 0.2	99.00	48.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18433	TR	175.00	176.00	1.00	< 0.01		< 0.2	93.00	45.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18434	TR	176.00	177.00	1.00	< 0.01		< 0.2	63.00	47.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18435	1	177.00	178.00	1.00	< 0.01		< 0.2	170.00	61.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18436	4	178.00	179.00	1.00	< 0.01		< 0.2	91.00	77.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18437	TR	179.00	180.00	1.00	< 0.01		< 0.2	105.00	56.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18438	2	180.00	181.00	1.00	< 0.01		< 0.2	142.00	70.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18441	1	181.00	182.00	1.00	< 0.01		< 0.2	118.00	44.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18442	2	182.00	183.00	1.00	< 0.01	< 0.01	< 0.2	141.00	63.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18443	2	183.00	184.00	1.00	< 0.01		< 0.2	178.00	38.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18444	4	184.00	185.00	1.00	< 0.01		< 0.2	166.00	66.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18445	4	185.00	186.00	1.00	< 0.01		< 0.2	84.00	76.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18446	5	186.00	187.00	1.00	< 0.01		< 0.2	128.00	55.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18447	5	187.00	188.00	1.00	< 0.01		< 0.2	105.00	52.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18448	5	188.00	189.00	1.00	< 0.01		< 0.2	242.00	118.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18449	3	189.00	190.00	1.00	< 0.01		< 0.2	142.00	55.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18451	3	190.00	190.50	0.50	< 0.01		< 0.2	119.00	68.00	< 2	< 1	15-018; A15-00441
SK-14-05	ARG	M18452	20	190.50	191.00	0.50	< 0.01		0.30	199.00	117.00	6.00	< 1	15-018; A15-00441
SK-14-05	ARG	M18453	20	191.00	191.50	0.50	< 0.01	< 0.01	0.30	206.00	424.00	9.00	< 1	15-018; A15-00441
SK-14-05	BA	M18454	25	191.50	192.00	0.50	< 0.01		0.40	444.00	144.00	11.00	< 1	15-018; A15-00441
SK-14-05	BA	M18455	18	192.00	192.50	0.50	< 0.01		< 0.2	138.00	152.00	6.00	< 1	15-018; A15-00441
SK-14-05	BA	M18456	17	192.50	193.00	0.50	< 0.01		< 0.2	136.00	162.00	4.00	< 1	15-018; A15-00441
SK-14-05	BA	M18457	20	193.00	193.60	0.60	< 0.01		< 0.2	148.00	103.00	2.00	< 1	15-018; A15-00441
SK-14-05	BA	M18458	15	193.60	194.00	0.40	< 0.01		< 0.2	154.00	74.00	< 2	1.00	15-018; A15-00441
SK-14-05	BA	M18461	5	194.00	194.30	0.30	< 0.01		< 0.2	128.00	65.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18462	2	194.30	195.00	0.70	< 0.01		< 0.2	129.00	60.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18463	5	195.00	195.40	0.40	< 0.01		< 0.2	90.00	50.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18464	10	195.40	195.80	0.40	< 0.01		< 0.2	146.00	63.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18465	10	195.80	196.50	0.70	< 0.01	< 0.01	< 0.2	164.00	66.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18466	5	196.50	197.00	0.50	< 0.01		< 0.2	107.00	50.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18467	TR	197.00	197.70	0.70	< 0.01		< 0.2	100.00	72.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18468	15	197.70	198.50	0.80	< 0.01		< 0.2	159.00	113.00	2.00	< 1	15-018; A15-00441
SK-14-05	BA	M18469	20	198.50	199.20	0.70	< 0.01		< 0.2	118.00	106.00	< 2	< 1	15-018; A15-00441
SK-14-05	BA	M18471	15	199.20	200.00	0.80	0.01		0.20	146.00	98.00	4.00	< 1	15-019; A15-00441

DDH	Rock	Sample#	% Sul	From	To	m	Au g/t	Ag g/t	Cu %	Zn %	Pb %	Mo %	CERTIFICATE
SK-15-06	AGL	283651	5	62.4	63	0.6	< 0.01	<0.3	109	150	10	< 1	15-1245/A15-03836
SK-15-06	AGL	283652	6	63	64	1	< 0.01	<0.3	156	156	12	< 1	15-1245/A15-03836
SK-15-06	AGL	283653	3	64	65	1	< 0.01	<0.3	127	184	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283654	7	65	66	1	< 0.01	<0.3	131	189	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283655	3	66	67	1	< 0.01	<0.3	129	147	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283656	4	67	68	1	< 0.01	<0.3	131	135	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283657	8	68	69	1	< 0.01	<0.3	115	84	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283658	10	69	69.5	0.5	< 0.01	<0.3	104	83	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283659	20	69.5	70	0.5	0.01	<0.3	147	61	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283660	20	70	70.5	0.5	< 0.01	<0.3	141	63	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283661	20	70.5	71	0.5	< 0.01	<0.3	160	62	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283662	5	71	71.5	0.5	< 0.01	<0.3	91	90	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283663	10	71.5	72	0.5	< 0.01	<0.3	98	93	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283664	15	72	72.5	0.5	< 0.01	<0.3	103	98	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283665	15	72.5	73	0.5	< 0.01	<0.3	125	78	3	< 1	15-1245/A15-03836
SK-15-06	AGL	283666	10	73	73.5	0.5	< 0.01	<0.3	142	76	< 3	< 1	15-1245/A15-03836
SK-15-06	AGL	283667	4	73.5	74	0.5	< 0.01	<0.3	141	105	< 3	< 1	15-1245/A15-03836
SK-15-06	AND	283668	4	74	75.3	1.3	< 0.01	<0.3	126	124	< 3	< 1	15-1245/A15-03836

DDH	Rock	Sample#	% Sul	From	To	m	Au g/t	Ag g/t	Cu, ppm	Zn, ppm	Pb, ppm	Mo, ppm	CERTIFICATE
SK-15-08	UM	283669	tr	75	76	1	<0.005	<1	10	94	9	<1	196_201542410
SK-15-08	UM	283670	3	76	76.4	0.4	<0.005	<1	70	99	8	3	196_201542410
SK-15-08	ARG	283671	15	76.4	77	0.6	<0.005	<1	195	296	7	10	196_201542410
SK-15-08	ARG	283672	7	77	77.6	0.6	<0.005	<1	230	702	5	12	196_201542410
SK-15-08	RY	283673	5	77.6	78.1	0.5	<0.005	<1	28	85	8	5	196_201542410
SK-15-08	RY	283674	5	78.1	78.5	0.4	<0.005	<1	14	52	10	4	196_201542410
SK-15-08	RY	283675	7	78.5	79	0.5	<0.005	<1	20	26	9	6	196_201542410
SK-15-08	RY	283676	7	79	79.5	0.5	<0.005	<1	13	48	26	7	196_201542410
SK-15-08	RY	283677	4	79.5	80	0.5	<0.005	<1	11	103	11	4	196_201542410
SK-15-08	RY	283678	8	80	80.4	0.4	<0.005	<1	14	38	9	8	196_201542410
SK-15-08	RY	283679	25	80.4	80.7	0.3	<0.005	<1	48	49	8	8	196_201542410
SK-15-08	RY	283680	5	80.7	81	0.3	<0.005	<1	11	84	7	4	196_201542410
SK-15-08	RY	283681	5	81	81.6	0.6	<0.005	<1	15	79	7	4	196_201542410
SK-15-08	RY	283682	6	81.6	82	0.4	<0.005	<1	22	82	6	1	196_201542410
SK-15-08	RY	283683	7	82	82.5	0.5	<0.005	<1	13	70	5	4	196_201542410
SK-15-08	RY	283684	8	82.5	83	0.5	<0.005	<1	13	74	4	7	196_201542410
SK-15-08	RY	283685	6	83	83.55	0.55	<0.005	<1	9	44	3	5	196_201542410
SK-15-08	RY	283686	50	83.55	83.85	0.3	<0.005	<1	23	49	13	22	196_201542410
SK-15-08	RY	283687	5	83.85	84.4	0.55	<0.005	<1	8	50	3	7	196_201542410
SK-15-08	RY	283688	5	84.4	84.9	0.5	<0.005	<1	10	67	6	3	196_201542410
SK-15-08	RY	283689	18	84.9	85.2	0.3	<0.005	<1	13	48	2	6	196_201542410
SK-15-08	RY	283690	18	85.2	85.6	0.4	<0.005	<1	14	71	8	6	196_201542410
SK-15-08	RY	283691	7	85.6	86	0.4	<0.005	<1	9	60	7	5	196_201542410
SK-15-08	RY	283692	15	86	86.3	0.3	<0.005	<1	8	46	5	7	196_201542410
SK-15-08	RY	283693	35	86.3	86.7	0.4	<0.005	<1	24	41	8	15	196_201542410
SK-15-08	RY	283694	9	86.7	87	0.3	<0.005	<1	8	45	5	3	196_201542410
SK-15-08	RY	283695	5	87	87.5	0.5	<0.005	<1	7	33	2	<1	196_201542410
SK-15-08	RY	283696	7	87.5	88	0.5	<0.005	<1	10	45	<1	4	196_201542410
SK-15-08	RY	283697	7	88	88.5	0.5	<0.005	<1	11	61	2	3	196_201542410
SK-15-08	RY	283698	7	88.5	89	0.5	<0.005	<1	9	56	<1	3	196_201542410
SK-15-08	RY	283699	5	89	89.5	0.5	<0.005	<1	9	34	1	4	196_201542410
SK-15-08	RY	283700	4	89.5	90.3	0.8	<0.005	<1	7	36	1	<1	196_201542410
SK-15-08	RY	284501	tr	90.3	91	0.7	<0.005	<1	8	41	<1	<1	196_201542410
SK-15-08	RY	284502	tr	91	91.5	0.5	<0.005	<1	12	50	5	4	196_201542410
SK-15-08	RY	284503	tr	91.5	92	0.5	<0.005	<1	13	57	2	5	196_201542410
SK-15-08	RY	284504	2	92	92.5	0.5	<0.005	<1	9	55	3	4	196_201542410
SK-15-08	RY	284505	3	92.5	93	0.5	<0.005	<1	11	98	6	5	196_201542410
SK-15-08	RY	284506	1	93	93.5	0.5	<0.005	<1	12	77	8	7	196_201542410

SK-15-08	RY	284507	4	93.5	94	0.5	<0.005	<1	13	92	8	8	196_201542410
SK-15-08	RY	284508	6	94	94.5	0.5	<0.005	<1	11	70	12	6	196_201542410
SK-15-08	RY	284509	1	94.5	95	0.5	<0.005	<1	13	80	5	6	196_201542410
SK-15-08	RY	284510	3	95	95.5	0.5	<0.005	<1	13	49	3	5	196_201542410
SK-15-08	RY	284511	tr	95.5	96	0.5	<0.005	<1	11	42	7	4	196_201542410
SK-15-08	RY	284512	tr	96	96.5	0.5	<0.005	<1	15	61	5	5	196_201542410
SK-15-08	RY	284513	tr	96.5	97	0.5	<0.005	<1	8	50	5	5	196_201542410
SK-15-08	RY	284514	tr	97	97.5	0.5	<0.005	<1	11	49	<1	6	196_201542410
SK-15-08	RY	284515	tr	97.5	98	0.5	<0.005	<1	4	53	6	4	196_201542410
SK-15-08	RY	284516	tr	98	98.5	0.5	<0.005	2	17	65	5	4	196_201542410
SK-15-08	RY	284517	tr	98.5	99	0.5	<0.005	<1	12	53	2	5	196_201542410
SK-15-08	RY	284518	3	99	99.3	0.3	<0.005	<1	113	164	12	12	196_201542410
SK-15-08	RY	284519	tr	99.3	100	0.7	<0.005	<1	7	65	5	4	196_201542410
SK-15-08	RY	284520	tr	100	100.5	0.5	<0.005	<1	9	38	7	4	196_201542410
SK-15-08	RY	284521	tr	100.5	101	0.5	<0.005	<1	5	38	5	5	196_201542410
SK-15-08	RY	284522	tr	101	101.5	0.5	<0.005	<1	5	32	3	3	196_201542410
SK-15-08	RY	284523	tr	101.5	102	0.5	<0.005	<1	5	27	4	4	196_201542410
SK-15-08	RY	284524	tr	102	102.5	0.5	<0.005	<1	4	31	5	6	196_201542410
SK-15-08	RY	284525	tr	102.5	103	0.5	<0.005	<1	20	38	4	8	196_201542410
SK-15-08	RY	284526	1	103	103.5	0.5	<0.005	<1	39	58	14	7	196_201542410
SK-15-08	RY	284527	1	103.5	104	0.5	<0.005	<1	39	52	11	10	196_201542410
SK-15-08	MI	284528	1	104	104.5	0.5	0.005	<1	62	78	7	8	196_201542410
SK-15-08	MI	284529	2	104.5	105.1	0.6	<0.005	<1	38	58	17	9	196_201542410
SK-15-08	MI	284530	tr	105.1	105.5	0.4	0.006	<1	86	87	12	8	196_201542410
SK-15-08	MI	284531	tr	105.5	106	0.5	<0.005	<1	58	95	8	4	196_201542410
SK-15-08	MI	284532	tr	106	106.5	0.5	<0.005	<1	16	105	11	4	196_201542410
SK-15-08	MI	284533	tr	106.5	107	0.5	<0.005	<1	19	88	6	4	196_201542410
SK-15-08	RY	284534	tr	107	107.5	0.5	<0.005	<1	14	36	5	4	196_201542410
SK-15-08	RY	284535	tr	107.5	108	0.5	<0.005	<1	171	44	6	7	196_201542410
SK-15-08	RY	284536	tr	108	108.5	0.5	<0.005	<1	17	39	6	5	196_201542410
SK-15-08	RY	284537	tr	108.5	109	0.5	<0.005	<1	10	45	4	6	196_201542410
SK-15-08	RY	284538	tr	109	109.5	0.5	<0.005	<1	12	44	8	7	196_201542410
SK-15-08	RY	284539	tr	109.5	110	0.5	<0.005	<1	55	65	10	5	196_201542410
SK-15-08	MI	284540	0	110	111	1	<0.005	<1	84	91	10	2	196_201542410
SK-15-08	MI	284541	tr	111	112	1	<0.005	<1	71	86	11	1	196_201542410
SK-15-08	MI	284542	tr	112	112.7	0.7	<0.005	<1	63	84	10	3	196_201542410
SK-15-08	RY	284543	tr	112.7	113	0.3	<0.005	<1	11	42	4	7	196_201542410
SK-15-08	RY	284544	tr	113	113.65	0.65	<0.005	<1	21	36	5	5	196_201542410
SK-15-08	MI	284545	tr	113.65	114	0.35	<0.005	<1	175	45	9	3	196_201542410

SK-15-08	MI	284546	tr	114	115	1	<0.005	<1	95	55	<1	2	196_201542410
SK-15-08	MI	284547	tr	115	116	1	<0.005	<1	40	66	10	5	196_201542410
SK-15-08	MI	284548	tr	126	126	0	<0.005	<1	79	69	<1	2	196_201542410
SK-15-08	MI	284549	tr	126	126.6	0.6	<0.005	<1	93	76	2	3	196_201542410
SK-15-08	RY	284550	tr	126.6	127	0.4	<0.005	<1	7	22	4	4	196_201542410
SK-15-08	RY	284551	tr	127	128	1	<0.005	<1	15	14	6	4	196_201542410
SK-15-08	RY	284552	tr	128	129	1	<0.005	<1	11	46	1	4	196_201542410
SK-15-08	RY	284553	tr	129	130	1	<0.005	<1	22	203	6	7	196_201542410
SK-15-08	RY	284554	tr	130	131	1	<0.005	<1	20	140	2	6	196_201542410
SK-15-08	RY	284555	tr	131	132	1	<0.005	<1	82	64	<1	9	196_201542410
SK-15-08	RY	284556	tr	132	133	1	0.006	<1	85	164	4	7	196_201542410
SK-15-08	RY	284557	tr	133	134	1	<0.005	<1	12	30	11	5	196_201542410
SK-15-08	RY	284558	tr	134	134.4	0.4	<0.005	<1	104	186	5	6	196_201542410
SK-15-08	RY	284559	4	134.4	134.8	0.4	<0.005	<1	142	214	12	8	196_201542410
SK-15-08	RY	284560	tr	134.8	135.5	0.7	0.008	<1	19	18	5	5	196_201542410
SK-15-08	MI	284561	tr	135.5	136	0.5	<0.005	<1	106	90	3	4	196_201542410
SK-15-08	MI	284562	tr	136	137	1	<0.005	<1	62	52	1	5	196_201542410
SK-15-08	BA	284563	tr	153.5	154	0.5	<0.005	<1	62	68	12	13	196_201542410
SK-15-08	BA	284564	3	154	155	1	<0.005	<1	53	65	5	9	196_201542410
SK-15-08	BA	284565	5	155	156	1	<0.005	<1	65	59	3	12	196_201542410
SK-15-08	BA	284566	5	156	157	1	<0.005	<1	260	62	6	15	196_201542410
SK-15-08	BA	284567	tr	157	158	1	0.007	<1	114	77	<1	5	196_201542410
SK-15-08	BA	284568	tr	158	158.5	0.5	0.007	<1	116	90	<1	1	196_201542410
SK-15-08	BA	284569	tr	161.5	162	0.5	0.008	<1	102	89	6	<1	196_201542410
SK-15-08	BA	284570	tr	162	163	1	<0.005	<1	113	88	9	4	196_201542410
SK-15-08	RY	284571	tr	163	164	1	0.014	<1	22	190	7	4	196_201542410
SK-15-08	RY	284572	tr	164	165	1	0.007	<1	22	111	10	4	196_201542410
SK-15-08	RY	284573	1	165	165.5	0.5	<0.005	<1	23	308	18	5	196_201542410
SK-15-08	RY	284574	2	165.5	166.5	1	<0.005	<1	27	66	7	5	196_201542410
SK-15-08	RY	284575	2	166.5	167.2	0.7	<0.005	<1	24	65	4	7	196_201542410
SK-15-08	RY	284576	tr	167.2	168	0.8	<0.005	<1	18	56	6	4	196_201542410
SK-15-08	RY	284577	tr	168	169	1	<0.005	<1	21	77	11	4	196_201542410
SK-15-08	RY	284578	tr	169	169.8	0.8	<0.005	<1	10	45	5	2	196_201542410

## Assay Certificates



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

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### Assay Certificate

**Certificate Number: 15-016**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **12-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 49 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au		Au Chk
	FA-MP	FA-MP	
	g/Mt	g/Mt	
18301	0.02		
18302	0.01		
18304	< 0.01		
18305	< 0.01		
18306	< 0.01		
18307	< 0.01		
18308	< 0.01		
18309	< 0.01		
18311	< 0.01		
18312	< 0.01	< 0.01	
Blank Value	< 0.01		
OxH97	1.27		
18313	< 0.01		
18314	< 0.01		
18315	< 0.01		
18316	< 0.01		
18317	< 0.01		
18319	< 0.01		
18320	< 0.01		
18321	< 0.01		
18322	< 0.01		
18324	< 0.01	< 0.01	
18325	< 0.01		
18326	0.01		
18327	< 0.01		

Certified by \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 2 of 3

## Assay Certificate

**Certificate Number: 15-016**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **12-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 49 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
18328	< 0.01	
18329	< 0.01	
18331	< 0.01	
18332	< 0.01	
18333	< 0.01	
Blank Value	< 0.01	
OxH97	1.29	
18334	< 0.01	
18335	< 0.01	< 0.01
18336	0.01	
18337	0.01	
18338	< 0.01	
18341	< 0.01	
18342	< 0.01	
18344	< 0.01	
18345	< 0.01	
18346	< 0.01	
18347	< 0.01	
18348	< 0.01	0.01
18349	< 0.01	
18351	< 0.01	
18352	< 0.01	
18353	< 0.01	
18354	< 0.01	
18355	< 0.01	

Certified by \_\_\_\_\_  
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# Swastika Laboratories Ltd

Assaying - Consulting - Representation

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## Assay Certificate

**Certificate Number: 15-016**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **12-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 49 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au	Au Chk
	FA-MP g/Mt	FA-MP g/Mt
18356	< 0.01	
18357	< 0.01	
Blank Value	< 0.01	
OxH97	1.25	
18358	< 0.01	

*Certified by* \_\_\_\_\_  
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# Swastika Laboratories Ltd

Assaying - Consulting - Representation

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## Assay Certificate

**Certificate Number: 15-017**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **14-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 51 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au	
	FA-MP	Au Chk FA-MP
	g/Mt	g/Mt
18361	< 0.01	
18362	< 0.01	
18363	< 0.01	
18364	< 0.01	
18365	< 0.01	
18366	< 0.01	
18367	< 0.01	
18368	< 0.01	
18369	< 0.01	
18371	< 0.01	< 0.01
Blank Value	< 0.01	
OxH97	1.26	
18372	< 0.01	
18373	< 0.01	
18374	< 0.01	
18375	< 0.01	
18376	< 0.01	
18377	< 0.01	
18378	< 0.01	
18379	<b>1</b>	
18381	< 0.01	
18382	< 0.01	0.01
18383	< 0.01	
18384	< 0.01	
18385	< 0.01	

1. listed not received

Certified by \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
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# Swastika Laboratories Ltd

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## Assay Certificate

**Certificate Number: 15-017**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **14-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 51 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
18386	< 0.01	
18387	< 0.01	
18388	< 0.01	
18389	< 0.01	
18391	< 0.01	
Blank Value	< 0.01	
OxH97	1.27	
18392	< 0.01	
18393	< 0.01	< 0.01
18394	< 0.01	
18395	< 0.01	
18396	< 0.01	
18397	< 0.01	
18398	< 0.01	
18401	< 0.01	
18402	< 0.01	
18403	< 0.01	
18404	< 0.01	
18405	< 0.01	< 0.01
18406	< 0.01	
18407	< 0.01	
18408	< 0.01	
18409	< 0.01	
18411	< 0.01	
18412	< 0.01	

1. listed not received

*Certified by*

**Jing Lin, M Sc.**

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# Swastika Laboratories Ltd

Assaying - Consulting - Representation

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## Assay Certificate

**Certificate Number: 15-017**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **14-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 51 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
18413	< 0.01	
18414	< 0.01	
Blank Value	< 0.01	
OxH97	1.26	
18415	< 0.01	
18416	< 0.01	< 0.01
18417	< 0.01	

1. listed not received

*Certified by*

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

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## Assay Certificate

**Certificate Number: 15-018**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **14-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 44 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
18418	< 0.01	
18421	< 0.01	
18422	< 0.01	
18423	< 0.01	
18424	< 0.01	
18425	< 0.01	
18426	< 0.01	
18427	< 0.01	
18428	< 0.01	
18429	< 0.01	< 0.01
Blank Value	< 0.01	
OxH97	1.25	
18431	< 0.01	
18432	< 0.01	
18433	< 0.01	
18434	< 0.01	
18435	< 0.01	
18436	< 0.01	
18437	< 0.01	
18438	< 0.01	
18441	< 0.01	
18442	< 0.01	< 0.01
18443	< 0.01	
18444	< 0.01	
18445	< 0.01	

*Certified by* \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 2 of 2

## Assay Certificate

**Certificate Number: 15-018**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **14-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 44 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au	
	FA-MP g/Mt	Au Chk FA-MP g/Mt
18446	< 0.01	
18447	< 0.01	
18448	< 0.01	
18449	< 0.01	
18451	< 0.01	
Blank Value	< 0.01	
OxH97	1.27	
18452	< 0.01	
18453	< 0.01	< 0.01
18454	< 0.01	
18455	< 0.01	
18456	< 0.01	
18457	< 0.01	
18458	< 0.01	
18461	< 0.01	
18462	< 0.01	
18463	< 0.01	
18464	< 0.01	
18465	< 0.01	< 0.01
18466	< 0.01	
18467	< 0.01	
18468	< 0.01	
18469	< 0.01	

*Certified by* \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 2

## Assay Certificate

**Certificate Number: 15-019**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **15-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 32 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au	
	FA-MP g/Mt	Au Chk FA-MP g/Mt
18471	0.01	
18472	0.01	
18473	< 0.01	
18474	< 0.01	
18475	0.01	
18476	0.02	
18477	< 0.01	
18478	< 0.01	
18479	< 0.01	
18480	< 0.01	< 0.01
Blank Value	< 0.01	
OxH97	1.27	
18482	0.01	
18483	< 0.01	
18484	< 0.01	
18485	< 0.01	
18486	0.01	
18487	< 0.01	
18488	< 0.01	
18489	0.01	
18492	< 0.01	
18493	< 0.01	< 0.01
18494	< 0.01	
18495	< 0.01	
18496	0.01	

*Certified by* \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 2 of 2

## Assay Certificate

**Certificate Number: 15-019**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **15-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 32 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au		Au Chk
	FA-MP	FA-MP	
	g/Mt	g/Mt	
18497	< 0.01		
18498	< 0.01		
18499	< 0.01		
18500	< 0.01		
18502	< 0.01		
Blank Value	< 0.01		
OxH97	1.26		
18503	< 0.01		
18504	< 0.01	< 0.01	
18505	< 0.01		
18506	< 0.01		

*Certified by* \_\_\_\_\_

**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300





# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 1

## Assay Certificate

**Certificate Number: 15-073**

Company: **Mistango River Resources**

Project: **Sackville**

Report Date: **26-Jan-15**

Attn: **Donald Kasner**

*We hereby certify* the following Assay of 1 core samples  
submitted 07-Jan-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
18507	< 0.01	

*Certified by* \_\_\_\_\_  
**Jing Lin, M Sc.**

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300

Quality Analysis ...



Innovative Technologies

Date Submitted: 21-Jan-15  
Invoice No.: A15-00441  
Invoice Date: 03-Feb-15  
Your Reference: Mistango 15-017;016;073;018;019

Swastika Labs  
Box 10, 1 Cameron Ave.  
Swastika ON P0K 1T0  
Canada

ATTN: Jing Lin

## CERTIFICATE OF ANALYSIS

177 Pulp samples were submitted for analysis.

The following analytical package was requested: Code 1E3 Aqua Regia ICP(AQUAGEO)


REPORT A15-00441

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### Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

  
Emmanuel Esemé, Ph.D.  
Quality Control

ACTIVATION LABORATORIES LTD.  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)



## Results

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP	AR-JCP
18301	< 20	0.2	0.9	180	711	2	75	9	703	1.85	4	< 10	18	< 0.5	< 2	1.30	40	134	0.78	< 10	< 1	0.18	< 10
18302	< 20	0.3	3.1	155	203	5	140	12	1890	1.07	3	< 10	18	< 0.5	< 2	0.83	81	218	8.76	< 10	< 1	0.05	11
18304	< 20	< 0.2	< 0.5	92	479	< 1	589	5	82	1.87	3	< 10	27	< 0.5	< 2	1.11	87	817	5.91	< 10	< 1	0.12	< 10
18305	< 20	< 0.2	< 0.5	103	411	< 1	821	< 2	31	1.75	4	< 10	43	< 0.5	< 2	1.72	102	794	3.60	< 10	< 1	0.13	< 10
18306	< 20	< 0.2	< 0.5	105	478	< 1	784	< 2	33	2.02	58	< 10	29	< 0.5	< 2	1.92	98	903	3.82	< 10	< 1	0.10	< 10
18307	< 20	< 0.2	< 0.5	121	581	< 1	533	< 2	25	2.14	51	< 10	72	< 0.5	< 2	3.08	82	796	3.25	< 10	< 1	0.21	< 10
18308	< 20	< 0.2	< 0.5	86	483	< 1	84	< 2	27	2.06	3	< 10	52	< 0.5	< 2	2.59	23	212	2.07	< 10	< 1	0.16	< 10
18309	< 20	< 0.2	< 0.5	78	679	< 1	75	< 2	44	2.28	< 2	< 10	33	< 0.5	< 2	2.32	30	282	4.13	< 10	< 1	0.10	< 10
18311	< 20	< 0.2	< 0.5	54	800	< 1	81	< 2	34	1.93	< 2	< 10	38	< 0.5	< 2	3.05	25	319	3.41	< 10	< 1	0.12	< 10
18312	< 20	< 0.2	< 0.5	85	658	1	83	< 2	37	1.95	2	< 10	27	< 0.5	< 2	3.00	25	270	3.59	< 10	< 1	0.09	< 10
18313	< 20	< 0.2	< 0.5	75	616	< 1	83	< 2	34	1.88	< 2	< 10	39	< 0.5	< 2	2.28	24	263	3.35	< 10	< 1	0.10	< 10
18314	< 20	< 0.2	< 0.5	180	618	< 1	95	< 2	39	1.81	< 2	< 10	35	< 0.5	< 2	2.39	35	269	3.50	< 10	< 1	0.11	< 10
18315	< 20	< 0.2	< 0.5	125	730	< 1	102	< 2	42	2.54	< 2	< 10	57	< 0.5	< 2	3.41	34	329	3.88	< 10	< 1	0.16	< 10
18316	< 20	< 0.2	< 0.5	89	789	< 1	85	< 2	49	2.53	< 2	< 10	67	< 0.5	< 2	3.23	31	376	4.06	< 10	< 1	0.19	< 10
18317	< 20	< 0.2	< 0.5	335	788	< 1	129	< 2	126	2.49	< 2	< 10	27	< 0.5	< 2	2.82	48	383	5.67	< 10	< 1	0.09	< 10
18319	< 20	< 0.2	< 0.5	123	705	< 1	48	< 2	40	2.57	< 2	< 10	39	< 0.5	< 2	3.25	27	110	3.15	< 10	< 1	0.13	< 10
18320	< 20	< 0.2	< 0.5	143	777	< 1	82	< 2	47	2.73	8	< 10	33	< 0.5	< 2	3.87	33	170	3.58	< 10	< 1	0.08	< 10
18321	< 20	< 0.2	< 0.5	43	733	< 1	106	< 2	82	2.84	6	< 10	60	< 0.5	< 2	3.00	24	348	2.89	< 10	< 1	0.14	< 10
18322	< 20	< 0.2	< 0.5	42	887	< 1	90	< 2	51	1.86	5	< 10	46	< 0.5	< 2	4.90	19	327	2.43	< 10	< 1	0.12	< 10
18324	< 20	< 0.2	< 0.5	100	1420	< 1	87	< 2	117	2.53	11	< 10	47	< 0.5	< 2	7.18	37	107	4.86	< 10	< 1	0.14	< 10
18325	< 20	< 0.2	< 0.5	113	1390	< 1	82	< 2	128	2.44	15	< 10	51	< 0.5	< 2	4.90	44	117	5.44	< 10	< 1	0.21	< 10
18326	< 20	0.3	< 0.5	169	1430	2	80	7	111	1.79	14	< 10	27	< 0.5	< 2	9.08	40	103	4.74	< 10	< 1	0.14	< 10
18327	< 20	0.3	< 0.5	76	1150	3	119	5	201	1.35	118	< 10	42	< 0.5	< 2	5.16	36	143	2.85	< 10	< 1	0.17	11
18328	< 20	< 0.2	< 0.5	24	355	1	34	3	85	1.21	33	< 10	79	< 0.5	< 2	1.40	9	102	1.40	< 10	< 1	0.33	10
18329	< 20	< 0.2	< 0.5	72	689	< 1	83	< 2	57	2.40	5	< 10	77	< 0.5	< 2	2.17	27	166	3.19	< 10	< 1	0.16	< 10
18331	< 20	< 0.2	< 0.5	54	679	< 1	44	< 2	40	2.17	3	< 10	77	< 0.5	< 2	2.59	19	131	3.05	< 10	< 1	0.18	< 10
18332	< 20	< 0.2	< 0.5	53	682	< 1	56	< 2	48	2.32	4	< 10	49	< 0.5	< 2	2.32	27	125	3.77	< 10	< 1	0.14	< 10
18333	< 20	< 0.2	< 0.5	127	553	< 1	73	< 2	44	2.48	14	< 10	45	< 0.5	< 2	2.58	29	128	3.43	< 10	< 1	0.13	< 10
18334	< 20	< 0.2	< 0.5	78	689	< 1	88	< 2	48	2.40	5	< 10	43	< 0.5	< 2	2.89	29	179	3.57	< 10	< 1	0.15	< 10
18335	< 20	0.4	< 0.5	86	679	2	83	11	273	1.25	150	< 10	44	< 0.5	< 2	3.15	23	104	2.54	< 10	< 1	0.28	14
18336	< 20	0.4	< 0.5	108	402	2	101	12	400	1.81	78	< 10	44	< 0.5	< 2	0.70	30	121	3.18	< 10	< 1	0.39	14
18337	< 20	< 0.2	< 0.5	56	503	2	39	6	140	1.11	17	< 10	59	< 0.5	< 2	2.20	12	88	1.97	< 10	< 1	0.38	< 10
18338	< 20	< 0.2	< 0.5	28	283	< 1	16	5	114	1.24	2	< 10	119	< 0.5	< 2	1.03	5	92	0.91	< 10	< 1	0.49	12
18341	< 20	< 0.2	< 0.5	40	284	3	32	8	184	1.27	8	< 10	72	< 0.5	< 2	0.79	9	113	1.30	< 10	< 1	0.44	13
18342	< 20	< 0.2	< 0.5	49	739	2	81	4	169	1.81	6	< 10	67	< 0.5	< 2	3.55	16	111	1.85	< 10	< 1	0.46	13
18344	< 20	< 0.2	< 0.5	77	827	1	86	3	138	2.69	7	< 10	148	< 0.5	< 2	2.44	25	178	3.43	< 10	< 1	1.10	< 10
18345	< 20	< 0.2	< 0.5	109	788	< 1	58	< 2	59	2.95	5	< 10	94	< 0.5	< 2	2.88	34	142	3.70	< 10	< 1	0.27	< 10
18346	< 20	< 0.2	< 0.5	82	587	< 1	50	< 2	38	1.79	< 2	< 10	38	< 0.5	< 2	2.23	22	84	2.90	< 10	< 1	0.13	< 10
18347	< 20	< 0.2	< 0.5	174	790	< 1	50	< 2	70	3.07	3	< 10	85	< 0.5	< 2	3.87	35	65	3.49	< 10	< 1	0.14	< 10
18348	< 20	< 0.2	< 0.5	300	1030	< 1	48	< 2	82	3.47	6	< 10	67	< 0.5	< 2	4.12	42	71	5.37	< 10	< 1	0.15	< 10
18349	< 20	0.2	< 0.5	190	2200	< 1	41	2	83	2.58	3	< 10	30	< 0.5	< 2	9.29	42	50	6.48	< 10	< 1	0.08	< 10
18351	< 20	< 0.2	< 0.5	171	1060	< 1	49	< 2	75	3.24	8	< 10	83	< 0.5	< 2	3.88	41	74	4.88	< 10	< 1	0.14	< 10
18352	< 20	< 0.2	< 0.5	127	939	< 1	44	< 2	82	2.40	11	< 10	44	< 0.5	< 2	3.64	35	80	3.63	< 10	< 1	0.10	< 10
18353	< 20	< 0.2	< 0.5	125	952	< 1	45	< 2	87	3.06	11	< 10	45	< 0.5	< 2	3.88	37	87	4.00	< 10	< 1	0.12	< 10
18354	< 20	2.6	2.1	1120	745	108	186	118	338	1.89	179	14	34	6.9	32	2.17	37	85	4.56	20	5	0.47	29
18355	< 20	< 0.2	< 0.5	118	784	1	45	< 2	85	2.46	9	< 10	39	< 0.5	< 2	2.56	35	89	3.47	< 10	< 1	0.11	< 10
18356	< 20	< 0.2	< 0.5	198	798	< 1	52	< 2	81	2.67	4	< 10	41	< 0.5	< 2	2.59	38	83	3.66	< 10	< 1	0.12	< 10
18357	< 20	< 0.2	< 0.5	183	985	< 1	80	< 2	107	3.16	5	< 10	30	< 0.5	< 2	3.96	42	115	4.83	< 10	< 1	0.09	< 10
18358	< 20	< 0.2	< 0.5	126	607	< 1	49	< 2	110	1.71	16	< 10	30	< 0.5	< 2	2.43	42	81	2.90	< 10	< 1	0.08	< 10

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18361	< 20	< 0.2	< 0.5	168	655	< 1	44	< 2	86	1.74	3	< 10	40	< 0.5	< 2	1.81	41	89	3.26	< 10	< 1	0.09	< 10
18362	< 20	< 0.2	< 0.5	122	737	< 1	48	< 2	82	2.04	9	< 10	52	< 0.5	< 2	2.74	40	88	3.25	< 10	< 1	0.13	< 10
18363	< 20	< 0.2	< 0.5	149	628	< 1	53	< 2	88	1.72	8	< 10	83	< 0.5	< 2	2.50	41	89	2.88	< 10	< 1	0.11	< 10
18364	< 20	< 0.2	< 0.5	71	900	< 1	50	< 2	82	2.57	14	< 10	84	< 0.5	< 2	3.70	32	137	3.46	< 10	< 1	0.15	< 10
18365	< 20	< 0.2	< 0.5	184	1240	< 1	52	< 2	87	3.05	4	< 10	48	< 0.5	< 2	4.90	38	118	5.11	< 10	< 1	0.14	< 10
18366	< 20	< 0.2	< 0.5	84	567	< 1	172	< 2	39	2.75	11	< 10	76	< 0.5	< 2	2.41	33	396	3.36	< 10	< 1	0.20	< 10
18367	< 20	< 0.2	< 0.5	85	878	< 1	138	< 2	41	3.51	2	< 10	83	< 0.5	< 2	3.61	30	172	3.42	< 10	< 1	0.26	< 10
18368	< 20	2.7	2.2	1150	747	109	188	119	338	1.91	179	14	35	7.0	32	2.16	37	85	4.59	20	5	0.48	29
18369	< 20	< 0.2	< 0.5	164	762	3	65	< 2	32	2.70	21	< 10	70	< 0.5	< 2	4.15	27	117	3.73	< 10	< 1	0.19	< 10
18371	< 20	< 0.2	< 0.5	58	643	< 1	73	< 2	24	2.33	< 2	< 10	64	< 0.5	< 2	4.29	19	176	2.26	< 10	< 1	0.16	< 10
18372	< 20	< 0.2	< 0.5	49	535	1	82	< 2	23	2.85	12	< 10	77	< 0.5	< 2	3.84	18	119	2.21	< 10	< 1	0.20	< 10
18373	< 20	< 0.2	< 0.5	73	680	1	83	< 2	38	2.27	14	< 10	81	< 0.5	< 2	3.72	24	251	3.23	< 10	< 1	0.15	< 10
18374	< 20	< 0.2	< 0.5	20	718	< 1	40	< 2	53	2.34	6	< 10	157	< 0.5	< 2	2.35	20	154	3.17	< 10	< 1	0.22	< 10
18375	< 20	< 0.2	< 0.5	116	749	< 1	56	< 2	51	2.71	3	< 10	53	< 0.5	< 2	3.13	38	102	3.81	< 10	< 1	0.14	< 10
18376	< 20	< 0.2	< 0.5	134	720	< 1	49	< 2	53	2.36	< 2	< 10	54	< 0.5	< 2	2.79	38	83	3.99	< 10	< 1	0.13	< 10
18377	< 20	< 0.2	< 0.5	217	748	< 1	47	< 2	52	2.72	3	< 10	54	< 0.5	< 2	3.13	38	82	4.28	< 10	< 1	0.14	< 10
18378	< 20	< 0.2	< 0.5	137	989	1	82	< 2	76	3.13	6	< 10	70	< 0.5	< 2	4.02	41	104	4.39	10	< 1	0.18	< 10
18381	< 20	< 0.2	< 0.5	157	1030	< 1	54	< 2	80	2.91	4	< 10	71	< 0.5	< 2	3.50	36	102	4.76	10	< 1	0.17	< 10
18382	< 20	< 0.2	< 0.5	101	1070	< 1	44	< 2	65	2.64	< 2	< 10	83	< 0.5	< 2	3.17	31	88	4.89	10	< 1	0.17	< 10
18383	< 20	< 0.2	< 0.5	151	1050	2	48	< 2	87	2.88	4	< 10	51	< 0.5	< 2	2.42	39	99	4.95	10	< 1	0.12	< 10
18384	< 20	< 0.2	< 0.5	84	1290	< 1	49	< 2	45	3.23	4	< 10	30	< 0.5	< 2	4.81	33	117	5.53	10	< 1	0.05	< 10
18385	< 20	< 0.2	< 0.5	88	1220	< 1	57	9	100	3.53	5	< 10	22	< 0.5	< 2	3.18	38	111	5.64	10	< 1	0.06	< 10
18386	< 20	< 0.2	< 0.5	122	902	< 1	56	2	39	2.99	3	< 10	36	< 0.5	< 2	3.12	43	111	4.34	10	< 1	0.09	< 10
18387	< 20	< 0.2	< 0.5	162	932	< 1	45	< 2	88	2.98	2	< 10	36	< 0.5	< 2	2.77	35	85	4.17	< 10	< 1	0.10	< 10
18388	< 20	< 0.2	< 0.5	115	856	< 1	49	< 2	56	2.98	4	< 10	88	< 0.5	< 2	3.37	33	101	3.93	< 10	< 1	0.17	< 10
18389	< 20	< 0.2	< 0.5	151	828	< 1	43	< 2	89	2.81	< 2	< 10	119	< 0.5	< 2	2.52	32	105	4.18	10	< 1	0.28	< 10
18391	< 20	< 0.2	< 0.5	59	930	< 1	25	< 2	49	1.99	< 2	< 10	73	< 0.5	< 2	4.34	17	88	3.52	10	< 1	0.15	< 10
18392	< 20	< 0.2	< 0.5	83	1050	< 1	42	< 2	82	3.01	< 2	< 10	58	< 0.5	< 2	3.78	28	118	4.89	10	< 1	0.17	< 10
18393	< 20	< 0.2	< 0.5	93	981	< 1	44	< 2	85	2.73	< 2	< 10	53	< 0.5	< 2	3.88	31	116	4.46	10	< 1	0.16	< 10
18394	< 20	< 0.2	< 0.5	78	1150	< 1	53	< 2	71	3.04	4	< 10	80	< 0.5	< 2	3.08	35	148	5.64	10	< 1	0.14	< 10
18395	< 20	< 0.2	< 0.5	105	951	< 1	48	< 2	88	2.83	3	< 10	75	< 0.5	< 2	3.58	31	128	4.46	< 10	< 1	0.15	< 10
18396	< 20	< 0.2	< 0.5	119	894	1	56	< 2	88	2.44	4	< 10	74	< 0.5	< 2	3.10	40	109	4.73	< 10	< 1	0.17	< 10
18397	< 20	< 0.2	< 0.5	119	898	< 1	50	< 2	107	2.58	2	< 10	44	< 0.5	< 2	2.67	45	51	5.29	< 10	< 1	0.11	< 10
18398	< 20	< 0.2	< 0.5	129	887	< 1	53	< 2	105	2.74	< 2	< 10	40	< 0.5	< 2	3.22	38	94	4.76	< 10	< 1	0.10	< 10
18401	< 20	< 0.2	< 0.5	176	771	< 1	55	< 2	98	3.20	3	< 10	39	< 0.5	< 2	3.86	39	94	4.56	< 10	< 1	0.09	< 10
18402	< 20	< 0.2	< 0.5	108	718	< 1	42	< 2	94	3.20	2	< 10	38	< 0.5	< 2	2.90	38	45	4.59	< 10	< 1	0.10	< 10
18403	< 20	< 0.2	< 0.5	82	855	< 1	55	< 2	59	2.95	7	< 10	80	< 0.5	< 2	3.27	34	122	3.49	< 10	< 1	0.10	< 10
18404	< 20	< 0.2	< 0.5	97	866	< 1	45	< 2	81	3.06	4	< 10	94	< 0.5	< 2	3.07	44	86	5.12	10	< 1	0.40	< 10
18405	< 20	< 0.2	< 0.5	110	920	< 1	41	< 2	103	3.58	3	< 10	59	< 0.5	< 2	3.11	50	49	5.37	10	< 1	1.02	< 10
18406	< 20	< 0.2	< 0.5	95	1080	< 1	40	< 2	109	3.74	4	< 10	55	< 0.5	< 2	3.71	49	40	5.85	10	< 1	0.83	< 10
18407	< 20	< 0.2	< 0.5	142	958	< 1	40	< 2	99	3.84	< 2	< 10	58	< 0.5	< 2	2.78	47	46	5.84	10	< 1	1.16	< 10
18408	< 20	< 0.2	< 0.5	117	785	< 1	56	< 2	89	3.11	3	< 10	133	< 0.5	< 2	3.69	48	85	4.54	< 10	< 1	0.48	< 10
18409	< 20	< 0.2	< 0.5	149	572	1	52	< 2	76	2.87	6	< 10	89	< 0.5	< 2	2.66	43	72	3.89	< 10	< 1	0.15	< 10
18411	< 20	< 0.2	< 0.5	87	729	< 1	42	< 2	88	2.53	16	< 10	87	< 0.5	< 2	4.07	31	125	3.05	< 10	< 1	0.10	< 10
18412	< 20	0.2	< 0.5	480	905	< 1	65	3	219	3.26	3	< 10	23	< 0.5	< 2	3.45	47	80	6.97	10	< 1	0.13	< 10
18413	< 20	< 0.2	< 0.5	214	888	< 1	46	< 2	89	3.24	3	< 10	74	< 0.5	< 2	3.51	36	83	5.05	< 10	< 1	0.16	< 10
18414	< 20	< 0.2	< 0.5	198	888	< 1	54	< 2	106	3.51	3	< 10	108	< 0.5	< 2	3.83	40	99	4.43	< 10	< 1	0.16	< 10
18415	< 20	< 0.2	< 0.5	138	858	< 1	48	< 2	72	3.72	< 2	< 10	118	< 0.5	< 2	3.73	35	87	4.54	10	< 1	0.16	< 10
18416	< 20	< 0.2	< 0.5	182	998	< 1	54	< 2	81	3.58	2	< 10	87	< 0.5	< 2	3.87	36	116	4.52	< 10	< 1	0.14	< 10
18417	< 20	< 0.2	< 0.5	106	1030	< 1	57	< 2	59	2.97	9	< 10	87	< 0.5	< 2	3.92	40	155	4.30	< 10	< 1	0.11	< 10

## Activation Laboratories Ltd.

Report: A15-00441

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18418	<20	<0.2	<0.5	73	805	<1	38	<2	80	1.84	8	<10	83	<0.5	<2	1.73	37	85	3.37	<10	<1	0.09	<10
18421	<20	<0.2	<0.5	109	827	<1	38	<2	109	2.00	4	<10	70	<0.5	<2	2.08	39	37	3.58	<10	<1	0.09	<10
18422	<20	<0.2	<0.5	187	717	<1	46	<2	83	2.53	<2	<10	89	<0.5	<2	3.17	34	79	3.64	<10	<1	0.13	<10
18423	<20	<0.2	<0.5	72	754	<1	39	<2	85	3.32	4	<10	85	<0.5	<2	3.72	24	95	3.48	<10	<1	0.18	<10
18424	<20	<0.2	<0.5	253	1490	1	38	<2	148	3.88	4	<10	55	<0.5	<2	4.33	32	85	7.80	<10	<1	0.15	<10
18425	<20	<0.2	<0.5	93	1530	<1	32	<2	94	3.88	<2	<10	88	<0.5	<2	5.52	28	43	8.52	10	<1	0.20	<10
18426	<20	<0.2	<0.5	148	1000	<1	41	<2	71	3.58	<2	<10	49	<0.5	<2	4.04	38	51	4.29	10	<1	0.14	<10
18427	<20	<0.2	<0.5	148	788	<1	35	<2	122	3.48	2	<10	82	<0.5	<2	3.32	41	38	3.80	10	<1	0.17	<10
18428	<20	<0.2	<0.5	177	843	<1	50	<2	138	2.66	<2	385	49	<0.5	<2	3.54	35	57	2.87	<10	<1	0.14	<10
18429	<20	<0.2	<0.5	147	692	<1	53	<2	105	2.92	5	15	48	<0.5	<2	3.51	35	82	2.78	<10	<1	0.16	<10
18431	<20	<0.2	<0.5	141	1020	<1	48	<2	99	3.40	6	20	87	<0.5	<2	3.78	35	120	4.41	<10	<1	0.15	<10
18432	<20	<0.2	<0.5	99	844	<1	51	<2	48	2.15	6	<10	40	<0.5	<2	3.75	29	152	3.00	<10	<1	0.07	<10
18433	<20	<0.2	<0.5	93	823	<1	40	<2	45	2.18	5	<10	42	<0.5	<2	3.04	25	125	2.36	<10	<1	0.07	<10
18434	<20	<0.2	<0.5	83	822	<1	37	<2	47	2.89	8	<10	58	<0.5	<2	3.18	24	134	2.45	<10	<1	0.10	<10
18435	<20	<0.2	<0.5	170	881	<1	52	<2	81	2.84	7	<10	53	<0.5	<2	3.48	34	188	3.82	<10	<1	0.08	<10
18436	<20	<0.2	<0.5	91	987	<1	56	<2	77	2.77	8	<10	50	<0.5	<2	3.88	32	192	4.05	<10	<1	0.08	<10
18437	<20	<0.2	<0.5	105	975	1	57	<2	56	2.35	6	<10	40	<0.5	<2	3.85	33	183	3.80	<10	<1	0.07	<10
18438	<20	<0.2	<0.5	142	1020	<1	53	<2	70	2.93	3	<10	57	<0.5	<2	3.74	29	211	5.29	<10	<1	0.11	<10
18441	<20	<0.2	<0.5	118	823	<1	51	<2	44	3.00	15	<10	119	<0.5	<2	4.04	32	188	3.27	<10	<1	0.08	<10
18442	<20	<0.2	<0.5	141	907	<1	49	<2	83	3.13	7	<10	98	<0.5	<2	3.80	30	191	4.39	<10	<1	0.11	<10
18443	<20	<0.2	<0.5	178	752	1	49	<2	38	3.22	21	<10	99	<0.5	<2	4.18	31	148	2.89	<10	<1	0.09	<10
18444	<20	<0.2	<0.5	186	1020	1	49	<2	86	3.71	19	<10	119	<0.5	<2	4.21	39	103	4.41	<10	<1	0.16	<10
18445	<20	<0.2	<0.5	84	1180	1	39	<2	76	3.16	10	<10	83	<0.5	<2	3.70	31	80	4.78	<10	<1	0.10	<10
18446	<20	<0.2	<0.5	128	1110	<1	41	<2	55	2.85	4	<10	40	<0.5	<2	4.00	30	85	4.10	<10	<1	0.07	<10
18447	<20	<0.2	<0.5	105	1050	<1	34	<2	52	2.59	17	<10	70	<0.5	<2	3.82	30	73	3.88	<10	<1	0.08	<10
18448	<20	<0.2	<0.5	242	1150	<1	43	<2	118	3.18	15	<10	85	<0.5	<2	4.19	37	74	5.04	<10	<1	0.09	<10
18449	<20	<0.2	<0.5	142	603	<1	38	<2	55	3.51	22	<10	141	<0.5	<2	3.28	35	82	2.70	<10	<1	0.16	<10
18451	<20	<0.2	<0.5	119	593	<1	53	<2	88	3.83	5	<10	85	<0.5	<2	3.29	37	85	3.17	<10	<1	0.20	<10
18452	<20	0.3	<0.5	199	770	<1	81	8	117	3.13	2	<10	28	<0.5	<2	1.70	47	105	7.14	10	<1	0.21	<10
18453	<20	0.3	0.7	206	742	<1	78	9	424	2.82	<2	<10	38	<0.5	<2	3.25	57	128	6.94	10	<1	0.13	<10
18454	<20	0.4	<0.5	444	809	<1	82	11	144	2.84	<2	<10	15	<0.5	<2	1.99	86	145	9.23	10	<1	0.14	<10
18455	<20	<0.2	<0.5	138	572	<1	80	8	182	3.33	2	<10	33	<0.5	<2	1.67	51	91	8.10	10	<1	0.21	<10
18456	<20	<0.2	<0.5	136	862	<1	58	4	182	3.10	<2	<10	24	<0.5	<2	1.71	48	111	8.90	10	<1	0.17	<10
18457	<20	<0.2	<0.5	148	582	<1	81	2	103	3.01	2	<10	28	<0.5	<2	1.98	50	91	5.87	<10	<1	0.12	<10
18458	<20	<0.2	<0.5	154	811	1	83	<2	74	2.87	2	<10	31	<0.5	<2	1.74	58	79	5.72	<10	<1	0.12	<10
18461	<20	<0.2	<0.5	128	741	<1	53	<2	85	2.82	4	<10	74	<0.5	<2	2.12	48	94	5.18	<10	<1	0.16	<10
18462	<20	<0.2	<0.5	129	788	<1	42	<2	80	2.78	3	<10	80	<0.5	<2	2.85	41	87	4.81	<10	<1	0.13	<10
18463	<20	<0.2	<0.5	90	773	<1	38	<2	50	2.84	3	<10	78	<0.5	<2	2.91	34	52	4.04	<10	<1	0.15	<10
18464	<20	<0.2	<0.5	148	818	<1	52	<2	83	2.88	11	<10	87	<0.5	<2	3.15	42	121	4.70	<10	<1	0.13	<10
18465	<20	<0.2	<0.5	164	882	<1	51	<2	86	2.25	3	<10	87	<0.5	<2	2.38	48	81	4.50	<10	<1	0.14	<10
18466	<20	<0.2	<0.5	107	574	<1	38	<2	50	2.28	4	<10	81	<0.5	<2	1.71	38	58	3.67	<10	<1	0.10	<10
18467	<20	<0.2	<0.5	100	537	<1	44	<2	72	3.77	3	<10	79	<0.5	<2	2.16	40	49	4.30	10	<1	0.16	<10
18468	<20	<0.2	<0.5	158	881	<1	58	2	113	2.81	<2	<10	31	<0.5	<2	1.41	50	83	8.75	<10	<1	0.12	<10
18469	<20	<0.2	<0.5	118	814	<1	58	<2	108	2.84	<2	<10	43	<0.5	<2	1.31	49	86	5.89	<10	<1	0.18	<10
18471	<20	0.2	<0.5	148	840	<1	77	4	98	2.28	<2	<10	32	<0.5	<2	1.28	53	133	8.38	<10	<1	0.18	<10
18472	<20	<0.2	<0.5	227	757	<1	44	<2	70	3.24	<2	<10	30	<0.5	<2	2.84	38	60	5.08	10	<1	0.09	<10
18473	<20	<0.2	<0.5	123	743	<1	33	<2	52	3.23	4	<10	47	<0.5	<2	3.08	28	80	3.90	<10	<1	0.10	<10
18474	<20	<0.2	<0.5	155	807	<1	50	<2	128	2.92	4	<10	44	<0.5	<2	2.72	40	71	5.18	<10	<1	0.10	<10
18475	<20	<0.2	2.0	126	718	2	143	4	1020	2.22	38	<10	34	<0.5	<2	3.14	45	278	5.09	<10	<1	0.13	<10
18476	<20	0.8	<0.5	192	877	1	108	7	279	2.59	10	<10	14	<0.5	<2	2.53	48	141	10.09	<10	<1	0.19	<10

## Activation Laboratories Ltd.

Report: A15-00441

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18477	< 20	< 0.2	< 0.5	107	701	< 1	43	< 2	45	2.87	8	< 10	87	< 0.5	< 2	3.73	27	139	3.41	< 10	< 1	0.13	< 10
18478	< 20	< 0.2	< 0.5	108	519	1	37	< 2	35	2.88	28	< 10	48	< 0.5	< 2	2.98	28	123	2.37	< 10	< 1	0.11	< 10
18479	< 20	< 0.2	< 0.5	123	808	< 1	43	< 2	38	2.85	9	< 10	45	< 0.5	< 2	3.43	25	141	2.58	< 10	< 1	0.11	< 10
18480	< 20	< 0.2	< 0.5	90	646	< 1	48	< 2	38	2.80	5	< 10	38	< 0.5	< 2	3.87	25	147	2.70	< 10	< 1	0.10	< 10
18482	< 20	< 0.2	< 0.5	125	808	< 1	38	< 2	32	2.41	3	< 10	29	< 0.5	< 2	3.49	20	127	2.62	< 10	< 1	0.08	< 10
18483	< 20	< 0.2	< 0.5	82	880	< 1	42	< 2	73	3.85	8	< 10	48	< 0.5	< 2	4.81	28	87	4.01	< 10	< 1	0.14	< 10
18484	< 20	< 0.2	< 0.5	123	837	< 1	47	< 2	87	3.73	4	< 10	83	< 0.5	< 2	4.40	34	82	4.48	< 10	< 1	0.22	< 10
18485	< 20	< 0.2	< 0.5	85	905	< 1	49	< 2	89	3.42	5	< 10	51	< 0.5	< 2	4.14	32	135	3.74	< 10	< 1	0.14	< 10
18486	< 20	< 0.2	< 0.5	161	837	1	51	< 2	90	3.58	3	< 10	77	< 0.5	< 2	3.39	44	82	5.11	< 10	< 1	0.17	< 10
18487	< 20	< 0.2	< 0.5	148	893	< 1	89	< 2	82	3.40	< 2	< 10	31	< 0.5	< 2	2.77	58	82	8.01	< 10	< 1	0.11	< 10
18488	< 20	< 0.2	< 0.5	118	807	< 1	82	< 2	98	3.21	< 2	< 10	41	< 0.5	< 2	2.82	51	81	5.42	< 10	< 1	0.08	< 10
18489	< 20	0.2	< 0.5	182	582	< 1	78	< 2	108	3.23	< 2	< 10	29	< 0.5	< 2	3.01	83	59	8.75	< 10	< 1	0.05	< 10
18492	< 20	< 0.2	< 0.5	89	864	< 1	59	< 2	112	2.98	< 2	< 10	31	< 0.5	< 2	2.57	47	50	5.77	< 10	< 1	0.09	< 10
18493	< 20	< 0.2	< 0.5	89	829	< 1	51	< 2	75	2.77	< 2	< 10	70	< 0.5	< 2	2.45	38	55	4.81	< 10	< 1	0.17	< 10
18494	< 20	< 0.2	< 0.5	70	784	< 1	47	< 2	72	2.47	2	< 10	127	< 0.5	< 2	2.87	30	78	4.35	< 10	< 1	0.28	< 10
18495	< 20	< 0.2	< 0.5	282	707	< 1	87	< 2	40	2.90	< 2	< 10	120	< 0.5	< 2	3.78	31	90	4.17	< 10	< 1	0.25	< 10
18498	< 20	< 0.2	< 0.5	123	521	< 1	43	< 2	31	1.90	< 2	< 10	58	< 0.5	< 2	2.43	18	87	2.82	< 10	< 1	0.15	< 10
18497	< 20	< 0.2	< 0.5	128	488	< 1	82	< 2	28	2.45	< 2	< 10	85	< 0.5	< 2	3.13	19	102	2.51	< 10	< 1	0.20	< 10
18498	< 20	< 0.2	< 0.5	48	538	2	123	< 2	45	3.47	< 2	< 10	83	< 0.5	< 2	3.40	23	183	3.18	< 10	< 1	0.30	< 10
18499	< 20	< 0.2	< 0.5	49	379	2	89	< 2	45	2.19	4	< 10	108	< 0.5	< 2	2.90	28	169	1.99	< 10	< 1	0.32	< 10
18500	< 20	< 0.2	< 0.5	48	123	2	9	< 2	18	0.48	3	< 10	27	< 0.5	< 2	0.82	3	128	0.88	< 10	< 1	0.05	< 10
18502	< 20	< 0.2	< 0.5	87	573	< 1	88	< 2	32	4.23	< 2	15	91	< 0.5	< 2	3.95	25	124	3.25	< 10	< 1	0.31	< 10
18503	< 20	< 0.2	< 0.5	85	438	< 1	55	< 2	37	3.41	< 2	12	99	< 0.5	< 2	2.74	19	153	3.05	< 10	< 1	0.29	< 10
18504	< 20	< 0.2	< 0.5	128	704	< 1	24	< 2	31	1.71	< 2	< 10	31	< 0.5	< 2	2.21	24	78	4.27	< 10	< 1	0.10	< 10
18505	< 20	< 0.2	< 0.5	73	453	< 1	52	< 2	38	3.50	< 2	13	108	< 0.5	< 2	2.78	20	82	3.18	< 10	< 1	0.32	< 10
18506	< 20	< 0.2	< 0.5	88	705	< 1	18	< 2	38	1.93	< 2	< 10	28	< 0.5	< 2	2.87	21	21	4.87	< 10	< 1	0.11	< 10
18507	< 20	< 0.2	< 0.5	82	964	1	78	< 2	51	3.30	< 2	< 10	80	< 0.5	< 2	5.22	27	359	3.58	< 10	< 1	0.28	< 10

## Results

Analyte Symbol	Mg	Na	P	S	Sb	Se	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18301	0.74	0.263	0.019	4.42	2	10	26	0.25	3	< 2	< 10	97	< 10	11	12
18302	0.30	0.154	0.014	6.13	3	3	18	0.07	2	< 2	< 10	26	< 10	8	37
18304	2.68	0.115	0.017	2.99	5	8	8	0.16	3	< 2	< 10	69	< 10	4	6
18305	1.45	0.256	0.018	1.47	4	8	24	0.17	5	< 2	< 10	61	< 10	5	3
18306	2.03	0.222	0.017	0.92	4	9	16	0.17	3	< 2	< 10	67	< 10	5	4
18307	1.78	0.225	0.018	0.58	4	10	27	0.21	2	< 2	< 10	75	< 10	6	3
18308	1.42	0.289	0.019	0.09	< 2	9	43	0.24	2	< 2	< 10	70	< 10	6	2
18309	2.58	0.202	0.020	0.11	3	14	12	0.24	4	< 2	< 10	107	< 10	7	4
18311	2.10	0.177	0.030	0.17	3	11	16	0.20	3	< 2	< 10	83	< 10	6	4
18312	2.29	0.150	0.020	0.14	2	10	11	0.22	2	< 2	< 10	83	< 10	7	4
18313	2.19	0.204	0.018	0.03	2	11	15	0.23	< 1	< 2	< 10	83	< 10	6	3
18314	1.82	0.204	0.018	0.60	2	11	20	0.21	3	< 2	< 10	81	< 10	7	4
18315	1.93	0.285	0.018	0.39	3	14	41	0.24	5	< 2	< 10	100	< 10	8	3
18316	2.33	0.225	0.018	0.05	3	16	22	0.26	4	< 2	< 10	113	< 10	8	4
18317	2.20	0.195	0.021	1.83	4	14	13	0.19	< 1	< 2	< 10	105	< 10	7	7
18319	1.55	0.336	0.022	0.24	< 2	11	41	0.24	3	< 2	< 10	97	< 10	7	3
18320	1.84	0.371	0.021	0.54	< 2	12	44	0.21	3	< 2	< 10	100	< 10	7	4
18321	1.75	0.339	0.023	0.07	2	7	43	0.21	5	< 2	< 10	69	< 10	5	9
18322	1.64	0.191	0.017	0.08	2	6	29	0.18	8	< 2	< 10	58	< 10	6	10
18324	2.34	0.167	0.019	0.95	2	15	49	0.25	4	< 2	< 10	136	< 10	9	6
18325	2.70	0.094	0.024	1.02	3	21	31	0.28	2	< 2	< 10	170	< 10	10	8
18326	1.91	0.086	0.018	2.09	2	17	51	0.23	4	< 2	< 10	104	< 10	9	10
18327	1.23	0.111	0.041	1.24	< 2	10	34	0.18	< 1	< 2	< 10	77	< 10	7	29
18328	0.82	0.107	0.025	0.46	< 2	3	12	0.07	2	< 2	< 10	25	< 10	3	25
18329	1.56	0.296	0.024	0.21	< 2	13	33	0.22	< 1	< 2	< 10	104	< 10	7	9
18331	1.22	0.272	0.022	0.16	< 2	11	33	0.20	2	< 2	< 10	88	< 10	7	7
18332	1.73	0.267	0.029	0.13	< 2	15	19	0.24	1	< 2	< 10	120	< 10	11	8
18333	1.64	0.283	0.030	0.23	2	13	28	0.20	< 1	< 2	< 10	113	< 10	8	5
18334	1.78	0.278	0.025	0.12	< 2	14	22	0.25	4	< 2	< 10	117	< 10	9	5
18335	0.97	0.080	0.041	1.39	2	5	16	0.10	< 1	< 2	< 10	44	< 10	6	28
18336	1.06	0.090	0.052	1.88	< 2	5	11	0.12	1	< 2	< 10	44	< 10	8	37
18337	0.55	0.054	0.026	1.24	< 2	2	12	0.04	< 1	< 2	< 10	13	< 10	3	29
18338	0.33	0.080	0.017	0.44	< 2	< 1	18	0.03	< 1	< 2	< 10	7	< 10	3	23
18341	0.52	0.106	0.024	0.56	< 2	3	15	0.06	< 1	< 2	< 10	20	< 10	4	32
18342	0.72	0.110	0.037	0.80	< 2	4	30	0.10	< 1	< 2	< 10	37	< 10	5	22
18344	1.47	0.275	0.026	0.86	< 2	12	39	0.22	< 1	< 2	< 10	94	< 10	7	16
18345	1.74	0.360	0.024	0.48	< 2	14	37	0.27	3	< 2	< 10	130	< 10	7	7
18346	1.45	0.213	0.025	0.13	< 2	12	18	0.21	2	< 2	< 10	101	< 10	8	4
18347	1.50	0.433	0.023	0.58	< 2	12	55	0.18	4	< 2	< 10	99	< 10	7	3
18348	2.25	0.333	0.023	1.20	3	18	43	0.21	4	< 2	< 10	144	< 10	9	5
18349	2.27	0.122	0.016	2.55	2	12	26	0.15	2	< 2	< 10	111	< 10	12	5
18351	2.36	0.305	0.024	0.54	< 2	18	38	0.24	2	< 2	< 10	153	< 10	10	5
18352	1.76	0.262	0.023	0.26	< 2	13	28	0.23	2	< 2	< 10	113	< 10	8	4
18353	2.00	0.330	0.024	0.31	< 2	15	34	0.23	1	< 2	< 10	130	< 10	9	4
18354	1.20	0.200	0.059	1.15	24	9	96	0.12	3	10	27	76	14	28	33
18355	1.55	0.342	0.024	0.30	2	14	37	0.23	5	< 2	< 10	110	< 10	7	4
18356	1.52	0.374	0.024	0.69	< 2	13	40	0.20	3	< 2	< 10	102	< 10	7	5
18357	2.10	0.220	0.023	0.83	2	15	25	0.23	1	< 2	< 10	134	< 10	9	6
18358	1.59	0.161	0.024	0.29	< 2	12	22	0.21	2	< 2	< 10	108	< 10	7	8



Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP	AR-HCP
18361	1.60	0.195	0.027	0.57	< 2	13	18	0.25	< 1	< 2	< 10	125	< 10	8	6
18362	1.70	0.235	0.026	0.40	< 2	14	26	0.26	4	< 2	< 10	130	< 10	9	6
18363	1.47	0.220	0.024	0.50	< 2	11	27	0.22	3	< 2	< 10	97	< 10	7	6
18364	2.03	0.305	0.023	0.19	< 2	14	37	0.24	1	< 2	< 10	115	< 10	8	5
18365	2.25	0.314	0.022	1.03	2	17	43	0.24	4	< 2	< 10	136	< 10	9	6
18366	1.98	0.275	0.024	0.07	3	10	26	0.21	2	< 2	< 10	83	< 10	6	7
18367	1.75	0.350	0.026	0.26	< 2	9	43	0.24	5	< 2	< 10	85	< 10	7	4
18368	1.21	0.199	0.059	1.16	25	9	96	0.12	3	9	28	77	15	28	33
18369	1.86	0.313	0.030	0.67	3	11	34	0.28	3	< 2	< 10	94	< 10	11	7
18371	1.36	0.279	0.026	0.10	< 2	6	37	0.22	2	< 2	< 10	60	< 10	8	6
18372	1.34	0.271	0.020	0.08	< 2	6	39	0.18	< 1	< 2	< 10	61	< 10	6	3
18373	1.79	0.227	0.023	0.32	< 2	9	28	0.24	5	< 2	< 10	73	< 10	8	7
18374	1.69	0.208	0.022	0.06	2	13	28	0.26	4	< 2	< 10	100	< 10	7	7
18375	1.63	0.298	0.023	0.60	< 2	13	36	0.29	1	< 2	< 10	118	< 10	9	5
18376	1.80	0.265	0.023	0.79	< 2	13	29	0.27	3	< 2	< 10	115	< 10	9	5
18377	1.62	0.353	0.026	1.28	< 2	12	40	0.27	3	< 2	< 10	107	< 10	10	5
18378	2.07	0.370	0.027	0.64	2	16	40	0.29	7	< 2	< 10	131	< 10	10	5
18381	2.26	0.262	0.026	0.88	2	17	33	0.30	8	< 2	< 10	150	< 10	11	6
18382	2.19	0.213	0.022	0.99	< 2	15	25	0.28	3	< 2	< 10	125	< 10	10	7
18383	2.76	0.187	0.024	0.63	2	18	21	0.32	3	< 2	< 10	160	< 10	10	6
18384	4.29	0.062	0.020	0.49	3	21	18	0.28	3	< 2	< 10	169	< 10	11	10
18385	4.08	0.077	0.021	0.56	3	22	15	0.26	< 1	< 2	< 10	193	< 10	11	8
18386	2.42	0.143	0.024	0.79	< 2	14	16	0.31	4	< 2	< 10	141	< 10	10	8
18387	1.82	0.208	0.023	0.87	< 2	13	18	0.25	4	< 2	< 10	112	< 10	9	5
18388	1.80	0.353	0.023	0.52	< 2	15	37	0.26	2	< 2	< 10	119	< 10	9	6
18389	1.80	0.262	0.024	0.60	< 2	16	29	0.27	4	< 2	< 10	131	< 10	8	7
18391	1.44	0.114	0.019	0.26	2	11	27	0.19	2	< 2	< 10	92	< 10	6	7
18392	1.91	0.294	0.024	0.31	< 2	18	32	0.26	5	< 2	< 10	148	< 10	9	6
18393	1.70	0.263	0.023	0.49	2	15	27	0.23	4	< 2	< 10	120	< 10	9	7
18394	2.38	0.186	0.022	0.90	< 2	18	27	0.23	4	< 2	< 10	135	< 10	8	8
18395	1.82	0.305	0.020	0.88	3	15	39	0.20	2	< 2	< 10	119	< 10	8	6
18396	1.91	0.269	0.024	0.91	2	17	26	0.28	4	< 2	< 10	141	< 10	9	6
18397	1.50	0.355	0.024	2.14	< 2	13	34	0.25	< 1	< 2	< 10	120	< 10	9	6
18398	1.94	0.324	0.024	0.91	3	16	26	0.28	< 1	< 2	< 10	131	< 10	10	5
18401	1.65	0.419	0.024	1.07	3	14	42	0.22	1	< 2	< 10	113	< 10	9	4
18402	1.92	0.444	0.026	0.51	3	16	33	0.25	2	< 2	< 10	142	< 10	9	4
18403	1.69	0.387	0.023	0.33	< 2	13	38	0.23	3	< 2	< 10	108	< 10	8	3
18404	1.96	0.386	0.025	0.94	< 2	17	35	0.35	2	< 2	< 10	158	< 10	12	6
18405	2.01	0.384	0.029	0.93	2	17	38	0.48	3	< 2	< 10	204	< 10	14	5
18406	2.12	0.361	0.029	1.20	3	20	45	0.46	2	< 2	< 10	217	< 10	13	8
18407	2.18	0.349	0.030	1.17	< 2	19	43	0.48	3	< 2	< 10	226	< 10	13	7
18408	1.84	0.449	0.027	0.97	2	14	46	0.40	< 1	< 2	< 10	146	< 10	11	5
18409	1.64	0.319	0.024	0.97	2	11	36	0.21	< 1	< 2	< 10	113	< 10	7	4
18411	1.63	0.356	0.020	0.18	2	12	38	0.29	1	< 2	< 10	102	< 10	8	3
18412	1.70	0.388	0.026	2.69	3	12	50	0.19	1	< 2	< 10	95	< 10	9	9
18413	2.07	0.314	0.023	0.90	3	14	34	0.23	2	< 2	< 10	118	< 10	9	5
18414	1.94	0.371	0.023	0.64	< 2	14	42	0.23	2	< 2	< 10	124	< 10	8	4
18415	2.17	0.438	0.024	0.26	3	16	41	0.26	< 1	< 2	< 10	139	< 10	8	4
18416	1.93	0.520	0.024	0.33	3	17	46	0.26	4	< 2	< 10	139	< 10	9	4
18417	2.05	0.392	0.024	0.21	2	19	37	0.28	2	< 2	< 10	147	< 10	10	4



Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18418	1.68	0.204	0.028	0.08	< 2	14	15	0.31	2	< 2	< 10	139	< 10	9	5
18421	1.77	0.205	0.028	0.23	< 2	15	17	0.23	< 1	< 2	< 10	144	< 10	9	4
18422	1.74	0.316	0.026	0.41	< 2	13	34	0.32	2	< 2	< 10	116	< 10	12	4
18423	1.64	0.421	0.025	0.09	< 2	13	55	0.20	5	< 2	< 10	103	< 10	7	3
18424	2.05	0.330	0.023	1.16	3	15	34	0.21	< 1	< 2	< 10	120	< 10	9	5
18425	2.00	0.361	0.022	0.37	2	16	40	0.24	< 1	< 2	< 10	134	< 10	10	4
18426	1.75	0.411	0.026	0.31	2	14	45	0.27	< 1	< 2	< 10	136	< 10	8	4
18427	1.64	0.344	0.033	0.38	< 2	14	42	0.34	2	< 2	< 10	160	< 10	10	6
18428	1.24	0.234	0.026	0.27	< 2	9	34	0.29	6	< 2	< 10	101	< 10	8	5
18429	1.46	0.287	0.024	0.15	< 2	12	36	0.28	< 1	< 2	< 10	116	< 10	7	4
18431	2.01	0.430	0.023	0.32	2	16	36	0.26	< 1	< 2	< 10	130	< 10	9	5
18432	1.47	0.337	0.021	0.21	< 2	13	30	0.25	2	< 2	< 10	94	< 10	9	3
18433	1.43	0.367	0.021	0.08	< 2	11	34	0.28	3	< 2	< 10	88	< 10	8	3
18434	1.59	0.478	0.021	0.04	2	12	43	0.26	2	< 2	< 10	89	< 10	7	3
18435	1.99	0.324	0.021	0.54	2	13	32	0.23	2	< 2	< 10	99	< 10	8	4
18436	2.11	0.344	0.020	0.32	2	15	29	0.25	1	< 2	< 10	111	< 10	9	4
18437	2.04	0.290	0.021	0.22	< 2	14	19	0.25	3	< 2	< 10	103	< 10	10	3
18438	2.79	0.303	0.019	0.24	3	17	16	0.23	< 1	< 2	< 10	122	< 10	9	3
18441	1.69	0.429	0.020	0.18	3	13	46	0.25	2	< 2	< 10	95	< 10	8	3
18442	2.23	0.364	0.021	0.31	2	15	36	0.23	< 1	< 2	< 10	110	< 10	9	3
18443	1.47	0.455	0.021	0.33	2	10	49	0.23	2	< 2	< 10	83	< 10	8	2
18444	2.12	0.480	0.025	0.38	< 2	16	45	0.25	3	< 2	< 10	127	< 10	9	3
18445	2.03	0.388	0.021	0.18	3	15	30	0.23	6	< 2	< 10	118	< 10	9	3
18446	1.70	0.385	0.022	0.27	2	14	32	0.21	2	< 2	< 10	107	< 10	8	3
18447	1.68	0.365	0.023	0.14	< 2	13	30	0.22	3	< 2	< 10	107	< 10	8	3
18448	1.92	0.409	0.021	0.86	3	15	33	0.21	3	< 2	< 10	116	< 10	9	4
18449	1.38	0.502	0.024	0.25	< 2	10	51	0.21	2	< 2	< 10	91	< 10	6	2
18451	1.40	0.568	0.024	0.61	< 2	9	50	0.24	< 1	< 2	< 10	90	< 10	6	3
18452	2.29	0.298	0.023	3.68	3	12	25	0.35	3	< 2	< 10	130	< 10	11	5
18453	1.43	0.330	0.020	4.35	3	16	36	0.30	2	< 2	< 10	127	< 10	12	6
18454	1.67	0.226	0.023	6.23	4	18	25	0.35	4	< 2	< 10	144	< 10	11	8
18455	1.65	0.408	0.026	3.19	2	10	37	0.42	6	< 2	< 10	128	< 10	11	6
18456	1.99	0.283	0.025	3.27	3	15	28	0.31	3	< 2	< 10	131	< 10	11	10
18457	1.63	0.473	0.024	2.78	3	13	37	0.24	4	< 2	< 10	113	< 10	8	8
18458	1.83	0.347	0.026	2.33	< 2	12	26	0.23	3	< 2	< 10	116	< 10	7	8
18461	2.09	0.324	0.025	0.96	< 2	18	23	0.29	2	< 2	< 10	154	< 10	9	7
18462	1.99	0.285	0.025	0.58	3	16	23	0.25	3	< 2	< 10	142	< 10	9	4
18463	1.70	0.348	0.028	0.39	< 2	15	26	0.24	7	< 2	< 10	131	< 10	10	3
18464	2.05	0.270	0.024	0.63	3	17	24	0.22	3	< 2	< 10	143	< 10	9	5
18465	1.68	0.238	0.024	1.05	< 2	13	23	0.22	2	< 2	< 10	118	< 10	8	6
18466	1.60	0.308	0.026	0.61	< 2	12	20	0.19	3	< 2	< 10	109	< 10	8	4
18467	1.94	0.508	0.025	0.73	< 2	11	38	0.18	< 1	< 2	< 10	121	< 10	6	3
18468	2.03	0.248	0.024	3.07	3	11	22	0.20	2	< 2	< 10	110	< 10	6	9
18469	1.77	0.330	0.025	2.53	< 2	11	26	0.20	2	< 2	< 10	121	< 10	7	7
18471	1.74	0.223	0.023	3.53	3	13	19	0.19	4	< 2	< 10	112	< 10	9	7
18472	2.34	0.282	0.026	0.55	2	16	22	0.22	< 1	< 2	< 10	135	< 10	11	5
18473	1.89	0.392	0.024	0.15	< 2	13	37	0.21	< 1	< 2	< 10	118	< 10	7	3
18474	2.01	0.323	0.024	1.28	2	14	32	0.25	< 1	< 2	< 10	123	< 10	9	6
18475	1.64	0.220	0.040	2.28	3	13	38	0.27	4	< 2	< 10	104	< 10	10	17
18476	1.56	0.260	0.018	5.08	4	10	37	0.17	2	< 2	< 10	91	< 10	7	11

Analyte Symbol	Mg	Na	P	S	Sb	Se	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
18477	1.89	0.342	0.020	0.46	2	11	39	0.19	3	< 2	< 10	88	< 10	7	3
18478	1.45	0.398	0.022	0.07	< 2	10	43	0.15	4	< 2	< 10	80	< 10	6	2
18479	1.52	0.406	0.021	0.11	< 2	11	49	0.22	2	< 2	< 10	83	< 10	6	3
18480	1.67	0.375	0.021	0.13	< 2	11	46	0.23	2	< 2	< 10	87	< 10	7	3
18482	1.58	0.347	0.021	0.08	< 2	10	40	0.21	< 1	< 2	< 10	78	< 10	6	2
18483	1.82	0.536	0.024	0.17	< 2	14	59	0.24	< 1	< 2	< 10	116	< 10	8	4
18484	2.04	0.430	0.024	0.39	2	15	52	0.24	3	< 2	< 10	125	< 10	8	4
18485	1.83	0.419	0.022	0.24	< 2	15	54	0.23	3	< 2	< 10	123	< 10	7	4
18486	1.73	0.500	0.025	1.09	3	16	51	0.23	3	< 2	< 10	124	< 10	9	6
18487	1.32	0.500	0.022	2.52	< 2	11	58	0.20	< 1	< 2	< 10	95	< 10	8	6
18488	1.21	0.559	0.024	2.40	3	11	61	0.23	4	< 2	< 10	94	< 10	9	6
18489	0.91	0.567	0.023	3.62	2	10	69	0.21	< 1	< 2	< 10	78	< 10	8	7
18492	1.31	0.450	0.024	2.00	< 2	11	53	0.17	2	< 2	< 10	92	< 10	8	6
18493	1.89	0.331	0.025	0.45	2	17	23	0.24	4	< 2	< 10	136	< 10	9	4
18494	1.69	0.318	0.024	0.59	< 2	13	28	0.22	2	< 2	< 10	108	< 10	8	8
18495	1.67	0.377	0.032	0.63	< 2	11	36	0.27	3	< 2	< 10	110	< 10	10	6
18496	1.73	0.200	0.027	0.06	< 2	12	15	0.21	4	< 2	< 10	84	< 10	8	4
18497	1.48	0.233	0.021	0.09	< 2	7	28	0.21	1	< 2	< 10	67	< 10	6	4
18498	2.15	0.292	0.017	0.04	< 2	7	30	0.17	2	< 2	< 10	67	< 10	4	5
18499	0.90	0.219	0.028	0.22	< 2	12	28	0.25	4	< 2	< 10	101	< 10	8	10
18500	0.24	0.114	0.016	0.25	< 2	2	11	0.06	< 1	< 2	< 10	15	< 10	3	10
18502	1.73	0.399	0.021	0.20	< 2	10	51	0.22	2	< 2	< 10	95	< 10	7	2
18503	1.69	0.312	0.024	0.14	< 2	9	39	0.21	4	< 2	< 10	84	< 10	6	11
18504	1.74	0.235	0.049	0.09	< 2	17	12	0.27	3	< 2	< 10	140	< 10	19	11
18505	1.67	0.339	0.025	0.13	< 2	10	39	0.21	1	< 2	< 10	90	< 10	7	10
18506	1.48	0.270	0.049	0.03	< 2	17	11	0.28	5	< 2	< 10	183	< 10	22	8
18507	1.46	0.476	0.027	0.46	3	10	54	0.22	2	< 2	< 10	88	< 10	9	8

QC

Analyte Symbol	Th	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	20	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-4 Meas	< 20	3.3	< 0.5	6330	142	315	36	39	66	2.75	103	< 10	37	1.4	21	0.93	13	53	2.88	10	< 1	1.86	53
GXR-4 Cert	22.5	4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-4 Meas	< 20	3.4	< 0.5	6450	141	319	37	41	69	2.77	105	< 10	38	1.4	20	0.94	13	55	2.92	10	< 1	1.89	52
GXR-4 Cert	22.5	4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas	< 20	0.3	< 0.5	70	1070	3	22	88	123	7.23	244	< 10	1110	0.9	< 2	0.14	13	79	5.30	20	< 1	1.26	< 10
GXR-6 Cert	5.30	1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0880	1.87	13.9
GXR-6 Meas	< 20	0.3	< 0.5	72	1100	2	23	93	127	7.39	237	< 10	1140	0.9	< 2	0.15	13	81	5.45	20	2	1.29	< 10
GXR-6 Cert	5.30	1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0880	1.87	13.9
SARM (U.S.G.S.) Meas	< 20	3.2	5.5	346	4930	13	41	1020	1010	1.22	43		242	1.1	2	0.31	11	93	2.76	< 10		0.32	52
SARM (U.S.G.S.) Cert	17.2	3.64	5.27	331.0000	5220	13.1	41.5	982	930.0	6.30	38.8		801	2.20	1.94	0.61	10.70	79.7	2.99	17		2.94	57.4
SARM (U.S.G.S.) Meas	< 20	3.8	5.3	339	4710	14	41	1000	967	1.26	43		253	1.1	< 2	0.33	10	87	2.74	< 10		0.33	53
SARM (U.S.G.S.) Cert	17.2	3.64	5.27	331.0000	5220	13.1	41.5	982	930.0	6.30	38.8		801	2.20	1.94	0.61	10.70	79.7	2.99	17		2.94	57.4
18311 Orig	< 20	< 0.2	< 0.5	54	592	< 1	80	< 2	34	1.91	< 2	< 10	37	< 0.5	< 2	3.01	24	316	3.40	< 10	< 1	0.12	< 10
18311 Dup	< 20	< 0.2	< 0.5	54	809	< 1	82	< 2	34	1.95	< 2	< 10	39	< 0.5	< 2	3.08	25	322	3.42	< 10	< 1	0.12	< 10
18327 Orig	< 20	0.3	< 0.5	75	1140	3	119	5	200	1.34	117	< 10	43	< 0.5	< 2	5.13	36	142	2.83	< 10	< 1	0.17	11
18327 Dup	< 20	0.3	< 0.5	77	1150	2	118	5	202	1.36	119	< 10	42	< 0.5	< 2	5.19	35	145	2.87	< 10	< 1	0.18	11
18344 Orig	< 20	< 0.2	< 0.5	78	827	1	87	4	138	2.88	8	< 10	142	< 0.5	< 2	2.44	25	178	3.44	< 10	< 1	1.10	< 10
18344 Dup	< 20	< 0.2	< 0.5	77	828	1	85	3	138	2.70	6	< 10	150	< 0.5	< 2	2.44	24	178	3.42	< 10	< 1	1.10	< 10
18361 Orig	< 20	< 0.2	< 0.5	164	649	< 1	44	< 2	94	1.72	3	< 10	39	< 0.5	< 2	1.78	41	68	3.22	< 10	< 1	0.09	< 10
18361 Dup	< 20	< 0.2	< 0.5	171	660	< 1	45	< 2	87	1.76	3	< 10	41	< 0.5	< 2	1.84	41	70	3.29	< 10	< 1	0.09	< 10
18387 Orig	< 20	< 0.2	< 0.5	161	931	< 1	45	2	86	2.07	2	< 10	37	< 0.5	< 2	2.77	35	85	4.16	< 10	< 1	0.10	< 10
18387 Dup	< 20	< 0.2	< 0.5	162	933	< 1	45	< 2	85	2.08	2	< 10	36	< 0.5	< 2	2.78	35	85	4.17	< 10	< 1	0.10	< 10
18404 Orig	< 20	< 0.2	< 0.5	97	870	< 1	46	< 2	82	3.08	5	< 10	102	< 0.5	< 2	3.09	45	67	5.15	10	< 1	0.40	< 10
18404 Dup	< 20	< 0.2	< 0.5	97	861	< 1	45	< 2	81	3.04	3	< 10	85	< 0.5	< 2	3.05	44	65	5.08	10	< 1	0.40	< 10
18418 Orig	< 20	< 0.2	< 0.5	74	815	< 1	37	< 2	61	1.87	9	< 10	94	< 0.5	< 2	1.76	38	66	3.40	< 10	< 1	0.09	< 10
18418 Dup	< 20	< 0.2	< 0.5	72	595	< 1	36	< 2	59	1.80	7	< 10	83	< 0.5	< 2	1.70	35	63	3.34	< 10	< 1	0.09	< 10
18435 Orig	< 20	< 0.2	< 0.5	161	800	< 1	49	< 2	58	2.51	6	< 10	51	< 0.5	< 2	3.29	33	155	3.57	< 10	< 1	0.08	< 10
18435 Dup	< 20	< 0.2	< 0.5	178	923	< 1	54	< 2	64	2.78	7	< 10	56	< 0.5	< 2	3.64	35	177	4.07	< 10	< 1	0.09	< 10
18456 Orig	< 20	< 0.2	< 0.5	136	695	< 1	59	4	162	3.13	< 2	< 10	25	< 0.5	< 2	1.72	46	111	6.97	10	< 1	0.17	< 10
18456 Dup	< 20	0.2	< 0.5	136	669	< 1	57	3	162	3.08	< 2	< 10	23	< 0.5	< 2	1.70	46	111	6.82	10	< 1	0.17	< 10
18473 Orig	< 20	< 0.2	< 0.5	120	744	< 1	33	< 2	52	3.24	3	< 10	47	< 0.5	< 2	3.08	28	59	3.90	< 10	< 1	0.11	< 10
18473 Dup	< 20	< 0.2	< 0.5	127	741	1	32	< 2	52	3.22	6	< 10	47	< 0.5	< 2	3.04	29	60	3.99	< 10	< 1	0.10	< 10
18487 Orig	< 20	< 0.2	< 0.5	151	699	< 1	71	< 2	95	3.46	< 2	< 10	26	< 0.5	< 2	2.75	57	96	6.16	< 10	< 1	0.12	< 10
18487 Dup	< 20	< 0.2	< 0.5	145	686	< 1	87	< 2	89	3.34	< 2	< 10	35	< 0.5	< 2	2.80	54	78	5.85	< 10	< 1	0.11	< 10
18504 Orig	< 20	< 0.2	< 0.5	127	712	< 1	24	< 2	31	1.72	< 2	< 10	32	< 0.5	< 2	2.22	24	74	4.30	< 10	< 1	0.10	< 10
18504 Dup	< 20	< 0.2	< 0.5	128	696	< 1	24	< 2	31	1.71	< 2	< 10	30	< 0.5	< 2	2.19	24	77	4.25	< 10	< 1	0.10	< 10
Method Blank	< 20	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 20	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 20	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	11	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

QC

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-4 Meas	1.61	0.138	0.114	1.69	5	6	76	0.14	6	< 2	< 10	77	16	12	10
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-4 Meas	1.63	0.136	0.117	1.70	4	7	78	0.14	1	2	< 10	79	15	12	10
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.41	0.088	0.031	0.01	3	18	31		3	< 2	< 10	174	< 10	5	14
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	0.42	0.087	0.032	0.02	4	18	32		< 1	< 2	< 10	177	< 10	5	12
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
SAR-M (U.S.G.S.) Meas	0.35	0.038	0.060		5	3	35	0.06	4	< 2	< 10	37	< 10	22	
SAR-M (U.S.G.S.) Cert	0.50	1.140	0.07		6.0	7.93	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
SAR-M (U.S.G.S.) Meas	0.36	0.040	0.061		5	4	35	0.06	3	< 2	< 10	38	< 10	24	
SAR-M (U.S.G.S.) Cert	0.50	1.140	0.07		6.0	7.93	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
18311 Orig	2.07	0.175	0.030	0.17	3	11	16	0.20	4	< 2	< 10	82	< 10	6	3
18311 Dup	2.12	0.180	0.030	0.17	3	12	17	0.21	3	< 2	< 10	84	< 10	7	4
18327 Orig	1.22	0.113	0.041	1.24	< 2	10	34	0.18	1	< 2	< 10	77	< 10	7	29
18327 Dup	1.24	0.110	0.042	1.24	2	10	34	0.18	< 1	< 2	< 10	77	< 10	7	29
18344 Orig	1.47	0.274	0.026	0.87	< 2	12	39	0.22	2	< 2	< 10	94	< 10	7	16
18344 Dup	1.47	0.275	0.026	0.86	< 2	12	39	0.22	< 1	< 2	< 10	94	< 10	7	16
18361 Orig	1.58	0.190	0.027	0.57	< 2	13	17	0.25	5	< 2	< 10	123	< 10	8	6
18361 Dup	1.62	0.199	0.027	0.58	< 2	13	18	0.25	< 1	< 2	< 10	126	< 10	8	6
18387 Orig	1.82	0.210	0.023	0.87	< 2	13	18	0.25	4	< 2	< 10	112	< 10	9	6
18387 Dup	1.82	0.206	0.023	0.86	2	13	17	0.25	4	< 2	< 10	112	< 10	9	5
18404 Orig	1.98	0.390	0.025	0.95	< 2	17	35	0.35	3	< 2	< 10	160	< 10	12	6
18404 Dup	1.94	0.382	0.024	0.92	2	17	35	0.35	1	< 2	< 10	157	< 10	11	6
18418 Orig	1.72	0.204	0.028	0.08	2	14	16	0.31	3	< 2	< 10	140	< 10	9	5
18418 Dup	1.65	0.204	0.028	0.08	< 2	14	15	0.30	1	< 2	< 10	137	< 10	9	5
18435 Orig	1.87	0.309	0.020	0.51	2	12	31	0.21	3	< 2	< 10	93	< 10	8	3
18435 Dup	2.12	0.340	0.021	0.56	3	14	34	0.25	1	< 2	< 10	105	< 10	8	4
18456 Orig	2.00	0.288	0.026	3.31	3	15	28	0.31	3	< 2	< 10	131	< 10	11	10
18456 Dup	1.97	0.279	0.025	3.23	3	15	28	0.31	2	< 2	< 10	131	< 10	11	10
18473 Orig	1.90	0.393	0.024	0.15	< 2	13	37	0.22	< 1	< 2	< 10	118	< 10	7	3
18473 Dup	1.89	0.391	0.024	0.15	3	13	37	0.21	< 1	< 2	< 10	117	< 10	7	3
18487 Orig	1.36	0.508	0.023	2.51	< 2	12	58	0.20	< 1	< 2	< 10	97	< 10	8	6
18487 Dup	1.27	0.492	0.022	2.54	3	11	57	0.19	2	< 2	< 10	92	< 10	7	6
18504 Orig	1.75	0.238	0.049	0.09	2	17	12	0.28	4	< 2	< 10	140	< 10	19	11
18504 Dup	1.73	0.233	0.050	0.09	< 2	17	12	0.26	1	< 2	< 10	139	< 10	19	10
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.014	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.015	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1

Quality Analysis ...



Innovative Technologies

Date Submitted: 12-Jan-15  
Invoice No.: A15-00195  
Invoice Date: 15-Jan-15  
Your Reference: Mistango14-1745

Swastika Labs  
1 Cameron Ave  
P.O. Box 10  
Swastika ON P0K 1T0  
Canada

ATTN: Lydia Deschenes

## CERTIFICATE OF ANALYSIS

1 Pulp samples were submitted for analysis.

The following analytical package was requested:

Code 4B (1-10) Major Elements Fusion ICP(WRA)

REPORT      **A15-00195**

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Notes:

Total includes all elements in % oxide to the left of total.

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé".

Emmanuel Esemé, Ph.D.  
Quality Control

ACTIVATION LABORATORIES LTD.  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)



## Results

Analyte Symbol	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub> (T)	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
SK-14-05-001	52.49	13.05	12.07	0.248	7.55	10.89	1.59	0.52	0.825	0.07	1.48	100.8	108	119	15	42	52	< 1	283

## QC

Analyte Symbol	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Ba	Sr	Y	Sc	Zr	Be	V
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	2	2	1	1	2	1	5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
NIST 694 Meas	11.08	1.87	0.73	0.013	0.34	42.53	0.88	0.54	0.117	30.16									1643
NIST 694 Cert	11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2									1740
DNC-1 Meas	46.84	18.78	9.88	0.145	10.14	11.48	1.83	0.22	0.485	0.06			110	148	17	31	38		180
DNC-1 Cert	47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070			118	144.0	18.0	31	38		148
GBW 07113 Meas	72.18	12.75	3.27	0.143	0.15	0.61	2.39	5.38	0.283	0.04			493	41	45	5	401	4	6
GBW 07113 Cert	72.8	13.0	3.21	0.140	0.180	0.590	2.57	5.43	0.300	0.0500			508	43.0	43.0	5.00	403	4.00	5.00
W-2a Meas	52.81	15.30	10.87	0.166	8.29	11.09	2.25	0.84	1.084	0.16			181	200	21	38	89	< 1	288
W-2a Cert	52.4	15.4	10.7	0.163	8.37	10.9	2.14	0.826	1.06	0.130			182	190	24.0	36.0	84.0	1.30	282
SY-4 Meas	49.64	20.82	6.12	0.107	0.51	8.15	7.00	1.88	0.290	0.13			346	1192	117	1	524	3	10
SY-4 Cert	49.9	20.89	6.21	0.108	0.54	8.05	7.10	1.86	0.287	0.131			340	1191	119	1.1	517	2.6	8.0
BIR-1a Meas	47.54	15.67	11.53	0.172	9.56	13.70	1.80	0.02	0.983	0.02			13	110	16	43	16	< 1	348
BIR-1a Cert	47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021			6	110	16	44	18	0.58	310
SK-14-05-001 Orig	52.32	13.32	11.95	0.247	7.48	10.83	1.59	0.53	0.821	0.07	1.46	100.8	108	123	15	42	53	< 1	283
SK-14-05-001 Dup	52.67	12.78	12.19	0.246	7.83	10.95	1.58	0.52	0.829	0.07	1.46	100.9	107	116	15	41	51	< 1	283

Quality Analysis ...



Innovative Technologies

Date Submitted: 29-May-15  
Invoice No.: A15-03836  
Invoice Date: 05-Jun-15  
Your Reference: MISTANGO 15-1245

Swastika Labs  
Box 10, 1 Cameron Ave.  
Swastika ON P0K 1T0  
Canada

ATTN: Colleen Chouinard

## CERTIFICATE OF ANALYSIS

18 Pulp samples were submitted for analysis.

The following analytical package was requested:

Code 1F2 Total Digestion ICP(TOTAL)

REPORT A15-03836

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Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé".

Emmanuel Esemé, Ph.D.  
Quality Control

ACTIVATION LABORATORIES LTD.  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Ancaster@actlabs.com](mailto:Ancaster@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)





## Results

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
283651	< 0.3	6.73	6	191	< 1	< 2	7.04	< 0.3	53	122	109	6.97	17	< 1	0.71	2.81	18	1230	< 1	1.68	66	0.030	10
283652	< 0.3	6.75	4	164	< 1	< 2	6.45	< 0.3	62	113	156	7.80	17	< 1	0.77	2.92	17	1170	< 1	1.72	67	0.029	12
283653	< 0.3	7.41	< 3	288	< 1	< 2	5.69	< 0.3	65	103	127	7.46	16	< 1	0.81	3.38	23	1160	< 1	2.01	69	0.030	< 3
283654	< 0.3	7.38	< 3	287	< 1	< 2	5.61	< 0.3	61	123	131	7.68	16	< 1	0.74	3.34	18	1140	< 1	2.01	70	0.030	< 3
283655	< 0.3	7.04	4	141	< 1	< 2	6.28	< 0.3	63	132	129	7.46	16	< 1	0.72	3.13	19	1170	< 1	1.82	72	0.027	< 3
283656	< 0.3	6.87	< 3	164	< 1	< 2	7.01	< 0.3	65	132	131	8.95	17	< 1	0.42	3.37	12	1280	< 1	1.68	74	0.026	< 3
283657	< 0.3	6.77	< 3	111	< 1	< 2	5.19	< 0.3	60	120	115	9.32	16	< 1	0.52	3.34	21	1220	< 1	1.76	64	0.027	< 3
283658	< 0.3	7.01	< 3	125	< 1	< 2	5.76	< 0.3	55	440	104	9.34	15	< 1	0.48	3.93	24	1390	< 1	1.84	74	0.026	< 3
283659	< 0.3	6.12	< 3	44	< 1	< 2	4.49	< 0.3	71	173	147	11.3	15	< 1	0.54	2.85	19	1020	< 1	1.61	74	0.025	< 3
283660	< 0.3	5.87	6	104	< 1	< 2	4.44	< 0.3	63	166	141	10.6	14	< 1	0.44	2.78	16	1060	< 1	1.53	65	0.026	< 3
283661	< 0.3	6.30	< 3	41	< 1	< 2	4.62	< 0.3	69	174	160	11.6	16	< 1	0.46	2.86	18	1130	< 1	1.54	71	0.025	< 3
283662	< 0.3	7.11	< 3	221	< 1	< 2	5.90	< 0.3	56	104	91	7.95	15	< 1	0.70	3.75	28	1440	< 1	1.88	62	0.025	< 3
283663	< 0.3	6.46	3	173	< 1	< 2	5.41	< 0.3	60	121	98	10.7	16	< 1	0.56	3.33	23	1310	< 1	1.30	68	0.024	< 3
283664	< 0.3	6.80	< 3	188	< 1	< 2	5.16	< 0.3	48	132	103	9.47	16	< 1	0.59	3.91	26	1320	< 1	1.65	58	0.025	< 3
283665	< 0.3	7.16	4	167	< 1	< 2	5.08	< 0.3	54	84	125	9.85	14	< 1	0.42	3.44	24	1230	< 1	2.06	62	0.030	3
283666	< 0.3	6.97	4	136	< 1	< 2	4.55	< 0.3	68	99	142	9.82	16	< 1	0.47	3.20	26	1180	< 1	1.92	67	0.027	< 3
283667	< 0.3	7.25	< 3	164	< 1	< 2	5.50	< 0.3	61	91	141	8.59	17	< 1	0.58	3.59	19	1260	< 1	1.89	65	0.028	< 3
283668	< 0.3	7.42	3	172	< 1	< 2	6.86	< 0.3	62	107	126	7.77	16	< 1	0.53	3.41	17	1240	< 1	1.60	66	0.031	< 3

## Results

Analyte Symbol	Sb	S	Sc	Sr	Te	Ti	Ti	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
283651	< 5	1.91	34	155	< 2	0.42	< 5	< 10	210	< 5	12	150	38
283652	< 5	2.57	37	129	< 2	0.49	< 5	< 10	240	< 5	12	156	31
283653	< 5	2.06	40	134	< 2	0.52	< 5	< 10	249	< 5	13	184	34
283654	< 5	2.31	39	126	< 2	0.51	< 5	< 10	244	< 5	13	189	36
283655	< 5	2.12	37	116	< 2	0.45	< 5	< 10	221	< 5	13	147	32
283656	< 5	2.80	38	104	4	0.44	< 5	< 10	222	< 5	13	135	31
283657	< 5	3.45	38	102	5	0.49	< 5	< 10	234	< 5	13	84	35
283658	< 5	3.05	39	101	6	0.42	< 5	< 10	211	< 5	15	83	30
283659	< 5	6.75	34	91	8	0.47	< 5	< 10	220	< 5	12	61	34
283660	< 5	5.74	33	90	10	0.46	< 5	< 10	214	< 5	12	63	37
283661	< 5	6.79	35	92	4	0.46	< 5	< 10	226	< 5	12	62	36
283662	< 5	1.78	39	106	5	0.47	< 5	< 10	230	< 5	14	90	28
283663	< 5	4.14	36	79	< 2	0.41	< 5	< 10	211	< 5	13	93	32
283664	< 5	3.38	39	88	< 2	0.44	< 5	< 10	222	< 5	13	98	35
283665	< 5	4.34	39	108	3	0.54	< 5	< 10	256	< 5	14	78	40
283666	< 5	4.58	38	101	6	0.51	< 5	< 10	243	< 5	13	76	43
283667	< 5	2.03	39	107	< 2	0.49	< 5	< 10	248	< 5	14	105	42
283668	< 5	1.44	40	103	8	0.49	< 5	< 10	227	< 5	14	124	41

## QC

Analyte Symbol	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	Mg	Li	Mn	Mo	Na	Ni	P	Pb
Unit Symbol	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	ppm	ppm	ppm	%	ppm	%	ppm
Lower Limit	0.3	0.01	3	7	1	2	0.01	0.3	1	1	1	0.01	1	1	0.01	0.01	1	1	1	0.01	1	0.001	3
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	31.1	2.19	407	671	1	1380	0.88	1.9	8	13	1180	23.4	12	6	0.04	0.21	8	839	14	0.05	45	0.058	716
GXR-1 Cert	31.0	3.52	427	750	1.22	1380	0.960	3.30	8.20	12.0	1110	23.6	13.8	3.90	0.050	0.217	8.20	852	18.0	0.0520	41.0	0.0650	730
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	3.4	6.05	112	171	2	14	1.07	< 0.3	15	60	6450	3.05	16	< 1	2.41	1.69	11	151	303	0.51	42	0.130	42
GXR-4 Cert	4.0	7.20	98.0	1640	1.90	19.0	1.01	0.860	14.6	64.0	6520	3.09	20.0	0.110	4.01	1.66	11.1	155	310	0.564	42.0	0.120	52.0
SDC-1 Meas		7.67	4	630	3		1.07		19	42	27	4.78	20	< 1	2.45	0.99	33	854		1.51	36	0.053	21
SDC-1 Cert		8.34	0.220	630	3.00		1.00		18.0	64.00	30.000	4.82	21.00	0.20	2.72	1.02	34.00	880.00		1.52	38.0	0.0690	25.00
GXR-6 Meas	< 0.3	12.9	243	> 1000	1	< 2	0.17	< 0.3	14	49	67	5.78	27	< 1	1.75	0.61	32	1060	< 1	0.09	28	0.036	90
GXR-6 Cert	1.30	17.7	330	1300	1.40	0.290	0.180	1.00	13.8	96.0	66.0	5.58	35.0	0.0680	1.87	0.609	32.0	1010	2.40	0.104	27.0	0.0350	101
DNC-1a Meas				97					56	154	93		12				4				257		5
DNC-1a Cert				118					57.0	270	100.00		15				5.20				247		6.3
SBC-1 Meas			19	741	3	< 2		< 0.3	25	67	34		26						2		88		26
SBC-1 Cert			25.7	788.0	3.20	0.70		0.40	22.7	109	31.0000		27.0				163.0		2.40		82.8		35.0
OREAS 45d (4-Acid) Meas	7.28	11	178	< 1	< 2	0.19			34	553	363	13.9	20		0.38	0.24	22	490	3	0.09	247	0.033	20
OREAS 45d (4-Acid) Cert	8.160	13.80	183.0	0.79	0.31	0.185			29.50	549.0	371.0	14.520	21.20		0.412	0.245	21.50	490.000	2.500	0.101	231.0	0.042	21.8
283662 Orig	< 0.3	7.00	< 3	229	< 1	< 2	5.86	< 0.3	54	113	88	7.88	15	< 1	0.68	3.72	28	1420	< 1	1.87	62	0.025	< 3
283662 Dup	< 0.3	7.22	< 3	212	< 1	< 2	5.93	< 0.3	57	94	94	8.02	15	< 1	0.71	3.78	29	1450	< 1	1.90	62	0.025	< 3
Method Blank	< 0.3	0.07	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		< 1	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3
Method Blank	< 0.3	< 0.01	< 3	< 7	< 1	< 2	< 0.01	< 0.3	< 1		2	< 0.01	< 1	< 1	< 0.01	< 0.01	< 1		< 1	< 0.01	< 1	< 0.001	< 3

## QC

Analyte Symbol	Se	S	Sc	Sr	Te	Ti	Tl	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	11	0.25	< 4	283	7	0.03	< 5	40	86	153	28	718	25
GXR-1 Cert	122	0.257	1.58	275	13.0	0.036	0.390	34.9	80.0	164	32.0	760	38.0
DH-1a Meas								2320					
DH-1a Cert								2629					
GXR-4 Meas	< 5	1.79	8	215	13	0.29	< 5	< 10	88	42	13	68	35
GXR-4 Cert	4.80	1.77	7.70	221	0.970	0.29	3.20	6.20	87.0	30.8	14.0	73.0	186
SDC-1 Meas	< 5		16	174		0.10	< 5	< 10	32	< 5		99	32
SDC-1 Cert	0.54		17.00	180.00		0.606	0.70	3.10	102.00	0.80		103.00	290.00
GXR-6 Meas	< 5	0.02	28	39	< 2		< 5	< 10	115	< 5	12	129	60
GXR-6 Cert	3.60	0.0160	27.6	35.0	0.0180		2.20	1.54	186	1.90	14.0	118	110
DNC-1a Meas	< 5		32	131		0.29			141		14	59	32
DNC-1a Cert	0.96		31	144.0		0.29			148.00		18.0	70.0	38.000
SBC-1 Meas	< 5		20	174		0.47	< 5	< 10	210	6	29	184	97
SBC-1 Cert	1.01		20.0	178.0		0.51	0.89	5.76	220.0	1.60	36.5	186.0	134.0
OREAS 45d (4-Acid) Meas	< 5	0.05	55	31		0.22	< 5	< 10	133	5	11	41	85
OREAS 45d (4-Acid) Cert	0.82	0.049	49.30	31.30		0.773	0.27	2.63	235.0	1.62	9.53	45.7	141
283662 Orig	< 5	1.76	39	105	6	0.48	< 5	< 10	232	< 5	14	90	29
283662 Dup	< 5	1.81	40	107	4	0.47	< 5	< 10	227	< 5	14	91	28
Method Blank	< 5	< 0.01	< 4	2	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5

Activation Laboratories Ltd.

Report: A15-03836

Analyte Symbol	So	S	Sc	Sr	Te	Tl	Ti	U	V	W	Y	Zn	Zr
Unit Symbol	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	4	1	2	0.01	5	10	2	5	1	1	5
Method Code	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP
Method Blank	< 5	< 0.01	< 4	< 1	< 2	< 0.01	< 5	< 10	< 2	< 5	< 1	< 1	< 5



# Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 1

## Assay Certificate

**Certificate Number: 15-1245**

Company: **Mistango River Resources**  
Project: **Sackville**  
Attn: **Donald Kasner**

Report Date: **26-May-15**

*We hereby certify* the following Assay of 18 core samples  
submitted 25-May-15 by Donald Kasner

Sample Number	Au FA-MP g/Mt	Au Chk FA-MP g/Mt
283651	< 0.01	
283652	< 0.01	
283653	< 0.01	
283654	< 0.01	
283655	< 0.01	
283656	< 0.01	
283657	< 0.01	
283658	< 0.01	
283659	0.01	
283660	< 0.01	< 0.01
Blank Value	< 0.01	
OxH97	1.28	
283661	< 0.01	
283662	< 0.01	
283663	< 0.01	
283664	< 0.01	
283665	< 0.01	
283666	< 0.01	
283667	< 0.01	
283668	< 0.01	

Certified by Jing Lin  
Jing Lin, M Sc.

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 Fax (705) 642-3300



1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www accurassay.com  
assay@accurassay.com

Thursday, July 9, 2015

## Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, liliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

---

Acc #	Client ID	Au g/t (ppm)
209488	283669	<0.005
209489	283670	<0.005
209490	283671	<0.005
209491	283672	<0.005
209492	283673	<0.005
209493	283674	<0.005
209494	283675	<0.005
209495	283676	<0.005
209496	283677	<0.005
209497	283678	<0.005
209498	283678 Dup	<0.005
209499	283679	<0.005
209500	283680	<0.005
209501	283681	<0.005
209502	283682	<0.005
209503	283683	<0.005
209504	283684	<0.005
209505	283685	<0.005
209506	283686	<0.005
209507	283687	<0.005
209508	283688	<0.005
209509	283688 Dup	<0.005
209510	283689	<0.005
209511	283690	<0.005
209512	283691	<0.005

APPLIED SCOPES: ALP1, ALFA1, ALMA1

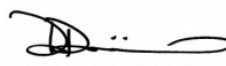
Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

Certified By:

  
Andrew Oleski  
Lab Manager - Thunder Bay

Authorized By:

  
Derek Demianiuk, VP Quality

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1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630 www accurassay.com  
Fax: (807) 622-7571 assay@accurassay.com

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Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, iiliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

---

Acc #	Client ID	Au g/t (ppm)
209513	283692	<0.005
209514	283693	<0.005
209515	283694	<0.005
209516	283695	<0.005
209517	283696	<0.005
209518	283697	<0.005
209519	283698	<0.005
209520	283698 Dup	<0.005
209521	283699	<0.005
209522	283700	<0.005
209523	284501	<0.005
209524	284502	<0.005
209525	284503	<0.005
209526	284504	<0.005
209527	284505	<0.005
209528	284506	<0.005
209529	284507	<0.005
209530	284508	<0.005
209531	284508 Dup	<0.005
209532	284509	<0.005
209533	284510	<0.005
209534	284511	<0.005
209535	284512	<0.005
209536	284513	<0.005
209537	284514	<0.005

APPLIED SCOPES: ALP1, ALFA1, ALMA1

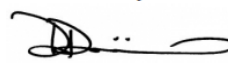
Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

Certified By:

  
Andrew Oleski  
Lab Manager - Thunder Bay

Authorized By:

  
Derek Demianiuk, VP Quality

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Canada P7B 5X5

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Fax: (807) 622-7571

www.accurassay.com  
assay@accurassay.com

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Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, iliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

---

Acc #	Client ID	Au g/t (ppm)
209538	284515	<0.005
209539	284516	<0.005
209540	284517	<0.005
209541	284518	<0.005
209542	284518 Dup	<0.005
209543	284519	<0.005
209544	284520	<0.005
209545	284521	<0.005
209546	284522	<0.005
209547	284523	<0.005
209548	284524	<0.005
209549	284525	<0.005
209550	284526	<0.005
209551	284527	<0.005
209552	284528	0.005
209553	284528 Rep	0.005
209554	284529	<0.005
209555	284530	0.006
209556	284531	<0.005
209557	284532	<0.005
209558	284533	<0.005
209559	284534	<0.005
209560	284535	<0.005
209561	284536	<0.005
209562	284537	<0.005

APPLIED SCOPES: ALP1, ALFA1, ALMA1

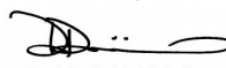
Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

Certified By:

  
Andrew Oleski  
Lab Manager - Thunder Bay

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1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www accurassay.com  
assay@accurassay.com

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Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, iiliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

Acc #	Client ID	Au g/t (ppm)
209563	284538	<0.005
209564	284538 Dup	0.008
209565	284539	<0.005
209566	284540	<0.005
209567	284541	<0.005
209568	284542	<0.005
209569	284543	<0.005
209570	284544	<0.005
209571	284545	<0.005
209572	284546	<0.005
209573	284547	<0.005
209574	284548	<0.005
209575	284548 Dup	<0.005
209576	284549	<0.005
209577	284550	<0.005
209578	284551	<0.005
209579	284552	<0.005
209580	284553	<0.005
209581	284554	<0.005
209582	284555	<0.005
209583	284556	0.006
209584	284557	<0.005
209585	284558	<0.005
209586	284558 Dup	<0.005
209587	284559	<0.005

APPLIED SCOPES: ALP1, ALFA1, ALMA1

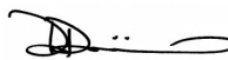
Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

Certified By:

  
Andrew Oleski  
Lab Manager - Thunder Bay

Authorized By:

  
Derek Demianiuk, VP Quality

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**ACCURASSAY**  
LABORATORIES

1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www accurassay.com  
assay@accurassay.com

Thursday, July 9, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, iliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

---

Acc #	Client ID	Au g/t (ppm)
209588	284560	0.008
209589	284561	<0.005
209590	284562	<0.005
209591	284563	<0.005
209592	284564	<0.005
209593	284565	<0.005
209594	284566	<0.005
209595	284567	0.007
209596	284568	0.007
209597	284568 Dup	0.006
209598	284569	0.008
209599	284570	<0.005
209600	284571	0.014
209601	284572	0.007
209602	284573	<0.005
209603	284574	<0.005
209604	284575	<0.005
209605	284576	<0.005
209606	284577	<0.005
209607	284578	<0.005
209608	284578 Dup	<0.005

APPLIED SCOPES: ALP1, ALFA1, ALMA1

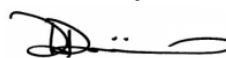
Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

Certified By:

  
Andrew Oleski  
Lab Manager - Thunder Bay

Authorized By:

  
Derek Demianiuk, VP Quality

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1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www accurassay.com  
assay@accurassay.com

Thursday, July 9, 2015

## Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
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Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

### Control Standards

QC Type	QC Performance (ppm)	Mean (ppm)	Std Dev (ppm)
AR02	1.820	1.575	0.088
AR02	1.686	1.575	0.088
KL01	0.394	0.394	0.011
AR02	1.604	1.575	0.088

APPLIED SCOPES: ALP1, ALFA1, ALMA1


### Validated By:

  
Jesse Deschutter  
Assistant Manager - Thunder Bay

### Certified By:

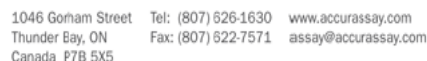
  
Andrew Oleski  
Lab Manager - Thunder Bay

### Authorized By:

  
Derek Demianluk, VP Quality

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Reference:  
Sample #: 110

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Str ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
200488	283669	<1	<0.01	26	5	<2	<1	4.62	5	69	969	10	7.90	<0.01	35	5.86	1218	<1	339	102	9	<5	<5	<10	43	2530	2	177	12	10	94
200489	283670	<1	<0.01	13	203	<2	<1	4.70	5	65	776	70	8.26	<0.01	48	4.96	1301	<1	275	199	8	<5	<5	<10	56	2933	<2	166	17	10	99
200490	283671	<1	0.68	7	536	<2	<1	1.83	<4	44	201	195	4.87	<0.01	36	1.89	750	10	140	253	7	<5	<5	<10	105	1976	3	93	25	9	296
200491	283672	<1	0.67	23	1655	<2	<1	2.36	<4	52	39	230	2.59	<0.01	36	0.88	747	12	101	255	5	<5	<5	<10	77	1606	<2	56	40	8	702
200492	283673	<1	1.36	12	1715	<2	<1	1.68	<4	15	17	28	2.62	<0.01	22	0.54	696	5	43	241	8	<5	<5	<10	118	1414	4	33	30	4	85
200493	283674	<1	1.62	12	1646	<2	<1	0.55	<4	11	25	14	2.17	<0.01	26	0.54	442	4	36	161	10	<5	<5	<10	94	1262	4	33	10	4	82
200494	283675	<1	1.62	16	1266	<2	<1	1.37	<4	15	24	20	2.33	<0.01	20	0.44	503	6	40	263	9	<5	<5	<10	113	1055	<2	36	<10	5	26
200495	283676	<1	2.49	9	1314	<2	<1	0.52	<4	11	27	13	1.71	<0.01	12	0.39	262	7	45	209	26	<5	<5	<10	122	910	<2	40	18	5	46
200496	283677	<1	1.18	5	465	<2	<1	1.55	<4	9	33	11	1.42	<0.01	19	0.42	359	4	30	181	11	<5	<5	<10	115	898	<2	27	25	5	103
200497	283678	<1	1.37	9	362	<2	<1	1.87	<4	7	37	14	2.34	<0.01	32	0.42	374	8	49	161	9	<5	<5	<10	152	1006	3	31	14	5	38
200498	283678	<1	1.58	7	361	<2	<1	1.85	<4	6	37	14	2.34	<0.01	33	0.42	370	8	48	193	10	<5	<5	<10	153	1013	<2	31	16	4	34
200499	283679	<1	1.20	9	351	<2	<1	0.73	<4	29	23	46	5.76	<0.01	49	0.47	342	8	32	239	8	<5	<5	<10	137	990	<2	30	12	4	49
200500	283680	<1	1.52	12	296	<2	<1	1.70	<4	7	26	11	1.51	<0.01	15	0.37	261	4	33	269	7	<5	<5	<10	209	980	<2	34	28	4	84
200501	283681	<1	1.64	2	271	<2	<1	2.01	<4	8	27	15	1.78	<0.01	19	0.44	377	4	31	261	7	5	<5	<10	169	1135	<2	35	<10	4	79
200502	283682	<1	4.61	2	277	<2	<1	1.72	<4	8	13	22	2.27	<0.01	36	0.66															

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1046 Gorham Street Tel: (807) 626-1630 www accurassay.com  
Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com  
Canada P7B 5X5

Monday, July 20, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkhasner@yahoo.ca, iliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si ppm	Str ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
209508	283888	<1	2.49	2	177	<2	<1	1.72	<4	4	34	10	1.37	<0.01	15	0.40	198	5	30	211	<1	<5	<5	<10	250	832	<2	31	17	5	88
209509D	283888	<1	1.50	11	188	<2	<1	1.82	<4	4	30	10	1.31	0.02	13	0.36	190	3	29	186	8	<5	<5	<10	250	803	<2	29	22	4	87
209510	283889	<1	1.93	3	182	<2	<1	1.36	<4	7	32	13	2.50	0.06	11	0.36	198	8	33	198	2	<5	<5	<10	245	832	<2	31	13	4	48
209511	283890	<1	1.81	17	189	<2	<1	1.28	<4	11	30	14	3.79	0.04	21	0.39	210	8	28	201	8	<5	<5	15	235	594	<2	30	28	4	71
209512	283891	<1	0.77	19	206	<2	<1	1.36	<4	6	41	9	2.46	0.31	25	0.33	189	5	28	218	7	<5	<5	<10	236	897	4	32	22	4	80
209513	283892	<1	2.81	17	183	<2	<1	0.85	<4	9	34	8	3.15	<0.01	22	0.43	151	7	31	281	5	<5	8	<10	230	727	<2	37	25	5	48
209514	283893	<1	2.28	37	188	<2	<1	0.82	8	25	21	24	10.33	<0.01	27	0.54	237	15	15	241	8	<5	<5	17	195	648	<2	24	25	5	41
209515	283894	<1	3.45	7	209	<2	<1	1.95	<4	4	24	8	1.88	<0.01	28	0.59	275	3	24	265	5	<5	<5	<10	279	719	5	30	14	5	45
209516	283895	<1	0.88	3	174	<2	<1	1.84	<4	2	27	7	1.04	<0.01	17	0.42	288	<1	<1	178	2	<5	<5	<10	220	825	<2	18	18	4	33
209517	283896	<1	2.02	17	220	<2	<1	2.00	<4	4	37	10	1.28	<0.01	16	0.52	289	4	2	210	<1	<5	<5	<10	278	824	<2	23	12	5	45
209518	283897	<1	1.88	8	218	<2	<1	1.59	<4	3	24	11	1.39	<0.01	21	0.58	240	3	2	220	2	<5	<5	<10	265	809	<2	25	21	4	81
209519	283898	<1	2.50	4	241	<2	<1	1.98	<4	3	28	10	1.50	0.04	30	0.56	310	3	2	223	5	<5	8	<10	240	735	<2	22	14	5	55
209520D	283898	<1	1.88	<2	239	<2	<1	1.97	<4	2	25	9	1.49	0.03	30	0.54	312	3	2	195	<1	<5	<5	<10	247	739	<2	21	14	5	58
209521	283899	<1	1.90	8	158	<2	<1	2.04	<4	2	33	9	0.88	0.05	12	0.42	281	4	<1	201	1	<5	<5	<10	252	831	7	18	<10	5	34
209522	283700	<1	0.15	<2	198	<2	<1	1.87	<4	4	11	7	1.40	<0.01	22	0.50	241	<1	1	171	1	<5	<5	<10	198	827	<2	19	11	4	38
209523	284501	<1	0.23	8	172	<2	<1	1.41	<4	4	24	8	1.19	<0.01	14	0.42	190	<1	<1	175	<1	<5	<5	<10	241	852	<2	19	17	4	41
209524	284502	<1	5.09	11	253	<2	<1	1.91	<4	5	27	12	1.87	<0.01	25	0.71	225	4	4	283	5	<5	<5	<10	248	1150	<2	23	18	7	50
209525	284503	<1	5.98	2	245	<2	<1	2.07	<4	5	35	13	1.99	<0.01	35	0.86	199	5	3	303	2	5	8	13	345	1315	<2	28	18	7	57
209526	284504	<1	4.81	8	273	<2	<1	1.82	<4	7	28	9	2.24	0.03	34	0.87	202	4	3	274	3	<5	<5	19	306	1185	11	24	14	6	55
209527	284505	<1	3.91	8	252	<2	<1	1.93	<4	8	43	11	2.50	0.02	33	0.81	207	5	3	280	8	<5	5	<10	310	1228	<2	30	14	6	98

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified By:   
Jazzy Bhatta, VP Operations, Assayer

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Sample #: 110

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
206528	284508	<1	4.64	8	262	<2	<1	2.04	<4	7	41	12	2.80	<0.01	35	0.86	215	7	2	269	8	<5	<5	<10	322	1263	9	34	17	6	77
206529	284507	<1	3.34	5	284	<2	<1	1.31	<4	7	53	13	2.35	0.33	20	0.71	198	8	2	243	8	<5	<5	<10	286	1003	3	21	18	6	92
206530	284508	<1	3.00	7	203	<2	<1	1.21	<4	8	38	11	2.44	0.13	30	0.72	169	7	3	244	7	8	<5	<10	239	1019	<2	22	28	5	81
206531D	284508	<1	2.83	8	215	<2	<1	1.30	<4	7	39	11	2.56	0.24	33	0.71	199	8	4	235	12	<5	<5	10	240	1049	<2	23	<10	5	70
206532	284509	<1	2.94	4	255	<2	<1	1.77	<4	7	30	13	2.32	0.28	43	0.82	266	8	4	387	5	<5	<5	<10	252	1734	<2	40	24	8	80
206533	284510	<1	2.91	5	264	<2	<1	2.82	<4	5	44	13	1.73	0.26	24	0.53	345	5	3	202	3	<5	<5	<10	308	1186	<2	37	<10	8	40
206534	284511	<1	2.81	7	302	<2	<1	1.93	<4	4	36	11	1.19	0.29	21	0.47	250	4	2	265	7	<5	<5	15	312	848	<2	34	17	6	42
206535	284512	<1	3.61	3	270	<2	<1	1.81	<4	5	31	15	1.79	0.15	32	0.70	275	5	2	257	5	<5	8	<10	327	1241	2	29	34	5	61
206536	284513	<1	6.34	5	295	<2	<1	1.83	<4	4	30	8	1.80	<0.01	34	0.91	305	5	4	282	5	<5	<5	<10	318	988	<2	25	21	7	50
206537	284514	<1	4.43	5	275	<2	<1	1.82	<4	8	37	11	1.89	<0.01	34	0.84	367	8	3	253	<1	<5	<5	<10	314	1210	<2	23	24	6	49
206538	284515	<1	4.03	3	300	<2	<1	2.01	<4	5	32	4	1.66	<0.01	26	0.79	372	4	3	253	8	<5	<5	<10	282	1259	<2	25	28	8	53
206539	284516	2	5.46	5	383	<2	<1	2.39	<4	8	33	17	1.50	0.06	28	0.78	330	4	4	327	5	<5	<5	<10	294	1625	4	38	14	7	65
206540	284517	<1	5.10	9	384	<2	<1	2.88	<4	7	30	12	1.94	0.06	34	0.77	465	5	3	295	2	<5	<5	<10	309	1553	8	31	44	7	53
206541	284518	<1	2.91	9	296	<2	<1	2.30	4	15	20	113	7.50	0.19	84	1.53	1502	12	10	302	12	8	<5	12	147	1360	3	37	22	8	164
206542D	284518	<1	2.19	4	212	<2	<1	2.33	5	17	23	114	7.64	0.25	85	1.47	1546	12	9	290	17	<5	<5	11	148	1393	<2	38</			

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**ACCURASSAY**  
LABORATORIES

1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www.accurassay.com  
assay@accurassay.com

Monday, July 20, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drnikasner@yahoo.ca, iliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
206548	284524	<1	1.43	5	827	<2	<1	3.30	<4	4	32	4	2.27	<0.01	36	0.47	1102	8	39	257	5	8	<5	<10	220	1342	8	35	27	4	31
206549	284525	<1	1.73	<2	441	<2	<1	3.80	<4	11	63	20	2.71	<0.01	36	0.74	822	8	47	551	4	<5	8	<10	426	2261	<2	58	28	5	38
206550	284526	<1	1.42	8	151	<2	<1	4.67	<4	20	74	39	3.84	<0.01	23	1.52	852	7	56	1069	14	<5	<5	<10	680	3516	<2	90	15	10	58
206551	284527	<1	5.72	7	445	<2	<1	4.59	<4	18	49	39	4.50	0.25	30	1.74	1180	10	51	1140	11	<5	<5	<10	622	3498	<2	88	26	15	52
206552	284528	<1	2.88	9	336	<2	<1	6.71	<4	33	118	82	5.62	0.09	43	2.62	1201	8	93	1794	7	<5	<5	21	698	5756	<2	144	36	16	78
206553R	284528	<1	2.77	3	331	<2	<1	6.76	<4	33	117	82	5.61	0.16	42	2.66	1205	7	89	1818	13	<5	<5	17	703	5709	<2	144	17	17	78
206554	284529	<1	2.87	7	330	<2	<1	4.77	<4	18	84	38	3.81	<0.01	33	1.53	1000	9	70	854	17	<5	<5	13	538	2803	<2	74	15	9	58
206555	284530	<1	4.44	8	91	<2	<1	6.27	4	40	84	88	6.09	0.11	51	3.25	1104	8	75	2484	12	<5	<5	18	726	7164	<2	179	17	23	87
206556	284531	<1	5.09	7	210	<2	<1	6.40	4	43	163	58	6.82	0.18	44	3.89	1145	4	110	2423	8	<5	<5	12	753	6878	<2	188	26	25	95
206557	284532	<1	5.45	<2	231	<2	<1	6.58	4	48	279	16	7.27	0.16	50	4.74	1296	4	177	2376	11	<5	<5	20	685	6886	<2	200	19	25	105
206558	284533	<1	5.74	2	205	2	<1	5.91	4	49	254	19	7.39	0.09	68	5.05	1289	4	166	2616	6	<5	<5	<10	764	7222	<2	211	11	25	88
206559	284534	<1	2.54	4	364	<2	<1	1.39	<4	7	36	14	1.61	<0.01	29	1.02	298	4	36	399	5	<5	7	<10	350	1593	<2	42	14	5	36
206560	284535	<1	3.51	12	503	<2	<1	1.19	<4	5	36	171	1.84	0.03	32	0.67	299	7	336	232	6	<5	8	10	374	1142	<2	32	14	4	44
206561	284536	<1	2.54	10	518	<2	<1	1.41	<4	4	30	17	1.08	<0.01	25	0.52	190	5	33	257	6	<5	<5	16	310	1157	<2	28	14	4	39
206562	284537	<1	2.75	6	671	<2	<1	2.28	<4	4	33	10	1.32	<0.01	28	0.62	319	6	31	260	4	<5	<5	<10	340	1389	2	29	15	4	45
206563	284538	<1	2.79	6	733	<2	<1	2.82	<4	4	32	12	1.45	<0.01	27	0.65	410	7	39	264	8	<5	<5	<10	411	1374	<2	31	27	5	44
206564D	284538	<1	2.84	8	726	<2	<1	2.78	<4	4	27	12	1.43	<0.01	26	0.65	406	7	39	272	4	<5	<5	14	407	1356	<2	31	29	5	46
206565	284539	<1	2.61	4	631	<2	<1	4.53	<4	30	149	55	4.40	<0.01	41	2.91	875	5	111	1582	10	<5	<5	16	654	4504	<2	121	10	14	65
206566	284540	<1	5.20	8	227	2	<1	6.01	4	49	286	84	6.67	0.07	57	5.34	1296	2	197	2402	10	<5	<5	<10	637	6634	<2	177	24	26	91
206567	284541	<1	4.89	5	198	2	<1	6.29	4	50	370	71	6.61	0.18	53	5.66	1235	1	240	2197	11	<5	<5	<10	654	6323	<2	167	28	25	86

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified By:   
Jesse Blais, VP Operations, Assayer

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1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5  
Tel: (807) 626-1630  
Fax: (807) 622-7571  
www accurassay.com  
assay@accurassay.com

Monday, July 20, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Pnr: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drnikasner@yahoo.ca, iliev74@yahoo.ca

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206968	284542	<1	5.33	8	236	<2	<1	6.33	4	46	293	63	6.37	0.10	62	4.79	1178	3	208	2233	10	8	<5	11	536	6205	<2	162	36	25	84
206969	284543	<1	5.69	8	633	<2	<1	1.59	<4	4	36	11	1.33	<0.01	29	0.83	295	7	32	206	4	<5	<5	<10	405	1379	<2	34	24	8	42
206970	284544	<1	4.70	11	672	<2	<1	1.05	<4	6	23	21	1.61	<0.01	34	0.76	319	5	27	340	5	<5	<5	<10	287	1482	<2	36	<10	7	36
206971	284545	<1	5.76	4	607	<2	<1	7.89	<4	45	197	175	4.78	0.02	61	1.66	1362	3	104	273	9	<5	<5	11	362	4206	2	204	30	15	45
206972	284546	<1	9.93	4	615	<2	<1	7.30	4	38	170	95	5.24	0.10	44	2.40	1202	2	91	263	<1	<5	<5	<10	323	3649	<2	192	24	18	55
206973	284547	<1	5.22	10	484	<2	<1	6.48	4	50	234	40	6.18	0.01	34	2.85	1207	5	120	206	10	<5	<5	12	270	4026	2	248	26	14	66
206974	284548	<1	6.57	3	759	<2	<1	6.68	4	49	232	79	6.45	0.02	41	3.18	1175	2	120	206	<1	<5	<5	12	348	4492	<2	230	24	17	69
206975D	284548	<1	7.21	4	754	<2	<1	6.60	4	47	226	76	6.35	0.16	41	3.24	1158	3	118	283	<1	<5	<5	10	345	4438	3	226	33	18	63
206976	284549	<1	5.74	2	485	<2	<1	7.74	4	46	235	93	6.34	0.20	45	2.96	1378	3	117	207	2	<5	<5	<10	288	4543	<2	230	10	17	76
206977	284550	<1	1.81	9	117	<2	1	3.01	<4	7	35	7	1.39	<0.01	23	0.72	342	4	24	252	4	<5	<5	<10	229	1150	<2	32	13	5	22
206978	284551	<1	3.01	5	260	<2	<1	1.02	<4	5	31	15	1.08	<0.01	24	0.67	181	4	29	217	6	<5	<5	<10	260	971	4	24	20	5	14
206979	284552	<1	5.98	9	452	<2	<1	0.99	<4	4	29	11	1.16	<0.01	30	0.72	199	4	24	285	1	<5	<5	<10	334	1151	4	27	13	7	46
206980	284553	<1	6.44	8	511	<2	<1	2.44	<4	15	71	22	1.31	0.01	31	0.77	334	7	48	288	6	<5	<5	<10	343	1505	3	65	34	9	203
206981	284554	<1	6.33	10	445	<2	<1	0.81	<4	5	40	20	1.48	<0.01	30	0.78	224	6	40	281	2	<5	<5	<10	358	1118	6	35	25	7	140
206982	284555	<1	5.32	8	252	<2	<1	0.80	<4	7	51	82	1.03	<0.01	20	0.62	173	9	52	253	<1	<5	<5	<10	230	804	<2	32	31	7	64
206983	284556	<1	5.04	6	286	<2	<1	0.71	<4	10	44	85	1.32	<0.01	29	0.79	227	7	39	257	4	<5	6	<10	246	867	<2	30	28	7	164
206984	284557	<1	3.90	10	334	<2	<1	0.45	<4	6	39	12	1.23	0.09	23	0.66	201	5	39	231	11	<5	<5	<10	276	1033	3	31	27	6	30
206985	284558	<1	4.48	3	463	<2	<1	2.59	<4	39	139	104	2.24	<0.01	34	0.79	487	6	97	307	5	<5	<5	<10	333	2817	<2	134	16	10	186
206986D	284558	<1	4.26	8	454	<2	<1	2.54	<4	38	139	102	2.19	<0.01	33	0.78	479	6	94	307	10	<5	<5	12	326	2823	<2	132	28	10	184
206987	284559	<1	3.32	10	589	<2	<1	1.16	<4	18	32	142	2.20	<0.01	30	0.72	286	8	43	290	12	<5	<5	<10	269	1373	<2	36	31	6	214

PROCEDURE CODES: ALP1, ALFA1, ALMA1

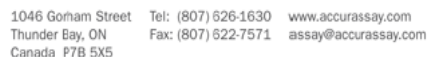
Certified By:   
Dr. Nikasner, VP Operations, Assayer

The results included on this report relate only to the items tested.  
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Page 5 of 7

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Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drnkasner@yahoo.ca, illev74@yahoo.ca

Sample #: 110

PROCEDURE CODES: ALP1, ALFA1, ALMA1

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Certified By: Jesse Moore, VP Operations, Asayon



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com  
Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com  
Canada P7B 5X5

Monday, July 20, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkaener@yahoo.ca, liliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/09/2015  
Job #: 201542410  
Reference:  
Sample #: 110

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Str ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
200608D	284578	<1	2.12	2	244	<2	<1	1.52	<4	7	35	12	1.33	<0.01	17	0.82	299	2	35	257	<1	<5	<5	<10	200	1144	<2	35	<10	5	44

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified By:  Jason B. B. 10 Operator, Analyst

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**ACCURASSAY**  
LABORATORIES

1046 Gorham Street  
Thunder Bay, ON  
Canada P7B 5X5

Tel: (807) 626-1630  
Fax: (807) 622-7571

www accurassay.com  
assay@accurassay.com

Monday, July 6, 2015

## Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drkkasner@yahoo.ca, iiliev74@yahoo.ca

Date Received: 06/22/2015  
Date Completed: 07/06/2015  
Job #: 201542411  
Reference:  
Sample #: 3

Acc #	Client ID	Fe2O3 %	SiO2 %	Al2O3 %	Na2O %	MgO %	K2O %	CaO %	P2O5 %	MnO %	TiO2 %	Cr2O3 %	V2O5 %	LOI %	Mass Balance %
209609	WR-8-84	3.51	68.68	16.42	2.99	0.66	2.89	2.15	0.07	0.03	0.26	0.10	<0.01	0.87	98.63
Control Standard Performance															
Control Std Certified															
		Fe2O3 %	SiO2 %	Al2O3 %	Na2O %	MgO %	K2O %	CaO %	P2O5 %	MnO %	TiO2 %	Cr2O3 %	V2O5 %	LOI %	Mass Balance %
NIST SR 690	95.58	3.71	0.18	0.00	0.18	0.00	0.20	0.03	0.23	0.02	0.00	0.00	0.00	0.00	100.13
NIST SR 692	85.18	10.14	1.41	0.01	0.46	0.04	0.02	0.09	0.00	0.04	0.00	0.00	0.00	2.50	99.89

APPLIED SCOPES: ALP1, ALXR1, ALMA1

Validated By:



Certified By:



Authorized By:



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**CALA**  
Testing  
Accreditation No. A2977



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com  
Thunder Bay, ON Fax: (807) 622-7571 assay@ accurassay.com  
Canada P7B 5X5

Tuesday, June 23, 2015

### Final Certificate

Mistango River Resources  
4 Al Wende PO Box 546  
Kirkland Lake, ON, CAN  
P2N3J5  
Ph#: (705) 567-5351  
Fax#: (705) 567-5557  
Email: drnkasner@yahoo.ca, illiev74@yahoo.ca

Date Received: 05/21/2015  
Date Completed: 05/23/2015  
Job #: 201541898  
Reference:  
Sample #: 4

Acc #	Client ID	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ce %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Br ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
160327	K-1	<1	3.08	12	425	<2	<1	0.96	<4	8	372	10	1.23	0.09	13	0.55	214	<1	12	273	6	<5	9	32	308	1158	34	20	<10	4	42
160328	7-140.3	<1	5.41	8	159	<2	<1	7.11	5	54	366	26	7.88	0.41	24	4.10	1433	<1	133	329	9	<5	8	35	154	5211	<2	262	11	21	82
160329	7-126.2	<1	3.73	13	224	<2	<1	4.93	<4	6	375	44	1.69	0.05	16	0.63	733	<1	13	237	3	<5	11	31	228	1370	27	23	<10	10	52
160330	7-47.3	<1	4.22	7	207	<2	<1	5.86	7	65	168	523	11.35	0.12	27	3.01	2105	<1	37	387	4	<5	12	35	130	6508	43	329	<10	24	84
160331D	7-47.3	<1	4.27	12	206	<2	<1	5.84	7	67	165	526	11.40	0.24	27	3.04	2112	<1	36	393	9	<5	<5	32	127	6612	14	331	<10	24	84

PROCEDURE CODES: ALP1, ALMA1, ALXR1

Certified By:   
Janet Krasner, VP Operations, Assayer

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The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.



Date Submitted: 11-May-15  
Invoice No.: A15-03287  
Invoice Date: 27-May-15  
Your Reference:

Mistango River Resources.  
Box 546  
Kirkland Lake Ontario P2N 3J5  
Canada

ATTN: Donald Kasner

## CERTIFICATE OF ANALYSIS

6 Soil samples were submitted for analysis.

The following analytical package was requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)  
Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT A15-03287

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3  
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

A handwritten signature in black ink.

Emmanuel Esemé, Ph.D.  
Quality Control

ACTIVATION LABORATORIES LTD.  
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6  
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com



## Results

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GR-01	11	< 0.2	< 0.5	79	320	< 1	90	6	66	2.66	5	< 10	79	< 0.5	< 2	0.78	19	66	3.60	< 10	< 1	0.09	16
GR-02	< 5	< 0.2	< 0.5	27	245	< 1	36	< 2	35	1.98	2	< 10	37	< 0.5	< 2	0.90	10	50	2.54	< 10	< 1	0.06	15
GR-03	10	0.4	< 0.5	152	415	1	94	8	98	3.73	11	< 10	76	0.6	< 2	0.68	28	112	4.52	10	< 1	0.12	17
GR-04	26	< 0.2	< 0.5	215	1100	1	120	18	131	2.71	27	< 10	132	< 0.5	< 2	0.92	36	178	5.54	< 10	< 1	0.40	41
GR-05	6	< 0.2	< 0.5	26	259	< 1	29	< 2	36	1.65	< 2	< 10	58	< 0.5	< 2	1.01	10	42	2.82	< 10	< 1	0.07	22
GR-06	17	0.3	< 0.5	89	637	< 1	4	4	169	2.47	< 2	< 10	59	< 0.5	< 2	0.13	20	11	7.61	10	< 1	1.16	< 10

## Results

Analyte Symbol	Mg	Na	P	S	Si	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GR-01	0.82	0.150	0.047	0.01	3	6	29	0.21	3	< 2	< 10	135	< 10	7	10
GR-02	0.51	0.186	0.063	< 0.01	< 2	4	28	0.19	3	< 2	< 10	136	< 10	7	8
GR-03	1.09	0.106	0.078	0.02	9	5	27	0.19	2	< 2	< 10	131	< 10	7	7
GR-04	1.81	0.113	0.100	0.01	< 2	12	33	0.23	1	< 2	< 10	128	< 10	16	10
GR-05	0.47	0.217	0.073	< 0.01	< 2	4	38	0.20	9	< 2	< 10	177	< 10	9	9
GR-06	0.35	0.025	0.035	1.00	3	4	6	0.17	< 1	< 2	< 10	39	< 10	4	22

## QC

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	29.7	1.8	1150	821	14	39	661	718	0.38	384	< 10	397	0.7	1450	0.74	8	7	22.2	< 10	4	0.03	< 10	
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	750	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.5	< 0.5	6480	141	318	37	41	72	2.99	97	< 10	38	1.3	11	0.88	12	54	2.99	10	< 1	1.76	48
GXR-4 Cert		4.0	0.960	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
GXR-6 Meas		0.3	< 0.5	69	1050	1	22	94	128	7.68	197	< 10	911	0.8	< 2	0.15	11	79	5.62	20	< 1	1.20	10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
SAR-M (U.S.G.S.) Meas		3.2	5.2	334	4600	13	42	1070	1030	1.33	35		194	1.0	< 2	0.31	10	87	2.81	< 10		0.33	51
SAR-M (U.S.G.S.) Cert		3.64	5.27		5220	13.1	41.5	982	930.0	6.30	38.8		801	2.20	1.94	0.61	10.70	79.7	2.99	17		2.94	57.4
Ox106 Meas	438																						
Ox106 Cert	414																						
Method Blank		< 0.2	< 0.5	3	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 5																						

## QC

Analyte Symbol	Mg	Na	P	S	Sb	Se	Sn	Ti	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.13	0.052	0.045	0.21	95	1	180	< 0.01	13	< 2	30	76	148	24	17
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.61	0.150	0.123	1.75	4	7	73	0.13	4	< 2	< 10	78	12	11	11
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.41	0.083	0.033	0.01	3	21	32		2	< 2	< 10	166	< 10	5	6
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
SAR-M (U.S.G.S.) Meas	0.35	0.039	0.065		5	4	31	0.05	3	< 2	< 10	37	< 10	21	
SAR-M (U.S.G.S.) Cert	0.50	1.140	0.07		6.0	7.83	151	0.38	0.96	2.7	3.57	67.2	9.78	28.00	
Ox106 Meas															
Ox106 Cert															
Method Blank	< 0.01	0.015	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank															