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ASSESSMENT REPORT

describing

GEOCHEMICAL SAMPLING AND HAND PITTING

Field work performed from August 18 to September 2, 2013

at the

TOULEARY PROPERTY

TL 1-109	YC76097-YC76205
110-183	YC93602-YC93675
184-580	YD30404-YD30800
581-632	YD31571-YD31622

NTS 115O/02 and 03 and 115J/14
Latitude 62°57'N; Longitude 139°10'W

located in the

Dawson Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

ATAC RESOURCES LTD.
and
ARCUS DEVELOPMENT GROUP INC.

by

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December 2013

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INTRODUCTION

The Touleary property hosts a Volcanogenic Massive Sulphide (VMS) occurrence and a number of areas with geochemically anomalous soil response. It lies within the renowned South Klondike District of western Yukon. This district encompasses numerous historical and active placer gold mines and has attracted wider attention due to hard rock exploration successes at the nearby Casino (Western Copper and Gold Corp.), White Gold (Kinross Gold Corporation), Coffee (Kaminak Gold Corporation) and QV (Comstock Metals Ltd.) properties. The Touleary property is owned 50% by ATAC Resources Ltd. and 50% by Arcus Development Group Inc., with Arcus acting as the joint venture operator.

The 2013 work program comprised soil geochemical sampling and hand pitting, which were done by Archer, Cathro & Associates (1981) Limited on behalf of Arcus and ATAC. This work was performed between August 18 and September 2, 2013. The author directed the program and her Statement of Qualifications is in Appendix I. A Statement of Expenditures is located in Appendix II.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The Touleary property comprises 632 contiguous mineral claims in the Thistle Mountain area of western Yukon. The property is centred at latitude 62°57'N and longitude 139°10'W on NTS map sheets 115O/02 and 03 and 115J/14, as shown on Figure 1. It covers an area of about 12,800 ha (128 sq km). The claims are registered with the Dawson Mining Recorder in the name of Archer Cathro, which holds them in trust for Arcus and ATAC. Claim data are listed below while the locations of individual claims are illustrated on Figure 2.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date*</u>
TL 1-109	YC76097-YC76205	April 29, 2025
110-183	YC93602-YC93675	April 29, 2025
184-580	YD30404-YD30800	April 29, 2020
581-632	YD31571-YD31622	April 29, 2020

* Expiry dates do not include 2013 work, which has not yet been filed for assessment credit.

The 2013 work was conducted from a small tent camp on the Touleary property. Mobilization of crew and gear from Dawson City to the Kirkman Creek airstrip was provided by an Islander aircraft operated by Great River Aviation Ltd. The crew and gear were moved between the airstrip and the camp site using either a Bell 206-B or Bell 206-L4 helicopter, both operated by Fireweed Helicopters Ltd. from its base in Dawson City.

The Touleary property lies within the Tr'ondëk Hwëch'in and Selkirk first nations traditional territories. Both of these first nations have concluded land claim agreements with Canada and Yukon. In 2013, the White River First Nation, which has not yet signed a land claim agreement, expanded the area of its purported traditional territory to include the Touleary property area.

**ARCUS DEVELOPMENT GROUP
ATAC RESOURCES LTD.**

FIGURE 1
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

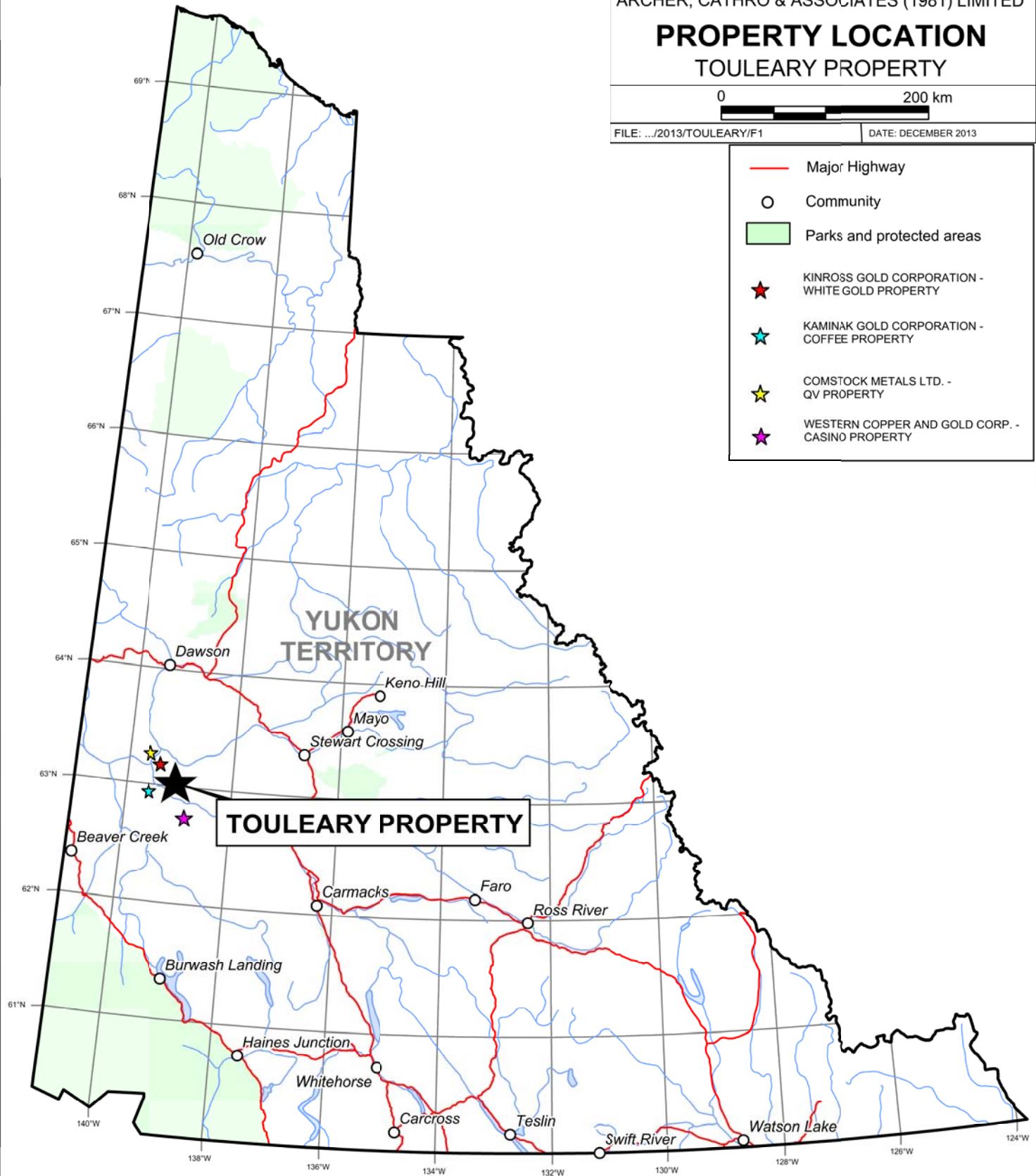
**PROPERTY LOCATION
TOULEARY PROPERTY**

0 200 km

FILE: .../2013/TOULEARY/F1

DATE: DECEMBER 2013

- Major Highway
- Community
- Parks and protected areas
- ★ KINROSS GOLD CORPORATION - WHITE GOLD PROPERTY
- ★ KAMINAK GOLD CORPORATION - COFFEE PROPERTY
- ★ COMSTOCK METALS LTD. - QV PROPERTY
- ★ WESTERN COPPER AND GOLD CORP. - CASINO PROPERTY



HISTORY

The Touleary property is located in the headwaters of four creeks that host historical and active placer gold operations in the southern part of the Klondike Goldfields. The area has a rich placer gold mining history dating back to 1898. Recorded hard rock exploration in the area started in 1936. Mining and exploration histories are described in more detail in the following paragraphs.

Placer History

Thistle, Kirkman, Ballarat and Sparkling creeks are placer gold producers that drain areas covered by the Touleary property (Figure 2). In addition, Touleary Creek is listed as a watercourse with past placer activity, but it is not currently staked. A 1.06 ounce gold nugget was reportedly recovered by panning on Touleary Creek in the early 1980s (pers. comm., J. Stephen, 2010). Table I below lists reported gold production from the main placer creeks in the Touleary property area.

Table I – Placer Production (VanLoon, 2013)

Creek	Status	Production (crude oz. year to year)	Fineness
Thistle	Active	89,940 (1949 to 2013)	848 to 895
Kirkman	Active	20,732 (1914 to 2013)	860 to 896
Sparkling	Active	2761 (1997 to 1998) and 85 (2006 to 2013)	880
Ballarat	Active	19,470 (1978 to 2013)	860

Hard Rock History

Three historical mineral occurrences lie on or adjacent to the Touleary property (Ballarat – 115J 061, Black Fox –115O 014 and Touleary –115J 060). These occurrences are described in the following paragraphs, and their locations are shown on Figure 2.

The Ballarat Occurrence is located on the west side of Ballarat Creek, 700 m east of the property. It was originally staked in 1936. Those claims were allowed to lapse and no further work was done until 1990, when Sparkling Minerals Incorporated performed prospecting, geological mapping and geochemical sampling. In 1990, Sparkling Minerals identified two styles of quartz veining at this occurrence. The first style is inferred to be epithermal and consists of massive interlocking white quartz crystals with occasional fine grained disseminated pyrite and specular hematite. The other style is thought to have originated from a mesothermal system and features quartz with feldspar. The epithermal veins are up to two metres wide and have vertical dips. Limonite forms up to 3% of these veins as fracture coatings and veinlets, while specular hematite comprises approximately 5%. Sparkling Minerals reported that a quartz vein sample with 1% galena yielded 31.71 g/t gold, 75.43 g/t silver and 1.5 % lead and that soil sampling returned up to 811 ppb gold (Andersen, 1991). In 1993, a small trenching program was completed and in 1998, additional soil and stream sediment sampling was performed. The highest gold-in-soil value from this work was 65 ppb (Andersen, 1999). No mineralization or geochemical anomalies are reported from the mesothermal veins. Stakeholder Gold Corp. currently owns claims that cover the Ballarat Occurrence. In 2012, Stakeholder drilled five holes totalling

753 m. The best result was 1.71 g/t gold over 1.0 m.

The Black Fox Occurrence lies 1000 m north of the property on Lulu Creek, a tributary of Thistle Creek. It was originally staked in 1901 and was restaked in 1910 and again in 1914. There is no record of any work performed on these claims. From 1970 to 1995, a number of companies staked claims and explored within the area surrounding this occurrence. The most noteworthy results were from a VLF-EM geophysical survey that Faith Mines Ltd. performed in 1995. This survey identified several linear conductors oriented parallel to a large fault (Southam, 1995a), but follow-up soil sampling, which was done at 25 m intervals on lines spaced 200 m apart over the VLF-EM conductors, returned only background values (Southam, 1995b). Claims covering the Black Fox Occurrence are currently owned by Kinross, which has not disclosed its exploration activities or results obtained from them.

The Touleary Occurrence is located on Touleary Creek within the current property boundary. The Minfile database speculates that quartz claims were staked based on previous placer activity. There is no record of any assessment reports having ever been filed for this occurrence.

In 1980, Archer Cathro performed regional exploration in the South Klondike District for the NAT Joint Venture (NAT JV), which comprised Chevron Canada Limited and Armco Mineral Exploration Ltd. The NAT JV program covered much of western Yukon and included reanalyses of splits from over 5000 previously collected samples for gold, silver, arsenic and lead, plus follow up geochemical sampling (Archer and Onasick, 1980). A number of silt samples collected from creeks draining the current Touleary property were analyzed and returned background to moderately anomalous values for gold (up to 28 ppb). Limited follow-up soil sampling returned only background values.

ATAC staked the initial claims comprising the Touleary property in April 2009 and soon afterward optioned them to Arcus. Work performed in 2009 included geochemical sampling and prospecting. A total of 65 rock and 2166 soil samples were collected for analysis. Results from this work were encouraging and are described in more detail in the Soil Geochemistry section below. The most anomalous rock sample was a limonitic quartz vein with dark grey metallic sulphide patches and rare arsenopyrite blebs, which returned 2.8 g/t gold. Three anomalous zones (Anomalies A to C) were identified through soil sampling. Anomaly A features gold-in-soil values up to 304 ppb, but lacks arsenic support. Anomalies B and C are arsenic-rich (20 to 324 ppm) but contain only background gold values (Smith, 2009).

In 2010, Arcus expanded the Touleary property based on exploration success of companies working nearby, particularly Kinross and Kaminak. The 2010 exploration program on the property comprised geochemical sampling and excavator trenching near Anomaly A. This work was performed from the Fell-Hawk Placer operation on Kirkman Creek. Six trenches totalling 1112 m in length were dug by a Komatsu 325 excavator owned and operated by Fell-Hawk. The trenching program was hindered by permafrost and therefore only 562 m of bedrock were exposed for mapping and sampling. The best result from this program was 0.82 g/t gold and 14.3 g/t silver over 34 m including 2.59 g/t gold and 20 g/t silver over five metres (Smith, 2011).

In March and April 2011, a helicopter-borne magnetic survey was contracted to Precision Geosurveys Inc. of Vancouver, British Columbia. A total of 756.8 line kilometres was flown over the Touleary property. Interpretation of the survey data was completed by Condor Consulting Inc. of Lakewood, Colorado. Details pertaining to this survey are discussed in the Geophysics Section below.

In summer 2011, Arcus performed soil geochemical sampling and diamond drilling on the Touleary property. Five drill holes totalling 935.9 m were completed within Anomaly A, in the area of the 2010 excavator trenching (Table II).

Table II – Drill Hole Data

HOLE	EASTING	NORTHING	ELEVATION	AZM	DIP	FEET	METRES
TL-01-11	594152	6987536	3917	0	-45	768	234.1
TL-02-11	594152	6987483	3862	0	-45	508	154.9
TL-03-11	594200	6987567	3948	0	-45	478	145.7
TL-04-11	594101	6987481	3860	0	-45	508	154.9
TL-05-11	594353	6987715	3979	0	-45	808	246.3

This drilling successfully identified a VMS horizon – the first significant VMS discovery made in Yukon-Tanana Terrane (YTT) west of the Tintina Fault. A segment of YTT located east of the Tintina Fault hosts a number of important VMS deposits including the Wolverine Mine. Table III below highlights significant results from the 2011 drill holes (Smith, 2012). Results from surface sampling are discussed in the Soil Geochemistry section below.

Table III – Significant Drill Intervals

Hole	Section	From (m)	To (m)	Interval (m)	Cu (%)	Ag (g/t)	Au (g/t)	Zn (%)
TL-01-11	4150 E	85.61	91.70	6.09	1.37	14.5	0.80	0.41
TL-02-11	4150 E	124.00	127.17	3.17	2.38	32.9	2.01	1.38
TL-03-11	4200 E	64.21	64.80	0.59	1.42	36.4	1.15	2.81
and		90.36	90.97	0.61	4.01	73.9	2.18	0.93
TL-04-11	4100 E	93.88	106.75	12.87	0.21	7.69	0.55	-
TL-05-11	4200 E	115.62	117.87	2.25	7.18	116	3.55	4.30
and		124.50	138.65	14.15	1.44	16.5	0.77	0.29
including		128.25	134.92	6.67	1.99	27.3	1.22	0.58

In December 2011, Arcus contracted Vancouver Petrographics Limited to create polished thin sections and perform thin section analyses on 10 specimens of Touleary drill core. Observations made by Vancouver Petrographics are incorporated into the Property Geology and Mineralization sections below, while a copy of Vancouver Petrographics' report can be found in Smith, 2013.

In February 2012, Arcus contracted Dr. V. Bennett to perform Scanning Electron Microscope (SEM) and zircon work on the same 10 samples that were collected for petrographic analyses. Interpretations made during the SEM study are incorporated into the Mineralization Section below. A zircon date was not attainable due to the small sample size.

In June 2012, Patrick Sack of the Yukon Geological Survey (YGS) visited the Touleary property. During his short stay on the property he re-logged TL-05-11, collected samples for whole rock geochemical analysis and collected 10 kg lithological samples to be used for zircon dating. No zircon grains were identified and therefore an age could not be determined.

GEOMORPHOLOGY

The Touleary claims lie on the Klondike Plateau in the northern part of the Dawson Range, immediately east of the Yukon River. Local topography shows moderate relief with elevations ranging from 730 to 1480 m. Treeline in the area is approximately 1400 m. Higher elevations are vegetated with moss and scrub brush while lower elevations support a mixture of deciduous and evergreen forests with thick buckbrush-, willow- and moss-covered slopes. Bedrock is exposed along ridges and spines at higher elevations and in road cuts at lower elevations.

The Touleary property is located in part of the Dawson Range that escaped Pleistocene glaciation and consequently, the landscape is mature with dendritic drainages forming radial fans off the flanks of upland domes.

In 2013, a 1:20,000 scale soil profile mapping program conducted by the YGS was performed to expand upon earlier work by Bond (2007) and others, which focussed on characterization of typical soil profiles. Detailed-scale mapping was completed on the nearby Coffee (Kaminak) and Boulevard (Independence Gold Corp.) properties to determine how eolian deposits, periglacial processes and mass movements complicate the collection and interpretation of soil geochemical data (McKillop et al., 2013). Twelve ‘landform-soil types’ (LST) have been recognized, with each type requiring specific sampling techniques based on soil and permafrost depth, surface organic and loess thickness, transport distance and type of geochemical anomaly.

Table IV summarizes the 12 LST classifications. Based on local knowledge gained through grassroots exploration programs on the Touleary property, all of the LST classifications except LST 9, may occur in various parts of the property. Geochemical sampling programs have been tailored using these specifications and sampling techniques are described in more detail in the Soil Geochemistry and Hand Trenching sections below.

Table IV – Landform-Soil Type Classifications (from McKillop et al., 2013)

LST No.	LST Name	Soil Thickness	Permafrost Depth¹	Organic Thickness²	Loess Thickness³	Transport Distance⁴	Anomaly Type⁵
1	Intact and Weathered	<1 m	Shallow to deep (alpine); absent (below treeline)	Absent to moderate	Absent to thick	<10m	Superjacent
2	Mixed Weathered Bedrock and	<1m	Deep (xsDv) to shallow (xzsCv) (alpine); absent to deep (below treeline)	Moderate to absent	Absent to moderate	<10m (xsDv); 10s of m (xzsCv)	Lateral to superjacent

3	Loess-rich Colluvial Veneer	<1 m	Shallow to near-surface (alpine); shallow to deep (below treeline)	Moderate to thick	Thin to thick	10s to ~100m	Lateral
4	Landslide-affected Colluvial Veneer	<1 m	Near-surface to shallow	Moderate to thick	Thin to thick	10s to 100s of m	Displaced or lateral
5	Loess-rich Colluvial Blanket	1 -5m	Shallow to near-surface	Moderate to thick	Moderate to thick	10s to 100s of m	Lateral or displaced
6	Loess-rich Colluvial Apron	5-20m	Shallow to near-surface	Thick to moderate	Thick	10s to 1000s of m	Displaced
7	Organic Plain	1-10m	Near-surface to shallow	Thick to moderate	Absent to moderate	n/a (organics)	Displaced
8	Fluvial Plain	1-10m	Absent to shallow	Moderate to absent	Absent to moderate	100s to 1000s of m	Displaced
9	Glaciofluvial Terrace	5-50 m	Absent or deep	Thin to moderate	Thin to thick	1000s to 10 000s of m	Displaced
10	Clast-rich Colluvial Blanket	1-3m	Absent	Thin to moderate	Thin	10s to ~100m	Lateral
11	Clast-rich Colluvial Veneer	<1 m	Absent	Thin	Thin	0 to 10s of m	Lateral to superjacent
12	Thin Clast-rich Colluvial Veneer	<0.2 m	Absent	Thin to absent	Thin	<10m	Superjacent to lateral

Notes:

Implications based on conventional soil geochemical analyses, not deep-penetrating soil geochemical methods (e.g., enzyme leach, MMI, etc.)

¹Permafrost –near-surface: <40 cm; shallow: 40-100 cm; deep:>100 cm

²Organic thickness –thin: <15 cm; moderate: 15-40 cm; thick: >40 cm

³Loess thickness –thin: <25 cm; moderate: 25-50 cm; thick: >50 cm

⁴Based on sample collected using a conventional hand auger

⁵Based on Hawkes and Webb (1962) and Levinson (1974) –superjacent: soil anomaly more or less directly over the bedrock source, commonly forming a halo; lateral: soil anomaly shifted or dispersed to one side and mainly underlain by barren bedrock; displaced: soil anomaly completely separated from its bedrock source.

The west and central parts of the property are drained by numerous creeks that flow directly into the Yukon River. The eastern part of the property is drained by two main creeks that flow into the Stewart River, a major tributary of the Yukon River.

REGIONAL GEOLOGY

The Touleary property lies within the YTT approximately 100 km southwest of the Tintina Fault (Figure 3). YTT comprises a variety of Late Devonian to Early Mississippian metavolcanic and metasedimentary and metamorphic rocks, and represents both arc and back-arc environments (Colpron and Nelson, 2006; Piercey et al., 2006). The Tintina Fault is a transcurrent structure that experienced about 450 km of dextral strike-slip movement during the Eocene. This movement offset a segment of YTT in the Finlayson Lake District of southeastern Yukon from the main body of YTT, which lies southwest of the fault.

YTT rocks of back-arc affinity occur mainly in the Finlayson Lake District where they are host to four major VMS deposits –Wolverine, Kudzu Kayah, Fyre Lake and GP4F. Back-arc facies are dominated by bimodal metavolcanic rocks associated with fine-grained carbonaceous

FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

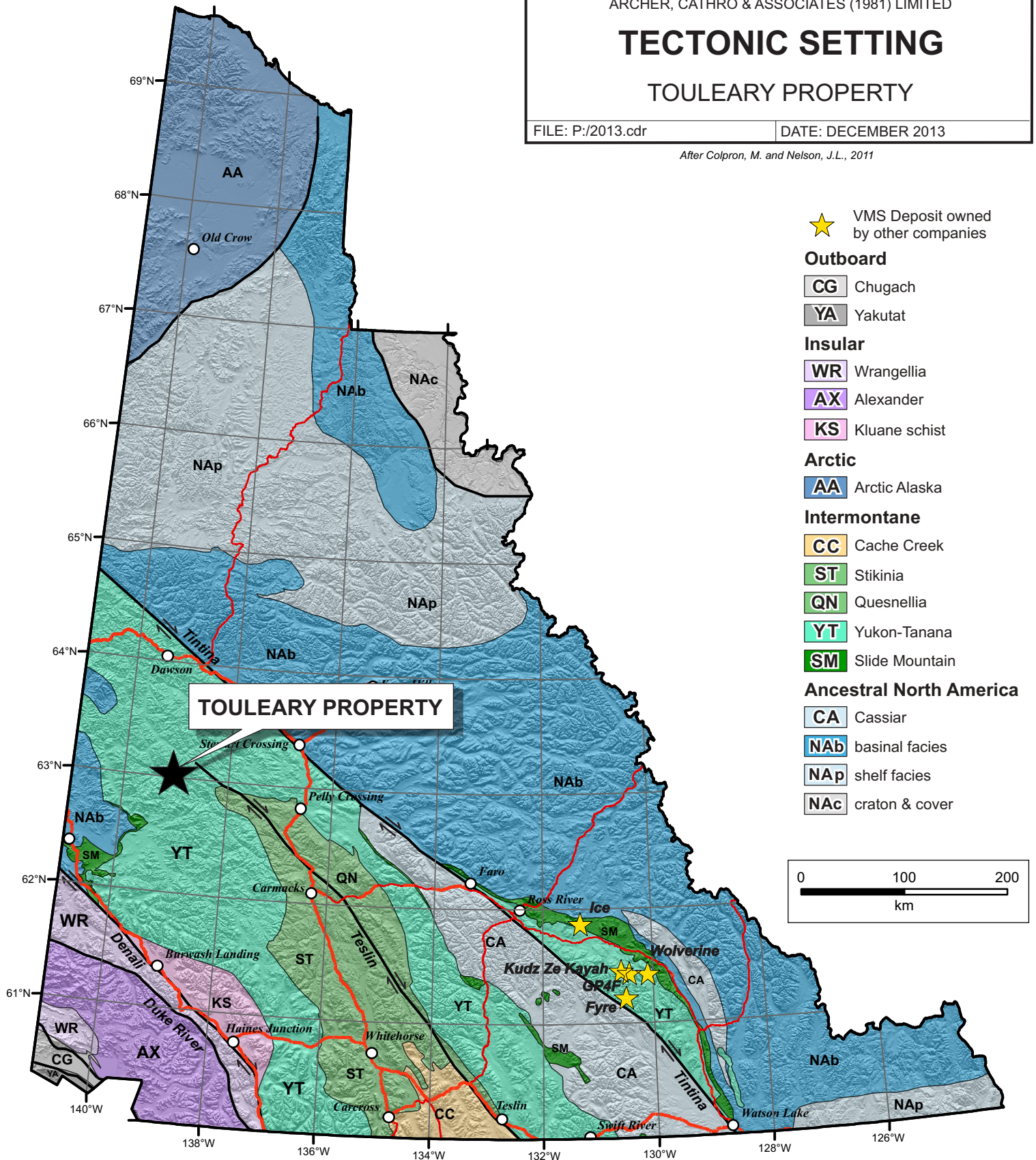
TECTONIC SETTING

TOULEARY PROPERTY

FILE: P:/2013.cdr

DATE: DECEMBER 2013

After Colpron, M. and Nelson, J.L., 2011

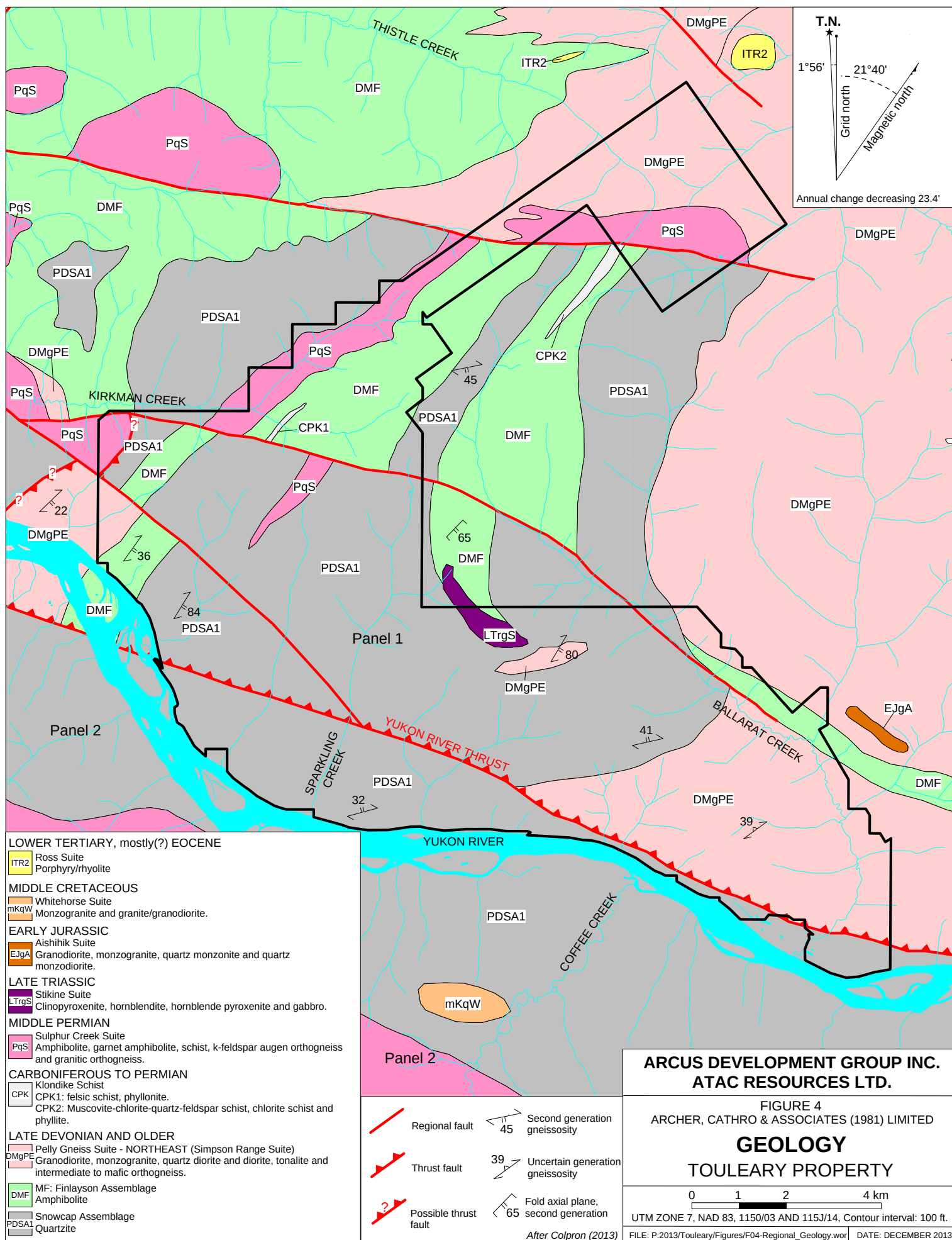


metaclastic rocks. Southwest of Tintina Fault, the YTT assemblage comprises mostly intermediate to mafic metavolcanic and metavolcaniclastic rocks of arc affinity, and fringing metasedimentary rocks (Colpron and Nelson, 2006). Recent regional-scale mapping by the Geological Survey of Canada and Yukon-wide data compilations by the Yukon Geological Survey have greatly increased the understanding of the geology in the South Klondike District. Regional geology in the Touleary property area has been divided into three distinct structural blocks (Panel 1 to 3) based on tectonostratigraphic units and geological histories (Ryan, in prep). These blocks are dismembered by numerous regional-scale faults including the Yukon River Thrust Fault (Figure 4). The following descriptions are after Ryan, 2012 unless referenced differently.

Panel 1 is the structurally highest panel and it comprises Devonian to Mississippian Finlayson Assemblage metavolcanic rocks, which have been intruded by Mississippian Simpson Range Suite (formerly the Pelly Gneiss Suite) plutons. The Finlayson Assemblage is considered to be an arc volcanic-plutonic succession comprised of amphibolites that contain hornblende-plagioclase and epidote±garnet-hornblende-quartz mineral assemblages with local chlorite-biotite overprint (Colpron et al., 2006). Other Finlayson Assemblage rocks appear as massive amphibolite and coarse-grained hornblende-garnet-plagioclase rafts and xenoliths within the Simpson Range Suite. Massive amphibolite locally contain relict pillows, which indicate a volcanic origin. The Simpson Range Suite is characterized by highly foliated to gneissic hornblende-biotite and biotite granodiorite with minor monzogranite, diorite and amphibolite, which yielded 346 Ma ages (Joyce, unpublished data). Simpson Range Suite gabbro and diorite are reportedly difficult to distinguish from Finlayson Assemblage amphibolites. The Late Triassic Pyroxene Mountain Suite (ca. 220 Ma: N. Joyce, unpublished data) occurs only in Panel 1 in the northern part of the map area, exclusively as sills and plugs in the Simpson Range suite. The type locality at Pyroxene Mountain comprises massive, coarse-grained, equigranular clinopyroxenite that is locally completely replaced by hornblendite.

Panel 2 consists of pre-Devonian Snowcap Assemblage, Permian Sulphur Creek Suite and unassigned Peridotite. The Snowcap Assemblage comprises siliciclastic rocks composed of quartzite, micaceous quartzite and psammitic quartz-muscovite-biotite±garnet schist (Colpron, 2006). The quartzite is grey to white, fine-grained and banded to massive. Other siliciclastic rocks commonly contain lenses or layers of marble, amphibolite and garnet amphibolite, which can be upwards of 10 m thick. Garnet-bearing schists are less common. The Sulphur Creek Suite comprises k-feldspar and quartz porphyritic to equigranular syenogranite to granodiorite with local augen and porphyroclastic textures and moderate foliation to strong gneissosity. Textures within the k-feldspar augen granitoid indicate plastic deformation consistent with amphibolite facies metamorphism between 260 and 262 Ma (Joyce, unpublished data). In the Touleary area, the Sulphur Creek Suite intrudes the Finlayson and Snowcap assemblages proximal to regional-scale faults. The Peridotite consists of small lenses of harzburgite, dunite, orthopyroxenite, serpentinite, talc-tremolite schist and listwanite, which help demarcate crustal-scale structural breaks. The closest mapped Peridotite lies about 24 km southwest of the Touleary property.

Panel 3 lies west of the Touleary property. It comprises mainly greenschist facies Permian Klondike schist and Sulphur Creek Suite. The Klondike Assemblage is composed of variably



deformed greenschist-facies volcanic, hypabyssal and sedimentary rocks. This assemblage is characterized by intermediate chlorite- and quartz-feldspar augen muscovite schists, which likely have a volcanic and volcanoclastic origin dating between 256 and 259 Ma (Joyce, unpublished data).

Table V below contains a brief summary of the main lithologies in the Touleary property area. Figure 4 illustrates the distribution of those lithologies.

Table V - Regional Lithologies (After Colpron, 2006)

Unit	Period	Description
ITR2	Lower Tertiary, mostly (?) Eocene	Ross Suite (2): Rhyolite flows, tuffs, ash-flow tuffs and breccias, locally laminated; small stocks and necks of white weathering, flow-banded, quartz-sanidine porphyry to granite porphyry. Local shale, sandstone, conglomerate and obsidian.
mKqW	Mid-Cretaceous	Whitehorse Suite (q): Felsic intrusives ranging in composition from quartz monzonite to leucogranite.
EJgA	Early Jurassic	Aishihik Suite: Medium to coarse grained, foliated biotite-hornblende granodiorite; biotite rich gneiss; foliated hornblende diorite to monzodiorite with local potassium-feldspar megacrysts.
LTrgS	Late Triassic	Stikine Suite: Coarse-grained, foliated, gabbroic hornblende orthogneiss; coarse-grained hornblende-biotite granite and granodiorite with potassium feldspar megacrysts; foliated, fine to medium grained hornblende quartz diorite to diorite with minor biotite.
PqS	Middle Permian	Sulphur Creek Suite: Moderately to strongly foliated biotite quartz monzonite gneiss; coarse grained, homogeneous hornblende-biotite-bearing granite, granodiorite and quartz monzonite with narrow foliated and mylonitic zones of the Ram Stock; Sulphur Creek Orthogneiss.
CPK	Carboniferous to Permian	Klondike Schist (1): Tan to rusty and black weathering muscovite and/or chloritic quartzite and quartz-muscovite-chlorite schist; quartz and/or feldspar augen-bearing quartz-muscovite ($\pm$ chlorite) schist; includes augen gneiss and amphibolite.
		Klondike Schist (2): Resistant, white weathering, white sugary marble with a ductile flow fabric; crystalline marble.
DMgPE	Late Devonian to Mississippian	Pelly Gneiss Suite (g): Massive, resistant, medium grey weathering, blocky, dark green protomylonite and mylonite derived from hornblende granodiorite to quartz diorite; granitic gneiss.
DMF	Late Devonian to	Finlayson Assemblage: Strongly foliated, locally

	Early Mississippian	deccusate textured amphibolite and garnet amphibolite with rare relict volcanic textures; probably derived from mafic sills, dykes, flows and volcanoclastic rocks.
PDSA1	Devonian and older	Snowcap Assemblage: Grey to white quartzite, micaceous quartzite and psammitic quartz-muscovite-biotite ($\pm$ garnet $\pm$ aluminosilicates) schist; minor metaconglomerate.

PROPERTY GEOLOGY

The Touleary property is mostly underlain by Late Devonian to Mississippian Simpson Range Suite (DMgPE) and highly strained Mississippian and older (?) Finlayson Assemblage (DMP) and Snowcap Assemblage (PDSA1) with local packages of younger, ultramafic and granitic rocks. Given the very limited bedrock exposure, no systematic property-scale mapping has been done; however, area-specific mapping has been done in conjunction with the following programs: excavator trenching (2010); diamond drilling (2011); and, hand trenching (2012 and 2013).

The most common rock types observed to date are gneisses and schists. The gneisses comprise the following suites: chlorite-amphibole-hornblende; megacrystic garnet augen gneiss; porphyritic chlorite augen gneiss; aphanitic biotite-chlorite-garnet gneiss; and, fuschite-muscovite-chlorite gneiss. Disseminations and spheres/augens of magnetite, garnet and quartz occur within most gneiss units.

Both mafic and felsic schists have been observed on the property. The felsic schist is composed of quartz-muscovite-talc-sericite-feldspar-biotite $\pm$ sphene $\pm$ garnet $\pm$ pyrite (Wengzynowski, internal summary 2012). The mafic schist comprises biotite-chlorite-muscovite. Both schists have minor components of thinly laminated barite.

In Area A, the intensely deformation and metamorphism observed in drill core make determination of the protoliths difficult; however, based on geological observations and mineral assemblages, the schists likely originated from a felsic or mafic volcanic suite (Leitch, 2011).

In Area C, two other units have been observed in rock specimens taken from soil and hand pits. The first unit is a finely laminated felsic volcanoclastic tuff that contains limonitic bands with lesser disseminated pyrite and minor remnant quartz fragmental textures. The other unit consists of thin mafic to ultramafic layers that typically occur within the gneisses. These layers are fine grained, equigranular and contain dark green chlorite, diopside and actinolite. They are often variably flooded by quartz, ankerite and/or calcite.

Alteration identified on the property includes sericite, ankerite and limonite. In some areas, garnet augens have retrograded to chlorite.

MINERALIZATION

The Touleary property hosts VMS mineralization within a structurally deformed package of quartz-sericite-chlorite-epidote±muscovite±talc schist that has undergone multiple phases of deformation. Petrographic studies on mineralized drill core have been performed by Leitch (2011) and Bennett (2012). Observations made during these studies have been incorporated below. Microstructural evidence suggests that deformation exerts an important control on modal distribution of sulphides with polymetallic ore coarsening and concentrating in early-stage tight to isoclinal fold hinges (Bennett, 2012). The deformation events include: major regional deformation, which metamorphosed the schist; followed by a pyrite alteration event, which preferentially replaced certain minerals in the schist; and a later deformation event, which folded the pyrite-rich schist.

Mineralization occurs along fold limbs and at fold hinges within the drill core. Limb-hosted mineralization comprises wispy, blebby, foliation parallel, sulphides while fold hinge-hosted mineralization consists of semi-massive to massive, net-textured, coarsely recrystallized sulphides. The primary sulphides present are chalcopyrite, pyrite, sphalerite, arsenopyrite, covellite and bornite. Where chalcopyrite is the primary sulphide, an accessory silver-bearing sulfosalt, tetrahedrite (?), occurs. Gangue mineralogy within the semi-massive to massive samples include: quartz, sericite, muscovite and barite (Leitch, 2011). The following photo (TL-11-05 at 129.25 m) is a good illustration of wispy, foliation parallel mineralization that blowouts to coarse sulphides near the fold hinge.

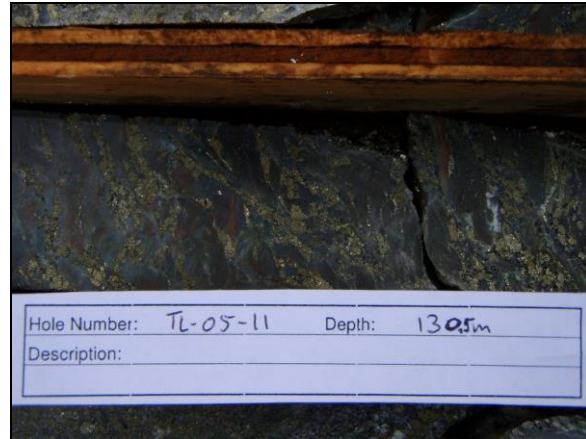


TL-11-05 at 129.25 m

The two following photos show the wispy textures developed on fold limbs in the felsic and intermediate schist-volcaniclastic (?). These photos also demonstrate the direct positive correlation between mineralization and silica content in the schist.

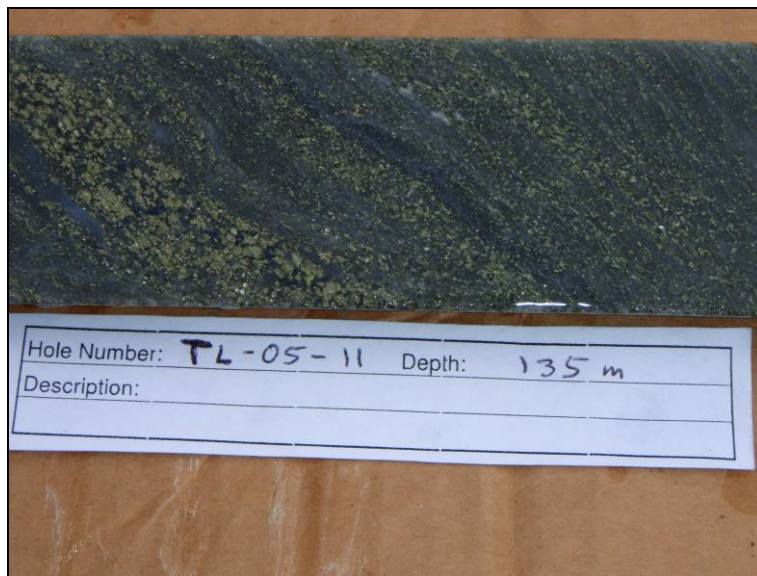


TL-11-03 at 91.52 m



TL-11-05 at 1305.5 m

The next photo is of talc-chlorite-sericite schist-volcaniclastic (?) with heavily disseminated and semi-massive, coarsely recrystallized and fine grained, wispy pyrite and chalcopyrite with relict foliation. This fabric is indicative of a fold limb domain.



TL-11-05 at 135 m

SEM analysis of fold hinge mineralization has shown that sulphide content is 48.37 wt. % chalcopyrite, 2.46 wt. % sphalerite and 4.41 wt. % pyrite, which contrasts dramatically with analysis of the fold limb mineralization where composition of sulphide was 0.89 wt. % chalcopyrite, 0.1 wt. % sphalerite and 35.43 wt. % pyrite (Bennett, 2012).

In 2013, 25 rock samples were collected from road cuts, sparse subcrop and pits dug at anomalous soil sample locations in the southern part of the property. Certificates of Analysis appear in Appendices III. All rock samples were sent to ALS Minerals in Whitehorse, where they were crushed to 70% passing 2 mm before a 250 g split was pulverized to 85% passing 70 microns. Splits of the pulverized fractions were then sent to ALS Minerals in North Vancouver, where they were dissolved in an aqua regia digestion and analyzed for 51 elements

using inductively coupled plasma-mass spectrometry technique (ME-MS41). Results from the rock sample analyses were generally low and did not indicate a direct link to the source of the strongly anomalous soil geochemical values.

SOIL GEOCHEMISTRY

In 2009, 2011 and 2012 grid soil geochemical surveys were conducted on the Touleary property. In total these grids cover less than 35% of the property. All 2009 samples were collected at reconnaissance (50 by 200 m) spacing. In 2011, closer spaced sampling (50 by 50 m and 50 by 100 m) was done in anomalous areas identified in 2009. Additional reconnaissance sampling (50 by 200 m) was also completed in 2011. In 2012, soil samples were collected at 50 by 50 m spacings from the southern part of the sampling area where significant copper-, silver-, lead- and zinc-in-soil values were previously identified. No grid soil samples were collected in 2013. Sampling procedures, analytical techniques and property-wide maps illustrating soil sample locations, and results for gold, copper, silver, lead and zinc geochemistry were all reported in Smith (2013) and have not been reproduced in this document.

Three main anomalous Areas (A, B and C) were identified by the soil geochemical sampling (Figure 5). Thresholds used for describing soil results are shown in Table VI.

Table VI– Soil Sample Thresholds

Element	Weak	Moderate	Strong	2010 Peak	2011 Peak	2012 Peak
Gold (ppb)	$20 \leq 50$	$50 \leq 100$	≥ 100	304	313	24
Silver (ppm)	$0.2 \leq 0.5$	$0.5 \leq 1.0$	≥ 1.0	1.3	3.6	0.9
Copper (ppm)	$20 \leq 50$	$50 \leq 100$	≥ 100	258	218	186
Lead (ppm)	$20 \leq 50$	$50 \leq 100$	≥ 100	521	381	337
Zinc (ppm)	$50 \leq 100$	$100 \leq 200$	≥ 200	377	1190	969

Area A is a 1250 by 350 m northeasterly elongated cluster that encompasses the 2010 and 2011 work areas. Area A straddles linear VTEM and magnetic anomalies. It contains nearly all of the moderately to strongly anomalous gold values on the property. It also hosts coincident silver, copper and zinc values. Antimony and molybdenum response within this area is moderate, while lead and arsenic values are low.

Area B is approximately circular and has a 1000 m diameter. It lies about four kilometres south-southwest of Area A. Area B comprises coincident silver-copper-lead-zinc soil anomalies that overlie a circular magnetic low that is discussed in more detail in the Geophysics section below. A few samples in this area returned moderately anomalous arsenic and molybdenum values.

Area C is a sinusoidal band of elevated values, which is 2150 m long and up to 950 m wide. It is located approximately three kilometres southeast of Area B. The bounds of Area C are defined by moderately to strongly anomalous zinc values. Smaller clusters of silver, lead and copper values lie within Area C. A number of elevated arsenic and molybdenum enriched samples fringe the southern edge of this area.

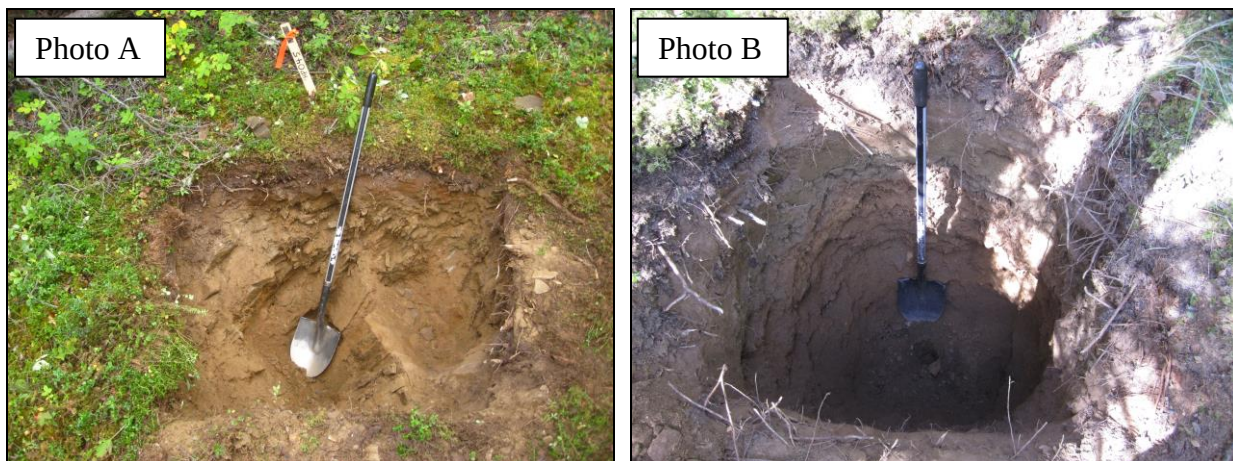
Clusters of anomalous copper values without strong gold, silver, lead or zinc support are scattered across the sampled area. The most interesting of these copper-rich clusters is a linear, but discontinuous, band of strongly anomalous values (up to 258 ppm) located about 1500 m south of Area A. This band is about 1700 m long.

High values for pathfinder elements, including arsenic, antimony and molybdenum, usually occur within the main anomalous areas; however, there are a few noteworthy exceptions. The strongest and most continuous arsenic anomaly lies 1000 m north of Area A and covers a 500 by 1000 m area. A secondary (1200 by 1100 m) arsenic anomaly lies 400 m south of Area A. The sample that yielded the highest antimony value lies 800 m west of Area C in an area with low response for other elements.

In 2013, no follow up work was done in Areas A and B, but hand pitting was completed within Area C and is described in detail in the following section.

HAND PITTING

In 2012, hand pits were dug within three grids (west, central and east) to test strongly anomalous, coincident, deep auger soil sample response within Area C. The pits were spaced at 25 by 100 m intervals and were tied-into known soil sample locations. In 2013, closer spaced (12.5 by 25 m intervals) hand pits were dug within and adjacent to the central and eastern grids, and a small (Mini) grid was established about 300 m along strike to the west of the eastern grid (Figure 5). A total of 133 hand pits were excavated. All hand pits were dug to bedrock (Photo A) or up to two metres depth (Photo B) depending on ground conditions.



In 2013, one or more representative rock samples were collected from all hand pits and a deep-auger soil sample was taken from as deep as possible below the bottom of each pit. The rock samples were all sawn in half, then sorted based on lithology and their respective hand pits' proximity to strong VMS indicator metal in soil. Twenty-five samples were selected and submitted for geochemical analysis. A number of prospective specimens will also be sent to Vancouver Petrographics for petrographic analysis.

Figure 5 shows the hand pit locations while Figures 6 to 10 illustrate thematic results for silver, copper, lead, zinc and gold. Table VII compares conventional and hand pit deep auger soil sample results within Area C.

Table VII– Area C Soil Sample Comparison

Element	2011 Peak Near Surface Soil Sample	2012 Peak Near Surface Soil Sample	2012 Peak Hand Pit Soil Sample	2013 Peak Hand Pit Soil Sample
Gold (ppb)	25	24	28	181
Silver (ppm)	2.5	0.9	5.1	13.8
Copper (ppm)	218	186	579	1305
Lead (ppm)	381	337	2400	2560
Zinc (ppm)	1185	969	4550	8820

The Central grid contains coincident, moderately to strongly anomalous silver, copper, lead and zinc geochemical values. Peak values for these elements are 181 ppb gold, 13.8 ppm silver, 1305 ppm copper, 2560 ppm lead and 8820 ppm zinc.

The East grid soil sampling returned numerous weakly to moderately anomalous geochemical values for gold, silver and copper, with moderately to strongly anomalous results for lead (up to 2460 ppm) and zinc (up to 2800 ppm).

The Mini grid yielded mostly weak to moderate values, with the exception of moderately to strongly anomalous lead (up to 337 ppm) and zinc (up to 1090 ppm) values.

Based on the deep auger surface and hand pit soil sampling data tabulated above, a number of observations can be made: 1) near surface soil samples in the hand pitted portion of Area C are anomalous for silver, copper, lead and zinc but not in gold, compared to surface samples collected elsewhere on the property; 2) soil samples collected from beneath the bottom of hand pits yielded significantly higher values than near surface soil samples, and include anomalous gold results; and, 3) Area C likely hosts a buried VMS horizon that is completely decomposed to soil near surface.

GEOPHYSICS

The magnetic and VTEM helicopter-borne geophysical surveys flown over the Touleary property in 2011 identified a number of magnetic domains with different textures (Witherly, 2011). The VTEM survey data was refined using a first vertical derivative (dB/dt) calculated time constant, which identified five conductive zones – one of which coincides with Area A. Area B is not conductive while the southwest limb of Area C shows moderate VTEM response.

Figure 11 shows the first vertical derivative magnetic signatures with diamond drill hole and hand pit locations. Area A is underlain by a linear magnetic low that is bound by two strong magnetic highs. Area B coincides with a circular magnetic low, which may mark a small intrusive plug. Area C was only partially covered by the geophysical survey and therefore its

geophysical signature cannot be determined. The copper anomaly located 1500 m south of Area A is underlain by magnetic anomalies with similar geometry, but weaker intensity, than those at Area A.

DEPOSIT MODEL

On-going studies are beginning to examine the spatial relationship between orogenic gold deposits and VMS deposits. No direct association has been established as yet (i.e. one deposit type can form without the other); however, it has been observed that orogenic gold deposits commonly occur within VMS districts (pers. comm, Goldfarb 2011) or vice versa. The VMS discovery at the Touleary property within an established orogenic gold camp (evident by placer mines and nearby White Gold and Coffee Creek deposits) supports Goldfarb's theory for a spatial relationship between the two deposit types.

At the present time it is difficult to classify the Touleary VMS discovery into a specific deposit type. However, the high copper content and mafic schist-volcaniclastic (?) host suggests a Besshi-style target. The high lead values in soil at Area E indicates that more than one type of mineralization may be present.

DISCUSSION AND CONCLUSIONS

The Touleary property covers a package of schists and gneisses belonging to the YTT. Reconnaissance- and detailed-scale exploration on the property has identified VMS style mineralization in an area renowned for placer gold. Drilling in 2011 identified gold-, silver-, copper- and zinc-rich VMS horizons in the vicinity of a large soil geochemical anomaly (Area A).

Two additional, undrilled soil geochemical anomalies have been identified on the property (Areas B and C). Area B may be related to an intrusive plug, based on geophysical data, while Area C may represent the surface expression of a second VMS horizon. The lead-, zinc-, silver- and copper-rich and gold-poor geochemical signature of Area C suggest that a second different type of deposit is present or that the skarn is a more distal to vent setting than is indicated at Area A. Small clusters of less mobile elements (silver and lead) within Area C appears to represent areas where there is less soil dispersion (i.e. nearer to in-situ mineralization) or, if the stratigraphic package is folded, a concentration of mineralization near fold hinges.

Future work on the property is warranted and should include the following:

1. Soil sampling – reconnaissance-scale and infill grid deep auger soil sampling should be done in some previously untested areas on the property, including:
 - a. the northwestern part of the property where a band of Finlayson Assemblage rocks occurs;
 - b. the southeastern part of the property where a regional-scale fault juxtaposes Finlayson Assemblage and Snowcap Assemblage with Simpson Range Suite; and,
 - c. within and peripheral to Areas A and B where infill sampling would help delineate known geochemical anomalies.

2. Hand pitting – in areas with strong geochemical response hand pitting is recommended to better define the source and character of the anomaly.
3. Geophysical surveying – a ground-based electromagnetic (horizontal loop?) survey would be useful to test the signature of the known VMS occurrences at Area A. Once the signature is established, additional lines could be used to trace the mineralization along strike. A second EM survey should be done across Area C to identify a buried source for the metals in the anomaly. Both surveys should tie-into soil sample, hand pit and drill hole locations so that results from different data sets can be directly compared.
4. Mechanized trenching – based on the trend of the geochemical anomaly at Area C, mechanized trenching may be effective where the trend crosses the Sparkling Creek road cut. Near the road cut the level of thaw should be sufficient to allow for trenching to reach bedrock. This work should be completed in August or September to allow for maximum seasonal thaw.
5. Diamond drilling – additional drilling is warranted within Area A to further test the known VMS horizon. Ultimately, diamond drilling will be required if buried mineralization is to be discovered within Area C. Reverse circulation drilling is not recommended in either area because of the moderately steep, forested terrain.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



H. Burrell, B.Sc., P.Geo.

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Yukon Zinc Corp.

2013 www.yukonzinc.com

APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Heather Burrell, geologist, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address in Squamish, British Columbia do hereby certify that:

1. I graduated from the University of British Columbia in 2006 with a B.Sc in Earth and Ocean Sciences.
2. From 2004 to present, I have been actively engaged in mineral exploration in the Yukon Territory, British Columbia and Northwest Territories.
3. I am a Professional Geoscientist (P.Geo.) with the Association of Professional Engineers and Geoscientists of British Columbia (Member Number 34689).
4. I have personally directed the fieldwork reported herein and have interpreted all data resulting from this work.



H. Burrell, B.Sc., P.Geo.

APPENDIX II

STATEMENT OF EXPENDITURES

Statement of Expenditures
Touleary Mineral Claims
April 25, 2014

Labour

D. Eaton – geologist – 12 hours May to February at \$120/hr	\$ 1,512.00
H. Burrell – geologist – 93 hours May to February at \$96/hr	9,374.40
L. Flavelle – geologist – 6 hours May to February at \$68/hr	428.40
J. McArther – field assistant – 136 hours May to February at \$69/hr	9,853.20
L. Engels – field assistant – 96 hours May to February at \$58/hr	5,846.40
D. Libman – field assistant – 65 hours May to February at \$55/hr	3,753.75
T. Stefanick – field assistant – 136 hours May to February at \$53/hr	7,568.40
L. Corbett – expeditor – 25 hours May to February at \$81/hr	2,126.25
L. Smith – expeditor – 13 hours May to February at \$62/hr	<u>846.30</u>
	41,309.10

Expenses (incl. management)

Field room and board – 65 ½ mandays at \$135/day	10,027.40
Fireweed Helicopters – 10.9 hours Bell 206B at \$1,050/hour plus fuel	14,220.71
Great River Aviation	5,660.39
ALS Chemex	3,566.84
Arcus (net of GST & no Management)	4,319.57
SKIVIK (net of GST & no Management)	<u>16,422.80</u>
	54,217.71

Total	<u>\$95,526.81</u>
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Total 158 soil and rock samples = \$604.60/sample

APPENDIX III
CERTIFICATE OF ANALYSIS



ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **ARCHER, CATHRO AND ASSOCIATES (1981)
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1016 - 510 W HASTINGS ST
VANCOUVER BC V6B 1L8**

Page: 1
Finalized Date: 23-SEP-2013
Account: F

CERTIFICATE WH13161573

Project: Touleary

P.O. No.:

This report is for 25 Rock samples submitted to our lab in Whitehorse, YT, Canada on 4-SEP-2013.

The following have access to data associated with this certificate:

JOAN MARIACHER

HEATHER SMITH

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

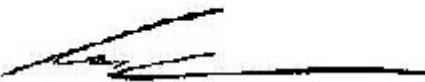
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED
ATTN: JOAN MARIACHER
1016 - 510 W HASTINGS ST
VANCOUVER BC V6B 1L8**

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A
 Total # Pages: 2 (A - C)
 Plus Appendix Pages
 Finalized Date: 23-SEP-2013
 Account: F

Project: Touleary

CERTIFICATE OF ANALYSIS WH13161573

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
K269134		1.51	<0.2	0.73	<2	<10	50	<0.5	<2	3.95	<0.5	11	27	132	2.26	<10
K269135		2.53	21.4	0.24	<2	<10	1270	<0.5	7	0.01	<0.5	1	7	21	0.36	<10
K269136		0.50	<0.2	0.21	<2	<10	230	<0.5	<2	0.11	<0.5	2	25	52	0.53	<10
K269137		0.64	<0.2	1.02	<2	<10	980	<0.5	<2	0.72	<0.5	5	11	57	2.36	<10
K269138		0.61	<0.2	0.65	<2	<10	40	<0.5	<2	0.71	<0.5	9	23	105	1.56	<10
K269139		0.59	<0.2	1.49	<2	<10	110	<0.5	<2	0.42	<0.5	7	5	55	2.36	10
K269140		0.60	<0.2	1.44	<2	<10	210	<0.5	<2	0.97	<0.5	16	20	44	2.69	<10
K269141		2.08	<0.2	1.56	48	<10	530	1.0	<2	0.81	<0.5	17	33	42	2.96	10
M354952		1.06	0.5	1.87	4	<10	470	0.5	2	0.22	0.5	16	3	526	3.65	10
M354953		1.25	0.3	0.85	<2	<10	150	<0.5	<2	0.03	0.5	1	3	201	3.60	<10
M354954		0.64	3.3	1.88	<2	<10	710	<0.5	12	0.09	0.6	5	4	760	5.08	10
M354955		1.04	<0.2	0.97	<2	<10	480	<0.5	<2	0.03	3.0	2	3	28	2.90	<10
M354956		0.85	2.5	0.77	<2	<10	190	<0.5	22	0.03	1.6	5	4	398	2.23	<10
M354957		0.79	0.9	2.30	<2	<10	300	0.8	2	0.25	1.3	12	15	241	2.76	10
M354958		0.61	0.3	1.50	13	<10	610	0.5	2	0.06	1.1	3	3	110	4.32	<10
M354959		1.28	0.4	1.59	4	<10	280	<0.5	<2	0.10	0.9	2	4	310	3.43	<10
M354960		0.64	1.4	2.02	<2	<10	510	<0.5	2	0.22	1.7	4	6	456	3.63	10
M354961		0.07	0.4	0.44	5	<10	450	<0.5	<2	21.5	26.5	7	1	128	5.43	<10
M354962		0.39	0.6	2.15	<2	<10	510	0.6	<2	0.20	2.9	7	4	278	3.73	10
M354963		0.46	0.4	0.74	<2	<10	720	<0.5	<2	0.07	0.6	2	3	19	0.71	<10
M354964		1.44	0.2	0.71	2	<10	1660	1.0	<2	0.41	2.3	5	6	119	1.04	<10
M354965		0.77	0.3	0.94	<2	<10	630	0.7	2	0.28	1.6	4	8	71	1.05	<10
M354966		0.21	7.5	0.62	<2	<10	2300	<0.5	37	0.17	0.5	2	6	20	0.81	<10
M354967		0.90	<0.2	0.86	<2	<10	300	0.8	<2	0.18	3.1	4	5	6	1.87	<10
M354968		0.46	1.1	0.67	2	<10	530	0.8	3	0.14	4.5	7	6	35	1.38	<10



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CERTIFICATE OF ANALYSIS WH13161573

Sample Description	Method Analyte Units LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
K269134		<1	0.04	<10	1.48	802	23	0.02	21	750	2	0.02	<2	4	65	<20
K269135		12	0.09	<10	0.02	32	10	0.03	<1	60	233	0.08	<2	1	176	<20
K269136		<1	0.02	<10	0.18	84	<1	0.01	5	110	2	0.01	<2	1	3	<20
K269137		<1	0.10	<10	0.46	497	1	0.08	4	660	32	0.03	<2	4	27	<20
K269138		<1	0.04	<10	0.62	443	5	0.10	7	340	<2	0.01	<2	4	5	<20
K269139		<1	0.12	<10	1.04	232	<1	0.07	4	580	2	<0.01	2	4	17	<20
K269140		<1	0.27	<10	0.93	346	<1	0.08	14	400	2	0.70	<2	6	11	<20
K269141		<1	0.20	20	0.56	206	5	0.05	60	540	5	0.06	<2	3	28	<20
M354952		<1	0.31	10	1.01	931	5	0.02	2	110	51	0.01	<2	2	13	<20
M354953		<1	0.29	<10	0.31	301	7	0.02	2	80	67	0.04	<2	<1	8	<20
M354954		<1	0.59	10	0.98	599	40	0.03	2	90	187	0.08	2	1	17	<20
M354955		<1	0.38	10	0.44	274	14	0.02	2	90	40	0.01	<2	1	7	<20
M354956		<1	0.22	10	0.16	1090	15	0.01	2	40	378	0.01	<2	1	6	<20
M354957		<1	0.35	40	0.84	1550	4	0.02	7	320	929	<0.01	<2	5	18	20
M354958		<1	0.37	<10	0.29	342	17	0.02	3	110	156	0.02	<2	1	11	<20
M354959		<1	0.48	10	0.70	303	7	0.02	2	110	119	0.02	<2	1	9	<20
M354960		<1	0.49	10	1.26	809	14	0.04	3	340	271	0.10	<2	2	27	<20
M354961		<1	0.07	70	0.28	3920	12	0.03	4	90	227	0.03	<2	9	188	<20
M354962		<1	0.69	10	1.56	1020	12	0.04	2	140	322	0.01	<2	2	14	<20
M354963		<1	0.40	20	0.23	359	2	0.02	1	150	172	0.01	<2	1	8	<20
M354964		<1	0.22	20	0.16	1605	2	<0.01	5	190	142	0.06	<2	3	640	<20
M354965		<1	0.47	20	0.25	1290	1	0.04	5	580	235	0.01	<2	3	21	<20
M354966		<1	0.34	<10	0.12	540	1	0.04	<1	110	284	0.06	<2	1	66	<20
M354967		<1	0.27	20	0.17	544	<1	0.06	3	280	14	<0.01	<2	5	10	<20
M354968		<1	0.23	20	0.07	1945	2	0.03	6	250	548	0.01	<2	4	11	<20



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CERTIFICATE OF ANALYSIS WH13161573

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	CERTIFICATE COMMENTS			
	LABORATORY ADDRESSES			
	Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.			
	Applies to Method:	CRU - 31	CRU - QC	LOG - 22
		PUL - QC	SPL - 21	PUL - 31
	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	Applies to Method:	ME - ICP41		



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CERTIFICATE WH13161574

Project: Touleary
P.O. No.: Batch 1
This report is for 135 Soil samples submitted to our lab in Whitehorse, YT, Canada
on 4-SEP-2013.

The following have access to data associated with this certificate:

JOAN MARIACHER

HEATHER SMITH

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both
EXTRA-01	Extra Sample received in Shipment

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED
ATTN: JOAN MARIACHER
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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CERTIFICATE OF ANALYSIS WH13161574

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ZZ91001		0.34	0.7	3.63	2	<10	620	1.6	<2	0.82	2.3	30	61	201	6.58	10
ZZ91002		0.27	1.9	3.88	<2	<10	1380	1.2	<2	0.71	7.9	27	61	336	7.16	10
ZZ91003		0.35	0.4	1.73	3	<10	240	<0.5	<2	0.23	3.4	6	5	89	2.13	<10
ZZ91004		0.27	1.1	3.33	<2	<10	950	0.9	5	0.61	7.3	23	6	1015	6.07	10
ZZ91005		0.29	1.1	2.76	<2	<10	530	0.9	2	0.48	2.4	6	7	315	3.47	10
ZZ91006		0.27	2.7	1.73	9	<10	490	<0.5	<2	0.46	2.0	11	28	221	2.81	<10
ZZ91007		0.32	1.2	3.82	<2	<10	770	0.8	<2	0.66	1.1	8	9	106	3.04	10
ZZ91008		0.28	<0.2	2.13	2	<10	400	0.6	<2	0.47	<0.5	11	19	50	3.35	10
ZZ91009		0.30	0.7	3.61	<2	<10	620	0.7	<2	0.86	0.5	23	97	128	6.03	10
ZZ91010		0.33	0.4	3.71	<2	<10	810	0.9	<2	1.03	0.8	31	76	102	7.41	10
ZZ91011		0.40	0.5	3.83	<2	<10	1760	0.9	<2	1.03	1.1	31	18	148	6.35	10
ZZ91012		0.37	2.4	2.11	2	<10	240	0.6	5	0.26	1.1	6	8	471	3.48	<10
ZZ91013		0.38	1.7	1.96	<2	<10	290	0.6	<2	0.27	1.0	7	8	174	2.53	10
ZZ91014		0.35	1.1	1.83	2	<10	400	0.5	<2	0.32	1.6	9	11	42	1.96	10
ZZ91015		0.26	0.5	1.44	5	<10	420	<0.5	<2	0.22	1.3	7	17	21	1.77	<10
ZZ91016		0.29	1.7	3.67	3	<10	670	0.8	2	0.35	0.9	16	178	321	4.29	10
ZZ91017		0.31	4.3	1.24	6	<10	490	1.2	24	0.10	8.1	19	6	1305	5.50	<10
ZZ91018		0.32	0.4	2.09	2	<10	760	0.9	<2	0.22	6.8	6	5	145	3.38	10
ZZ91019		0.42	1.1	2.50	6	<10	690	0.7	<2	0.27	0.7	9	26	676	4.92	10
ZZ91020		0.38	0.7	1.63	<2	<10	970	0.7	<2	0.34	2.8	18	26	1250	3.02	<10
ZZ91021		0.33	0.4	2.92	4	<10	540	0.8	<2	0.65	0.9	9	64	348	3.95	10
ZZ91022		0.36	<0.2	1.42	5	<10	520	1.0	<2	0.38	2.9	10	13	93	3.39	10
ZZ91023		0.37	<0.2	2.56	9	<10	200	0.5	<2	0.24	0.8	14	17	75	3.98	10
ZZ91024		0.37	0.4	3.17	7	<10	2180	0.9	<2	0.54	3.5	29	33	303	5.34	10
ZZ91025		0.32	<0.2	2.76	2	<10	1620	0.9	<2	0.74	2.1	18	13	88	4.88	10
ZZ91026		0.29	<0.2	3.63	5	<10	890	0.8	<2	0.49	0.5	24	37	95	5.85	10
ZZ91027		0.37	<0.2	1.97	7	<10	2100	2.4	<2	0.30	0.9	12	21	131	2.92	10
ZZ91028		0.33	<0.2	2.50	5	<10	260	0.5	<2	0.40	0.6	12	36	46	3.50	10
ZZ91029		0.37	<0.2	2.61	4	<10	390	0.7	2	0.19	<0.5	12	33	46	4.34	10
ZZ91030		0.35	<0.2	1.78	7	<10	290	0.6	2	0.24	0.9	9	16	54	2.99	10
ZZ91031		0.36	0.3	3.77	8	<10	1790	0.9	<2	0.87	<0.5	30	435	84	7.02	10
ZZ91032		0.33	<0.2	2.29	3	<10	390	<0.5	2	0.24	<0.5	8	8	32	2.98	10
ZZ91033		0.31	0.2	1.77	8	<10	320	<0.5	<2	0.36	<0.5	9	26	43	2.64	<10
ZZ91034		0.40	<0.2	3.08	4	<10	2180	0.9	<2	1.54	0.5	29	25	107	5.22	10
ZZ91035		0.30	<0.2	2.17	7	<10	270	0.9	2	0.13	<0.5	7	17	15	3.38	10
ZZ91036		0.30	0.2	3.03	3	<10	500	4.6	<2	0.74	0.8	22	50	83	5.41	10
ZZ91037		0.42	0.5	4.86	5	<10	1210	1.5	<2	1.51	<0.5	47	74	74	8.09	10
ZZ91038		0.33	<0.2	1.59	5	<10	230	0.7	<2	0.30	<0.5	8	10	29	3.06	10
ZZ91039		0.49	<0.2	2.34	6	<10	130	1.1	<2	0.48	<0.5	13	20	38	4.36	10
ZZ91040		0.37	<0.2	1.31	6	<10	80	1.2	<2	0.16	<0.5	5	9	22	3.41	<10



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Sample Description	Method Analyte Units LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
ZZ91001		<1	0.45	90	2.41	1795	2	0.02	21	1510	337	0.01	<2	15	26	20
ZZ91002		1	1.40	40	2.55	3080	4	0.04	29	1390	333	0.01	<2	17	29	<20
ZZ91003		<1	0.26	60	1.64	678	5	0.01	4	620	117	0.01	<2	2	12	40
ZZ91004		<1	1.05	30	1.94	1815	16	0.03	9	1810	1270	0.01	<2	13	26	<20
ZZ91005		<1	0.70	20	2.14	834	11	0.04	4	320	550	0.01	<2	2	26	<20
ZZ91006		<1	0.34	30	0.96	701	5	0.03	19	640	638	0.01	<2	4	32	<20
ZZ91007		<1	1.14	50	3.97	1160	2	0.04	8	660	209	0.03	<2	4	44	20
ZZ91008		<1	0.71	10	1.31	724	2	0.02	11	880	95	0.01	<2	4	25	<20
ZZ91009		<1	1.63	10	2.30	1395	2	0.03	27	1810	202	0.01	<2	4	47	<20
ZZ91010		<1	1.28	10	2.25	1175	2	0.03	29	2420	100	0.02	<2	6	59	<20
ZZ91011		<1	1.68	10	2.75	1140	3	0.03	21	1890	114	0.02	<2	4	64	<20
ZZ91012		<1	0.39	40	1.67	1220	49	0.01	6	790	1555	0.01	<2	3	11	30
ZZ91013		<1	0.17	40	1.10	1150	2	0.02	6	380	349	0.01	<2	3	14	30
ZZ91014		<1	0.31	10	1.11	627	3	0.02	7	410	294	0.01	<2	2	24	<20
ZZ91015		<1	0.11	10	0.54	428	3	0.02	9	230	135	0.01	<2	2	18	<20
ZZ91016		<1	0.82	30	2.41	1160	56	0.02	65	410	865	0.01	<2	5	25	<20
ZZ91017		<1	0.13	30	0.27	4880	51	0.01	7	310	984	0.02	<2	5	22	20
ZZ91018		<1	0.74	40	1.43	1850	14	0.03	5	420	169	0.02	<2	4	25	20
ZZ91019		<1	0.39	30	1.42	1140	34	0.03	12	260	349	0.05	<2	5	29	<20
ZZ91020		<1	0.50	110	0.63	2050	21	0.03	13	770	355	0.01	<2	5	24	<20
ZZ91021		<1	0.58	30	2.07	776	5	0.04	22	1040	233	0.01	<2	7	44	<20
ZZ91022		<1	0.41	40	0.43	2740	3	0.01	9	890	2390	<0.01	<2	7	23	<20
ZZ91023		<1	0.57	20	1.05	989	1	0.01	8	680	264	0.01	<2	5	13	<20
ZZ91024		1	1.70	40	1.83	2700	3	0.01	36	1560	2460	0.01	<2	16	35	<20
ZZ91025		<1	1.39	70	1.36	1515	1	0.01	8	1840	57	0.01	<2	8	35	<20
ZZ91026		<1	1.72	10	1.98	1280	1	0.02	19	1340	62	0.01	<2	7	26	<20
ZZ91027		<1	0.46	40	0.83	1010	1	<0.01	11	810	527	0.03	<2	6	44	<20
ZZ91028		<1	0.54	40	1.34	985	1	0.01	18	400	772	0.01	<2	7	24	<20
ZZ91029		<1	1.33	50	1.47	1210	1	0.01	17	480	41	0.02	<2	7	15	<20
ZZ91030		1	0.50	30	0.71	771	<1	0.01	9	280	234	0.03	<2	6	17	<20
ZZ91031		<1	0.82	10	1.71	707	1	0.01	61	1670	26	0.04	<2	24	50	<20
ZZ91032		<1	1.16	40	1.67	1180	<1	0.01	6	400	209	0.04	<2	2	13	20
ZZ91033		<1	0.14	20	0.71	496	1	0.01	17	520	143	0.05	<2	5	25	<20
ZZ91034		<1	1.38	10	2.18	850	<1	0.02	13	5130	15	0.03	<2	8	65	<20
ZZ91035		<1	0.67	10	0.74	588	1	0.01	9	320	15	0.04	<2	4	12	<20
ZZ91036		<1	1.42	20	1.78	1000	1	0.01	21	1830	55	0.04	<2	8	28	<20
ZZ91037		1	2.17	30	3.85	1415	<1	0.03	36	2830	24	0.04	<2	12	55	<20
ZZ91038		<1	0.26	40	0.72	782	1	0.01	8	550	31	0.03	<2	5	22	20
ZZ91039		<1	0.43	30	1.11	763	2	0.01	10	700	17	0.04	<2	7	33	20
ZZ91040		<1	0.10	90	0.23	483	2	0.01	7	310	39	0.04	<2	11	13	40



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-ICP21
		Ti	Ti	U	V	W	Zn	Au
		%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	10	10	1	10	2	0.001
ZZ91001		0.08	<10	<10	133	<10	1090	0.018
ZZ91002		0.21	<10	<10	137	<10	2160	0.013
ZZ91003		0.02	<10	<10	10	<10	662	0.013
ZZ91004		0.16	<10	<10	131	<10	8820	0.002
ZZ91005		0.03	<10	<10	24	<10	2140	0.014
ZZ91006		0.10	<10	<10	47	<10	710	0.027
ZZ91007		0.11	<10	<10	42	<10	1390	0.020
ZZ91008		0.13	<10	<10	58	<10	616	<0.001
ZZ91009		0.37	<10	<10	101	<10	703	<0.001
ZZ91010		0.36	<10	<10	121	<10	439	<0.001
ZZ91011		0.43	<10	<10	143	<10	946	0.007
ZZ91012		0.03	<10	<10	14	<10	1110	0.025
ZZ91013		0.01	<10	<10	29	<10	751	0.009
ZZ91014		0.06	<10	<10	27	<10	927	0.001
ZZ91015		0.04	<10	<10	34	<10	431	<0.001
ZZ91016		0.13	<10	<10	66	<10	1410	0.004
ZZ91017		0.01	<10	<10	11	<10	1490	0.053
ZZ91018		0.04	<10	<10	15	<10	596	0.005
ZZ91019		0.08	<10	<10	39	<10	671	0.027
ZZ91020		0.04	<10	<10	32	<10	1090	0.019
ZZ91021		0.14	<10	<10	51	<10	949	0.059
ZZ91022		0.03	<10	<10	40	<10	1120	0.001
ZZ91023		0.16	<10	<10	60	<10	808	<0.001
ZZ91024		0.14	<10	<10	85	<10	2800	0.001
ZZ91025		0.30	<10	<10	90	<10	403	<0.001
ZZ91026		0.33	<10	<10	98	<10	411	<0.001
ZZ91027		0.11	<10	<10	45	<10	467	<0.001
ZZ91028		0.19	<10	<10	61	<10	1040	0.001
ZZ91029		0.22	<10	<10	48	<10	420	<0.001
ZZ91030		0.15	<10	<10	41	<10	605	<0.001
ZZ91031		0.06	<10	<10	130	<10	182	0.001
ZZ91032		0.14	<10	<10	15	<10	588	<0.001
ZZ91033		0.13	<10	<10	53	<10	325	0.001
ZZ91034		0.23	<10	<10	140	<10	271	<0.001
ZZ91035		0.13	<10	<10	37	<10	223	0.039
ZZ91036		0.28	<10	<10	90	<10	468	<0.001
ZZ91037		0.44	<10	<10	198	<10	244	<0.001
ZZ91038		0.02	<10	<10	25	<10	227	<0.001
ZZ91039		0.06	<10	<10	60	<10	238	<0.001
ZZ91040		0.01	<10	<10	31	<10	384	0.001



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ZZ91041		0.32	1.2	2.75	9	<10	230	0.5	<2	0.27	<0.5	10	29	64	3.48	10
ZZ91042		0.42	0.8	2.70	8	<10	310	0.7	3	0.31	3.7	5	13	214	3.58	10
ZZ91043		0.31	0.6	2.97	<2	<10	820	0.8	3	0.67	2.5	13	22	582	4.35	10
ZZ91049		Not Recvd														
ZZ91050		Not Recvd														
ZZ91051		0.21	13.8	2.24	4	<10	510	0.5	2	0.56	1.8	10	36	74	4.70	10
ZZ91052		0.28	0.3	3.07	4	<10	570	0.5	<2	0.83	0.8	16	43	40	5.03	10
ZZ91053		0.29	0.7	1.85	2	<10	340	<0.5	3	0.40	0.9	7	9	45	2.24	<10
ZZ91054		0.28	1.2	3.11	2	<10	1250	0.7	3	0.71	2.0	25	18	231	3.65	10
ZZ91055		0.36	0.8	1.80	2	<10	410	0.6	2	0.54	3.0	7	4	280	2.93	<10
ZZ91056		0.57	1.1	1.62	3	<10	300	0.6	2	0.27	3.2	5	7	69	1.70	<10
ZZ91057		0.35	0.2	3.84	3	<10	1240	1.0	4	1.06	8.9	35	28	187	6.14	10
ZZ91058		0.37	1.0	2.16	7	<10	250	1.0	3	0.29	7.2	13	21	208	3.95	10
ZZ91059		0.40	1.0	1.93	4	<10	120	0.9	4	0.17	2.4	7	10	214	3.08	10
ZZ91060		0.35	2.8	2.57	3	<10	580	0.7	2	0.23	1.6	9	11	89	2.81	10
ZZ91061		0.32	0.3	2.26	20	<10	210	0.6	<2	0.28	<0.5	6	13	49	2.98	10
ZZ91062		0.32	<0.2	2.63	3	<10	910	0.8	<2	0.47	1.9	11	8	207	4.17	10
ZZ91063		0.24	2.1	2.57	5	<10	540	1.0	4	0.46	6.6	19	8	714	4.33	10
ZZ91064		0.35	0.9	2.33	5	<10	490	0.8	<2	0.25	4.6	29	10	391	2.21	10
ZZ91065		0.35	0.6	3.71	3	<10	1050	1.0	<2	0.36	1.3	21	9	487	5.76	10
ZZ91066		0.33	<0.2	3.35	4	<10	500	0.7	<2	0.20	1.3	16	8	219	3.93	10
ZZ91067		0.33	<0.2	3.35	2	<10	990	1.1	<2	0.36	1.3	10	4	213	4.33	10
ZZ91068		0.41	1.6	3.15	2	<10	820	0.8	4	0.63	2.9	17	9	466	4.41	10
ZZ91069		0.31	1.0	2.57	3	<10	600	0.7	3	0.60	0.5	19	26	103	5.12	10
ZZ91070		0.29	0.2	3.99	3	<10	1010	0.8	<2	0.45	0.6	27	48	131	6.31	10
ZZ91071		0.35	0.2	2.90	2	<10	910	0.5	<2	0.58	<0.5	24	17	48	4.51	10
ZZ91072		0.53	0.2	2.90	3	<10	960	0.5	<2	0.51	<0.5	24	10	51	4.74	10
ZZ91073		0.44	<0.2	3.30	3	<10	970	0.6	<2	0.53	<0.5	27	14	50	5.09	10
ZZ91074		0.35	<0.2	2.14	3	<10	340	0.6	<2	0.34	3.2	12	22	95	3.30	10
ZZ91075		0.41	<0.2	4.95	<2	<10	640	1.3	<2	0.47	0.5	26	329	115	7.27	20
ZZ91076		0.32	<0.2	1.91	4	<10	220	<0.5	<2	0.30	<0.5	10	28	27	2.86	10
ZZ91077		0.34	0.2	2.81	8	<10	1080	0.9	<2	0.56	2.2	22	20	112	6.07	10
ZZ91078		0.32	0.4	2.57	3	<10	440	0.7	<2	0.67	0.5	17	27	84	4.31	10
ZZ91082		0.36	0.2	2.81	5	<10	910	0.7	<2	0.63	6.6	24	17	248	4.82	10
ZZ91083		0.36	<0.2	1.98	4	<10	260	0.5	<2	0.29	<0.5	10	23	35	3.05	10
ZZ91084		0.37	<0.2	2.81	5	<10	410	0.7	<2	0.36	0.7	16	18	69	4.31	10
ZZ91085		0.25	<0.2	2.05	<2	<10	370	<0.5	2	0.17	<0.5	7	9	26	2.91	10
ZZ91086		0.34	0.2	2.92	<2	<10	680	<0.5	<2	0.55	<0.5	44	4	128	6.14	10
ZZ91087		0.29	0.4	2.19	2	<10	610	4.2	<2	0.54	5.7	29	43	106	6.26	10
ZZ91088		0.37	0.2	3.75	4	<10	750	5.9	2	1.10	2.7	32	37	80	6.13	10



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Sample Description	Method Analyte Units LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
ZZ91041		<1	0.50	10	1.65	499	3	0.01	18	660	33	0.05	<2	4	22	<20
ZZ91042		<1	0.35	50	1.81	743	5	0.02	9	630	263	0.06	<2	4	40	20
ZZ91043		<1	0.37	30	2.37	1345	7	0.02	14	1670	307	0.06	<2	6	51	<20
ZZ91049																
ZZ91050																
ZZ91051		<1	0.68	20	0.83	692	3	0.02	9	1540	174	0.19	<2	4	90	<20
ZZ91052		<1	1.55	<10	2.06	989	<1	0.02	20	1750	71	0.03	<2	3	41	<20
ZZ91053		<1	0.70	40	1.49	575	3	0.01	7	860	65	0.03	<2	3	18	30
ZZ91054		1	1.40	20	2.80	1820	7	0.03	19	1230	551	0.04	<2	3	53	<20
ZZ91055		<1	0.72	40	1.10	963	4	0.01	5	1620	488	0.03	<2	5	24	20
ZZ91056		<1	0.28	90	1.52	684	2	0.01	6	580	201	0.03	<2	3	13	30
ZZ91057		<1	1.57	20	3.01	2550	2	0.03	25	1790	533	0.03	<2	6	51	<20
ZZ91058		<1	0.16	170	0.86	1240	3	0.01	13	600	287	0.03	<2	11	20	30
ZZ91059		<1	0.14	130	0.82	1045	4	0.01	8	370	654	0.03	<2	8	13	50
ZZ91060		<1	0.56	30	2.35	963	5	0.01	7	490	529	0.03	<2	3	22	30
ZZ91061		<1	0.44	40	1.25	737	8	0.01	8	210	23	0.03	<2	3	18	<20
ZZ91062		<1	0.68	20	1.88	1250	8	0.03	8	920	192	0.03	<2	4	28	<20
ZZ91063		<1	0.78	20	1.56	1640	22	0.01	12	1030	1970	0.04	<2	4	46	<20
ZZ91064		<1	0.27	70	2.03	2640	12	0.01	8	410	322	0.04	<2	4	14	30
ZZ91065		1	0.83	180	2.07	2250	18	0.02	7	1090	2560	0.11	<2	8	156	20
ZZ91066		<1	0.80	50	2.55	1905	13	0.03	7	410	107	0.02	<2	3	14	20
ZZ91067		<1	0.72	60	2.64	1175	8	0.02	5	680	144	0.02	<2	4	20	20
ZZ91068		<1	0.93	20	2.39	1150	7	0.03	9	1640	367	0.03	<2	5	35	<20
ZZ91069		<1	1.14	10	1.35	1025	1	0.01	11	1340	111	<0.01	2	7	25	<20
ZZ91070		<1	2.25	20	2.49	1675	<1	0.02	22	1240	98	<0.01	<2	7	26	<20
ZZ91071		1	1.31	10	1.93	639	<1	0.02	12	1390	14	<0.01	2	3	28	<20
ZZ91072		1	1.62	10	1.78	821	<1	0.02	8	1380	17	<0.01	<2	3	22	<20
ZZ91073		1	1.72	10	2.11	736	<1	0.02	11	1390	17	<0.01	2	3	23	<20
ZZ91074		<1	0.74	60	1.07	1470	<1	0.01	13	630	383	<0.01	<2	6	18	20
ZZ91075		<1	2.93	60	3.84	2340	1	0.01	192	1080	209	<0.01	2	10	28	<20
ZZ91076		<1	0.23	20	0.86	589	<1	0.01	16	340	134	<0.01	2	5	22	<20
ZZ91077		1	1.59	30	1.49	1575	1	0.01	11	1740	41	<0.01	<2	11	22	<20
ZZ91078		<1	0.95	20	1.53	895	1	0.01	18	920	102	<0.01	<2	5	30	<20
ZZ91082		<1	0.99	20	1.80	1340	6	0.03	14	1620	154	<0.01	2	5	33	<20
ZZ91083		<1	0.49	20	0.88	698	<1	0.01	12	300	177	<0.01	<2	5	23	<20
ZZ91084		<1	1.27	30	1.67	1240	<1	0.01	12	730	409	<0.01	2	4	20	<20
ZZ91085		<1	0.79	30	1.23	837	<1	0.01	5	330	74	<0.01	<2	4	13	<20
ZZ91086		<1	1.34	<10	2.60	456	<1	0.04	29	360	<2	<0.01	<2	15	21	<20
ZZ91087		<1	0.94	20	0.69	1225	2	0.01	26	1530	51	<0.01	<2	15	18	20
ZZ91088		<1	1.18	10	3.12	1250	<1	0.02	24	1860	79	<0.01	4	10	47	<20



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-ICP21
		Ti	Ti	U	V	W	Zn	Au
		%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	10	10	1	10	2	0.001
ZZ91041		0.12	<10	<10	66	<10	239	<0.001
ZZ91042		0.04	<10	<10	27	<10	470	0.007
ZZ91043		0.03	<10	<10	53	<10	1150	0.038
ZZ91049								
ZZ91050								
ZZ91051		0.18	<10	<10	43	<10	648	0.003
ZZ91052		0.38	<10	<10	87	<10	401	<0.001
ZZ91053		0.08	<10	<10	31	<10	572	0.003
ZZ91054		0.19	<10	<10	61	<10	1810	0.010
ZZ91055		0.08	<10	<10	49	<10	3480	0.006
ZZ91056		0.01	<10	<10	11	<10	1235	0.006
ZZ91057		0.35	<10	<10	137	<10	1930	0.003
ZZ91058		0.02	<10	<10	50	<10	1130	0.007
ZZ91059		0.01	<10	<10	23	<10	1065	0.006
ZZ91060		0.05	<10	<10	25	<10	1365	0.051
ZZ91061		0.06	<10	<10	25	<10	205	<0.001
ZZ91062		0.07	<10	<10	54	<10	577	0.004
ZZ91063		0.11	<10	<10	48	<10	7170	0.017
ZZ91064		0.01	<10	<10	21	<10	1770	0.032
ZZ91065		0.10	<10	<10	87	<10	1010	0.009
ZZ91066		0.05	<10	<10	16	<10	666	0.003
ZZ91067		0.04	<10	<10	31	<10	717	0.012
ZZ91068		0.10	<10	<10	56	<10	2020	0.019
ZZ91069		0.20	<10	<10	76	<10	449	0.002
ZZ91070		0.36	<10	<10	102	<10	469	<0.001
ZZ91071		0.29	<10	<10	95	<10	244	<0.001
ZZ91072		0.30	<10	<10	92	<10	207	<0.001
ZZ91073		0.33	<10	<10	115	<10	250	<0.001
ZZ91074		0.16	<10	<10	46	<10	655	<0.001
ZZ91075		0.33	<10	<10	87	<10	1500	<0.001
ZZ91076		0.15	<10	<10	54	<10	332	<0.001
ZZ91077		0.29	<10	<10	97	<10	293	<0.001
ZZ91078		0.25	<10	<10	83	<10	459	0.004
ZZ91082		0.15	<10	<10	87	<10	1410	0.005
ZZ91083		0.18	<10	<10	52	<10	404	<0.001
ZZ91084		0.29	<10	<10	71	<10	793	<0.001
ZZ91085		0.15	<10	<10	36	<10	438	<0.001
ZZ91086		0.26	<10	<10	403	<10	57	<0.001
ZZ91087		0.13	<10	<10	82	<10	598	<0.001
ZZ91088		0.29	<10	<10	157	<10	1090	<0.001



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ZZ91089		0.33	0.2	3.32	5	<10	900	1.7	<2	1.11	4.7	31	29	80	6.58	10
ZZ91090		0.38	<0.2	2.66	3	<10	460	1.9	2	0.69	1.1	19	42	68	4.84	10
ZZ91091		0.34	0.7	1.88	9	<10	350	<0.5	3	0.17	<0.5	5	19	89	3.15	10
ZZ91092		0.34	<0.2	1.81	4	<10	70	0.9	<2	0.20	<0.5	8	15	20	4.15	10
ZZ91093		0.37	<0.2	1.85	4	<10	110	0.6	2	0.41	<0.5	10	16	18	3.61	10
ZZ91094		0.33	4.9	2.62	12	<10	450	0.6	3	0.36	0.7	6	6	785	8.07	10
ZZ91095		0.39	0.8	2.71	5	<10	220	0.7	2	0.38	1.6	6	13	207	3.71	10
ZZ91096		0.31	1.0	3.57	2	<10	1730	0.6	<2	0.43	2.9	20	53	498	4.24	10
ZZ91097		0.39	0.5	1.39	<2	<10	310	0.6	<2	0.36	1.4	9	14	86	3.16	10
ZZ91098		0.28	0.7	2.34	6	<10	1150	0.5	<2	0.46	1.3	9	25	159	3.23	10
ZZ91099		0.32	0.5	2.60	3	<10	900	0.9	2	0.26	2.8	10	13	719	4.48	10
ZZ91100		0.32	<0.2	2.97	4	<10	370	0.7	<2	0.23	0.6	5	6	186	3.47	10
ZZ91101		0.60	<0.2	1.53	4	<10	240	1.1	<2	0.31	1.5	11	21	105	4.04	<10
ZZ91102		0.43	0.7	0.85	2	<10	230	0.6	<2	0.22	1.7	7	10	118	2.29	<10
ZZ91103		0.47	0.7	0.87	2	<10	200	<0.5	<2	0.19	0.7	6	9	30	1.17	<10
ZZ91104		0.38	0.5	3.52	2	<10	1110	1.2	<2	0.60	2.5	21	23	227	6.22	10
ZZ91105		0.41	1.2	3.62	2	<10	860	1.2	2	0.74	5.8	27	18	272	6.34	10
ZZ91106		0.35	0.9	1.58	<2	<10	250	0.5	<2	0.24	2.2	15	3	220	1.71	<10
ZZ91107		0.43	1.7	3.82	<2	<10	1490	0.7	5	0.36	3.0	5	17	738	5.55	10
ZZ91108		0.38	0.8	2.58	5	<10	590	0.7	3	0.27	2.5	7	10	719	5.34	10
ZZ91109		0.41	1.1	1.99	4	<10	650	1.1	<2	0.33	4.3	5	11	401	4.32	10
ZZ91110		0.38	0.8	2.41	3	<10	840	0.6	<2	0.50	2.3	21	34	200	3.46	10
ZZ91111		0.38	0.7	2.36	4	<10	460	0.6	<2	0.29	0.8	5	6	104	2.55	10
ZZ91112		0.37	0.4	2.77	3	<10	760	0.6	<2	0.81	1.1	25	18	177	5.07	10
ZZ91113		0.34	0.3	3.01	4	<10	680	0.7	<2	0.79	0.7	21	33	167	5.72	10
ZZ91114		0.43	0.7	2.76	6	<10	660	0.5	<2	0.64	0.5	13	5	48	6.59	10
ZZ91115		0.45	0.2	2.25	4	<10	580	0.5	<2	0.53	0.7	15	19	66	4.53	10
ZZ91116		0.38	1.0	1.48	3	<10	860	0.6	<2	0.31	1.1	8	7	80	2.13	<10
ZZ91117		0.28	0.9	2.20	<2	<10	670	0.8	2	0.63	3.8	8	10	302	3.64	10
ZZ91118		0.48	5.6	2.54	2	<10	1340	0.9	10	0.56	3.8	20	10	912	4.00	10
ZZ91119		0.38	0.6	1.74	3	<10	600	0.8	<2	0.19	5.4	11	9	387	3.83	<10
ZZ91120		0.35	0.4	2.29	2	<10	1070	0.5	<2	0.31	0.7	11	9	145	2.96	10
ZZ91121		0.27	<0.2	2.58	6	<10	1180	2.2	<2	0.43	1.1	18	26	108	4.48	10
ZZ91122		0.41	0.3	2.34	4	<10	390	1.0	2	0.32	1.3	14	24	154	3.77	10
ZZ91123		0.23	0.5	1.97	4	<10	260	0.5	2	0.22	4.4	10	26	25	2.80	10
ZZ91124		0.30	0.7	2.00	7	<10	320	<0.5	3	0.08	0.9	6	7	84	4.69	10
ZZ91125		0.31	<0.2	2.22	5	<10	360	0.5	<2	0.29	<0.5	12	37	37	3.75	10
ZZ91126		0.31	0.2	2.35	6	<10	390	0.5	<2	0.16	0.6	15	18	34	3.62	10
ZZ91127		0.35	<0.2	2.28	5	<10	590	<0.5	<2	0.19	0.5	12	13	97	4.15	10
ZZ91128		0.28	<0.2	2.06	6	<10	190	0.6	<2	0.18	1.0	9	14	28	3.43	10



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CERTIFICATE OF ANALYSIS WH13161574

Sample Description	Method Analyte Units LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
ZZ91089		<1	1.21	50	2.17	1590	1	0.02	20	2160	36	<0.01	2	21	34	<20
ZZ91090		1	1.18	10	1.64	899	2	0.01	16	1630	181	<0.01	<2	4	30	<20
ZZ91091		<1	0.23	20	0.98	463	3	0.03	10	360	199	0.14	<2	3	52	<20
ZZ91092		<1	0.31	120	0.80	843	2	<0.01	6	290	50	<0.01	2	7	16	40
ZZ91093		<1	0.19	20	0.72	685	1	<0.01	9	450	12	<0.01	2	4	31	20
ZZ91094		<1	0.50	40	1.24	742	41	0.01	3	730	69	<0.01	<2	6	18	20
ZZ91095		<1	0.31	30	1.73	588	18	0.01	8	260	183	<0.01	<2	3	29	<20
ZZ91096		<1	1.53	50	2.77	1070	9	0.02	30	1220	501	0.11	<2	6	63	20
ZZ91097		1	0.26	30	0.59	1035	2	<0.01	8	760	229	<0.01	<2	6	17	<20
ZZ91098		<1	0.49	20	1.67	597	5	0.02	17	530	312	0.01	<2	5	35	<20
ZZ91099		<1	0.55	30	1.77	1275	10	0.02	10	720	381	<0.01	<2	6	29	<20
ZZ91100		<1	0.79	40	2.38	1465	5	0.01	4	270	76	<0.01	<2	3	15	20
ZZ91101		<1	0.19	120	0.57	1445	4	<0.01	12	610	364	<0.01	<2	9	22	20
ZZ91102		<1	0.10	60	0.36	757	4	<0.01	7	280	324	<0.01	<2	4	17	20
ZZ91103		<1	0.10	80	0.67	563	2	<0.01	6	210	467	<0.01	<2	1	13	30
ZZ91104		1	0.75	50	2.50	2070	2	0.02	18	1380	353	<0.01	<2	14	37	<20
ZZ91105		<1	1.24	40	2.46	1890	1	0.02	17	1600	979	<0.01	3	19	30	<20
ZZ91106		<1	0.55	80	1.58	1315	5	0.01	3	680	386	<0.01	<2	2	16	40
ZZ91107		1	1.42	30	3.10	1485	21	0.05	7	600	880	0.06	<2	5	117	<20
ZZ91108		1	0.59	20	1.65	1590	15	0.03	7	340	782	<0.01	<2	4	20	20
ZZ91109		1	0.84	170	1.17	638	11	0.03	9	1360	661	0.13	<2	5	171	20
ZZ91110		1	1.10	20	1.80	1240	14	0.02	17	1390	564	<0.01	<2	3	36	<20
ZZ91111		<1	0.77	60	2.27	737	5	0.02	5	650	696	0.05	<2	3	45	30
ZZ91112		<1	0.93	10	2.04	785	2	0.03	18	1620	59	<0.01	<2	4	46	<20
ZZ91113		1	1.33	10	1.71	1195	1	0.02	16	2070	80	<0.01	<2	4	41	<20
ZZ91114		<1	1.50	10	1.26	707	1	0.02	4	2390	37	0.05	<2	3	75	<20
ZZ91115		<1	0.85	10	1.31	822	1	0.02	10	1150	41	<0.01	<2	4	25	<20
ZZ91116		<1	0.27	40	0.96	1260	4	0.01	10	530	319	<0.01	<2	3	20	30
ZZ91117		<1	0.80	70	1.65	839	8	0.03	10	2030	376	0.08	<2	4	92	<20
ZZ91118		<1	0.83	30	1.89	2130	26	0.04	8	1900	1805	<0.01	<2	5	30	20
ZZ91119		<1	0.37	50	1.13	2500	14	0.01	9	520	461	<0.01	<2	5	25	20
ZZ91120		<1	0.80	20	1.97	827	8	0.02	7	440	275	0.01	<2	3	28	20
ZZ91121		<1	1.14	30	1.26	1175	<1	0.02	17	930	96	<0.01	<2	6	37	<20
ZZ91122		<1	0.87	40	1.28	1350	1	0.01	18	860	669	<0.01	<2	8	16	<20
ZZ91123		<1	0.25	20	0.81	1150	1	0.01	16	410	175	<0.01	<2	4	18	<20
ZZ91124		<1	1.10	30	0.89	507	7	0.02	4	940	717	0.35	<2	5	90	<20
ZZ91125		<1	0.75	10	1.24	790	4	0.02	18	530	11	0.01	<2	3	24	<20
ZZ91126		<1	0.74	10	1.08	849	1	0.01	10	480	28	<0.01	<2	2	19	<20
ZZ91127		<1	1.13	50	1.41	1210	3	0.01	6	660	50	<0.01	<2	6	13	<20
ZZ91128		<1	0.68	70	1.00	920	2	0.01	9	180	77	<0.01	<2	10	15	20



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-ICP21
		Ti	Ti	U	V	W	Zn	Au
		%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	10	10	1	10	2	0.001
ZZ91089		0.25	<10	<10	136	<10	331	<0.001
ZZ91090		0.26	<10	<10	83	<10	842	0.002
ZZ91091		0.06	<10	<10	37	<10	265	0.006
ZZ91092		0.05	<10	<10	47	<10	269	<0.001
ZZ91093		0.10	<10	<10	43	<10	174	<0.001
ZZ91094		0.04	<10	<10	20	<10	499	0.002
ZZ91095		0.04	<10	<10	29	<10	560	0.001
ZZ91096		0.10	<10	<10	49	<10	2090	0.181
ZZ91097		0.04	<10	<10	35	<10	516	0.008
ZZ91098		0.13	<10	<10	52	<10	1050	0.054
ZZ91099		0.06	<10	<10	43	<10	1010	0.028
ZZ91100		0.04	<10	<10	13	<10	544	0.005
ZZ91101		0.03	<10	<10	45	<10	466	0.007
ZZ91102		0.02	<10	<10	24	<10	562	0.007
ZZ91103		0.01	<10	<10	11	<10	341	0.010
ZZ91104		0.15	<10	<10	126	<10	1670	0.016
ZZ91105		0.24	<10	<10	143	<10	1450	0.017
ZZ91106		0.03	<10	<10	8	<10	541	0.010
ZZ91107		0.09	<10	<10	42	<10	1210	0.026
ZZ91108		0.03	<10	<10	23	<10	829	0.011
ZZ91109		0.07	<10	<10	28	<10	1600	0.013
ZZ91110		0.17	<10	<10	58	<10	2180	0.003
ZZ91111		0.09	<10	<10	22	<10	731	0.018
ZZ91112		0.27	<10	<10	102	<10	497	0.002
ZZ91113		0.33	<10	<10	102	<10	589	0.003
ZZ91114		0.37	<10	<10	105	<10	233	0.004
ZZ91115		0.23	<10	<10	56	<10	289	<0.001
ZZ91116		0.03	<10	<10	19	<10	684	0.010
ZZ91117		0.09	<10	<10	40	<10	869	0.012
ZZ91118		0.09	<10	<10	43	<10	1580	0.037
ZZ91119		0.03	<10	<10	29	<10	871	0.007
ZZ91120		0.08	<10	<10	32	<10	714	0.006
ZZ91121		0.23	<10	<10	80	<10	283	0.003
ZZ91122		0.19	<10	<10	60	<10	961	0.002
ZZ91123		0.12	<10	<10	51	<10	1225	0.002
ZZ91124		0.18	<10	<10	41	<10	371	0.001
ZZ91125		0.17	<10	<10	60	<10	141	0.001
ZZ91126		0.21	<10	<10	60	<10	354	0.001
ZZ91127		0.22	<10	<10	51	<10	405	0.002
ZZ91128		0.17	<10	<10	43	<10	619	0.002



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Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP41 Ag ppm	ME-ICP41 Al %	ME-ICP41 As ppm	ME-ICP41 B ppm	ME-ICP41 Ba ppm	ME-ICP41 Be ppm	ME-ICP41 Bi ppm	ME-ICP41 Ca %	ME-ICP41 Cd ppm	ME-ICP41 Co ppm	ME-ICP41 Cr ppm	ME-ICP41 Cu ppm	ME-ICP41 Fe %	ME-ICP41 Ga ppm
		0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
ZZ91129		0.30	0.7	1.55	2	<10	210	0.6	<2	0.17	1.0	7	4	140	2.14	<10
ZZ91130		0.30	0.2	1.95	9	<10	1300	0.7	<2	0.39	3.0	11	10	276	3.90	10
ZZ91131		0.35	<0.2	2.44	5	<10	880	0.5	<2	0.34	<0.5	17	25	57	4.10	10
ZZ91132		0.22	<0.2	1.70	3	<10	230	<0.5	<2	0.27	<0.5	8	24	21	2.59	10
ZZ91133		0.36	<0.2	1.60	5	<10	250	<0.5	<2	0.17	0.6	8	15	22	2.61	10
ZZ91134		0.33	<0.2	2.09	5	<10	420	<0.5	<2	0.38	0.6	14	15	23	3.05	10
ZZ91135		0.27	0.2	2.20	4	<10	570	3.4	<2	0.76	2.2	19	16	90	5.13	10
ZZ91136		0.33	0.4	3.70	3	<10	1230	1.2	<2	0.92	<0.5	38	92	44	7.60	10
ZZ91137		0.29	<0.2	3.06	6	<10	690	1.4	<2	0.70	0.7	28	33	70	6.11	10
ZZ91138		0.31	0.6	1.93	5	<10	360	2.6	<2	0.57	1.1	14	37	87	3.94	10
ZZ91139		0.38	0.6	1.45	2	<10	310	0.6	3	0.18	1.7	5	4	189	2.04	<10
ZZ91140		0.37	0.8	3.19	3	<10	950	0.8	<2	0.34	2.1	15	14	1220	5.89	10
ZZ91148		0.33	0.6	3.24	3	<10	360	1.1	<2	0.23	<0.5	4	4	501	3.74	10
ZZ91149		0.34	0.5	1.92	5	<10	160	0.7	<2	0.12	0.8	4	13	237	3.75	10
ZZ91150		0.34	0.2	2.39	5	<10	710	0.6	<2	0.38	0.6	6	25	199	3.24	10



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***** See Appendix Page for comments regarding this certificate *****



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Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-ICP21
		Ti	Ti	U	V	W	Zn	Au
		%	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	10	10	1	10	2	0.001
ZZ91129		0.08	<10	<10	10	<10	605	0.001
ZZ91130		0.15	<10	<10	46	<10	959	0.003
ZZ91131		0.25	<10	<10	80	<10	152	0.003
ZZ91132		0.15	<10	<10	52	<10	206	0.002
ZZ91133		0.15	<10	<10	35	<10	261	0.002
ZZ91134		0.22	<10	<10	57	<10	502	0.001
ZZ91135		0.18	<10	<10	70	<10	360	0.003
ZZ91136		0.33	<10	<10	174	<10	168	0.002
ZZ91137		0.32	<10	<10	95	<10	261	0.004
ZZ91138		0.12	<10	<10	68	<10	1270	0.003
ZZ91139		0.01	<10	<10	6	<10	612	0.022
ZZ91140		0.15	<10	<10	58	<10	1800	0.029
ZZ91148		0.06	<10	<10	22	<10	272	0.003
ZZ91149		0.04	<10	<10	23	<10	478	0.009
ZZ91150		0.10	<10	<10	39	<10	777	0.029



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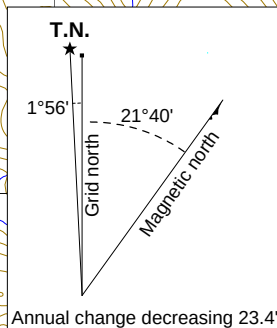
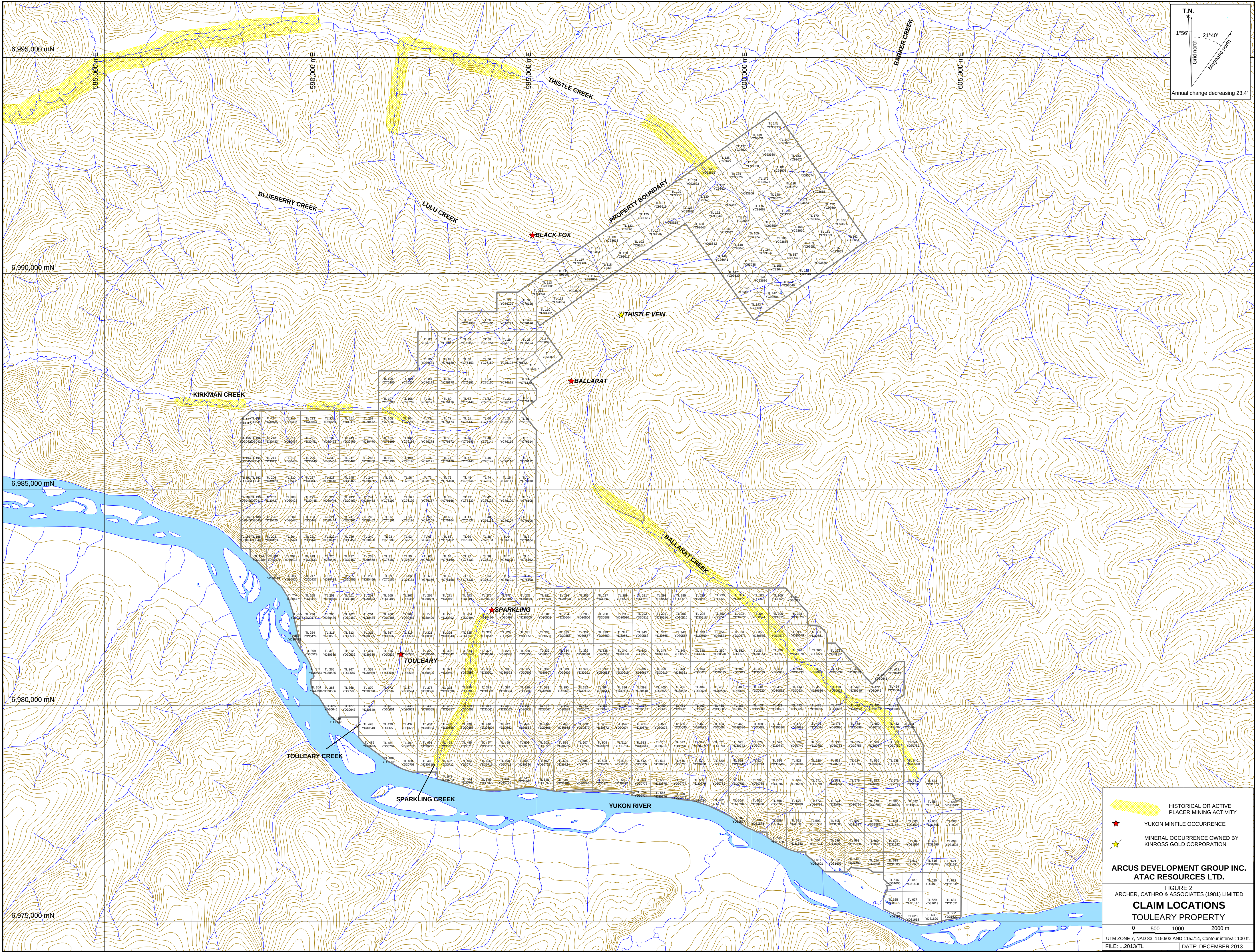
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CERTIFICATE OF ANALYSIS WH13161574

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada. EXTRA-01	LOG-22	SCR-41	WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. Au-ICP21	ME-ICP41		

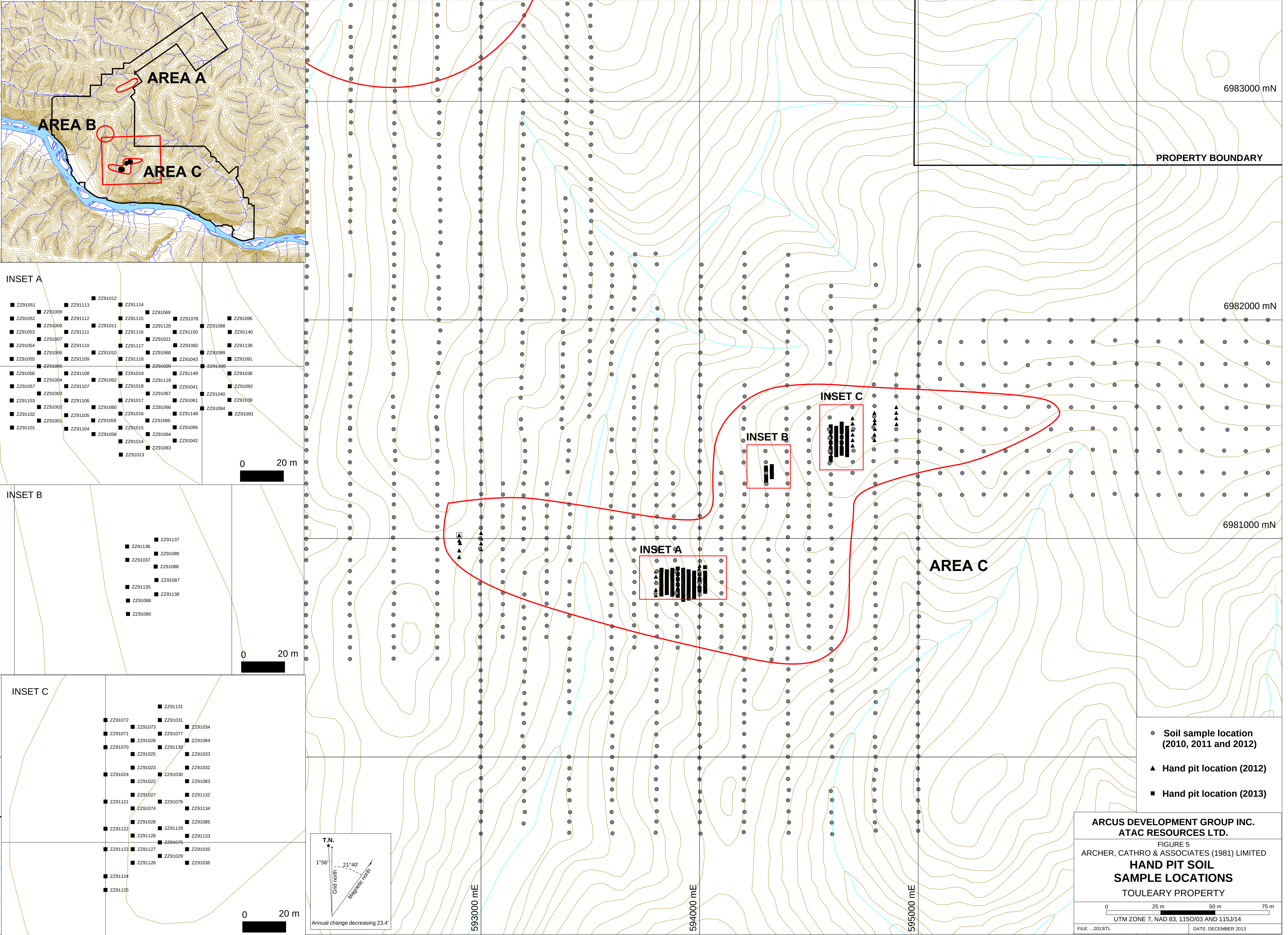


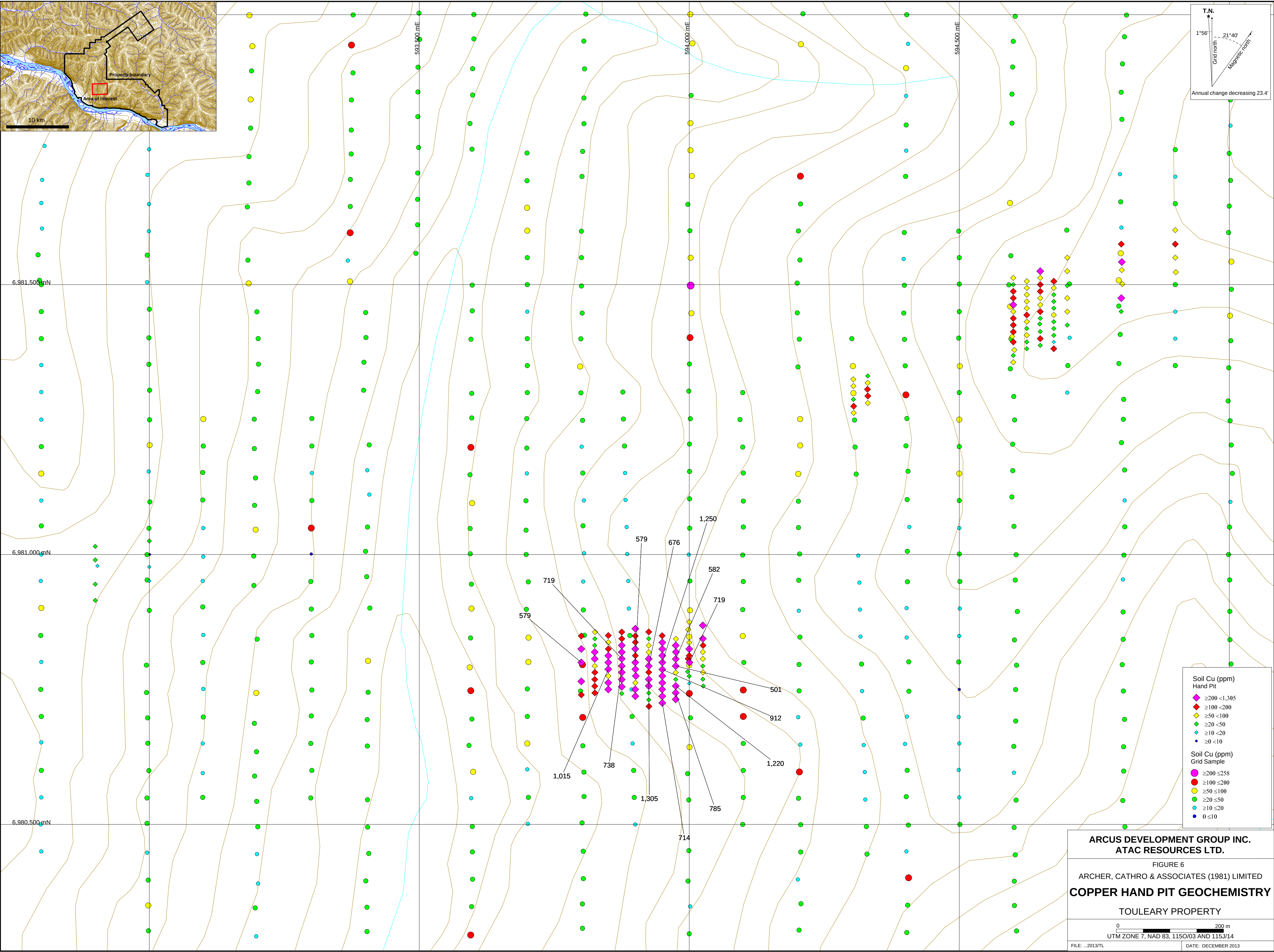
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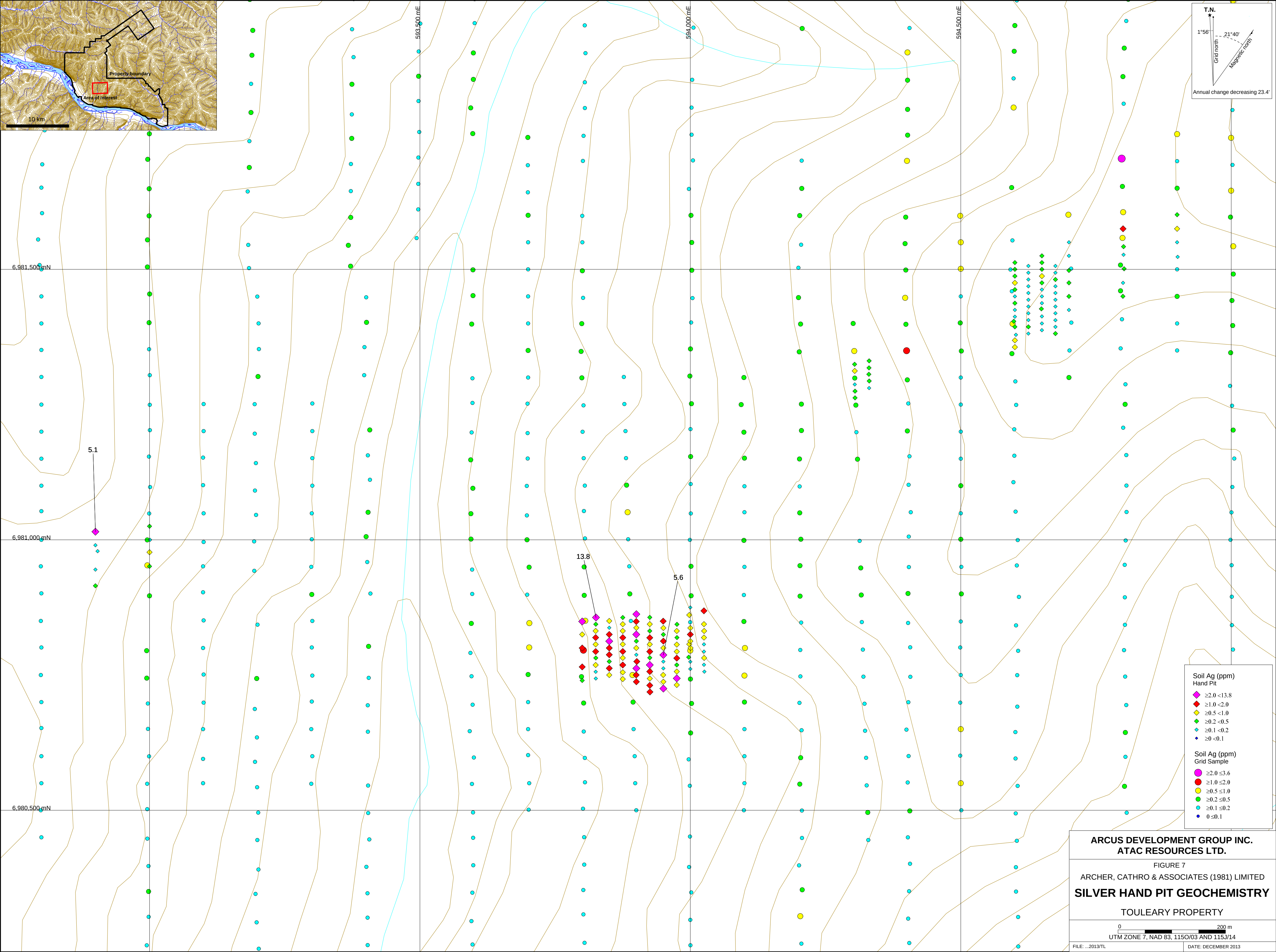
FIGURE 2
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
**CLAIM LOCATIONS
TOULEARY PROPERTY**

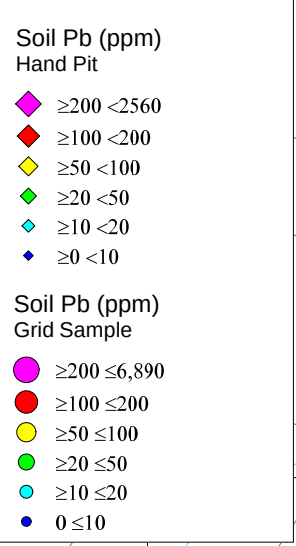
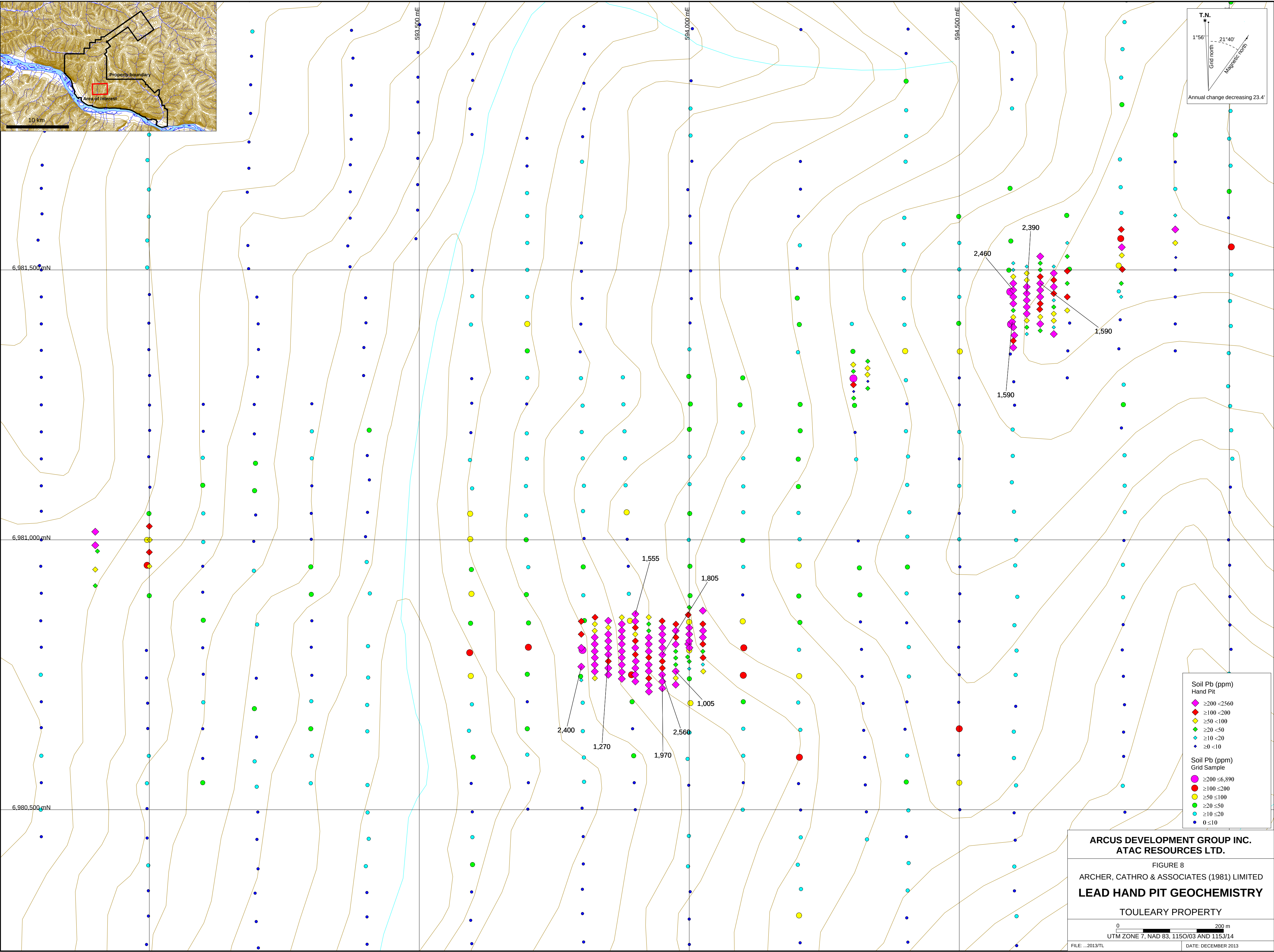
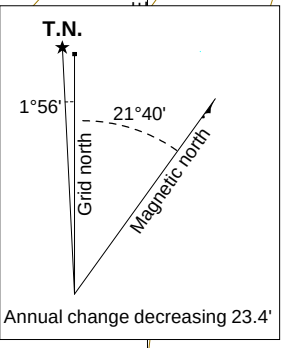
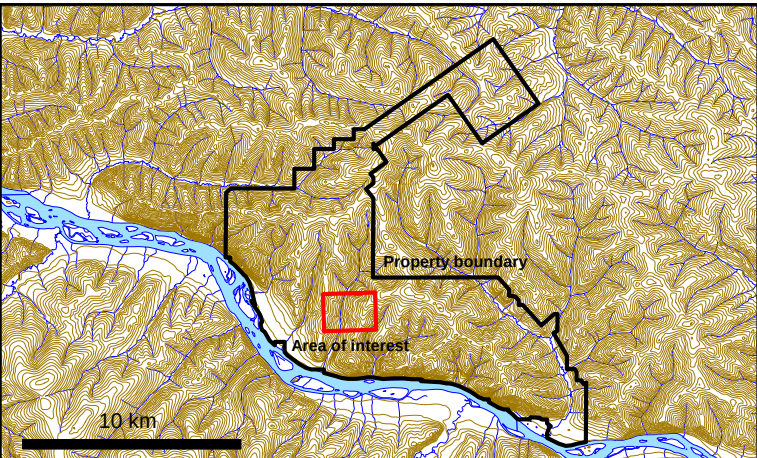
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UTM ZONE 7, NAD 83, 1150/03 AND 115J/14, Contour interval: 100 ft.
FILE: ..2013/TL DATE: DECEMBER 2013







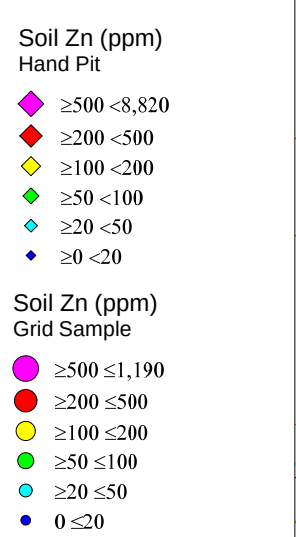
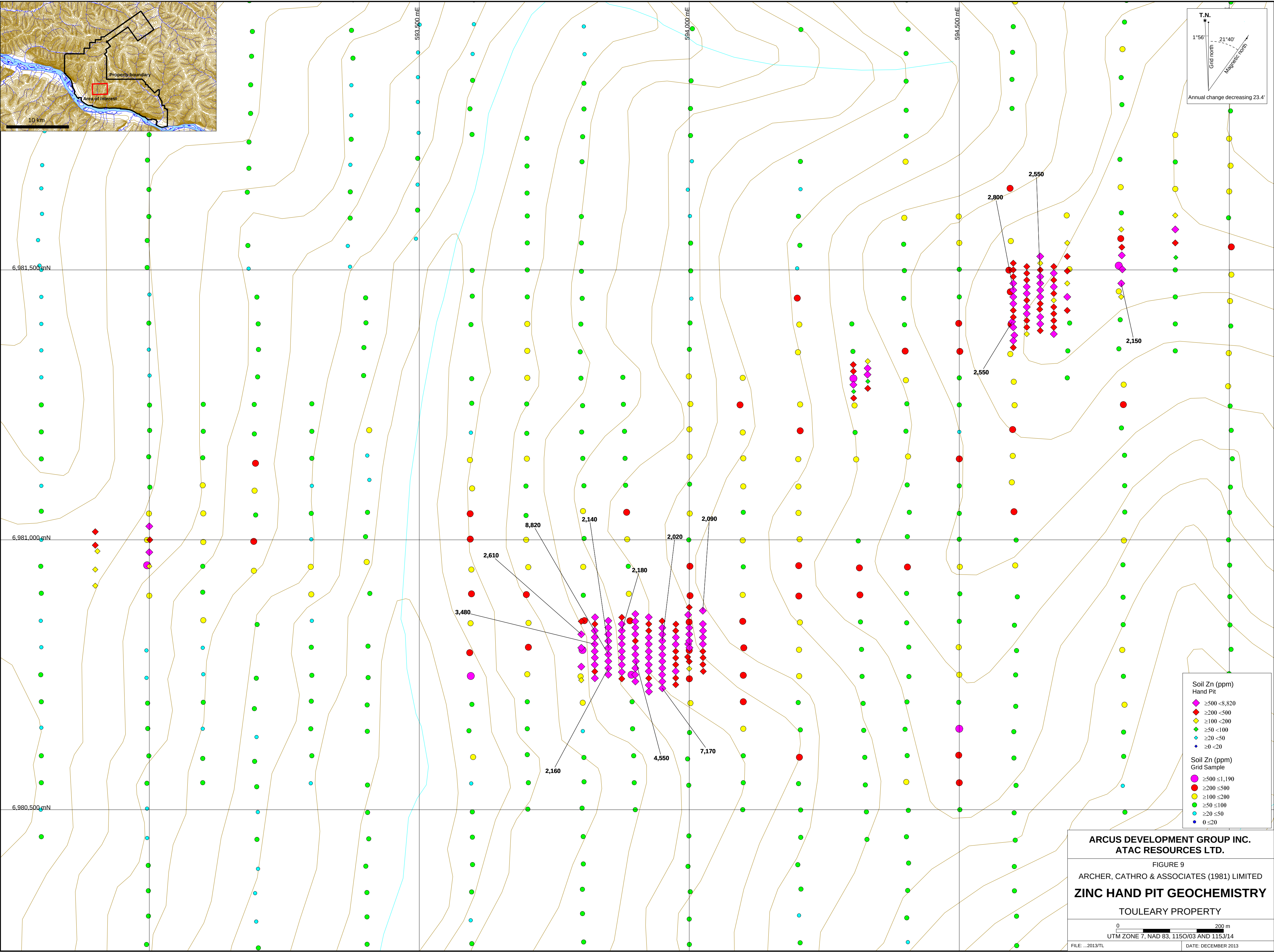
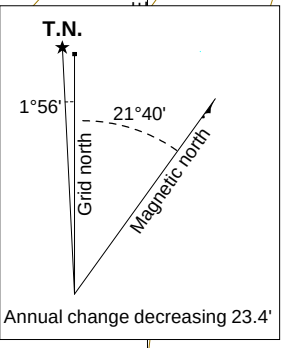
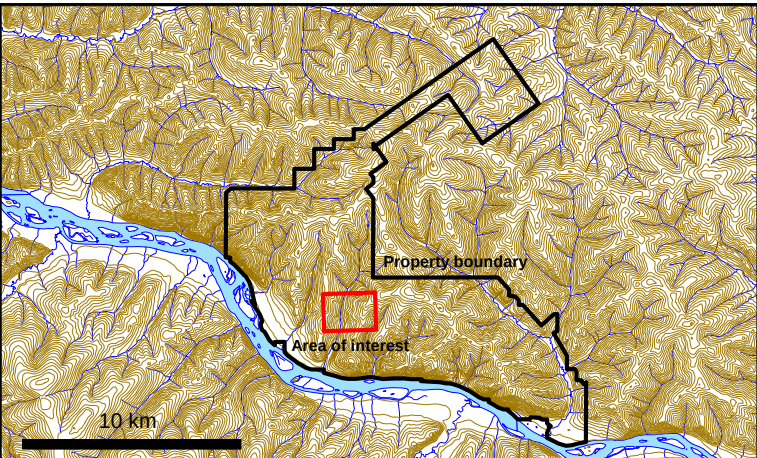


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FIGURE 8
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
LEAD HAND PIT GEOCHEMISTRY
TOULEARY PROPERTY

0 200 m
UTM ZONE 7, NAD 83, 1150/03 AND 115J/14

FILE: ...2013/TL DATE: DECEMBER 2013

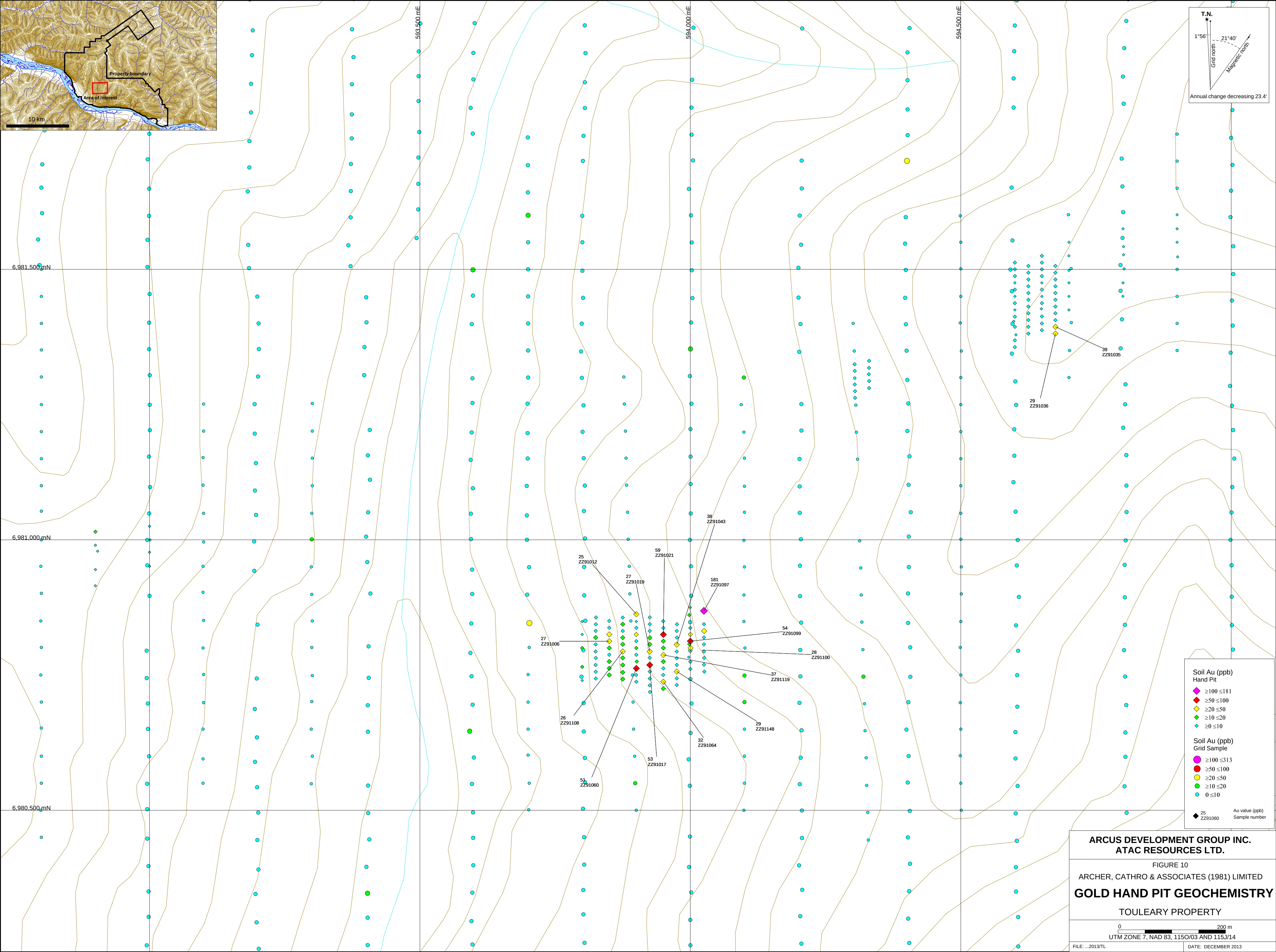


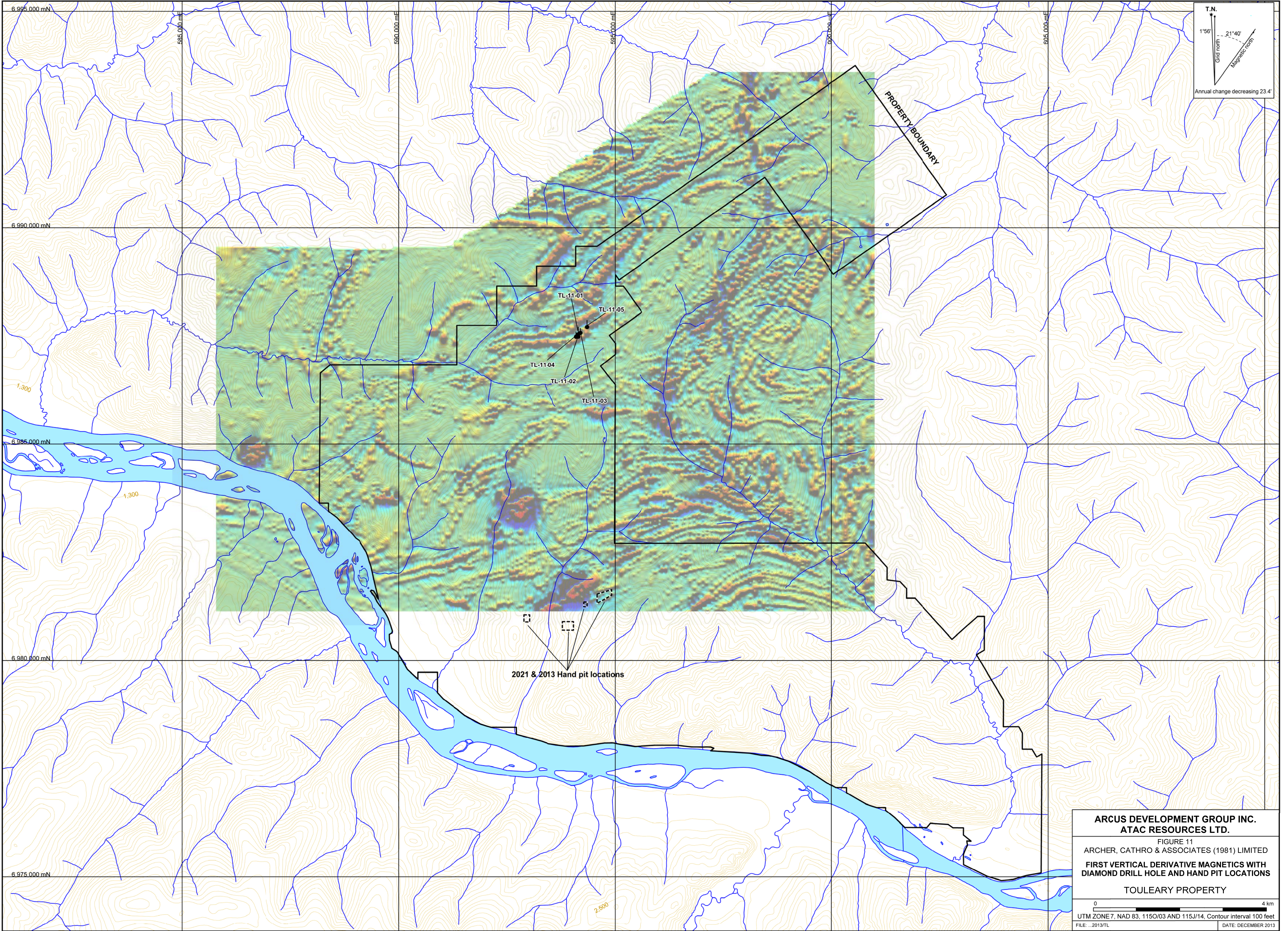
**ARCUS DEVELOPMENT GROUP INC.
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FIGURE 9
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
ZINC HAND PIT GEOCHEMISTRY
TOULEARY PROPERTY

0 200 m
UTM ZONE 7, NAD 83, 1150/03 AND 115J/14

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ARCUS DEVELOPMENT GROUP INC. ATAC RESOURCES LTD.	
FIGURE 11 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED	
FIRST VERTICAL DERIVATIVE MAGNETICS WITH DIAMOND DRILL HOLE AND HAND PIT LOCATIONS	
TOULEARY PROPERTY	
0 4 km	
UTM ZONE 7, NAD 83, 1150/03 AND 115J/14, Contour interval 100 feet	
FILE: ...2013/TL	DATE: DECEMBER 2013