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**ASSESSMENT REPORT**

describing

**GROUND SURVEYING**

Work performed on July 7, 2015

at the

**MELOY PROPERTY**

Meloy 1-20 YC65705-YC65724  
21-42 YC65745-YC65766

NTS 115G/08 and 115G/09  
Latitude 61°29'N; Longitude 138°11'W

located in the

Whitehorse Mining District  
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

**STRATEGIC METALS LTD.**

by

J. Morton, B.Sc., GIT

October 2015

## **CONTENTS**

INTRODUCTION	1
PROPERTY LOCATION, CLAIM DATA AND ACCESS	1
HISTORY	1
GEOMORPHOLOGY	3
REGIONAL GEOLOGY	3
PROPERTY GEOLOGY	4
AERIAL PHOTOGRAPHY AND GROUND SURVEYS	5
MINERALIZATION AND HAND TRENCHING	5
SOIL GEOCHEMISTRY	8
DISCUSSION AND CONCLUSIONS	9
REFERENCES	11

## **APPENDICES**

I	STATEMENT OF QUALIFICATIONS
II	STATEMENT OF EXPENDITURES
III	SURVEY DATA

## FIGURES

<u>No.</u>	<u>Description</u>	<u>Follows Page</u>
1	Property Location	1
2	Claim Locations	1
3	Tectonic Setting	3
4	Regional Geology	3
5	Property Geology	In pocket
6	Copper Rock Geochemistry and Air Photo Interpretation	6
7	Gold Rock Geochemistry and Air Photo Interpretation	6
8	Molybdenum Rock Geochemistry and Air Photo Interpretation	6
9	Silver Rock Geochemistry and Air Photo Interpretation	6
10	Copper Soil Geochemistry and Air Photo Interpretation	8
11	Gold Soil Geochemistry and Air Photo Interpretation	8
12	Molybdenum Soil Geochemistry and Air Photo Interpretation	8
13	Silver Soil Geochemistry and Air Photo Interpretation	8

## **TABLES**

<u>No.</u>	<u>Description</u>	<u>Page</u>
I	Lithological Descriptions	4
II	Styles of Mineralization within Quartz Veins	6
III	Anomalous Rock Thresholds	6
IV	Hand Trenching – Weighted Average Grades	8
V	Anomalous Soil Thresholds	8

## **INTRODUCTION**

The Meloy property covers porphyry and vein style, copper±gold±silver±molybdenum ±tungsten±tin±zinc mineralization. The property is located in the Ruby Range of southwestern Yukon and is wholly owned by Strategic Metals Ltd.

This report describes one day of ground surveying that was conducted on the Meloy property on July 7, 2015, to facilitate preparation of orthophotos and detailed topographic maps. The surveying was completed by Underhill Geomatics Ltd. on behalf of Strategic Metals. The author's Statement of Qualifications is in Appendix I and a Statement of Expenditures is located in Appendix II.

## **PROPERTY LOCATION, CLAIM DATA AND ACCESS**

The Meloy property comprises 42 contiguous mineral claims located 90 km northwest of Haines Junction in southwestern Yukon, at latitude 61°29'N and longitude 138°11'W on NTS map sheets 115G/08 and 115G/09 (Figure 1). The property covers an area of approximately 850 ha (8.5 km<sup>2</sup>). The claims are registered with the Whitehorse Mining Recorder in the name of Archer Cathro, which holds them in trust for Strategic Metals. 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>
Meloy 1-20	YC65705-YC65724	March 31, 2031
21-42	YC65745-YC65766	March 31, 2031

\* Expiry dates include 2015 work that has been filed for assessment credit, but has not yet been accepted.

The closest road access to the Meloy property is at the community of Aishihik about 35 km to the east-northeast. If required, heavy equipment could access the property via a trail that extends from Aishihik to the Meloy property and nearby historical placer workings (Figure 2).

The Meloy property lies within the traditional territory of the Kluane and White River first nations. The Kluane First Nation has concluded a land claim agreement with Canada and Yukon; however, the White River First Nation has not yet signed a land claim agreement.

## **HISTORY**

J. Meloy initially staked the area in 1951 as the Molly claims and performed hand trenching in 1952. The Molly claims were allowed to lapse, and the area was restaked in 1960 by J. McConnery as the Big Sam claims and again in 1962 by L. Nault as the Pag and Bird claims (Smith, 1971). No reports were filed regarding any of these claims.

In 1970, Phelps Dodge acquired a large claim block and conducted a work program that included mapping, geochemical surveys and one diamond drill hole (66.7 m) on the floor of the Main Cirque (Figure 2). No drill logs or assays were reported from this work (Smith, 1971).

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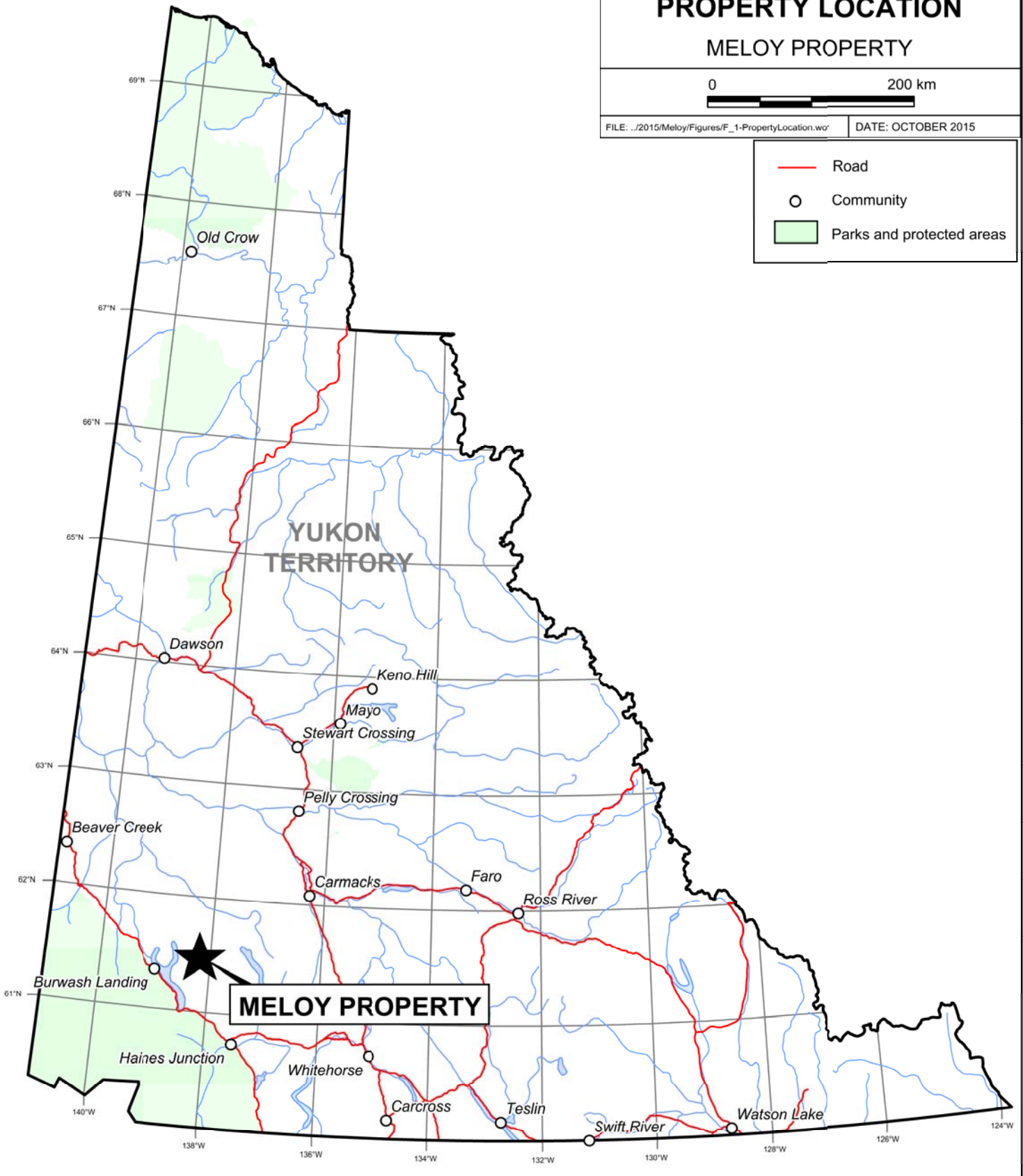
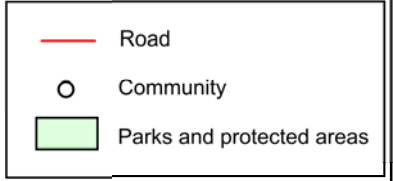
FIGURE 1  
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

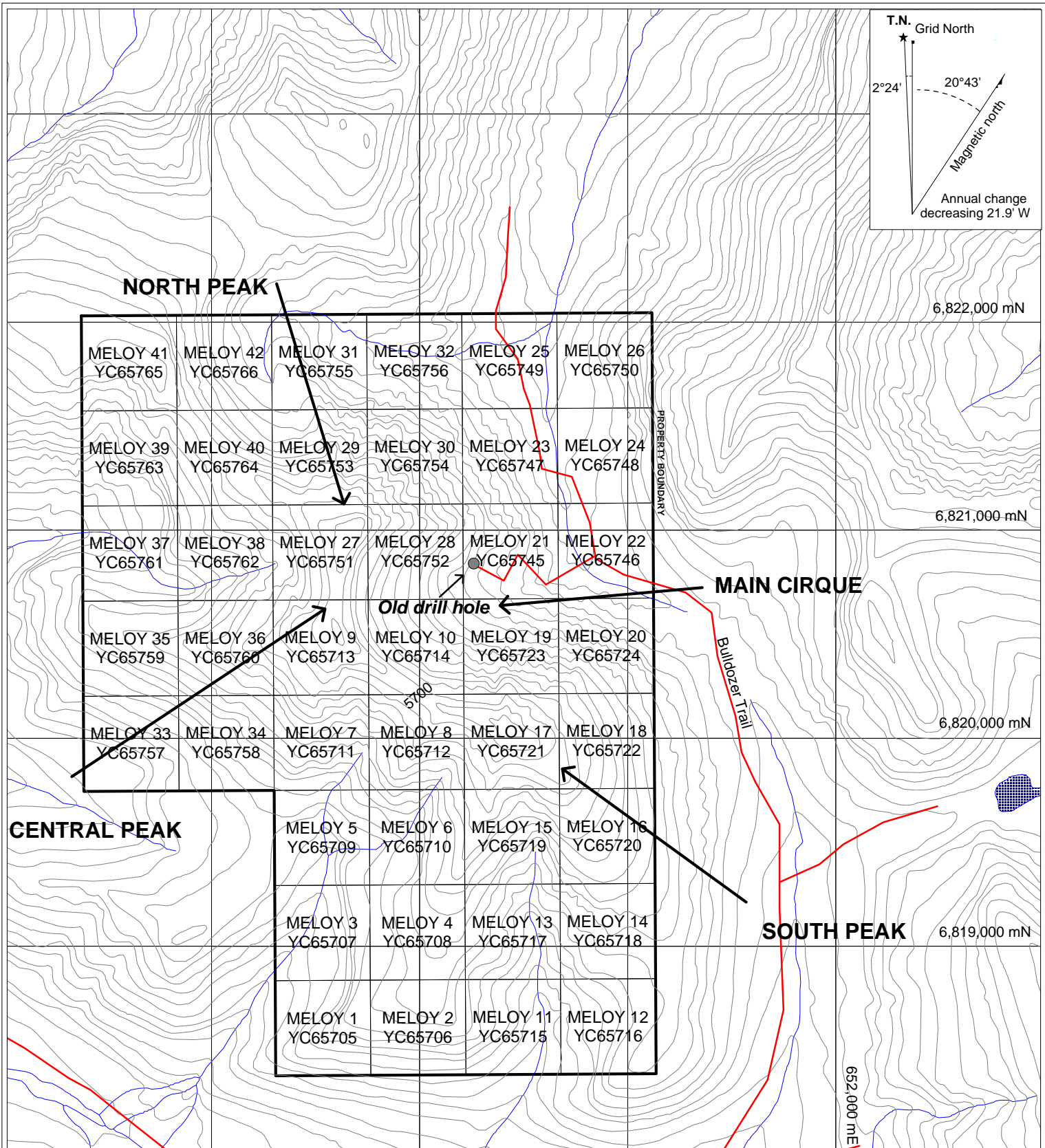
**PROPERTY LOCATION**

MELOY PROPERTY



FILE: ../2015/Meloy/Figures/F\_1-PropertyLocation.wor DATE: OCTOBER 2015





**STRATEGIC METALS LTD.**

FIGURE 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**CLAIM LOCATIONS**

**MELOY PROPERTY**

0 200 1000 m

UTM ZONE 7, NAD 83, 115G/08, Contour intervals = 100'

FILE: ..\2015\Meloy\Figures\F\_2\_Claim\_Locations.wor DATE: OCTOBER 2015

In 1986, the Geological Survey of Canada (GSC) performed a regional stream sediment survey on the map sheets where the Meloy property is located. Samples taken from streams draining the area of the property produced moderately to strongly anomalous results including peak values of 97 ppm copper, 28 ppm tungsten, and 298 ppm zinc (Friske *et al.*, 1986).

In 2007, Strategic Metals staked the Meloy property. In 2008, it performed a three day program comprising prospecting and soil sampling. Results from this program were encouraging. Twenty-six rock samples were assayed with peak values of 4.89% copper, 832 ppb gold, 9770 ppm molybdenum, 3.51% tungsten and 6420 ppm tin. One hundred and fifteen soil samples were also analyzed yielding peak values of 2300 ppm copper, 42 ppb gold, 595 ppm molybdenum, 129 ppm tungsten and 127 ppm tin (Smith, 2008).

In 2010, Strategic Metals spent one day prospecting and geochemically sampling the Meloy property. Eleven rock and 58 soil samples were collected for analysis. Results from this work supported the anomalies identified by the 2008 program. Rocks yielded up to 1.06 g/t gold, 110 ppm silver, 8720 ppm molybdenum, 3380 ppm tungsten, 312 ppm tin, and greater than 1% copper and zinc. Soil sampling returned further anomalous results to maximums of 2000 ppm copper, 224 ppb gold, 4 ppm silver, 12 ppm molybdenum, 100 ppm tungsten, and 80 ppm tin (Smith, 2011).

Also in 2010, Strategic Metals contracted New-Sense Geophysics Ltd. of Markham, Ontario to perform an airborne magnetic survey over the property. A total of 293 line kilometres were flown. This survey identified two circular magnetic lows in the northern part of the property and a number of linear lows in the southern part (Smith, 2011).

From early 2011 to summer 2012, the property was under option to Alix Resources Corp. There is no record of any work that Alix may have done under terms of that agreement.

In summer 2012, after the option agreement with Alix expired, Strategic Metals performed one day of mapping, prospecting and soil sampling. Eight rock samples and 135 soil samples were collected for analysis. Rocks yielded up to 0.303 g/t gold, 1.04% copper, 18.7 ppm silver, 1.47% molybdenum, 341 ppm tungsten, 119 ppm tin, and 589 ppm zinc. Soil sampling expanded the soil geochemical anomaly to encompass a 2500 m in diameter area with a 1000 m in diameter core of strong to very strong copper, gold, silver and molybdenum values. The core is centered on the Main Cirque (Figure 2) and includes peak values of 4520 ppm copper, 673 ppb gold, 18.6 ppm silver, 595 ppm molybdenum, 266 ppm tungsten, 217 ppm tin and 2090 ppm zinc (Smith, 2012).

In August 2013, Strategic Metals contracted Underhill Geomatics Ltd. to fly aerial photography over the Meloy property. An interpretation of the air photos was completed in spring 2014 and identified outcrop locations, vegetation and overburden covered areas, and colour variations that are thought to reflect differences in alteration types (Burrell, 2014).

In 2014, Strategic Metals conducted a seven-day work program at the Meloy property, consisting of geological mapping, prospecting, hand trenching and soil sampling. Individual rock samples collected from the property returned values as high as 8.72% copper, 1.06 g/t gold, 560 g/t silver

and 1.465% molybdenum. Four hand trenches were excavated on the property and continuous chip samples were taken along the entire length of each trench. A weighted average grade for one of the trenches yielded 4.47% copper, 0.208 g/t gold and 296 g/t silver over ten metres (Burrell, 2015). Details concerning mineralization on the property, including weighted average grades for the four hand trenches, can be found in the Mineralization and Hand Trenching section below.

### **GEOMORPHOLOGY**

The Meloy property lies within the Ruby Range in the southern part of the Yukon Plateau. It is underlain by rugged alpine terrain characterized by sharp peaks and high rounded ridges, which are bounded by steep-walled valleys with broad flat floors. Some of the peaks and ridges may have escaped glaciation, but glacial features are common at lower elevations (Muller, 1967).

A large northwest-trending ridge runs through the centre of the property connecting three prominent peaks referred to as South, Central and North (Figure 2). A series of southwest-trending spurs extend off the South and Central peaks. South-facing slopes are moderately steep and are blanketed by relatively stable talus and vegetation. North-facing slopes are largely inaccessible because of cliffs and unstable talus.

Elevations on the property range from 1675 m to 2245 m. Sparse vegetation consisting of moss and grass is found on valley floors, south-facing slopes and small upland plateaus.

All creeks draining the property flow into Talbot Arm of Kluane Lake, which is part of the White River watershed and the Yukon River system.

### **REGIONAL GEOLOGY**

The property is located between the Tintina and Denali faults (Figure 3). The regional geology was originally mapped at 1:250,000 scale by the Geological Survey of Canada (GSC) in the early 1970s (Templeman-Kluit, 1974). In 1999, Gordey and Makepeace (1999) reinterpreted regional geology in the Meloy area as part of a Yukon-wide compilation. In 2010, the Yukon Geological Survey (YGS) re-mapped parts of map sheets 115G and 115H (Israel et al., 2010). The following description of regional geology is based on the most recently published data.

Rocks in the vicinity of the Meloy property belong to three main tectonic elements: 1) Kluane Schist; 2) Ruby Range Suite; and 3) Yukon-Tanana Terrane. Collectively these elements form a northeast-dipping structural stack that exposes a roughly 40 km thick section of crust, extending from the Denali Fault to the White River. Figure 4 illustrates the current mapping near the Meloy property, while Table I below contains updated geological descriptions of the main units in the region.

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FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

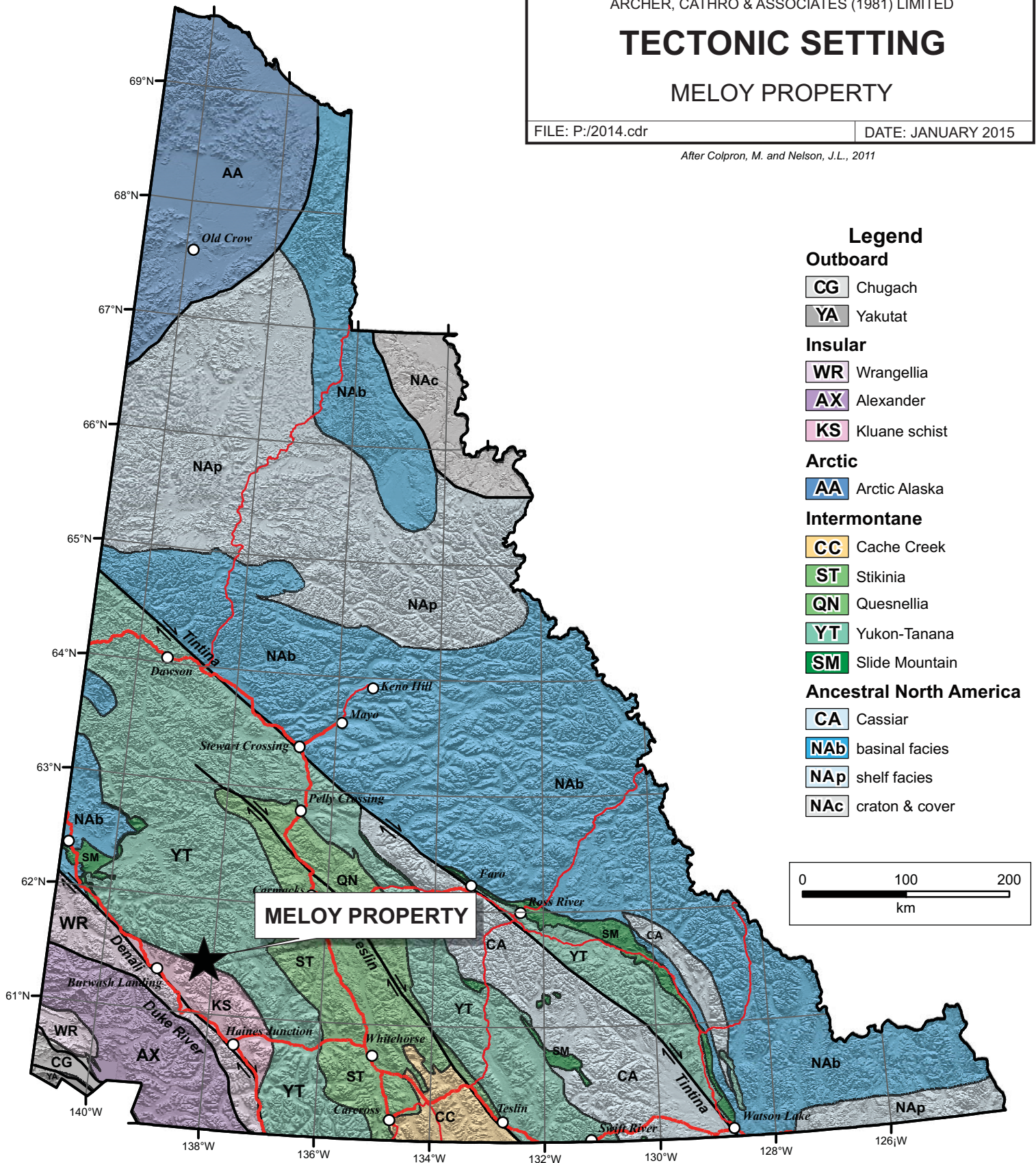
## TECTONIC SETTING

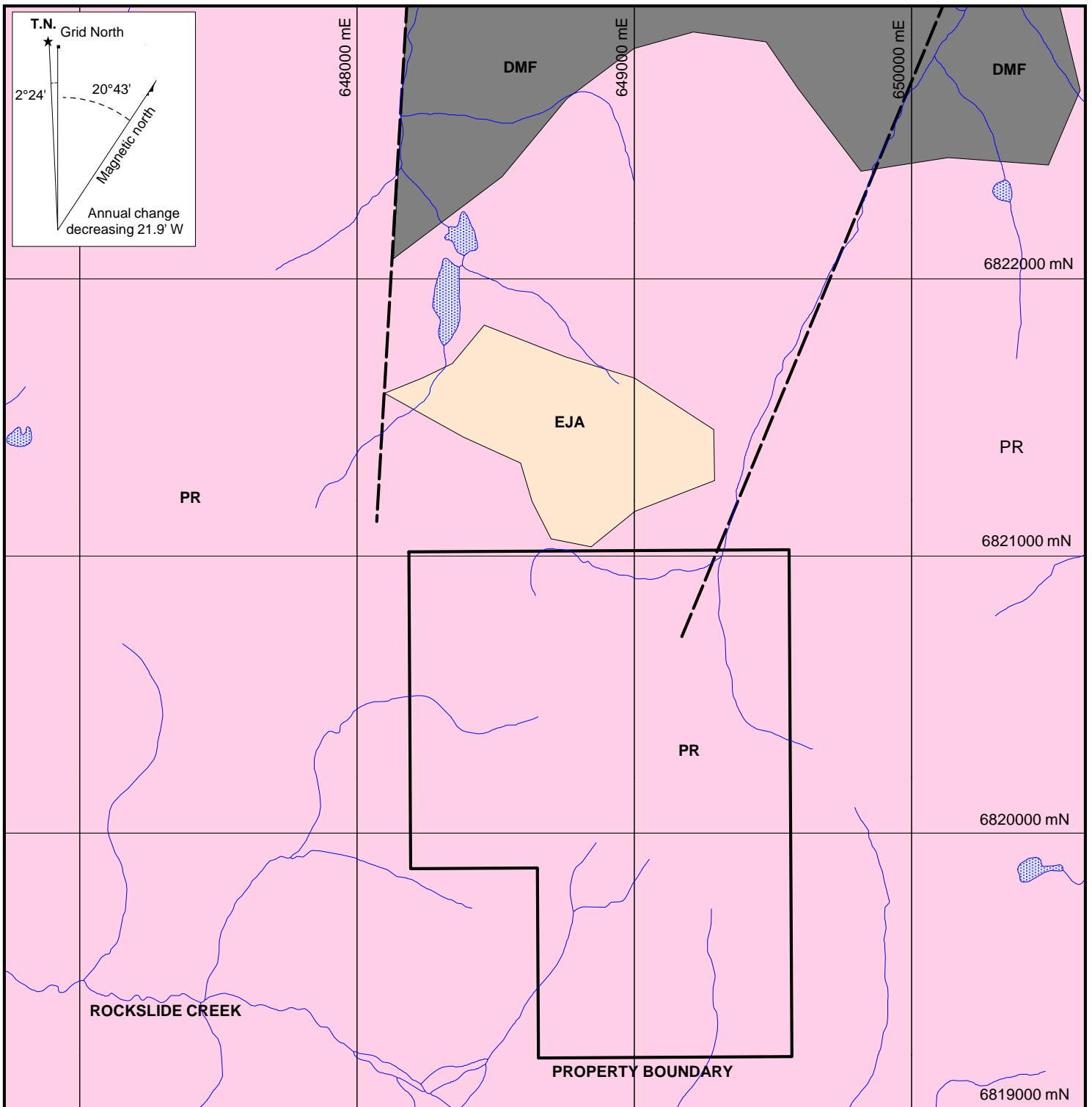
### MELOY PROPERTY

FILE: P:/2014.cdr

DATE: JANUARY 2015

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





**OVERLAP ASSEMBLAGES**  
PALEOCENE

**PR** Ruby Range Suite (ca. 64-57 Ma): fine to coarse grained, salt and pepper, hornblende-biotite quartz diorite; medium grained, light grey to pinkish, biotite-hornblende granodiorite; fine to medium grained, beige to grey tonalite with distinctive smokey grey quartz.

**EARLY JURASSIC**  
**EJA** Alaskite Creek Pluton (ca. 177 Ma): massive, unfoliated, medium grained, pink and grey, biotite-hornblende granite; greenish colour from altered plagioclase crystals; moderately to strongly magnetic.

**YUKON-TANANA TERRANE**  
UPPER DEVONIAN TO LOWER MISSISSIPPIAN  
**DMF** Finalyson Assemblage: polydeformed and metamorphosed mafic to felsic metavolcanic rocks; carbonaceous pelite, quartzite and psammite; quartz-muscovite schist; light grey to beige marble.

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FIGURE 4  
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**REGIONAL GEOLOGY**

MELOY PROPERTY



**Table I – Lithological Descriptions**

Unit Name (symbol)	Age	Description ( <i>From Israel et al., 2010</i> )
Ruby Range Suite (PR)	Paleocene	Fine to coarse grained, salt and pepper, hornblende±biotite quartz diorite, medium grained, light grey to pinkish, biotite±hornblende granodiorite; fine to medium grained, beige to grey tonalite with smokey grey quartz.
Alaskite Creek (EJA)	Early Jurassic	Massive, unfoliated, medium grained, green-pink-grey, biotite±hornblende granite, plagioclase crystals altering to a greenish colour, moderately to strongly magnetic.
Finlayson Assemblage (DMF)	Upper Devonian to Lower Mississippian	Polydeformed and metamorphosed mafic to felsic metavolcanic rocks; carbonaceous pelite, quartzite and psammite; quartz-muscovite schist; light grey to beige marble.

The Finlayson Assemblage of the YTT was thrust over Kluane Schist (Israel et al., 2010), before the Ruby Range Batholith and other plutons of the Ruby Range Suite intruded between and through both of the metamorphic packages. Younger, more felsic and porphyritic phases of the Ruby Range Suite occur in the upper part of the batholith. The contacts between the Finlayson Assemblage and the Ruby Range Suite are irregular and often formed by faults.

In the vicinity of the Meloy property, a Ruby Range Suite pluton obscures the Finlayson Assemblage-Kluane Schist contact. A large embayment and roof pendants of Finlayson Assemblage overlie parts of the Ruby Range Suite pluton north of the property, and both of these units are cut by two late-stage, northerly-trending faults. A raft of Alaskite Creek granite is preserved between these faults.

### **PROPERTY GEOLOGY**

In 2014, Strategic Metals conducted 1:5000 scale mapping on the property at the Main Ridge and Main Cirque areas (Figure 5). Systematic geological mapping elsewhere on the property has not been attempted and will be difficult because access to bedrock is limited by talus cover in some areas and cliffs in others.

The Meloy property is wholly underlain by Ruby Range Suite, comprising medium to coarse grained, hornblende±biotite quartz diorite and medium grained, light grey to pinkish, biotite±hornblende granodiorite with well-developed smokey grey quartz crystals. On the property, the Ruby Range Suite has been subdivided using distinctive weathering characteristics, which are likely related to alteration types. Rusty weathering Ruby Range Suite appears to be weakly argillic altered and contains minor pyrite around mafic minerals; grey weathering Ruby Range Suite is thought to be weakly potassic altered or unaltered; and tan weathering Ruby Range Suite is strongly clay altered. No detailed petrographic studies have been done yet to establish the alteration faults.

In the south-central part of the property there is a red-brown hematite-rich gossan zone. This gossan lies within Ruby Range Suite and is associated with closely spaced joint sets and random shearing (Smith, 1971).

Late stage, fine grained, homogenous, diabase dykes and fine grained aplite to quartz-feldspar porphyry dykes parallel the strongest fracture set. Where exposed, these dykes are up to one metre thick.

Several fracture sets have been measured within Ruby Range Suite. Although a wide range of attitudes were recorded, the primary fractures strike 000 to 045° and dip 65 to 80° to the west. A number of strong, recessively weathering linears cross the Main Ridge. These linears typically trend 000 to 012° and are developed atop strongly fractured dykes or up to two metre wide zones that contain multiple quartz-flooded fractures.

### **AERIAL PHOTOGRAPHY AND GROUND SURVEYS**

On August 11, 2013 Underhill Geomatics flew aerial photography over the Meloy property on behalf of Strategic Metals. Flight lines with photo numbers and digital aerial photographs can be found in Burrell (2014).

On July 7, 2015 Underhill Geomatics performed on-ground surveying in preparation of orthorectification of the air photos and creation of detailed topographic maps. When completed, the othophotos and topographic maps will be used for future exploration and compilation purposes survey data points are included in Appendix III.

### **MINERALIZATION AND HAND TRENCHING**

To date, the Main Ridge and the Main Cirque have been the primary focus of prospecting on the property. The following descriptions of mineralization, distribution and alteration are mainly based on observations from those areas. Most of the mineralization discovered to date on the property is hosted in quartz veins, veinlets and fractures. The mineralized structures are most evident in the grey weathering Ruby Range Suite. Some mineralization has also been found in the southern part of the property, in quartz veins within an east-trending zone of tan coloured talus that may be derived from a shear zone.

A variety of sulphide minerals have been identified to date on the property. Pyrite, arsenopyrite, chalcopyrite and bornite occur in narrow fractures and quartz veins. Molybdenum is found as fine grains in veins that range from millimetre-scale to 30 cm in width or as coarse rosettes along dry fractures. Bladed wolframite crystals up to 1.5 cm in length are hosted in quartz veins that are up to six centimetres across. No tin minerals have been identified on the property. Chalcopyrite±bornite±molybdenum-rich veins generally strike 150 to 195° and dip shallowly (<30°) or steeply (>65°) to the west. Table II describes styles of mineralization in the veins.

**Table II – Styles of Mineralization within Quartz Veins**

<b>Mineral</b>	<b>Abundance</b>	<b>Size and form</b>
Pyrite	Approximately 2%	Disseminated, 2 mm cubic crystals
Chalcopyrite	Approximately 4%	Disseminated and blebby crystals
Arsenopyrite	Less than 1%	Fine stringers
Molybdenite	Approximately 3%	Up to 3 cm diameter rosettes
Bornite	Less than 1%	Bands up to 2 cm thick
Wolframite	Approximately 1%	3 mm to 1.5 cm long bladed crystals.

Secondary mineralization occurs within and adjacent to weathered quartz veins and diabase dykes. Malachite and azurite coat talus surfaces and fracture planes in the recessive linears associated with dykes exposed on the Main Ridge. Small limonitic pits after pyrite are common within quartz veins. Scorodite is found within the east-trending zone of tan talus in the southern part of the property.

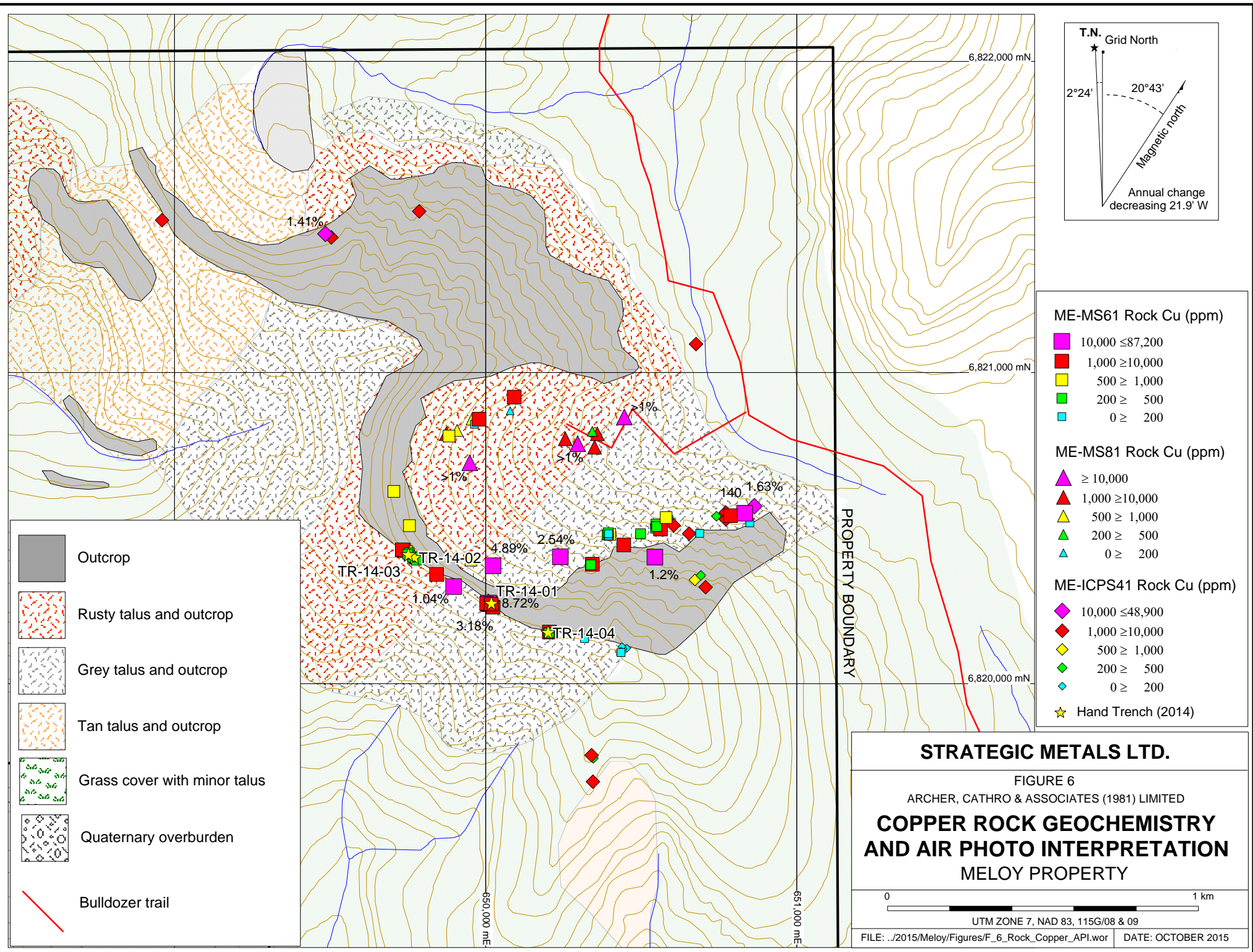
The highest concentrations of quartz veins are observed within recessive linears along the crest of the Main Ridge and in outcrops along the southern wall of the Main Cirque; however, this apparent distribution may be biased because only the central part of the property has been mapped and prospected. Overall abundance of quartz veins in most parts of the property has not yet been determined.

Most of the rock samples collected from the property to date were taken along the Main Ridge between the South and Central peaks or within the Main Cirque. Descriptions of samples collected during previous programs and sample preparation and analytical techniques used to test them can be found in Smith (2008, 2011 and 2012) and Burrell (2015). The following descriptions of the mineralized areas are from Burrell (2015). Table III lists anomalous thresholds used to describe rock geochemical results. Thematic results for copper, gold, molybdenum and silver are illustrated on Figure 6 to 9.

**Table III – Anomalous Rock Thresholds**

<b>Element</b>	<b>Weak (ppm)</b>		<b>Moderate (ppm)</b>		<b>Strong (ppm)</b>	<b>Peak* (ppm)</b>
Copper	>200	≤500	>500	≤1000	>1000	87,200
Gold	>0.2	≤0.5	>0.5	≤1.0	>1.0	1.06
Silver	>5	≤10	>10	≤20	>20	560
Molybdenum	>50	≤100	>100	≤500	>500	39,400
Tungsten	>100	≤200	>200	≤500	>500	35,100
Tin	>100	≤200	>200	≤500	>500	1950
Zinc	>500	≤1000	>1000	≤2000	>2000	10,010

\* Overlimit analyses for copper and zinc were not performed in 2010.

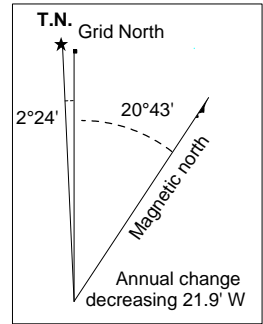
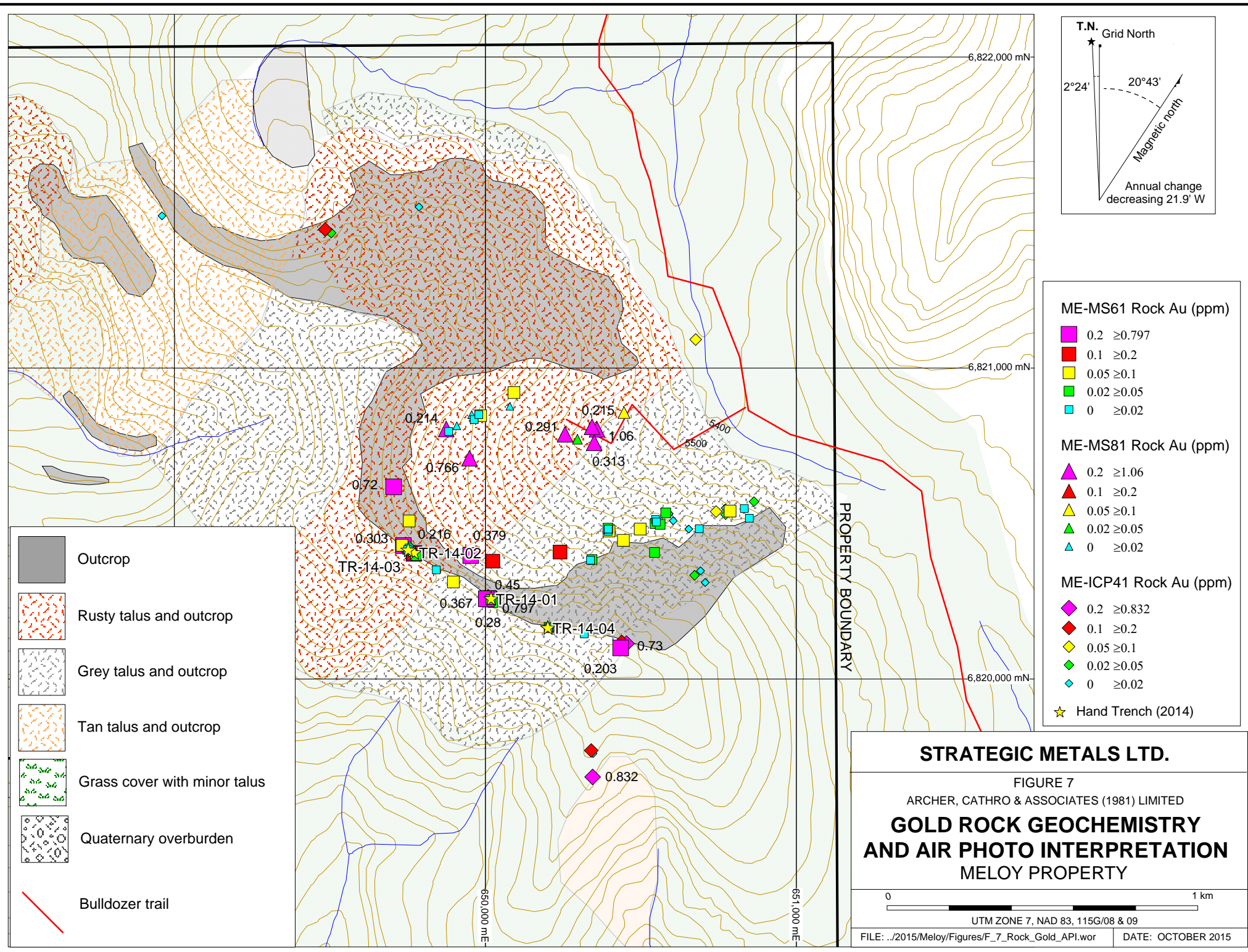


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FIGURE 6

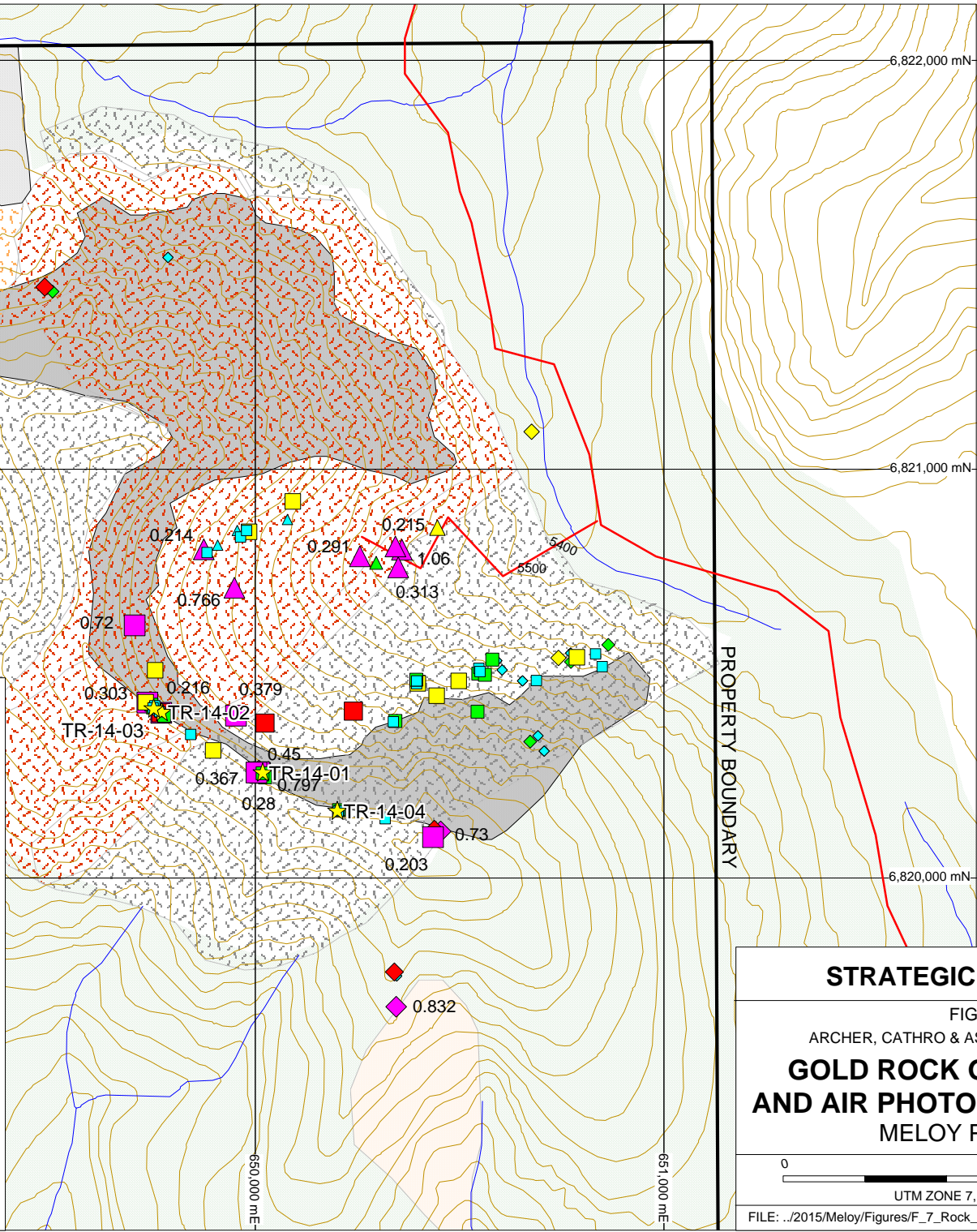
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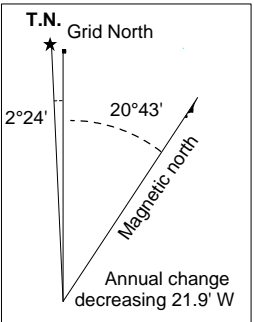
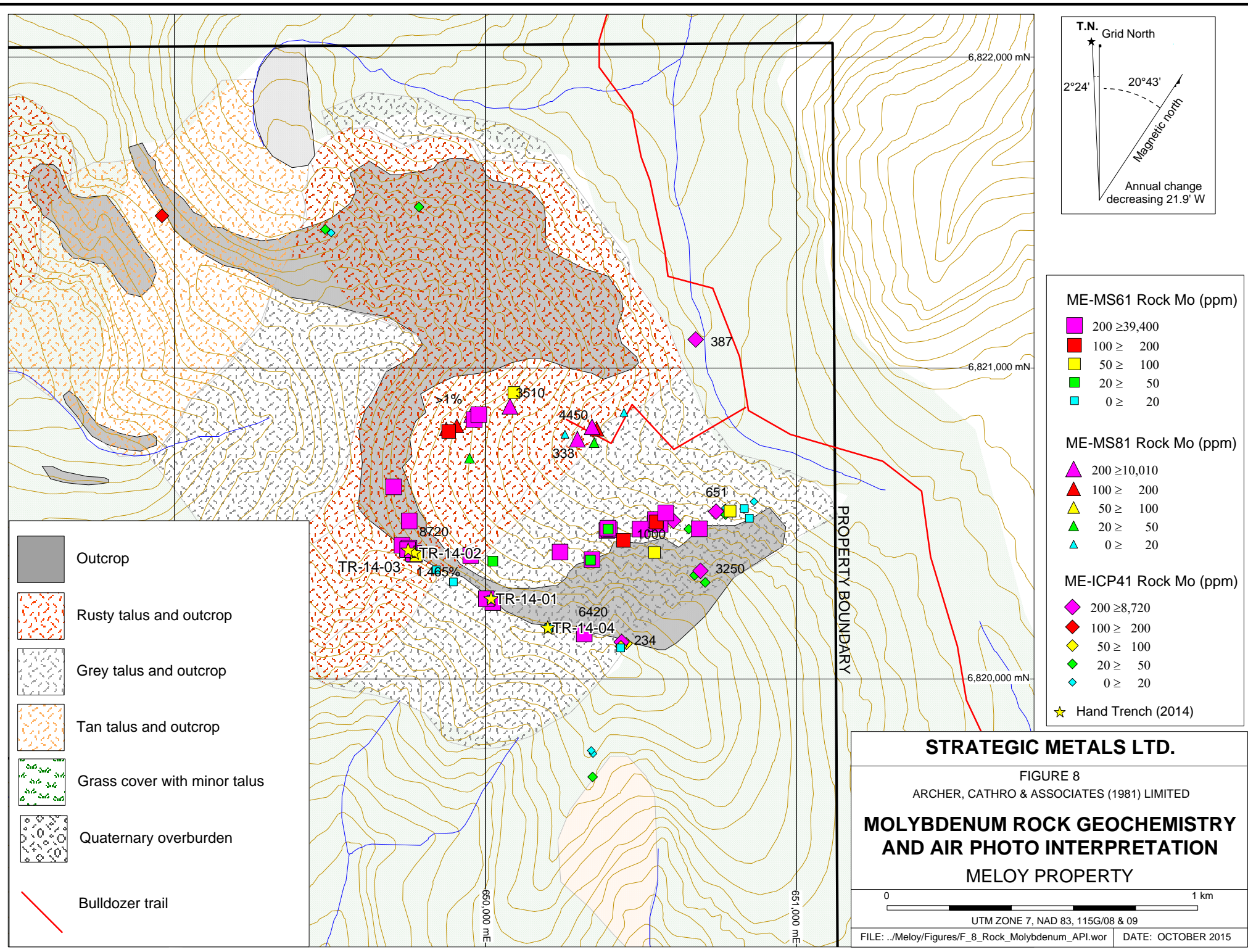
**COPPER ROCK GEOCHEMISTRY  
AND AIR PHOTO INTERPRETATION  
MELOY PROPERTY**



- Outcrop
- Rusty talus and outcrop
- Grey talus and outcrop
- Tan talus and outcrop
- Grass cover with minor talus
- Quaternary overburden
- Bulldozer trail

- ME-MS61 Rock Au (ppm)**
- 0.2 ≥0.797
  - 0.1 ≥0.2
  - 0.05 ≥0.1
  - 0.02 ≥0.05
  - 0 ≥0.02
- ME-MS81 Rock Au (ppm)**
- 0.2 ≥1.06
  - 0.1 ≥0.2
  - 0.05 ≥0.1
  - 0.02 ≥0.05
  - 0 ≥0.02
- ME-ICP41 Rock Au (ppm)**
- 0.2 ≥0.832
  - 0.1 ≥0.2
  - 0.05 ≥0.1
  - 0.02 ≥0.05
  - 0 ≥0.02
  - Hand Trench (2014)





**ME-MS61 Rock Mo (ppm)**

- 200 ≥ 39,400
- 100 ≥ 200
- 50 ≥ 100
- 20 ≥ 50
- 0 ≥ 20

**ME-MS81 Rock Mo (ppm)**

- 200 ≥ 10,010
- 100 ≥ 200
- 50 ≥ 100
- 20 ≥ 50
- 0 ≥ 20

**ME-ICP41 Rock Mo (ppm)**

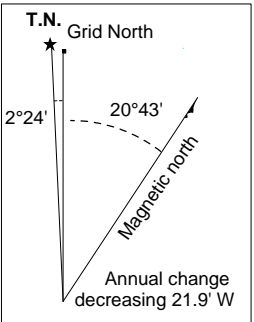
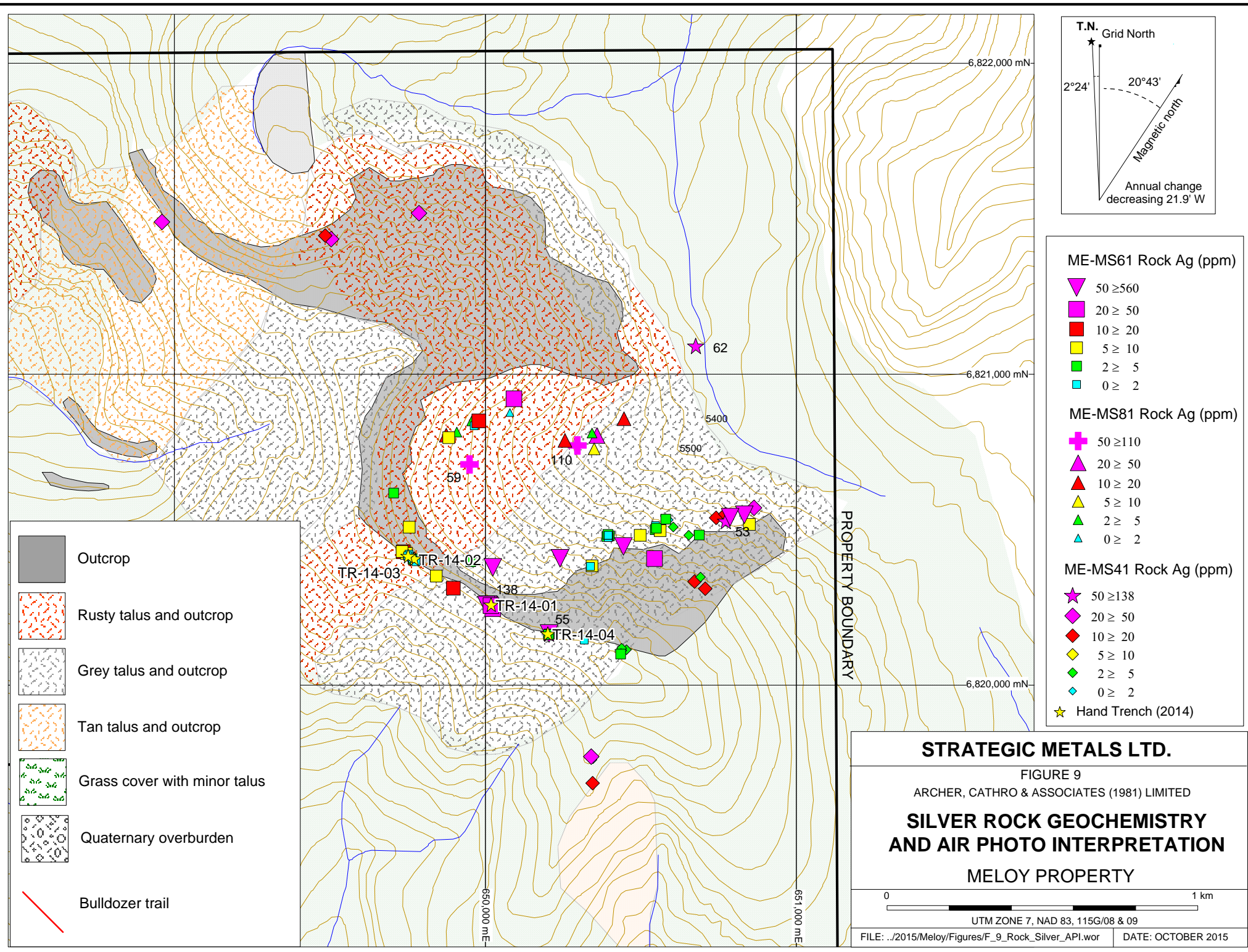
- 200 ≥ 8,720
- 100 ≥ 200
- 50 ≥ 100
- 20 ≥ 50
- 0 ≥ 20

★ Hand Trench (2014)

- Outcrop
- Rusty talus and outcrop
- Grey talus and outcrop
- Tan talus and outcrop
- Grass cover with minor talus
- Quaternary overburden
- Bulldozer trail

PROPERTY BOUNDARY

6,822,000 mN  
 6,821,000 mN  
 6,820,000 mN  
 651,000 mE  
 651,000 mE  
 651,000 mE  
 387  
 3510  
 4450  
 3338  
 651  
 8720  
 TR-14-03  
 TR-14-02  
 TR-14-01  
 TR-14-04  
 6420  
 234  
 1000  
 3250  
 >1%  
 1.465%



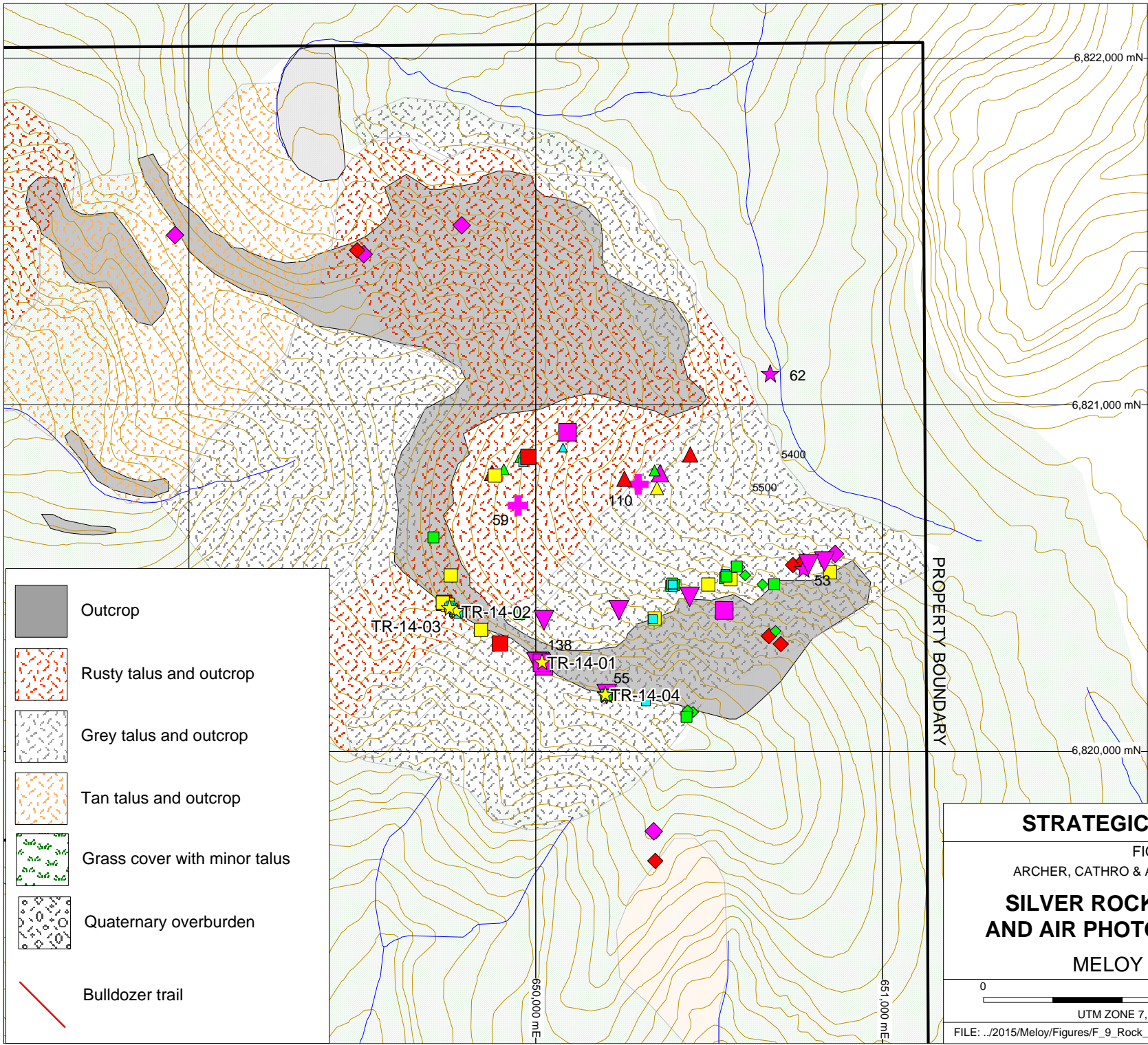
- ME-MS61 Rock Ag (ppm)**
- ▼ 50 ≥ 560
  - 20 ≥ 50
  - 10 ≥ 20
  - 5 ≥ 10
  - 2 ≥ 5
  - 0 ≥ 2

- ME-MS81 Rock Ag (ppm)**
- ✚ 50 ≥ 110
  - ▲ 20 ≥ 50
  - ▲ 10 ≥ 20
  - ▲ 5 ≥ 10
  - ▲ 2 ≥ 5
  - ▲ 0 ≥ 2

- ME-MS41 Rock Ag (ppm)**
- ★ 50 ≥ 138
  - ◆ 20 ≥ 50
  - ◆ 10 ≥ 20
  - ◆ 5 ≥ 10
  - ◆ 2 ≥ 5
  - ◆ 0 ≥ 2
  - ★ Hand Trench (2014)

- Outcrop
- Rusty talus and outcrop
- Grey talus and outcrop
- Tan talus and outcrop
- Grass cover with minor talus
- Quaternary overburden
- Bulldozer trail

PROPERTY BOUNDARY



### **Main Ridge**

The geochemical signature of samples taken along the Main Ridge is notably enriched in copper, silver, molybdenum and tungsten. Individual rock samples have returned background to strongly anomalous results, with all strongly anomalous values for elements of interest coming from quartz veins and Ruby Range Suite that is cut by swarms of veinlets. The highest copper (8.72%), gold (0.797 g/t), tungsten (3.51%) and zinc (1780 ppm) values occur in areas underlain by grey weathering Ruby Range Suite, while the highest molybdenum (1.465%), silver (560 ppm) and tin (1950 ppm) values are underlain by rusty weathering Ruby Range Suite (Burrell, 2015).

### **Main Cirque**

In 2014, a series of continuous chip samples were collected across grey weathering Ruby Range Suite outcrops in the Main Cirque, and rock specimen samples were collected from rusty weathering Ruby Range Suite. Both types of rock samples from the Main Cirque often contain high levels of copper, gold, silver, molybdenum, tungsten and zinc. Samples collected from the southern part of the cirque returned values ranging from background to strongly anomalous for copper (up to 2.54%), tungsten (up to 9770 ppm) and zinc (1980 ppm), while samples from the northern part of the cirque yielded background to strongly anomalous values for molybdenum (greater than 1%), silver (up to 110 ppm) and gold (up to 1.06 g/t). Tin values were typically background to moderately anomalous with one strongly anomalous value (579 ppm) (Burrell, 2015).

### **Other areas**

Four rock samples collected from the northern part of the property returned varied results including: moderately to strongly anomalous values for copper (up to 1.41%) and silver (up to 31 ppm); background to strongly anomalous values for tin (up to 517 ppm); background to moderately anomalous values for gold, molybdenum and zinc; and, background values for tungsten.

Samples collected south of the Main Ridge returned background to moderately anomalous values for copper, molybdenum, tin and zinc, and strongly anomalous values for gold (up to 0.832 g/t), silver (up to 26 ppm) and tungsten (up to 7320 ppm). These samples were collected immediately uphill from an area of tan talus that is thought to be derived from a shear zone.

### **Hand Trenching**

In 2014, four hand trenches were excavated in quartz-veined areas on the Meloy property. The trenches were oriented perpendicular to mineralized quartz veins, and continuous chip samples were taken along the entire length of each trench. Maps, sample descriptions and certificates of analysis for each trench can be found in Burrell (2015). Table IV shows the weighted average grade for each trench.

**Table IV – Hand Trenching – Weighted Average Grades**

Trench	Length (m)	Silver (g/t)	Gold (g/t)	Copper (ppm)	Molybdenum (ppm)	Tungsten (ppm)
TR-14-01	10.0	296	0.208	44700	9.69	685
TR-14-02	10.2	1.16	0.040	298	852	48.7
TR-14-03	15.1	1.31	0.013	326	1003	17.4
TR-14-04	6.4	18.7	0.01	1318	13.64	25.44

In order to evaluate the potential of apparently unmineralized wallrocks between the quartz veined areas, an eight metre composite chip sample of rusty weathering Ruby Range Suite with no quartz veining or visible mineralization was taken along the ridge between TR-14-02 and TR-14-03. This sample returned 2.93 g/t silver, 810 ppm copper, and 54.8 ppm molybdenum. Surprisingly, the silver and copper values are higher than those in the nearby trenches.

### **SOIL GEOCHEMISTRY**

A reconnaissance-scale stream sediment survey conducted in the 1980s by the GSC showed that samples taken from streams draining Ruby Range Suite rocks in the Meloy area are often anomalous compared to regional backgrounds, using the 95<sup>th</sup> percentile to define strongly anomalous values (Friske *et al.*, 1986). Threshold values used to categorize soil geochemical results from the Meloy property are set much higher than the regional thresholds, as shown in Table V.

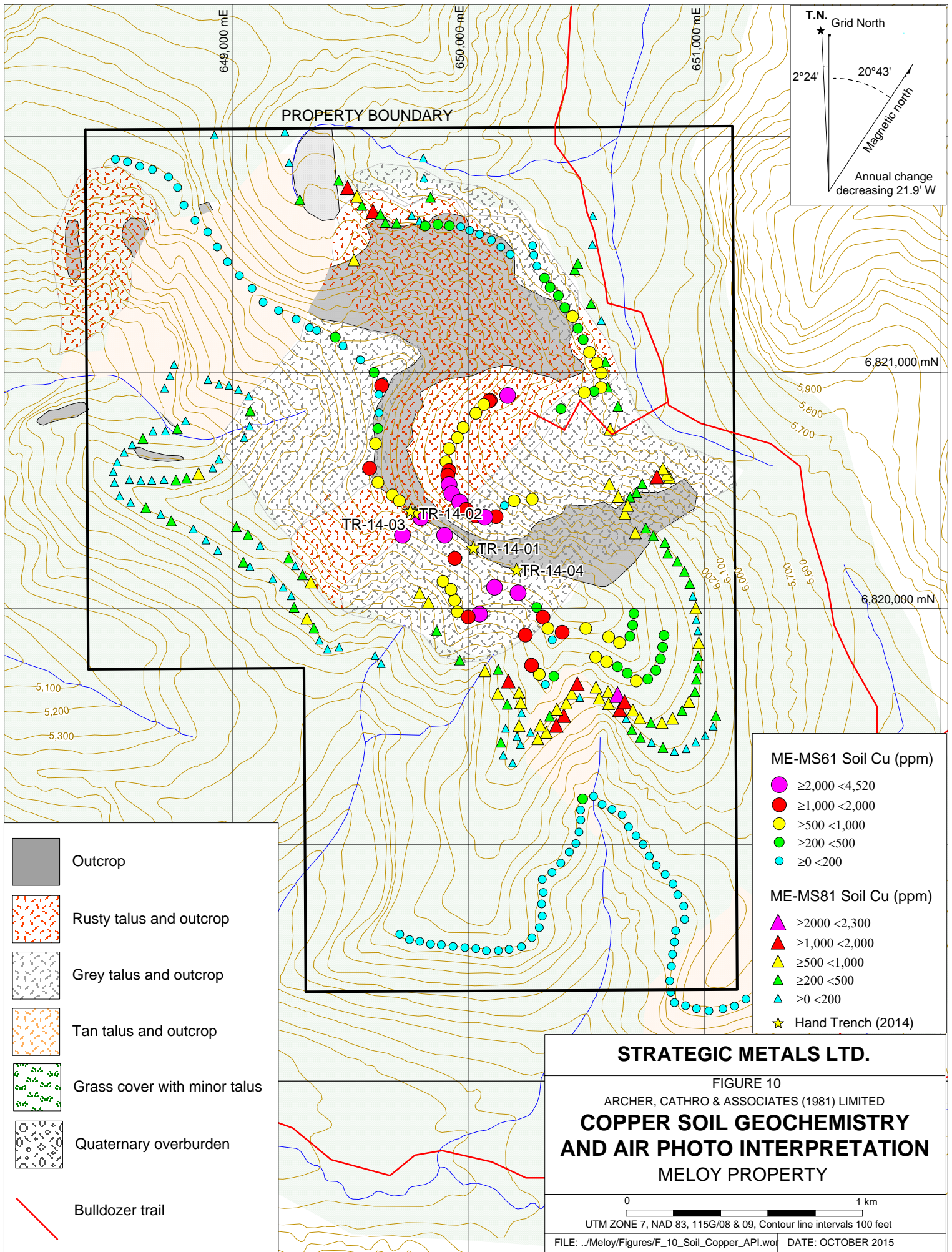
**Table V – Anomalous Soil Thresholds**

Element	Weak	Moderate	Strong	Peak	Regional 95 <sup>th</sup> Percentile *
Copper (ppm)	>100 ≤200	>200 ≤500	>500	4520	118
Gold (ppb)	>20 ≤50	>50 ≤100	>100	673	31
Silver (ppm)	>2 ≤5	>5 ≤10	>10	19	0.4
Molybdenum (ppm)	>5 ≤10	>10 ≤50	>50	595	3
Tungsten (ppm)	>10 ≤20	>20 ≤50	>50	356	16
Tin (ppm)	>10 ≤25	>25 ≤50	>50	217	16
Zinc (ppm)	>200 ≤500	>500 ≤1000	>1000	2090	298

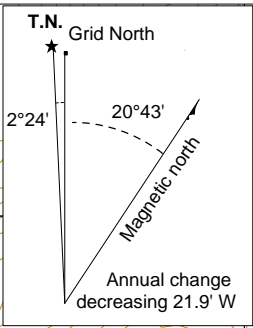
\* Stream sediment samples (Friske *et al.*, 1986)








In 2014, thirty-six soil samples were collected from the Meloy property. Soil development is poor in most areas sampled because the Ruby Range Suite weathers into talus fines rather than soil.












Figures 10 to 13 overlie thematic results for copper, gold, molybdenum and silver from all geochemical surveys, onto the air photo interpretation data. Significantly elevated soil values span a 2500 m diameter area covering much of the property. The most anomalous results are clustered in a 1000 m diameter core featuring strong to very strong copper, gold, silver and molybdenum, and moderate tungsten, tin and zinc values. The core area is centred on the Main



PROPERTY BOUNDARY



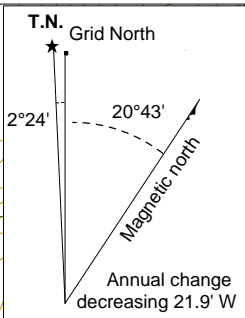
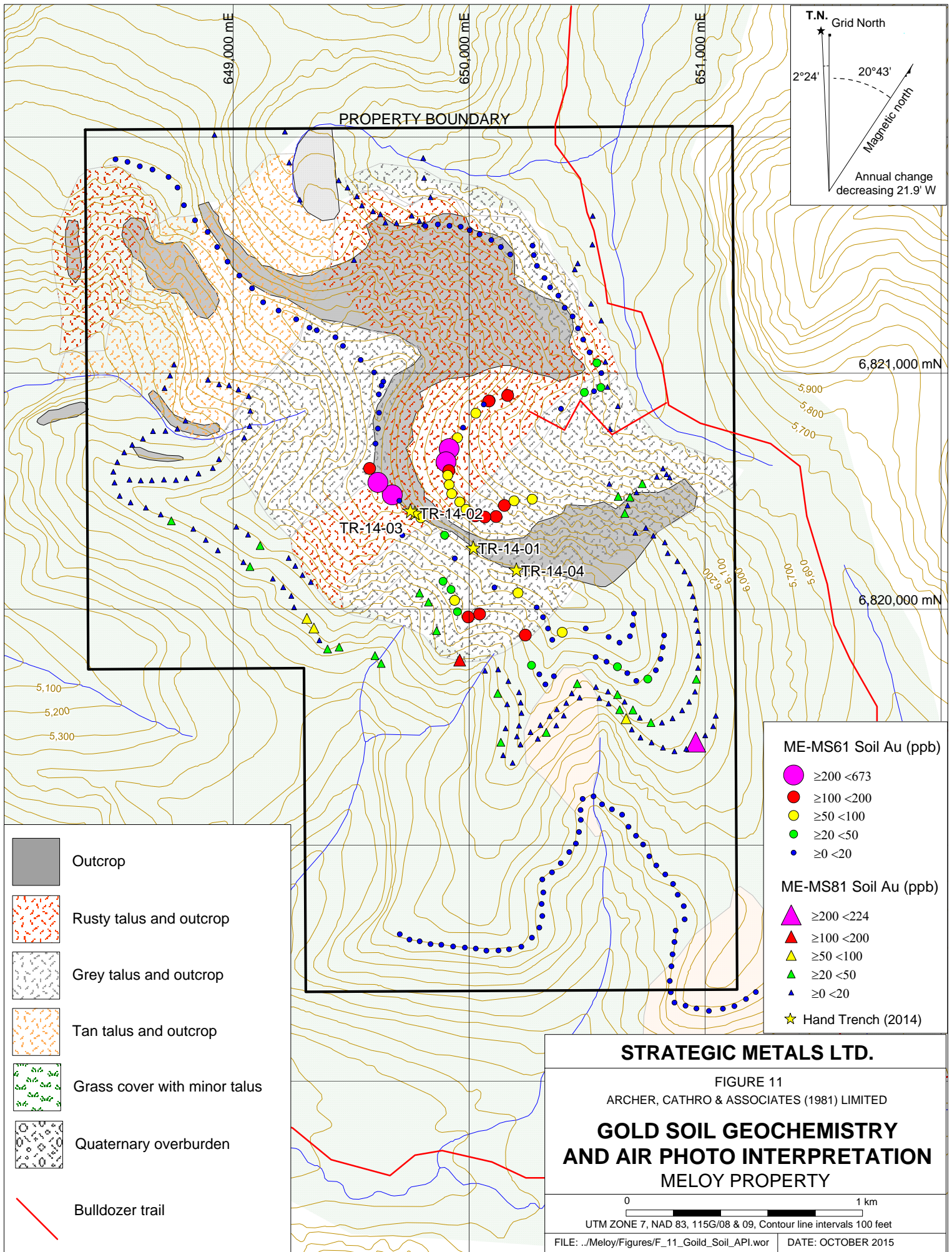
-  Outcrop
-  Rusty talus and outcrop
-  Grey talus and outcrop
-  Tan talus and outcrop
-  Grass cover with minor talus
-  Quaternary overburden
-  Bulldozer trail








- ME-MS61 Soil Cu (ppm)**
-  ≥2,000 <4,520
  -  ≥1,000 <2,000
  -  ≥500 <1,000
  -  ≥200 <500
  -  ≥0 <200
- ME-MS81 Soil Cu (ppm)**
-  ≥2000 <2,300
  -  ≥1,000 <2,000
  -  ≥500 <1,000
  -  ≥200 <500
  -  ≥0 <200
  -  Hand Trench (2014)











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FIGURE 10  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
**COPPER SOIL GEOCHEMISTRY  
 AND AIR PHOTO INTERPRETATION**  
 MELOY PROPERTY

0 1 km  
 UTM ZONE 7, NAD 83, 115G/08 & 09, Contour line intervals 100 feet  
 FILE: ../Meloy/Figures/F\_10\_Soil\_Copper\_API.wor DATE: OCTOBER 2015



-  Outcrop
-  Rusty talus and outcrop
-  Grey talus and outcrop
-  Tan talus and outcrop
-  Grass cover with minor talus
-  Quaternary overburden
-  Bulldozer trail

- ME-MS61 Soil Au (ppb)**
-  ≥200 <673
  -  ≥100 <200
  -  ≥50 <100
  -  ≥20 <50
  -  ≥0 <20
- ME-MS81 Soil Au (ppb)**
-  ≥200 <224
  -  ≥100 <200
  -  ≥50 <100
  -  ≥20 <50
  -  ≥0 <20
- ★ Hand Trench (2014)

**STRATEGIC METALS LTD.**

FIGURE 11

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

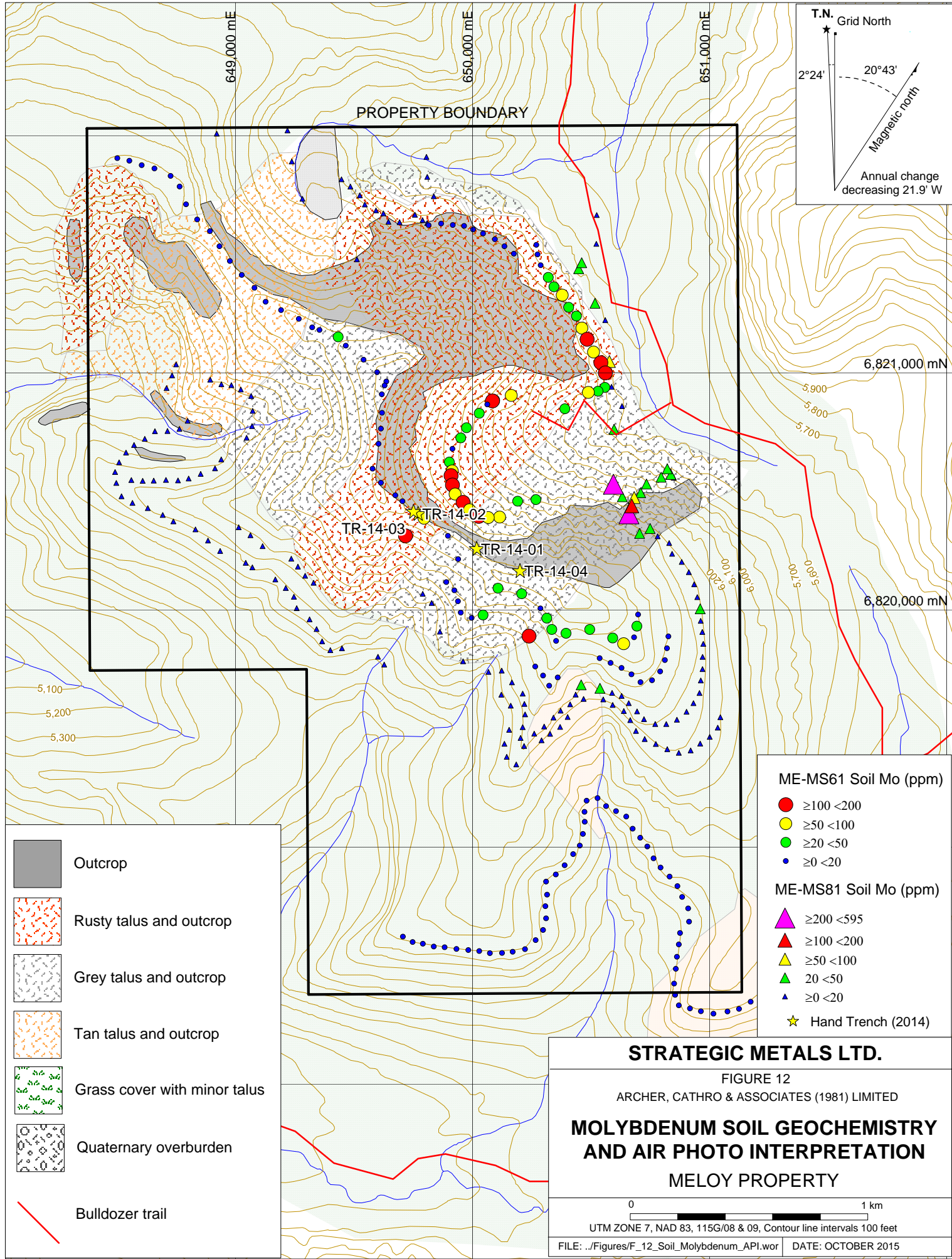
**GOLD SOIL GEOCHEMISTRY AND AIR PHOTO INTERPRETATION**

**MELOY PROPERTY**

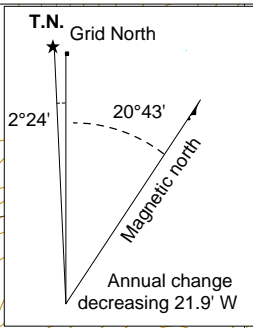
0 1 km








UTM ZONE 7, NAD 83, 115G/08 & 09, Contour line intervals 100 feet










FILE: ../Meloy/Figures/F\_11\_Goild\_Soil\_API.wor DATE: OCTOBER 2015



PROPERTY BOUNDARY



-  Outcrop
-  Rusty talus and outcrop
-  Grey talus and outcrop
-  Tan talus and outcrop
-  Grass cover with minor talus
-  Quaternary overburden
-  Bulldozer trail

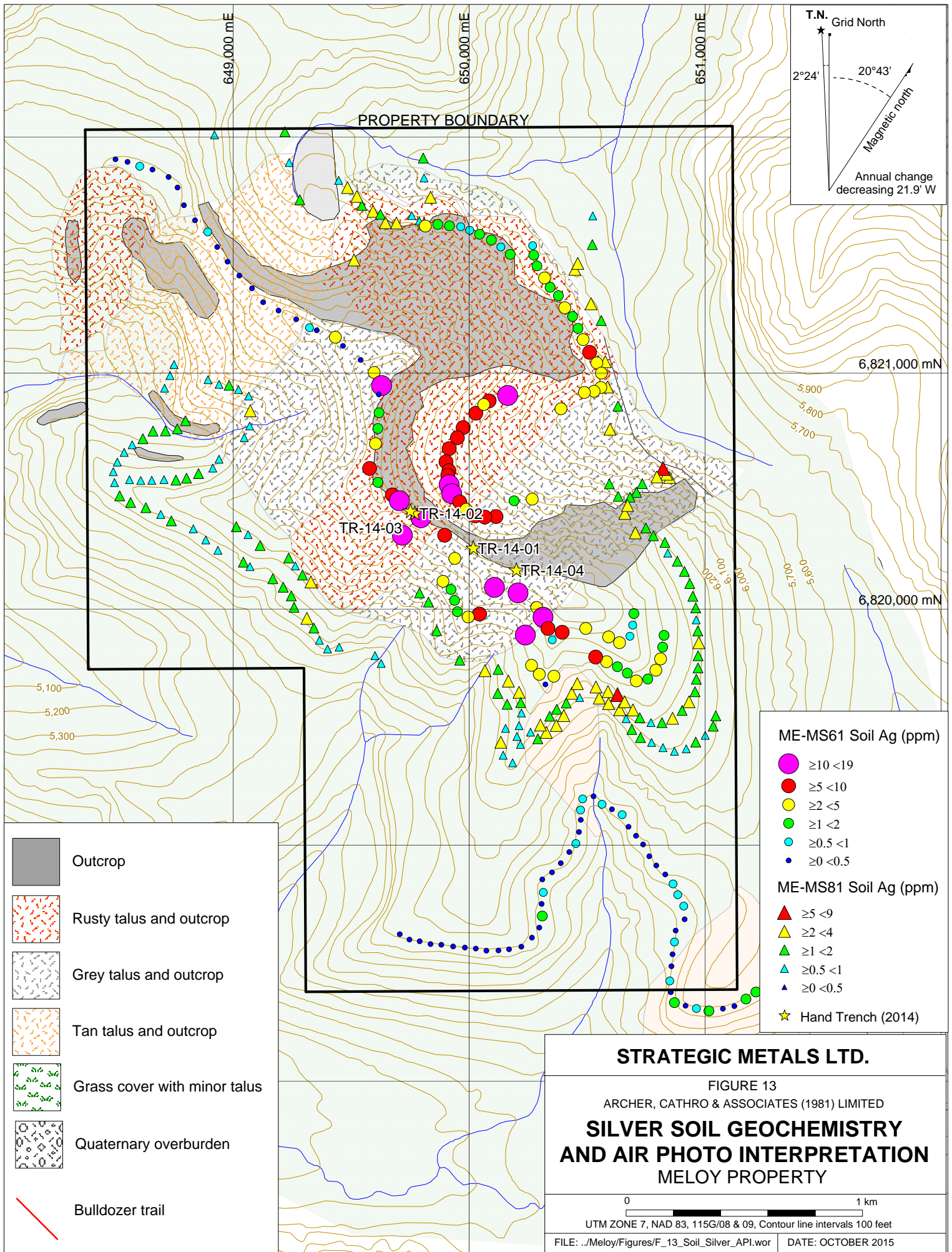
- ME-MS61 Soil Mo (ppm)**
-  ≥100 <200
  -  ≥50 <100
  -  ≥20 <50
  -  ≥0 <20
- ME-MS81 Soil Mo (ppm)**
-  ≥200 <595
  -  ≥100 <200
  -  ≥50 <100
  -  20 <50
  -  ≥0 <20
- ★ Hand Trench (2014)

**STRATEGIC METALS LTD.**

FIGURE 12  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**MOLYBDENUM SOIL GEOCHEMISTRY  
 AND AIR PHOTO INTERPRETATION  
 MELOY PROPERTY**

0 1 km  
 UTM ZONE 7, NAD 83, 115G/08 & 09, Contour line intervals 100 feet  
 FILE: ../Figures/F\_12\_Soil\_Molybdenum\_API.wor DATE: OCTOBER 2015



Cirque. Peak values from this sampling include: 4520 ppm copper, 673 ppb gold, 19 ppm silver, 595 ppm molybdenum, 356 ppm tungsten, 217 ppm tin and 2090 ppm zinc.

A second cluster of coincident strongly to very strongly anomalous values for copper, gold, tungsten, tin and zinc has been identified in the southern part of the property, about one kilometre southeast of the Main Cirque. Peak values from this area include: 2300 ppm copper, 224 ppm gold, 129 ppm tungsten, 127 ppm tin and 2150 ppm zinc. No follow up prospecting has been done in this area.

Smaller clusters of anomalous results occur in the northern and western parts of the property. These clusters comprise samples with moderately elevated values for copper, zinc, tungsten and tin. No follow up prospecting has been done in any of these areas.

### **DISCUSSION AND CONCLUSIONS**

The Meloy property hosts a large, multi-element geochemical anomaly believed to be related to atypical porphyry-style mineralization. Strongly anomalous rock and soil values for copper, gold, silver, molybdenum, tungsten, tin and zinc have been obtained from samples taken across the property. Economic minerals are hosted within fractures and quartz veins cutting rusty and grey weathering rocks of the Ruby Range Suite.

Mineralization is closely tied to a series of northerly-trending, steeply dipping linears, which are apparent along the Main Ridge but are mostly obscured by thick talus in other areas.

Future work on the Meloy property should consist of the following:

- 1) Preparation of orthophotos and detailed topographic maps;
- 2) Compilation of historical data onto the new, more detailed orthophotos and maps;
- 3) Detailed geological mapping in the northern part of the Main Cirque and elsewhere on the property where outcrop is accessible;
- 4) Continuous chip sampling along the Main Ridge to test the mineral potential of the rusty and grey weathering Ruby Range Suite rocks in addition to the mineralized quartz veins and dykes. Due to the recessive nature of the mineralized fracture/vein zones blocky intrusive talus will have to be excavated in most areas to expose bedrock, before chip sampling can be done;
- 5) Representative specimens of rusty, tan and grey weathering Ruby Range Suite should be collected so that thin sections can be made for petrographic studies;
- 6) Prospecting should follow up unexplained strongly anomalous soil geochemical values; and,
- 7) Pending favourable results from the chip sampling program, diamond drilling should be done to test the mineralization at depth.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

A handwritten signature in blue ink, appearing to be 'J. Morton', written over a horizontal line.

J. Morton, B.Sc., GIT

## REFERENCES

- Burrell, H.  
 2015 Assessment Report describing Geological Mapping, Prospecting, Hand Trenching and Soil Geochemistry at the Meloy Property; Assessment report prepared by Archer, Cathro & Associates (1981) for Strategic Metals Ltd.
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2012 Assessment Report describing Geochemical Sampling and Prospecting at the Meloy Property; Assessment report prepared by Archer, Cathro & Associates (1981) Limited for Strategic Metals Ltd.

Tempelman-Kluit, D.J.

1974 Reconnaissance geology of Aishihik Lake, Snag and part of Stewart River map-areas, west-central Yukon; Geological Survey of Canada.

**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**

## **STATEMENT OF QUALIFICATIONS**

I, Jack Morton, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from Simon Fraser University in 2013 with a B.Sc. in Earth Science.
2. From 2007 to present, I have been actively engaged in mineral exploration in Yukon Territory, British Columbia, and Northwest Territories
3. I am a Geoscientist in Training (G.I.T.) with the Association of Professional Engineers and Geoscientists of British Columbia.
4. I supervised the field program and have interpreted all data resulting from this work.



J. Morton, B.Sc., GIT

**APPENDIX II**  
**STATEMENT OF EXPENDITURES**

Statement of Expenditures  
Meloy 1-42 Mineral Claims  
November 10, 2015

Contract Field Survey (including management)

Underhill Geomatics Ltd.

\$12,121.90

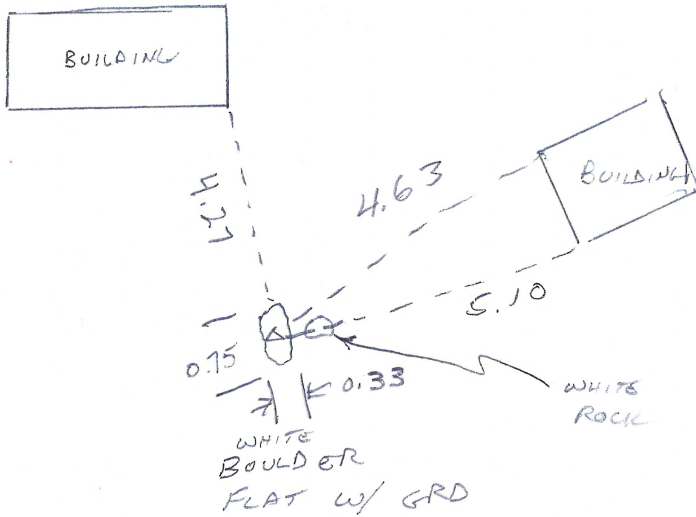
**APPENDIX III**  
**SURVEY DATA**

MELOY

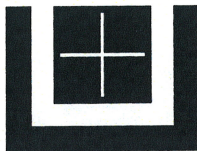
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Pt: 2

Sketch/Additional Notes:



GROUND ELEV. 1491.055



UNDERHILL GEOMATICS LTD.

PROFESSIONAL LAND SURVEYORS

4081 Fourth Ave, Whitehorse, Yukon Y1A 1H3

Phone: (867) 668 2048 Fax: (867) 668 4456

UNDERHILL  
GEOMATICS LTD.

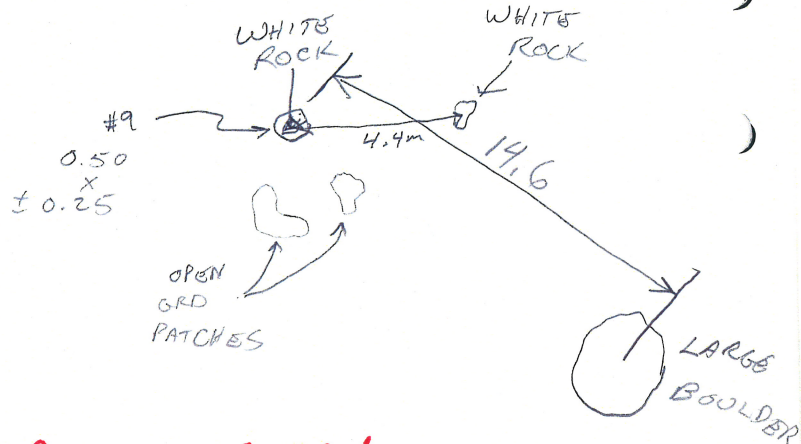
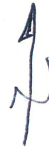


MELOT

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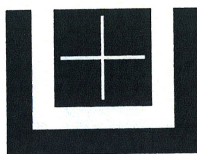
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Sketch/Additional Notes:



GROUND ELEV.  
1513.781

NOTE: WENT DOWN TO 4 GPS SAT.  
IN VALLEY.



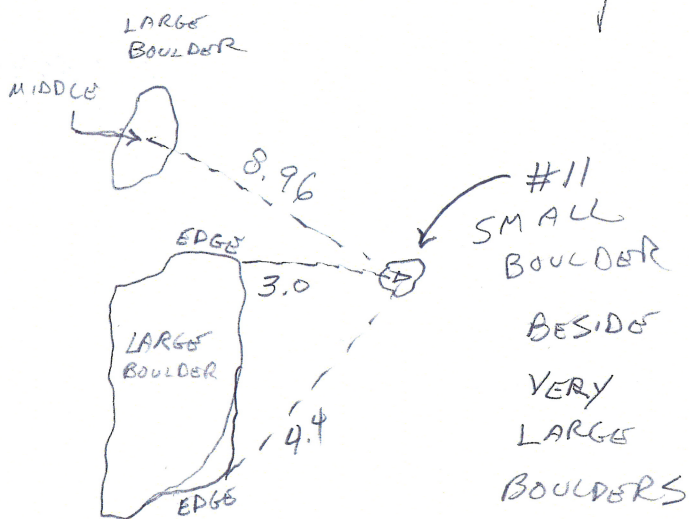
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MELOY

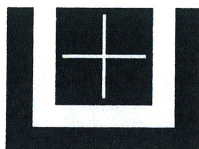
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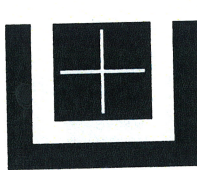
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MELOY

Page \_\_\_\_\_

Pt: 16 \_\_\_\_\_

Sketch/Additional Notes:



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MELLOY

Page \_\_\_\_\_

Pt: 21

**Sketch/Additional Notes:**



2m  
OPEN  
GROUND

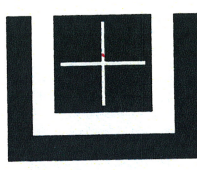


LARGE  
BOULDER  
2m x 1.6m

35.3



± 1m GROUND ELEV.  
ABOVE  
GAD 1296.445



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MELOY

Page \_\_\_\_\_

Pt: 27

Sketch/Additional Notes:



GROUND ELEV.  
1587.366.

VERY  
LARGE  
BOULDER

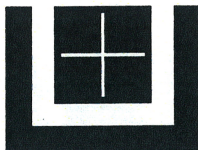


VERY  
LARGE  
BOULDER

14.72



ROCK OUTCROP



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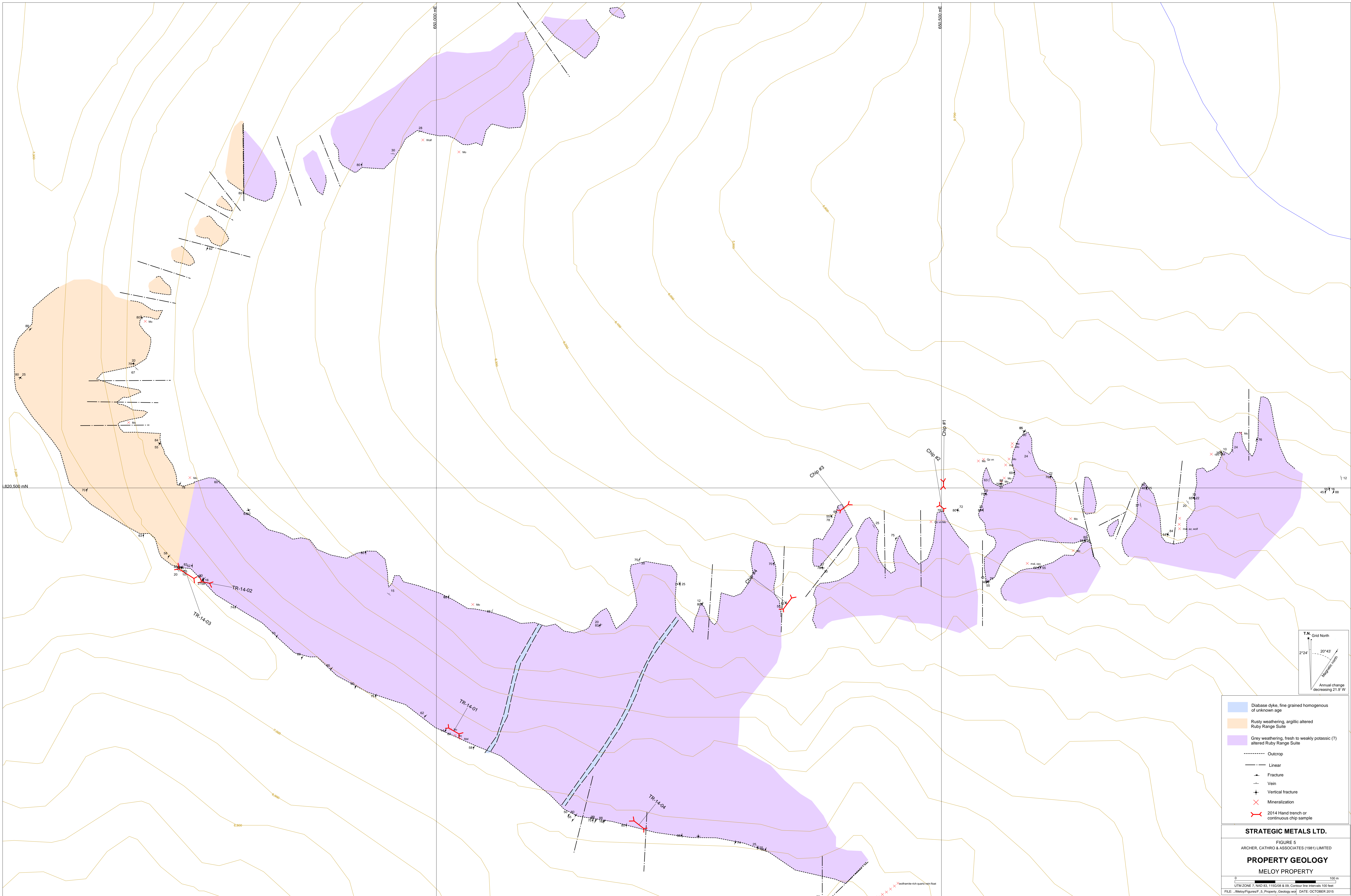
UNDERHILL  
GEOMATICS LTD.



## MELOY

Coordinates are NAD 83(CSRs) Zone 7 derived from Least Squares adjustment of GPS observations holding values of 2 and 11 fixed in 3D
Coordinates of 2 and 11 are derived from Natural Resources Canada PPP Services (Precise Point Positioning)
Elevations are Orthometric derived from CGVD28 datum and HTv2.0 Geoid

	NORTHING	EASTING	ELEVATION OF GROUND
2	6817709.072	651132.391	1491.055
9	6822464.831	650678.271	1513.781
11	6818143.981	649997.787	1480.53
16	6820807.914	650355.134	1778.823
21	6818780.902	647839.689	1296.445
27	6823192.963	648535.051	1587.366



- Diabase dyke, fine grained homogenous of unknown age
- Rusty weathering, argillic altered Ruby Range Suite
- Grey weathering, fresh to weakly potassic (?) altered Ruby Range Suite
- Outcrop
- Linear
- Fracture
- Vein
- Vertical fracture
- × Mineralization
- 2014 Hand trench or continuous chip sample

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FIGURE 5  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**PROPERTY GEOLOGY**  
**MELOY PROPERTY**

0 100 m  
 UTM ZONE 7, NAD 83, 115G08 & 09, Contour line intervals 100 feet  
 FILE: ..MeLOY\Figures\F\_5\_Property\_Geology.well DATE: OCTOBER 2015