2020 FINAL REPORT

YUKON MINERAL EXPLORATION PROGRAM
GRANT NUMBER YMEP2020-66

Upper Duncan Creek

MAYO MINING DISTRICT, YUKON TERRITORY

For

Earth & Iron Inc.

By

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Location: 63°50’16.5” N to 63°52’46.0” N; 135°07°52.55” W to 135°17°31.0” W
NTS: 105M14
Mining District: Mayo
Date: January 17, 2021

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Executive Summary

The following is the final report on exploration of the tributaries of Upper Duncan Creek conducted under grant number YMEP2020-066 of the Yukon Mineral Exploration Program (YMEP), placer module, for Earth & Iron Mines Inc. The property is located in central Yukon approximately 480 km by road from Whitehorse. Earth & Iron Inc. holds a Type B Water Use Licence (PM16-015-01) for Placer Mining and a Class 4 Mining Land Use Permit (AP16015) on its Upper Duncan Property, which are both valid until June 1, 2026. There are 145 placer claims held by Earth & Iron Inc. in the Upper Duncan drainage.

Mount Hinton is the locale for a significant bedrock gold source (MINFILE 105M052) which consists of a series of mineralized vein-faults hosted in both the Triassic Galena Suite Gabbro and the Carboniferous Keno Hill Quartzite. It lies at the headwaters of several major drainages including Upper Duncan Creek, Keystone Creek, Granite Creek, McNeil Gulch, McMillan Gulch and Allen Creek.

On Granite Creek, over 6000 ounces of placer gold have been mined in the last four years. There is a strong possibility that other drainages radiating from Mount Hinton have similar placer gold potential, however testing in these areas to date has been of insufficient scale and scope.

The 2020 exploration program consisted of 1km of electrical resistivity surveys, 5.32 creek miles of drone imagery, and 170m of Reverse Circulation (R/C) drilling and sampling.

The two new resistivity surveys conducted in the Stuart claims area had 3 exploration targets identified, while the 3 new resistivity surveys conducted in the Lindsey claim area had 4 targets identified.

R/C drilling of the previously identified geophysical targets in the Stuart claims area showed a good correlation between interpreted and true depths to bedrock. Prospective amounts of placer gold were found, mostly in layers above bedrock. The best gold values found in the Stuart claim area were from drill hole UD20-04, which was close to a previously identified geophysics target located on the right limit of the tributary. The fine-grained, wiry placer gold found in the sample could indicate a right limit paleochannel with a proximal gold source.

Due to poor access, the Jill claims tributary was not drilled, although the tributary has a right limit channel target defined by the geophysics done in previous years.

There were 4 R/C holes drilled and sampled for placer gold in the James, Lew and Izzie claim area in the uppermost reaches of Upper Duncan creek. The best gold samples were from drill hole UD20-10, which was collared at the toe of the McConnell age moraine. Here, the gold was found in the bottom 6m above bedrock in a brown sandy gravel layer. This unit may be interpreted as an oxidized interglacial paleochannel, and the overlying black gravel and silt may be interpreted as McConnell aged alpine till.

Overall, the exploration results on the Upper Duncan creek tributaries, although inconsistent, continue to be promising and further exploration is warranted. This should include access construction (drill roads), additional resistivity geophysics, R/C drilling of new and previous targets, and excavator test-pitting with increasingly larger-scale bulk sampling of promising targets.

Introduction

The following is the final report on exploration of the Upper Duncan Creek tributaries property conducted under grant number YMEP2020-066 of the Yukon Mineral Exploration Program (YMEP), placer module. The 2020 program includes resistivity surveys, reverse circulation (R/C) drilling, and drone imagery.

Location and Access

The property is located in central Yukon approximately 480 km by road from Whitehorse (Figure 1). Access is gained from Whitehorse via Stewart Crossing on the Klondike Highway (353 km), followed by a distance of 52 km east on the Silver Trail to Mayo. From Mayo to Keno City the road runs a distance of 65 km. The Upper Duncan Creek road turnoff lies a distance of 3.7 km south along the Duncan Creek road from Keno City. A final 6.3 km along this road leads to the main camp and staging area on the SAM claims. A steep, 1 km road connects the camp to the Sourdough Hill road on the ridge to the north. The Sourdough Hill road is a 4WD road, which runs from Keno City to the upper reaches of Upper Duncan Creek (10.1 km). The uppermost reaches of Upper Duncan Creek are reached from this point by another 2.9 km long road, which turns east. In 2017, a bypass road connected the camp on the SAM 11 claim to the Sourdough Hill/Upper Duncan Creek road, intersecting it on the IZZIE 10 claim.

Dates of Work and Personnel

The 2020 program was conducted between August 6 and August 22, 2020. The field crew consists of supervisor William LeBarge (Geoplacer Exploration Ltd.), Selena Magel, B.Sc., G.I.T., Allegra Webb, B.Sc., G.I.T., and a drilling crew.

Placer Mineral Tenure

A total of 145 placer claims are in the Upper Duncan drainage, under Grouping Certificate GM00278. The extent of the claims are plotted on Figure 2. The tables in Appendix 1 give the placer claims currently held by Earth & Iron Inc. and its affiliates in the Upper Duncan Creek property.

Quartz Mineral Tenure

Active quartz claims are held throughout the area including all of Upper Duncan Creek. There are currently several owners including Archer, Cathro & Associates (1981) Limited, Metallic Minerals Ltd. and Shawn Ryan. Earth & Iron Inc. and its affiliates hold no quartz tenure in the area.

Permitting

Earth & Iron Inc. currently holds a Type B Water Use Licence (PM16-015-01) for Placer Mining and a Class 4 Mining Land Use Permit (AP16015) on its Upper Duncan Property, which are both valid until June 1, 2026.

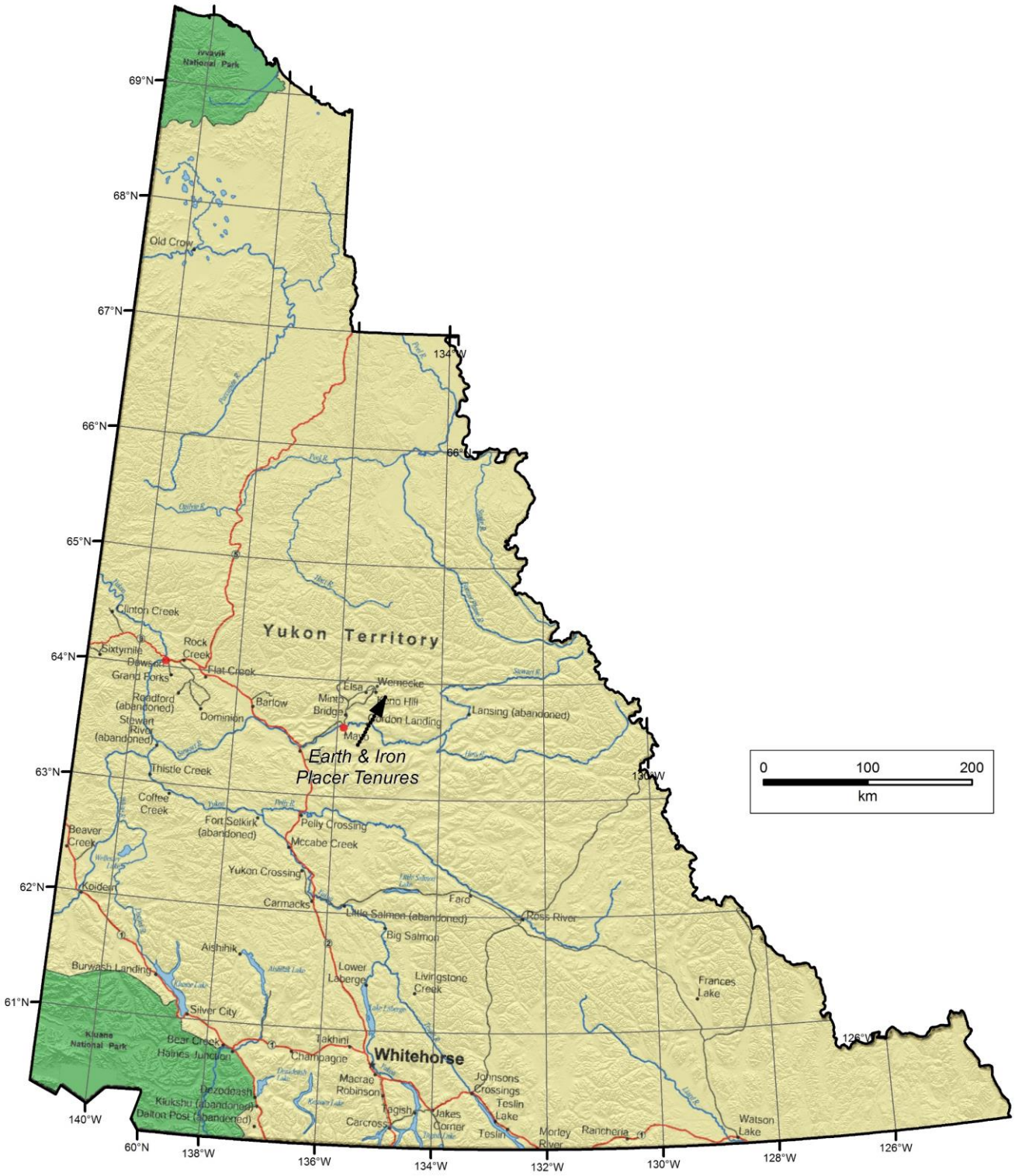

Figure 1 - Location of Placer Tenures held by Earth & Iron Inc. and its affiliates, Upper Duncan Creek, Yukon.

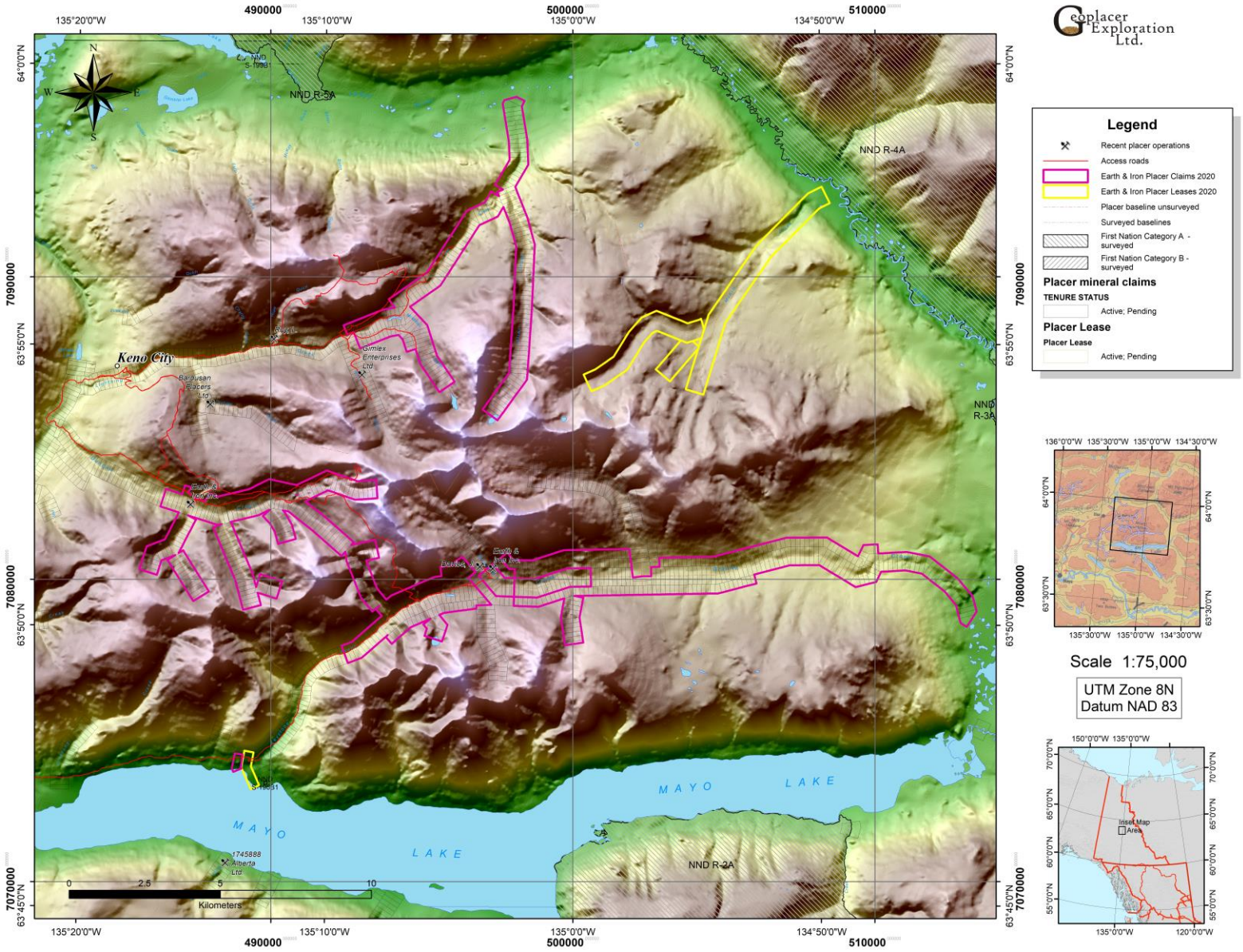

Figure 2 – Location map of Upper Duncan Creek, Lightning Creek and Granite Creek showing Earth & Iron Inc. holdings and other placer claims and prospecting leases held in the area.

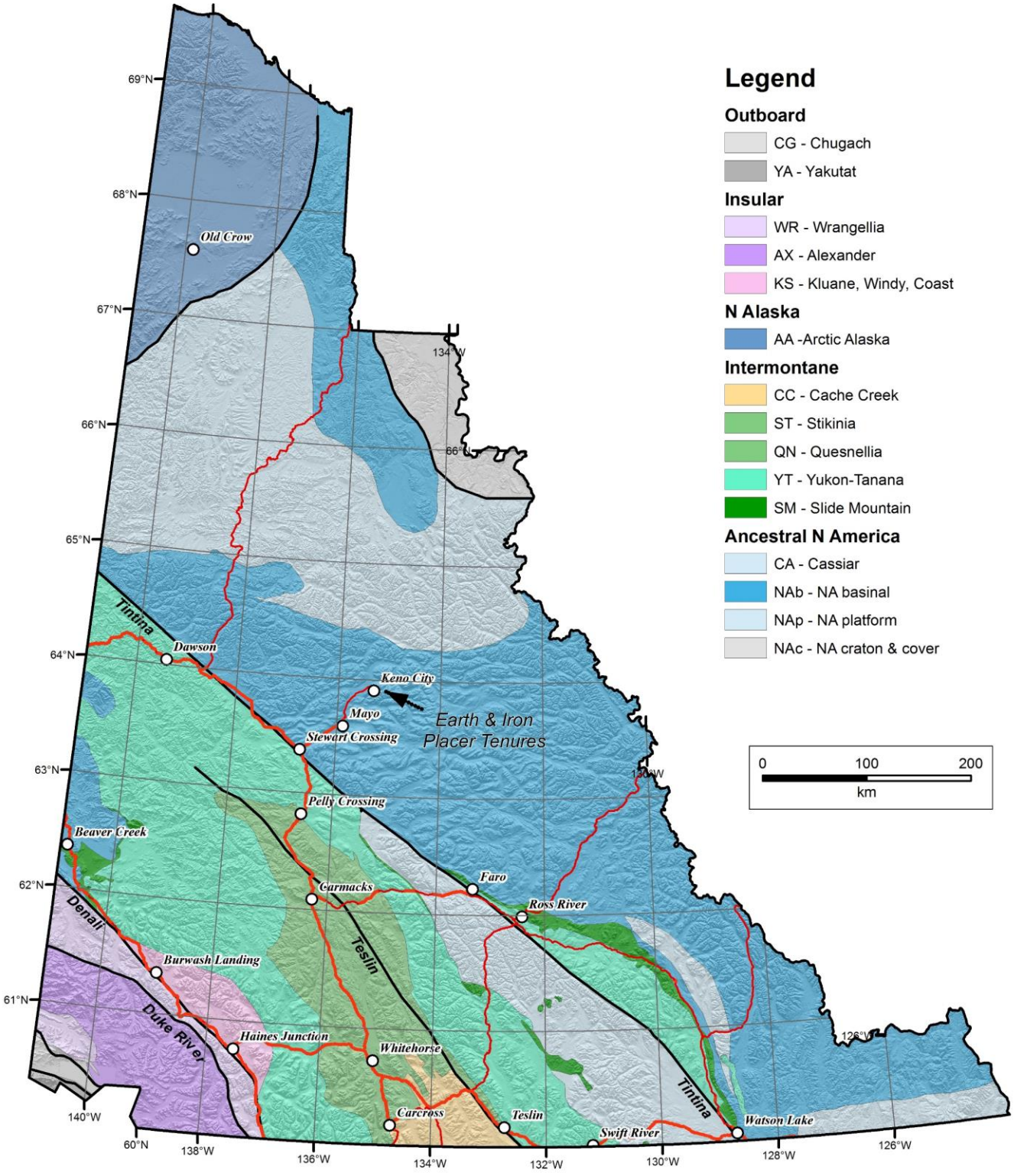

Figure 3 - Geological Map of Yukon, showing major bedrock terranes and structural elements. Modified after Yukon Geological Survey, 2018.

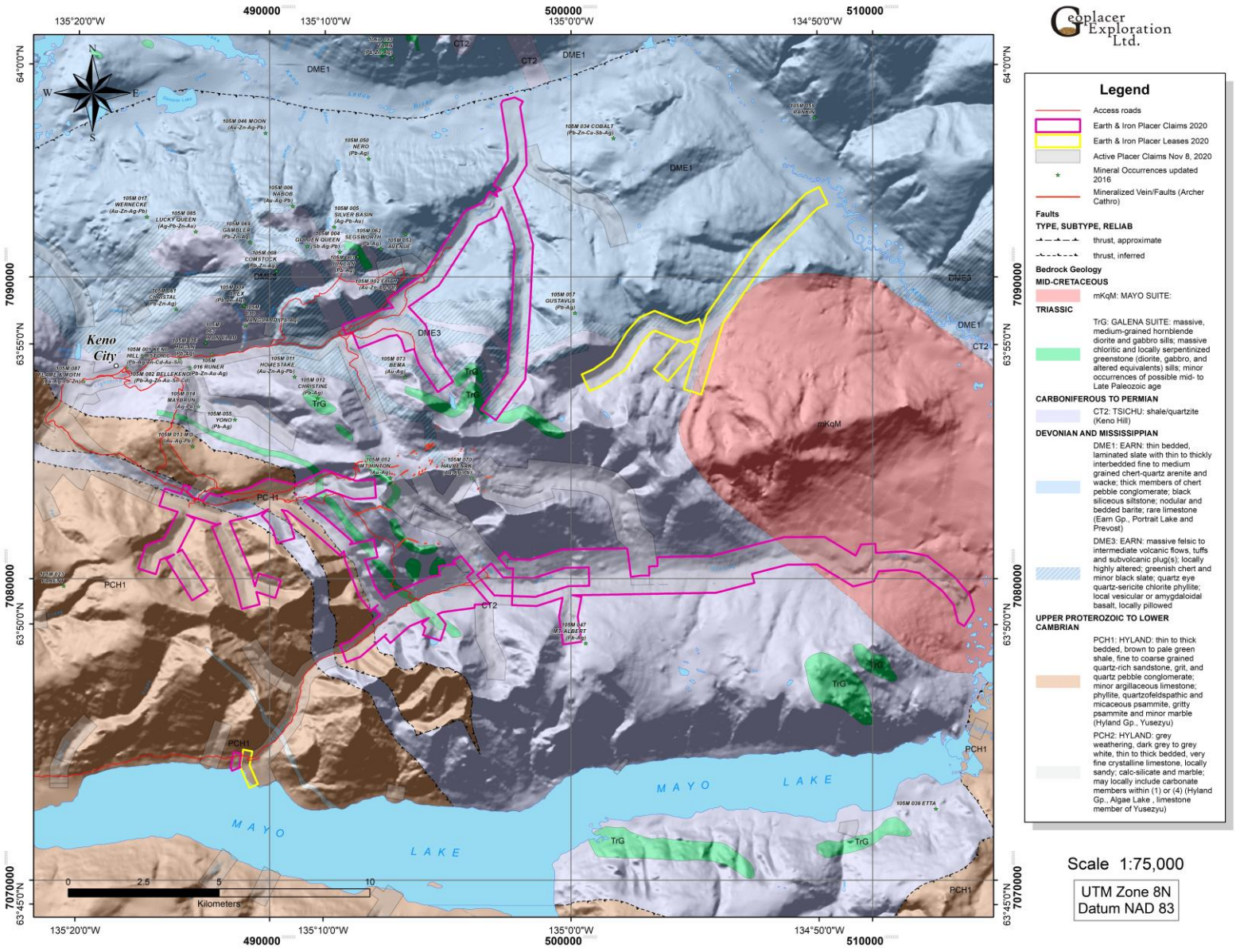

Figure 4 - Bedrock geology and mineral occurrences of Upper Duncan Creek, Lightning Creek and Granite Creek areas, after Yukon Geological Survey, 2018. Mineralized vein-faults digitized from Wengzynowski, 2008 (EMR Assessment report 095613).

Regional Bedrock Geology

Murphy (1997) and Roots (1997a, 1997b) mapped and described the McQuesten and Keno Hill area, and various researchers (Stephens et al., 2004; Hart et. al., 2002; Colpron and Ryan, 2010) have described the tectonic setting and mineral deposits throughout the region.

Figure 3 is a geological map of Yukon, showing major bedrock terranes and structural elements. The Earth & Iron Inc. properties in the Keno Hill district lie east of the Tintina Fault, within Ancestral North America in the *Nab* (North American basinal) terrane. In that part of the western Selwyn basin, dominantly clastic sedimentary rocks were deposited in an off-shelf setting in a period from the latest Neoproterozoic to the Carboniferous (Stephens et al., 2004).

The Keno Hill district is part of the Tombstone Gold Belt (Stephens et al, 2004), a subset of the Tintina Gold Province (Hart et al., 2002). This area is characterized by a northerly-directed, fold-and-thrust belt which developed in the Late Jurassic to Early Cretaceous (Roots, 1997a, 1997b; Murphy, 1997). The Dawson, Tombstone and Robert Service thrusts are the products of this deformation across the northern part of the basin (Murphy and Roots, 1996; Roots, 1997a).

The Robert Service Thrust sheet contains Hyland Group (Late Proterozoic to Cambrian) sandstone and grit with rare limestone and minor maroon argillite, overlain by a Cambrian to Middle Devonian succession of dark coloured siltstone, limestone and chert. These strata, a component of the regional Selwyn Basin, are unconformably overlain by Upper Devonian Earn Group argillite, chert and chert pebble conglomerate (Murphy, 1997; Roots, 1997a, 1997b). To the north, the Tombstone Thrust sheet consists of highly strained Earn Group carbonaceous phyllite, felsic meta-tuff and metaclastic rocks, succeeded by Carboniferous Keno Hill quartzite that is thickened by internal recumbent folds or thrusts in the north central part of the map area. These units host the Ag-Pb-Zn veins of the Elsa-Keno Hill camp and the Au veins of the Mount Hinton area (Roots, 1997a, 1997b).

Jurassic (?) and Cretaceous contraction produced regionally developed penetrative fabrics and folds of various scales as well as thrust faulting. A domain of intensely-developed foliation and lineation underlies the northern half of the map area, imparted during two or more phases of movement on the Tombstone Thrust (Roots, 1997a, 1997b).

Two main intrusive suites of rock were emplaced into the western Selwyn basin after the regional deformation; the McQuesten Intrusive Suite, and the Tombstone Plutonic Suite (Murphy, 1997). The Tombstone Suite was emplaced around 92 Ma, and its rocks are associated with the Tombstone Gold Belt deposits in Yukon (Brewery Creek, Dublin Gulch, Scheelite Dome and Clear Creek) as well as the Pogo, Fort Knox and Donlin Creek deposits in Alaska (Hart et al., 2002).

Mineral Occurrences

The Roop Lakes batholith, which outcrops in the eastern part of the project area, is a late Cretaceous granite, quartz monzonite and granodiorite intrusion of the Tombstone Suite. It is widely-held to be the probable heat source for epi- and meso-thermal veins of the Elsa-Keno Hill mining camp (Roots, 1997a, 1997b).

Table 1 lists YUKON MINFILE (Yukon Geological Survey, 2018) mineral occurrences in the Upper Duncan/Keno Hill district. Most of these occurrences are polymetallic veins, consisting of silver, lead and zinc with various amounts of accessory gold. The host rock is mainly the Carboniferous Keno Hill Quartzite, however some veins are hosted in carbonaceous phyllite, felsic meta-tuff and metaclastic rocks of the Devonian Earn Group. A few mineralized polymetallic veins are hosted in the metaclastic rocks of the Late Proterozoic to Cambrian Hyland Group.

Table 1 – Selected Mineral Occurrences, Keno Hill and Upper Duncan area, from MINFILE (Yukon Geological Survey, 2018).

MINFILE NUMBER	DEPOSIT TYPE	STATUS
105M 001 KENO HILL - HISTORIC (Pb-Ag-Zn-Cd-Au-Sn)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 002 FAITH (Au-Zn-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 003 DUNCAN (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 004 GOLDEN QUEEN (Sb-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 005 SILVER BASIN (Ag-Pb-Au)	Vein Polymetallic Ag-Pb-Zn+/-Au	Prospect
105M 006 NABOB (Au-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 007 MONUMENT (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 008 COMSTOCK (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 009 APEX (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 010 VANGUARD (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 011 HOMESTAKE (Au-Zn-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 012 CHRISTINE (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Prospect
105M 013 MO (Au-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 014 MAYBRUN (Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 015 HOGAN (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 016 RUNER (Pb-Zn-Au-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 017 WERNECKE (Au-Zn-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 018 FORMO (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 020 PADDY (Pb-Ag-Zn-Au)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 021 EAGLE (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 022 FISHER (Au-Zn-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Anomaly
105M 023 PARENT	Unknown	Anomaly
105M 024 CREAM AND JEAN (Pb-Zn-Cu-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 025 NORD (As-Zn-Ag-Pb-Au)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect

MINFILE NUMBER	DEPOSIT TYPE	STATUS
105M 047 MT ALBERT (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 050 NERO (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 052 MT HINTON (Au-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 053 AVENUE	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 055 YONO (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 061 CHRISTAL (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 062 SEGSWORTH (Pb-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 063 IRON CLAD	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 069 GAMBLER (Pb-Zn-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Past Producer
105M 070 HAVRENAK (Au-Ag-Pb)	Vein Polymetallic Ag-Pb-Zn+/-Au	Drilled Prospect
105M 073 BEMA (Au-Ag)	Vein Polymetallic Ag-Pb-Zn+/-Au	Showing
105M 082 BELLEKENO (Pb-Ag-Zn-Au-Sn-Cd)	Vein Polymetallic Ag-Pb-Zn+/-Au	Producer
105M 084 ONEK (Ag-Pb-Au-Zn-In)	Vein Polymetallic Ag-Pb-Zn+/-Au	Deposit
105M 085 LUCKY QUEEN (Ag-Pb-Zn-Au)	Vein Polymetallic Ag-Pb-Zn+/-Au	Deposit
105M 087 FLAME & MOTH (Au-Ag-Pb-Zn)	Vein Polymetallic Ag-Pb-Zn+/-Au	Deposit

Local Bedrock Geology

Figure 4 shows the bedrock geology and mineral occurrences of the Lightning Creek, Upper Duncan creek and Granite Creek area, modified from Roots, 1997b and Yukon Geological Survey, 2018. Mineralized vein/faults have been added from Wengzynowski, (2008).

Figure 5 shows the bedrock of the Upper Duncan Creek property in more detail. The western extent of the property is dominated by PCH1 (Proterozoic Hyland group (Yusezyu Formation) clastic metasediments, psammite and marble; this is fault-bounded by the Robert Service Thrust on its eastern extent by CT2 (Carboniferous to Permian Keno Hill Quartzite), which also forms a narrow graben that crosses the Upper Duncan Creek drainage in its mid-to upper reaches. Also in the east are outcrops of TrG (Triassic Galena Suite hornblende diorite and gabbro) which are entirely enclosed by the Keno Hill Quartzite. The Mount Hinton gold-silver veins occur in the headwaters of Upper Duncan Creek (MINFILE 105M 052) while the MO gold-silver vein occurrence (MINFILE 105M 013) lies to the north in the divide between Upper Duncan Creek and Thunder Gulch.

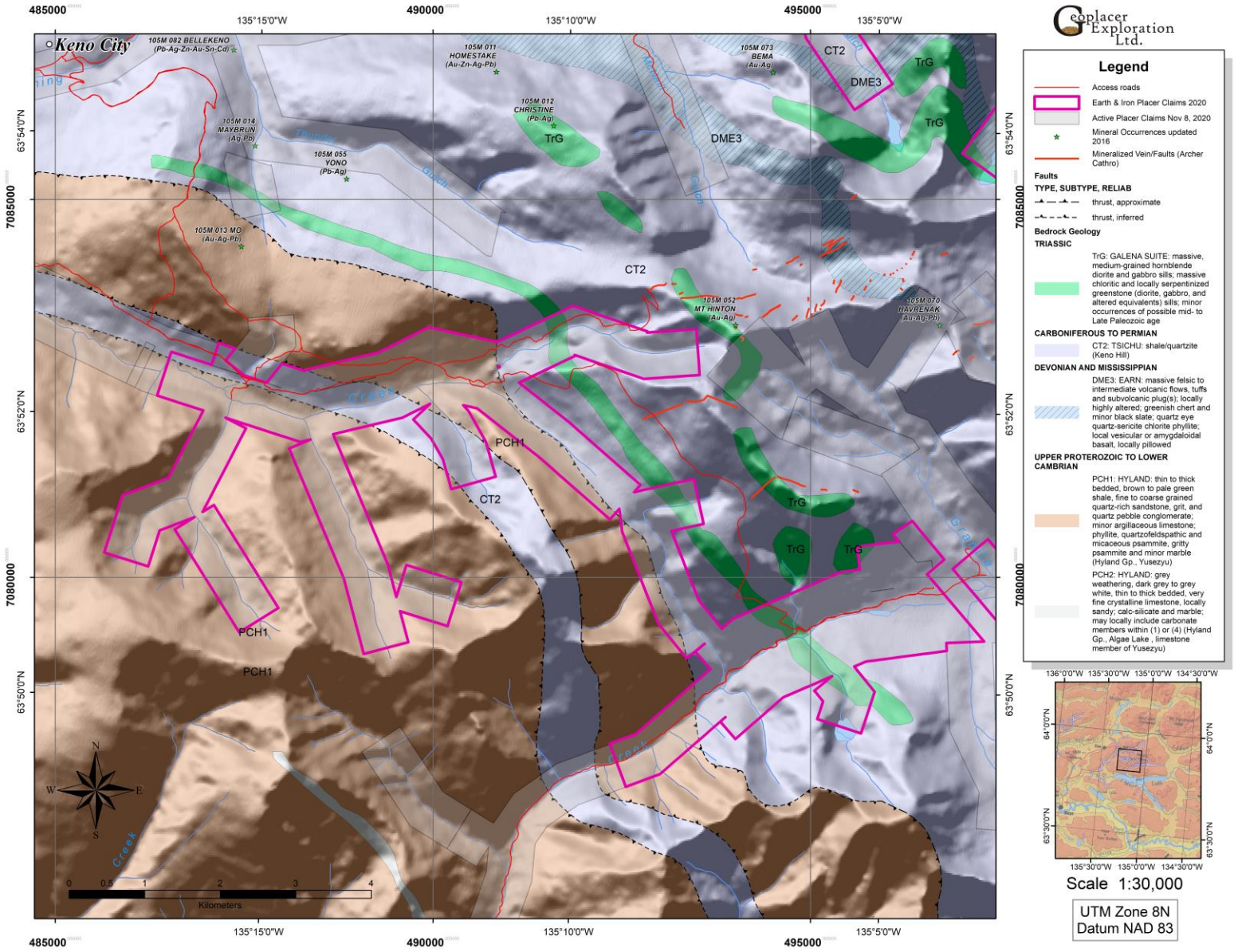

Figure 5 – 1: 30 000 scale map of bedrock geology of the Upper Duncan Creek area, including mineral occurrences from Yukon Minfile (Yukon Geological Survey, 2018).

Quaternary History

In the Mayo area, a minimum of four regional glaciations and two interglacial periods have influenced the deposition and erosion of sediments over the last 2.5 million years (Duk-Rodkin et. al., 2010; LeBarge et. al., 2002; Bond, 1996, 1997; Jackson et al., 2001). Glaciations include the pre-Reid (multiple early to mid-Pleistocene glaciations), Reid (130,000 years), and McConnell (14,000 -29,600 years). Warm, interglacial periods are indicated by relict paleosols such as the pre-Reid Wounded Moose paleosol (Tarnocai and Schweger, 1991) and the Reid Diversion Creek paleosol (Bond and Lipovsky, 2010).

During their maximum extent, pre-Reid ice sheets completely covered the Mayo/Keno Hill area. Undifferentiated pre-Reid surficial materials (moraine, glaciofluvial and glaciolacustrine deposits) are thick in the lowlands of Klondike Plateau and Tintina Trench, especially in areas proximal to the terminus of the pre-Reid glaciations.

During the subsequent Reid glaciation, glacial ice advanced from cirques formed in topographic highs such as Mount Hinton and Mt. Haldane, and coalesced with Cordilleran ice lobes which were advancing up-valley into the alpine areas. This resulted in a complex overlap assemblage of local alpine glacial sediments and more regionally-derived glacial sediments.

During the most recent (McConnell) glaciation, ice once again advanced from cirques in mountainous centres, however their advance was much less extensive than during previous glaciations. In most cases, McConnell ice advanced only short distances down-valley from their origins in the valley heads, depositing terminal moraines in the upper reaches of most valleys.

Figure 6 shows glacial limits and ice-flow directions for the Reid and McConnell glaciations in the Mayo area, after Bond (1999). This map shows that while the Reid glacial ice advanced down Upper Duncan Creek and coalesced with the Reid regional ice advance heading up Upper Duncan Creek, the McConnell glaciation was represented only by short alpine advances which left topographically obvious terminal moraines in the upper reaches of Upper Duncan Creek.

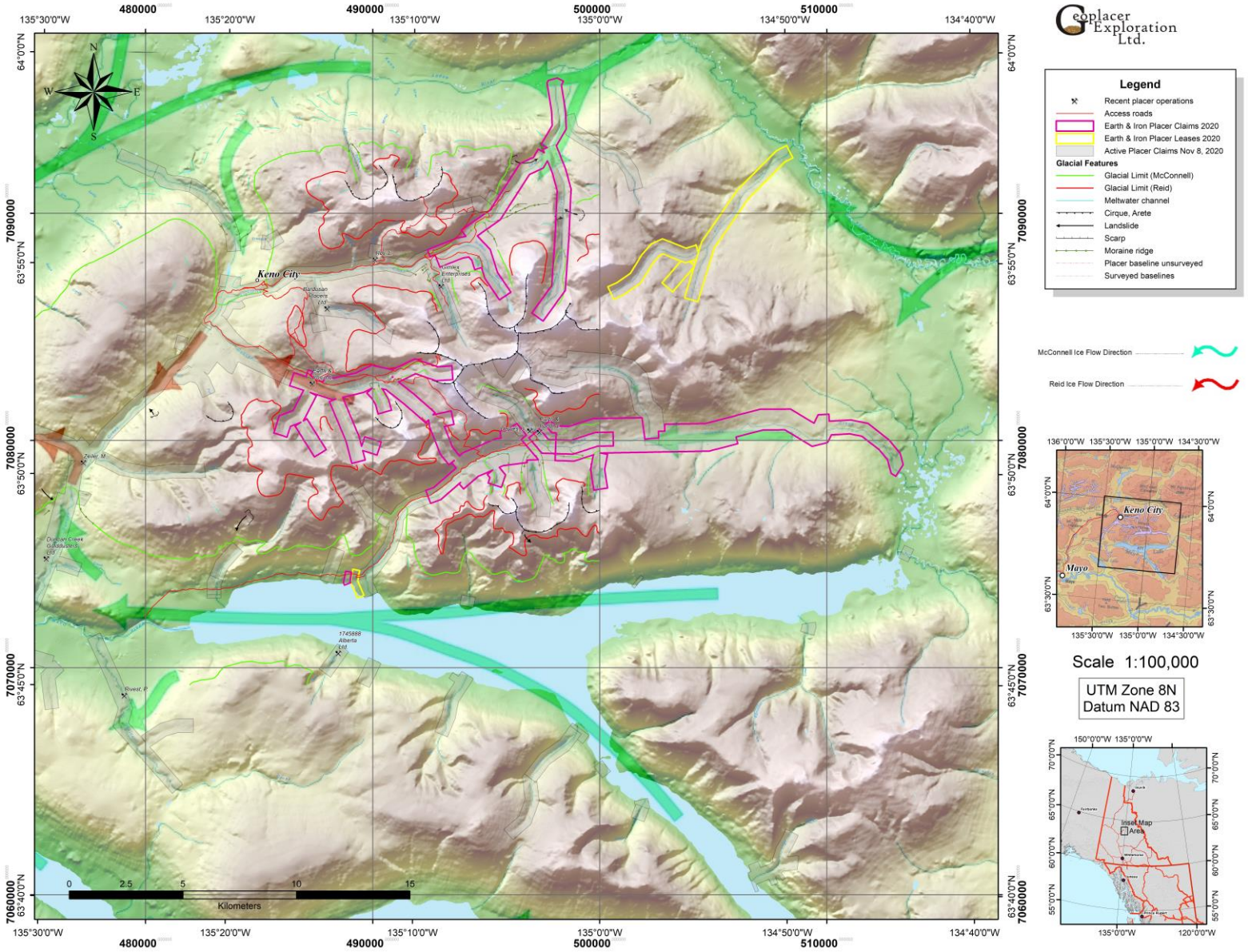

Figure 6 – 1: 100 000 scale map of glacial limits and ice-flow directions, Upper Duncan Creek, Lightning Creek and Granite Creek area, Mayo Mining District (after Bond, 1999). Reid-age ice advance shown in red, McConnell-age ice advance shown in green. Recent placer operations from Van Loon and Bond, (2014).

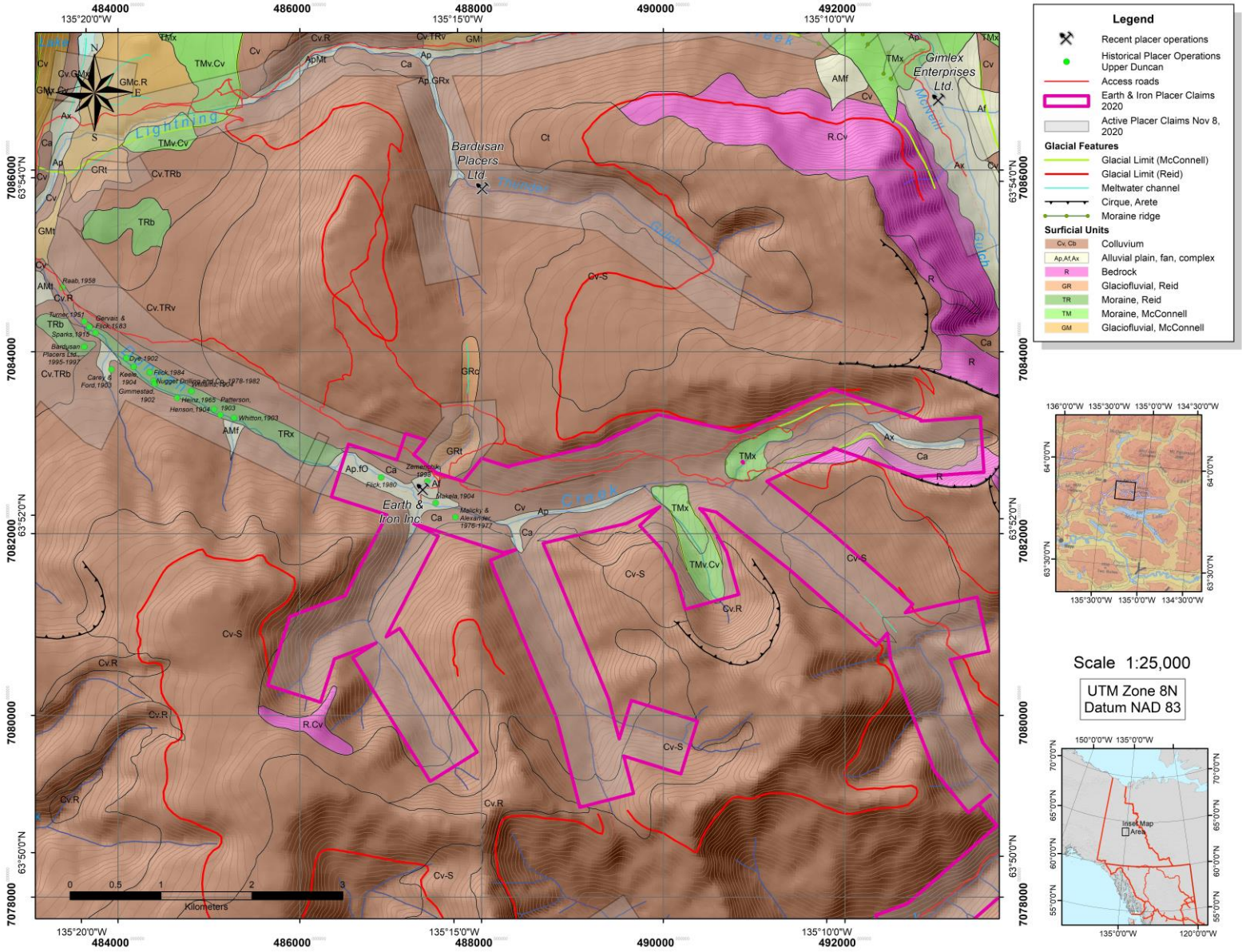

Figure 7 – 1: 25 000 scale map of surficial geology, Upper Duncan Creek, Mayo Mining District (after Bond, 1998). Historical operations (LeBarge, 2007) also shown.

Surficial Geology

Figure 7 is a 1:25,000 scale surficial map of the Upper Duncan drainage (modified after Bond, 1998) which also shows historical placer mining operations (after LeBarge, 2007).

Unconsolidated sediments in the Gustavus Range and the surrounding plateaus consist mainly of deposits from Cordilleran valley glaciers (continental ice sheet), alpine glaciers (local montane glaciers), colluvium, and minor alluvium. The surficial geology of the project area is complex, which is a result of the multiple glacial events that have occurred there over the last 1.5 million years.

The hills above the main drainages of Duncan, Upper Duncan and Lightning Creeks are mantled with colluvial deposits (veneers, blankets and aprons), while glacial erratics are found in the ridge tops and uppermost slopes. These were deposited when the pre-Reid glacial ice overtopped the hills in the region (LeBarge et.al., 2002; Bond, 1998).

Within and below the Reid glacial limit (shown as the red line in Figure 7), remnant deposits of Reid-age till line the valley bottoms and edges, and Reid glaciofluvial outwash channels lie along valley edges and on intervalley divides between third and fourth order drainages. In the lower reaches of Upper Duncan Creek, Reid-age till lies at the surface and confines the extent of the modern alluvial plain.

McConnell-age till forms moraines in the headwaters of most local drainages including Upper Duncan Creek (Mount Hinton) and Granite Creek. Deposits of McConnell glaciofluvial outwash lie along the valleys of Lightning Creek and Duncan Creek, and along the McQuesten River valley. McConnell-age alluvial and periglacial fans occur at the confluences of first order and second-order streams.

Modern alluvial fans, plains and complexes occur in all valleys, but are most prominent in larger, third to fourth order drainages. In some cases, alluvial fans have formed from re-activation and reworking of older deposits such as glaciofluvial terraces and eskers of Reid to McConnell age. Several of these fans are present on Upper Duncan Creek at the confluences of tributary valleys.

Placer Exploration and Mining History

The discovery of placer gold in the Mayo district began on the Stewart River in 1883, when a party of prospectors worked from the mouth of the Stewart River to the McQuesten River (Mayo Historical Society, 1990). Between 1885 and 1886, it is estimated that up to 14,500 fine ounces (451 000 g) was recovered by hand (Mayo Historical Society, 1990).

In 1892, Ray Stewart discovered gold on the McQuesten River, and in 1895 placer gold was noted on Haggart Creek. Discovery claims were recorded on Johnson and Haggart Creeks in 1898.

In the same year, gold was discovered on Duncan Creek in the area just downstream of the canyon, where Upper Duncan Creek joins Duncan Creek. Most of the hand-mining in the early days took place at this location and farther upstream on Upper Duncan Creek (LeBarge, 2007).

The discovery of placer gold on Duncan Creek in 1898 is credited to Mr. Gustavus Gustavusen and his two sons (Mayo Historical Society, 1990). These three were very secretive, and to help conceal the location of their ground they decided not to stake or record claims over it. They began to arouse curiosity and one day a party of four prospectors - Colin Hamilton, Duncan Patterson, Allan McIntosh and Jacob Davidson went looking for their ground. After a long search, the Scotsmen found the Swedes' workings. On the 15th of September 1901, they located a Discovery Claim in the canyon on what was named Duncan Creek. This claim was staked during the absence of the Swedes and included the ground already worked by them. The Gustavusen's, finding their ground legally staked, soon left the country.

By the end of 1902 Duncan Creek was staked from the headwaters to the mouth. Numerous cabins were built and preparations were made to develop the ground. The government constructed a wagon road from the mouth of the Mayo River to Duncan Creek. Two town-sites were located: one at Mayo River and one at Gordon Landing on the bank of the Stewart River.

During 1902, at Claim #104 Below Discovery (approx. 4.3 miles (7 km) below the canyon) a shaft was sunk a depth of 138 ft. (42 metres) without hitting bedrock. Other attempts were made in the area and numerous shafts reached 108 ft. (33 metres) in depth without reaching bedrock, mostly due to flooding by ground water. During 1903, at Claim #53 Below Discovery, a shaft sunk on the left limit hit bedrock at 105 ft. (32 metres). Drifting towards the creek was started, but just as the drift began to hit good pay, the groundwater became more than the pump could handle and the drift was abandoned. Total clean-up for this operation was $1200.

The busiest year on Upper Duncan Creek was 1903, with $30,000 produced from the canyon claims. Much work was also done in 1904, with $15,000 being produced from the canyon. Lower Duncan Creek produced very little during the early years, mostly due to excessive ground water.

During the period 1913-1916, J. A. Walsh, W. L. Bramley and J. Adair did considerable developmental work as well as some mining on Lower Duncan Creek, and some prospecting was done on the benches. By 1915, nine men were working; five on Upper Duncan, one near the forks (canyon) and three on Lower Duncan. By 1932 only one operation existed, on Upper Duncan Creek.

In 1940-41 Mr. C.E. Fisher mined ground worth 50 cents per yard above the bridge, and Mr. Ellis Johnson worked Claim #54 Above Discovery reporting "good prospects" on bedrock at 92 feet (28 metres). The locations of these operations are undocumented, but they may be on Upper Duncan Creek.

By the end of the 1950's, interest was renewed on Duncan Creek. Fred Taylor began testing a one-mile lease on lower Duncan Creek, and several United Keno Hill Mine employees started small operations in the canyon.

During 1965-1966 Mr. and Mrs. Heinz prospected and test-mined two one-mile leases on Upper Duncan Creek, producing 50 ounces.

In the 1960's, drilling by United Keno Hill Mines showed gravels to be about 167 ft. (51 metres) thick one mile (1.6 km) below Lightning and about 98 ft. (30 metres) thick 2 miles (3 km) below the confluence of Lightning and Duncan creeks. Some gold values were reported.

Between 1975 and 1977, Frank Taylor and J. Brooks (working as Duncan Creek Golddusters Ltd.) worked the left limit of lower Duncan Creek 1.5 miles (2.5 km) from the mouth.

Between 1978 and 1982, six operations were active at various locations along Duncan Creek and Upper Duncan Creek, including C. French and N. Bunka, D. Flick and G. Gervais, M. Alexander, Frank Taylor and Nugget Drilling. Four operations were active between 1983 and 1984, including N. Bunka, C. Deeks and E. Jarvis; D. Flick and G. Gervais; and Frank Taylor. Between 1985 and 1990, Frank Taylor and his family mined on lower Duncan Creek.

From 1989 to 1990, Sasha Mining mined on lower Duncan Creek. In 1996, Bruce Rittel hand-trenched on a terrace along lower Duncan Creek.

Bardusan Placers Ltd. mined a cut on Upper Duncan Creek just above the canyon between 1996 and 1997. Mr. Zemenchik did a small exploratory mining cut on Upper Duncan Creek in the vicinity of a right limit alluvial fan between 1998 and 2000.

Between 2001 and 2002, some claims located immediately below the waterfalls were leased to Larry Arnevick and Ricker Anderson by Joe Raab. Two cuts were completed in 2001. The narrow channel and tight, steep canyon walls made these claims a challenge to mine.

Mr. Mel Zeiler conducted testing operations on lower Duncan Creek from 2003 to 2005 and in 2007 and 2008.

Duncan Creek Golddusters on lower Duncan Creek have been continuously active since 1977, and they continued to mine in the 2017 and 2018 mining seasons.

Historical placer mining operations on Upper Duncan Creek are given in Table 2.

Table 2 - Historical placer mining operations, Upper Duncan Creek.

Operation	Status	Latitude	Longitude
Nugget Drilling and Co.,1978-1982	Recent Producer 1978-present	63° 52' 48" N	135° 19' 4" W
Bardusan Placers Ltd.,1995-1997	Recent Producer 1978-present	63° 53' 0" N	135° 20' 0" W
Flick,1984	Recent Producer 1978-present	63° 52' 51" N	135° 19' 7" W
Gervais & Flick,1983	Recent Producer 1978·present	63° 53' 5" N	135° 19' 51" W
Flick,1980	Recent Producer 1978·present	63° 52' 14" N	135° 16' 0" W
Malicky & Alexander,1976-1977	Historical Producer	63° 52' 0" N	135° 15' 0" W
Heinz,1965	Historical Producer	63° 52' 42" N	135° 18' 45" W
Raab,1958	Historical Producer	63° 53' 21" N	135° 20' 18" W
Turner,1951	Historical Producer	63° 53' 9" N	135° 20' 0" W
Sparks,1915	Historical Producer	63° 53' 7" N	135° 19' 56" W
Keele,1904	Historical Producer	63° 52' 53" N	135° 19' 20" W
Henson,1904	Historical Producer	63° 52' 38" N	135° 18' 15" W
Makela,1904	Historical Exploratory	63° 52' 5" N	135° 15' 16" W
Williams,1904	Historical Producer	63° 52' 44" N	135° 18' 33" W
Patterson,1903	Historical Exploratory	63° 52' 36" N	135° 18' 10" W
Carey & Ford,1903	Historical Producer	63° 52' 52" N	135° 19' 38" W
Whitton,1903	Historical Exploratory	63° 52' 35" N	135° 17' 59" W
Dye,1902	Historical Exploratory	63° 52' 56" N	135° 19' 26" W
McKinnon and Mcintosh,1902	Historical Exploratory	63° 1' 0" N	135° 19' 8" W
Gimmestad,1902	Historical Producer	63° 52' 47" N	135° 19' 3" W
Zemenchik, 1998	Exploratory	63° 52' 12" N	135° 15' 22" W

Government placer gold royalty records prior to 1978 are incomplete, however more detail can be found in subsequent years, which are given in Table 3. This table shows that over 165,000 crude ounces have been recorded in the Mayo Mining District between 1978 and 2015.

Table 3 - Placer gold production from reported gold royalties, Mayo Mining District. Figures are in crude (raw) ounces.

STREAM or RIVER	Tributary to	2011	2012	2013	2014	2015	1978-2015
Anderson	Mayo Lake	319.51	80.48	13.58			938
Bear (Van Bibber)	McQuesten						1448
Carlson	Minto						105
Davidson	Mayo River		113.9	310.6	884.6	735.46	4432
Dawn	Mayo Lake						15
Dirksen	Mayo Lake						31
Dublin Gulch	Haggart		3.2	16.3			13099
Duncan	Mayo River	294.54	236.44	241.7	246.03	279.36	34718
Empire	No Gold				7.54		1012
Gem	Sprague						428
Goodman	South McQuesten						37
Granite Creek	Mayo Lake					1249.16	1249
Haggart	McQuesten	3.05		3.7	2.8	2.39	24508
Highet	Minto		117.82	30.62	84.9	29.96	40450
Hope Gulch	Lightning						8
Jarvis	Minto			10.67			17
Johnson	McQuesten						5437
Ledge	Mayo Lake						5815
Lightning	Duncan		304.78			0.83	11624
McQuesten	Stewart					9.24	114
Minto	Mayo River			27.31	65.13	199.42	1547
Morrison	Seattle						16
Murphy's Pup	South McQuesten	5.35	18.294	21.5	15.56		159
Owl	Mayo Lake	153.01					3642
Russell	Macmillan						287
Seattle	McQuesten					83.6	292
Secret	Swede	79.16	148.81	155.3	224.92	20.77	693
Steep	Mayo Lake						709
Stewart	Yukon						872
Swede	Haggart		16.3				4347
Thunder	Lightning	532.96	394.29		578.8	508.06	5006
Vancouver	McQuesten						928
Various Mayo Creeks		10.3					1589
Total Mayo District		1397.88	1434.314	831.28	2110.28	3118.25	165569

2016 Placer Exploration Program

Introduction

In 2016, the exploration program consisted of geological evaluation and targeting of potential placer gold zones, limited auger drilling, resistivity geophysical surveys, RAB (rotary air blast) drilling, excavator test-pitting and ground magnetometer surveys. Figure 8 shows the main test areas and pit locations. Several bulk samples were processed and analyzed for gold character and content.

Auger drilling

Two auger drill holes (SAM 9.5-1 and SAM 9.5-2) were collared on the property near the camp, but were only able to drill approximately 35 feet each. Bedrock was not reached.

Ground Magnetometer Survey

Groundtruth Exploration Inc. conducted a ground magnetometer survey in the area of the alluvial fan on July 10 and 11, 2016. Approximately 6.25 line km of data was acquired. A digital elevation model (DEM) was created from the GPS altitude. The final TMI grid was produced from diurnal-corrected and IGRF-reduced data, and an 8m grid cell size was used.

The area of the alluvial fan appeared as a magnetic low, with some linear magnetic anomalies (highs) running parallel to the valley of Upper Duncan Creek. In comparison, the magnetic survey by Wengzynowski, (2008) shows only a broad high throughout the field area. This likely demonstrates that the magnetic anomalies in the ground magnetometer survey are a signature of magnetic mineral (magnetite) accumulations in the alluvial material, rather than a bedrock feature. Additionally, the magnetic low of the alluvial fan appears to obscure the magnetic signature of the paleochannels which run beneath it, and on the upstream and downstream sides of it.

Resistivity Geophysical Surveys

Groundtruth Exploration Inc. ran a total of 10 lines of resistivity geophysical surveys on the property in the vicinity of the SAM 5 to SAM 10 placer claims. The traces of these lines are shown on Figure 11. Line 2016-03 is shown as Figure 12 as an example.

RAB Drilling

A total of 6 RAB drill holes were collared on the property on the SAM claims, targeting interpreted paleochannels identified in the resistivity geophysical profiles. Bedrock was intersected in most holes at depths between 45 and 75 feet (LeBarge, 2017). Bedrock contacts and other lithological contacts were garnered from the drill logs, and this information was then plotted to scale on the resistivity profiles.

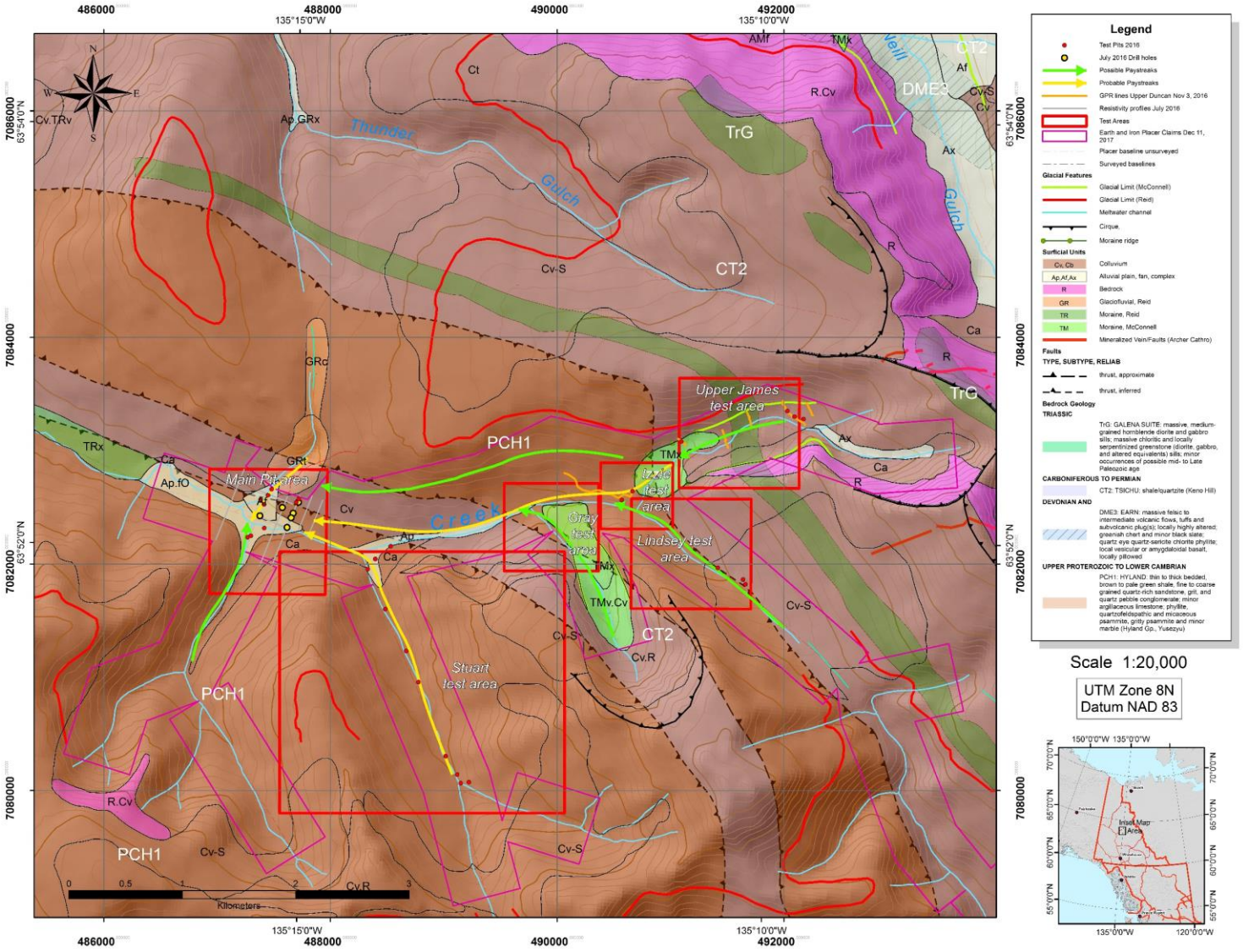

Figure 8 - Compilation map of Upper Duncan Creek showing bedrock and surficial geology, 2016 main test areas and probable and possible placer paystreaks inferred from geology, test pit results and drill results.

Ground Penetrating Radar Surveys

A total of 8 lines totalling 1741 metres were surveyed in 2016 on the Upper Duncan Creek drainage, located on the James 9-17 and Izzie 11-15 placer claims. Boris Logutov of 47129 Yukon Inc. conducted the geophysical surveys and interpreted the profiles. Detailed interpretations are contained in LeBarge and Logutov (2016).

The GPR survey was conducted using the GPR instrument "EasyRad PRO+", equipped with antenna with a working frequency of 100 MHz and a practical resolution of 0.2 m. The survey data was analyzed using the software program Prism 2.5. Survey lines were georeferenced in the field by recording the tracks and start and end points on a hand-held GPS. The results of the conducted surveys showed discernment of the main lithological units and the bedrock contact at depths of up to 43 m. All ground penetrating radar survey lines started in the valley (south) and ended on or near the road (north). Table 4 shows the lengths of the lines and maximum depth of bedrock encountered in the surveys.

Table 4 – GPR Line lengths and interpreted depths to bedrock on Upper Duncan Creek in 2016.

Line number	Elevation of centre (m)	Length (m)	Maximum Depth to Bedrock (m)
GPR Line 2	1478	336.63	27
GPR Line 3	1507	131.25	41
GPR Line 4	1446	149.06	23
GPR Line 5	1399	175.31	38
GPR Line 6	1373	103.85	19
GPR Line 6.1	1358	101.64	19
GPR Line 8	1247	685.75	26
GPR Line 9	1260	57.93	39

Excavator Test Pitting

A test-pitting program was conducted in several areas throughout the Upper Duncan property in 2016. The excavator used was a JSB JS220. Figure 8 shows the location of the 2016 test pits throughout the property. They were located in three main areas – the Main Pit/Fan (Sam claims); the Stuart Claims Tributary; and the James and Lindsay Claims in the uppermost reaches of Upper Duncan Creek. All pits were described as to their geology and stratigraphy and most were sampled for placer gold content.

Stuart Claims Tributary

Excavator test pit sampling on the Stuart claims tributary showed promising results from several samples. Samples were relatively small, all less than 15 cubic metres in volume.

Figure 9 - Gold from sample S-3 (Test Pit 2016-11) on the Stuart claims tributary was a mixture of coarse to medium colours, and weighed approximately 100 mg. The sample volume was 7.64 cubic metres.

James, Izzie and Lindsay claims (including upper moraines)

Samples J-1 (Pit 2016-18) and J-2 (Pit 2016-19) were both excavated in the upper moraine area. Each sample was approximately 20 cubic yards; and fine, silvery angular colours were noted in the initial concentrates in the field.

Excavator test pits 2016-22, 2016-23 and 2016-24 were dug on the Lindsay claims tributary. Only hand test pans were done, and a few very fine colours were noted.

Conclusions and Recommendations – 2016 Program

The 2016 program which used the combined methodologies of resistivity surveys, magnetometer surveys, ground penetrating radar surveys, RAB drilling and excavator test pitting was key to building a stratigraphic framework and exploration model.

The resistivity geophysical surveys appeared to define contacts including paleochannels which were traceable from one profile to the next, in cross-valley directions up and down-valley and parallel to the valley along the alluvial fan. Drill hole and test pit calibrations aided in the discernment of contacts in the profiles, however discontinuous permafrost and variable groundwater content complicated the possible interpretations. Potential paleochannels identified in the resistivity profiles and confirmed by the RAB drilling also appeared to coincide with linear magnetic anomalies identified by the magnetometer survey.

Ground penetrating radar appeared to show depths to bedrock, although the surveys have not yet been confirmed by other methods. Interpretation of the ground penetrating radar surveys was aided by the fact that several of the radar profiles started or ended near actual bedrock contacts in the valley sides. In addition, Test Pit 2016-20 coincided with GPR line GPR-6.1. In this case, the interpreted depth to bedrock (5m or 15 ft) on the radar line at the location of the test pit corresponded exactly to the depth that bedrock was encountered in the pit. Although it was usual to distinguish unconsolidated overburden material from bedrock, it was only rarely possible to distinguish other lithological contacts in the GPR profiles. Possible paleo-alluvium was identified in profiles GPR-02, GPR-05 and GPR-08. Significant paleochannel targets were identified in lines GPR-08 and GPR-09.

The main recommendations at the conclusion of the 2016 program were:

1) A large bulk sample for the Main pit area and areas immediately adjacent, including the meltwater channel pit just upstream of the Main pit, and
2) In the rest of the property including all tributaries, an extensive program of geophysics followed by drilling and test pitting of identified targets, in order to gauge or confirm interpreted depths to bedrock, paleochannels, lithological contacts and placer gold content.

2017 Placer Exploration Program

Introduction

In 2017, the exploration program on the Upper Duncan drainage (outside of the main pit/test mining area) consisted of 31 resistivity lines (totalling 6405 m) as well as limited excavator test pitting and bulk sampling. Work was conducted between June 2 and August 30th, 2017. Five main areas were targeted: the James claims (upper moraines), the Izzie claims, the Lindsay claims, the Gray claims and the Stuart claims. These areas are shown on Figure 10.

Resistivity Surveys

General Results

Overall, interpretation of potential bedrock contacts was possible in most of the surveys, and this was dramatically improved by the presence of nearby or adjacent test pits. Extensive permafrost in some survey areas generally increased the uncertainty of the interpreted results. Permafrost was more continuous on north facing slopes, and was discontinuous on south-facing slopes and in parts of the valleys with high water saturation. In these areas, contrasts between low and high resistivity values may have been partially or wholly a reflection of varying groundwater and permafrost conditions rather than strictly lithological boundaries, however there was enough information to identify drill targets for further exploration.

Table 5 outlines the lengths and locations of these lines, and detailed interpretations follow.

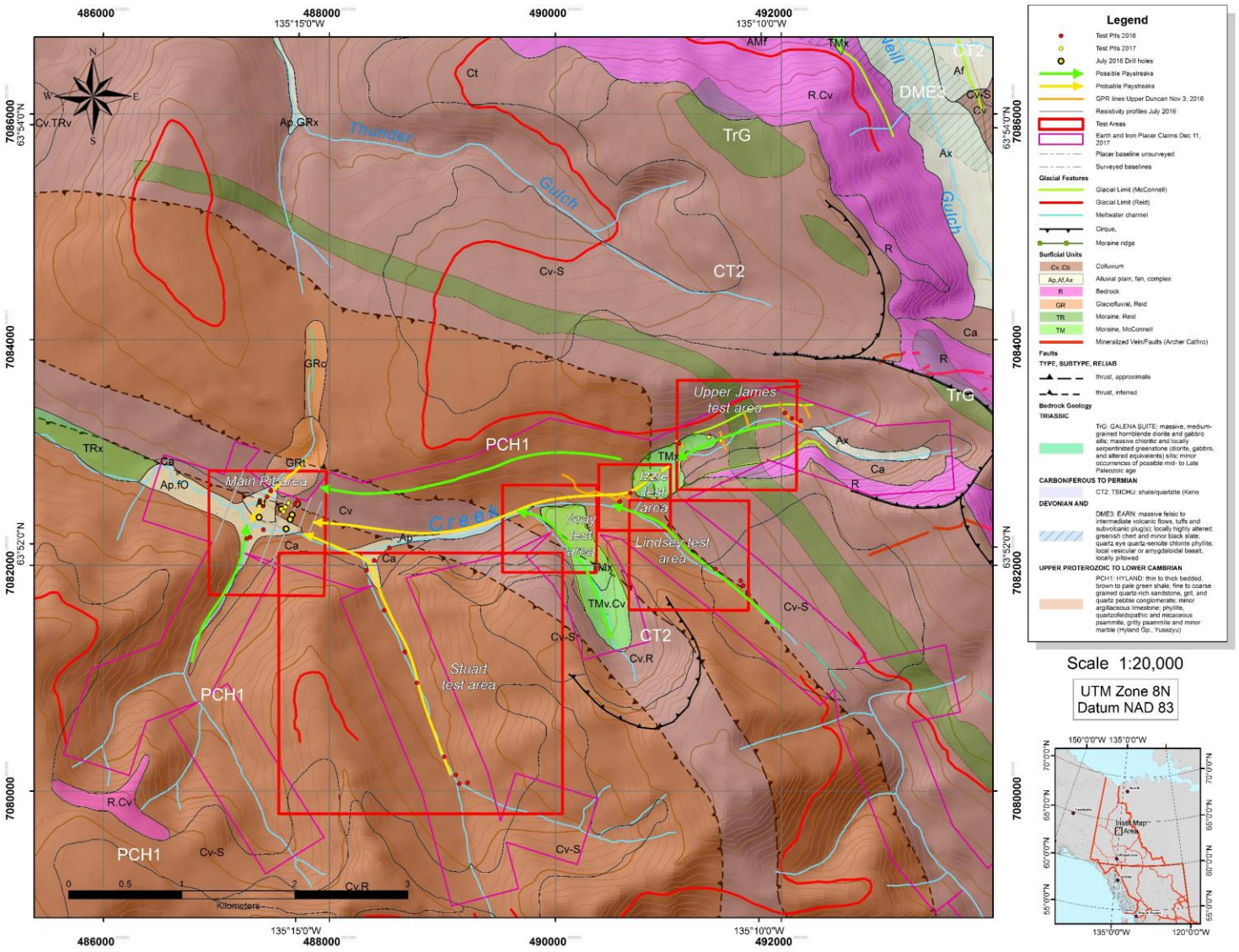

Figure 10 – Compilation surficial and bedrock geology map (after YGS, 2018) showing areas/tributaries explored in 2017, as well as possible paystreaks.

Table 5 – 2017 Resistivity line names with lengths and start and end GPS points.

Resistivity Line Name	Start Point				End Point				Length
	Latitude	Longitude	Northing	Easting	Latitude	Longitude	Northing	Easting	(m)
RES17-GRAY1-01	63.86735	-135.20318	7082248.562	490014.8615	63.86833	-135.20049	7082357.308	490147.3274	200
RES17-GRAY2-01	63.86494	-135.19903	7081979.007	490218.1163	63.86575	-135.19615	7082068.952	490359.7382	200
RES17-IZ12-01	63.87088	-135.19998	7082641.059	490173.3799	63.86856	-135.20166	7082383.541	490090.2881	300
RES17-IZ12-02	63.86976	-135.19864	7082516.602	490238.8496	63.87004	-135.20426	7082548.644	489962.9859	300
RES17-IZ13-01	63.87020	-135.19451	7082564.649	490441.8574	63.87241	-135.19292	7082810.463	490520.7653	300
RES17-IZ14-01	63.87095	-135.19094	7082648.097	490617.7687	63.87241	-135.19303	7082811.086	490515.2492	200
RES17-IZ14-02	63.86999	-135.19155	7082540.889	490587.5151	63.87080	-135.19032	7082630.742	490648.09	115
RES17-IZ14-03	63.87008	-135.19333	7082551.851	490500.1736	63.87158	-135.19240	7082718.633	490546.0331	180
RES17-IZ14-04	63.87103	-135.19122	7082656.828	490604.0026	63.87025	-135.19228	7082570.392	490551.5033	100
RES17-IZ14-05	63.87064	-135.19355	7082614.209	490489.3975	63.87296	-135.19510	7082873.064	490413.9634	300
RES17-IZ14-06	63.86999	-135.19234	7082540.947	490548.5912	63.87135	-135.19038	7082692.294	490645.1085	200
RES17-IZ15-01	63.87017	-135.18971	7082561.055	490678.0048	63.86954	-135.19071	7082491.003	490628.4993	100
RES17-IZ15-02	63.87036	-135.18771	7082581.586	490776.0959	63.86914	-135.18981	7082446.442	490672.5535	200
RES17-IZ15-03	63.87063	-135.18920	7082612.053	490702.9016	63.87059	-135.18744	7082606.842	490789.7046	100
RES17-IZ15-04	63.87016	-135.18900	7082559.73	490716.9433	63.87165	-135.18769	7082725.133	490777.6938	200

Resistivity Line Name	Start Point				End Point				Length
	Latitude	Longitude	Northing	Easting	Latitude	Longitude	Northing	Easting	(m)
RES17-IZ15-05	63.87110	-135.18876	7082664.6	490724.6282	63.86938	-135.19101	7082472.643	490613.7367	300
RES17-IZ16-01	63.86925	-135.18763	7082457.6	490779.8822	63.86869	-135.18902	7082395.634	490711.4378	100
RES17-IZ8-01	63.86842	-135.20938	7082368.8	489710.7892	63.87039	-135.21286	7082588.822	489540.472	300
RES17-IZ8-02	63.86843	-135.20941	7082370.4	489709.1426	63.86955	-135.20677	7082494.144	489839.4905	200
RES17-JM11-01	63.87810	-135.16300	7083441.0	491992.853	63.87601	-135.16092	7083207.495	492094.3525	300
RES17-JM14-01	63.87593	-135.17400	7083200.6	491451.6658	63.87393	-135.17284	7082977.034	491508.167	250
RES17-JM15-01	63.87618	-135.17640	7083227.2	491329.8055	63.87359	-135.17675	7082939.458	491311.3968	300
RES17-JM16-01	63.87552	-135.18020	7083155.4	491147.0862	63.87345	-135.17780	7082925.054	491264.2542	300
RES17-LN4-01	63.86427	-135.16980	7081900.2	491654.5093	63.86393	-135.17156	7081863.43	491567.7395	100
RES17-SM216-01	63.86411	-135.23503	7081892.4	488448.2183	63.86386	-135.23747	7081865.907	488328.5187	150
RES17-SM217-01	63.86558	-135.23513	7082056.3	488443.9642	63.86471	-135.23799	7081960.563	488303.1094	200
RES17-ST13-01	63.84822	-135.21925	7080119.6	489217.9674	63.84729	-135.22215	7080016.118	489074.7458	195
RES17-ST14-01	63.84709	-135.21403	7079992.9	489474.3262	63.84630	-135.21546	7079904.476	489403.33	145
RES17-ST2-01	63.86169	-135.23311	7081623.4	488541.8158	63.86105	-135.23612	7081552.187	488393.5177	185
RES17-ST4-01	63.85838	-135.22932	7081253.6	488726.8591	63.85789	-135.23223	7081199.42	488583.3241	190
RES17-ST9-01	63.85231	-135.22342	7080576.4	489014.6469	63.85213	-135.22687	7080557.04	488844.7174	195

Targeted Areas and Interpreted Profiles

James Claims (Upper Duncan moraines)

The James tributary originates in a steep cirque on the east side on Mount Hinton, which is the locale for significant gold-bearing mineralized bedrock (Minfile #105M 052 MT. HINTON). The proximity to this known bedrock gold source makes the James tributary a good prospect for placer gold. The local bedrock is of two types: Keno-Hill quartzite, and Triassic diorite. Both Reid and McConnell glacial features are mapped (Bond, 1998), however the main landforms are McConnell glacial moraines which extend along the whole length of the James claims. Contacts between bedrock units, such as the local quartzite with diorite intrusions, can be rich gold hosts due to increased mineralization along the contacts between the units.

Four resistivity profiles were surveyed on the James claims, shown on Figure 11. From upstream to downstream, these profiles are: RES17-JM11-01, RES17-JM14-01, RES17-JM15-01, and RES17-JM16-01. Profiles RES17-IZ14-01 and RES17-IZ14-05 are parallel to these but lie farther downstream, and are described in the IZZIE claims in the subsequent section following.

Evidence of a contact between the Keno-Hill quartzite and the Triassic diorite intrusion may be evident in resistivity section RES17-JM11-01 (Figure 12). The target in Figure 12 may include the fault or contact zone, and confirming this would assist in the understanding of the geology in the upper James tributary. Confirmation of the contact or fault and of Reid till located close to the known Mt. Hinton gold source makes the upper James claims a target for further ground investigation with test pits or drilling to confirm depths interpreted in the resistivity pseudosections.

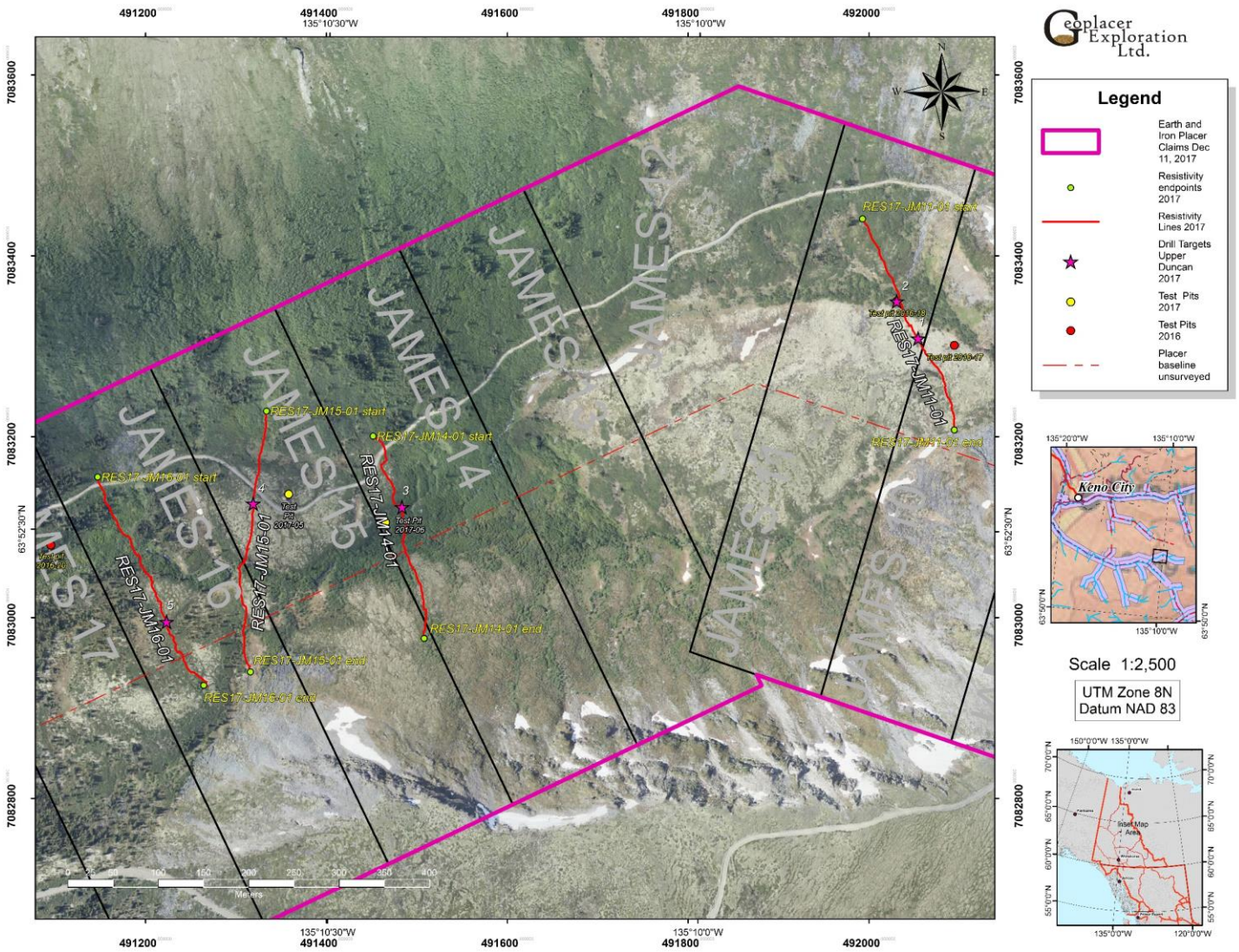

Figure 11 - Upper James claims in the upper moraines of Upper Duncan Creek, showing 2017 resistivity lines, 2016 and 2017 test pits, and proposed drill targets.

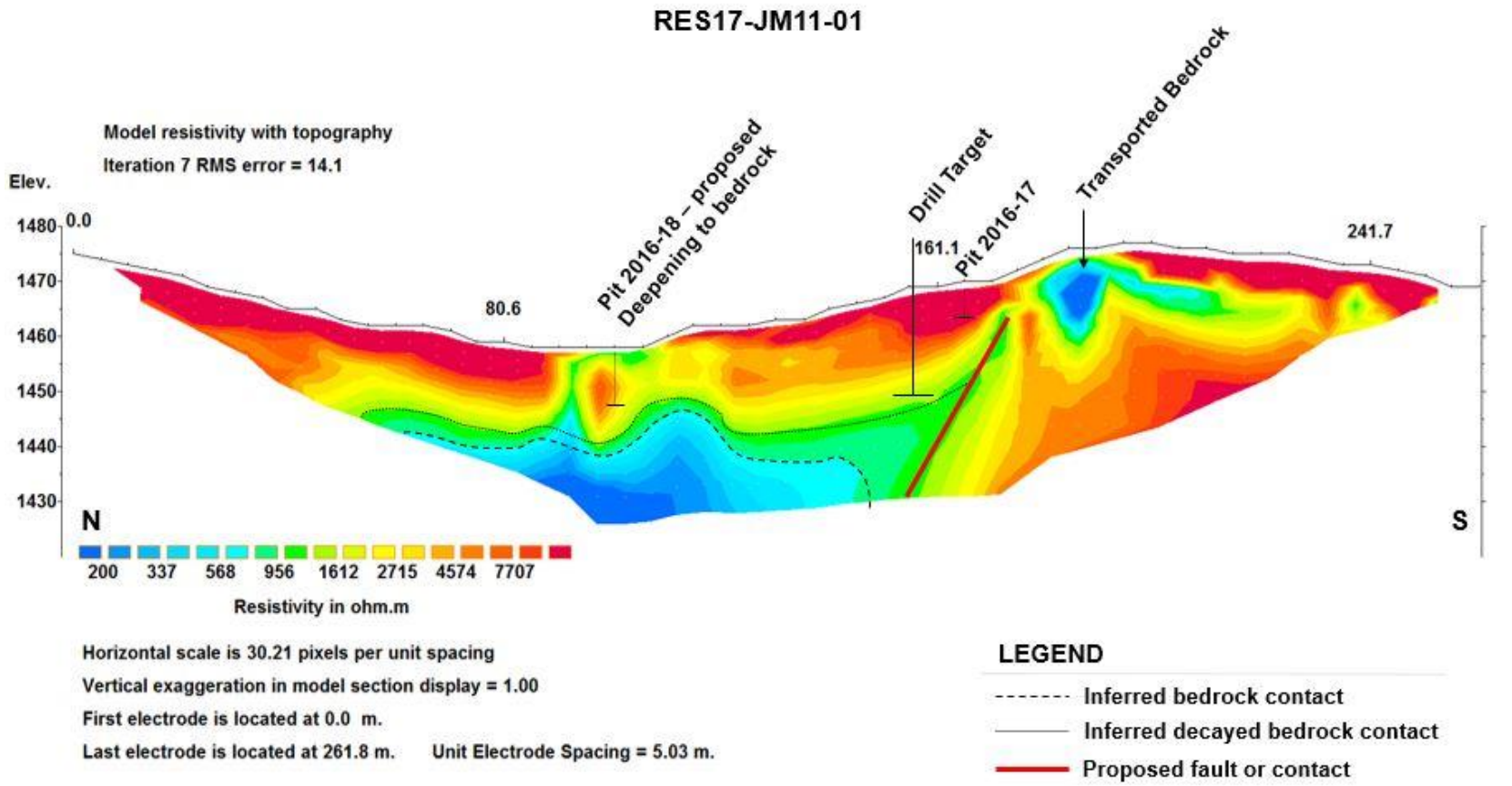

Figure 12 - RES17-JM11-01 is located at the upper end of the James tributary near the Mt. Hinton Cirque, and was surveyed across Test pits 2016-18 and 2016-17, which did not reach bedrock. The bedrock contact was interpreted by comparison of depths to downstream Test pit 2017-05, which reached bedrock. Transported bedrock was observed in the south end of the section and is the interpretation of the strong low resistivity anomaly shown. Proposed exploration includes deepening Test Pit 2016-18 and drilling in the area of the possible fault, which may separate two types of bedrock.

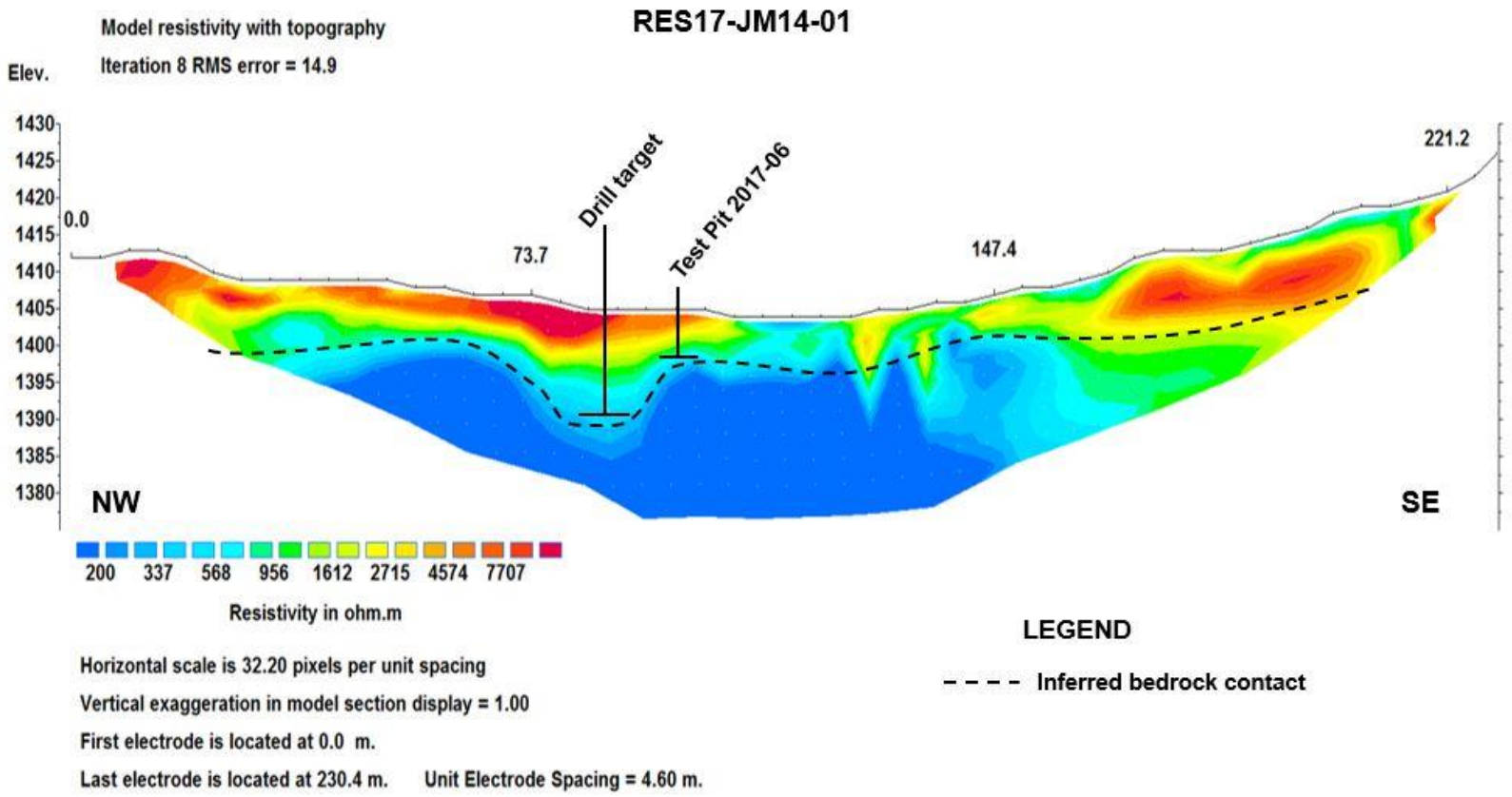

Figure 13 - RES17-JM14-01 is downstream of RES17-JM11-01. This profile has an interpreted bedrock contact that gently undulates except for a bedrock depression, which is a proposed drill target at 85 metres. Test Pit 2017-06 appears to have reached bedrock at approximately 7 m in a location adjacent to the bedrock depression.

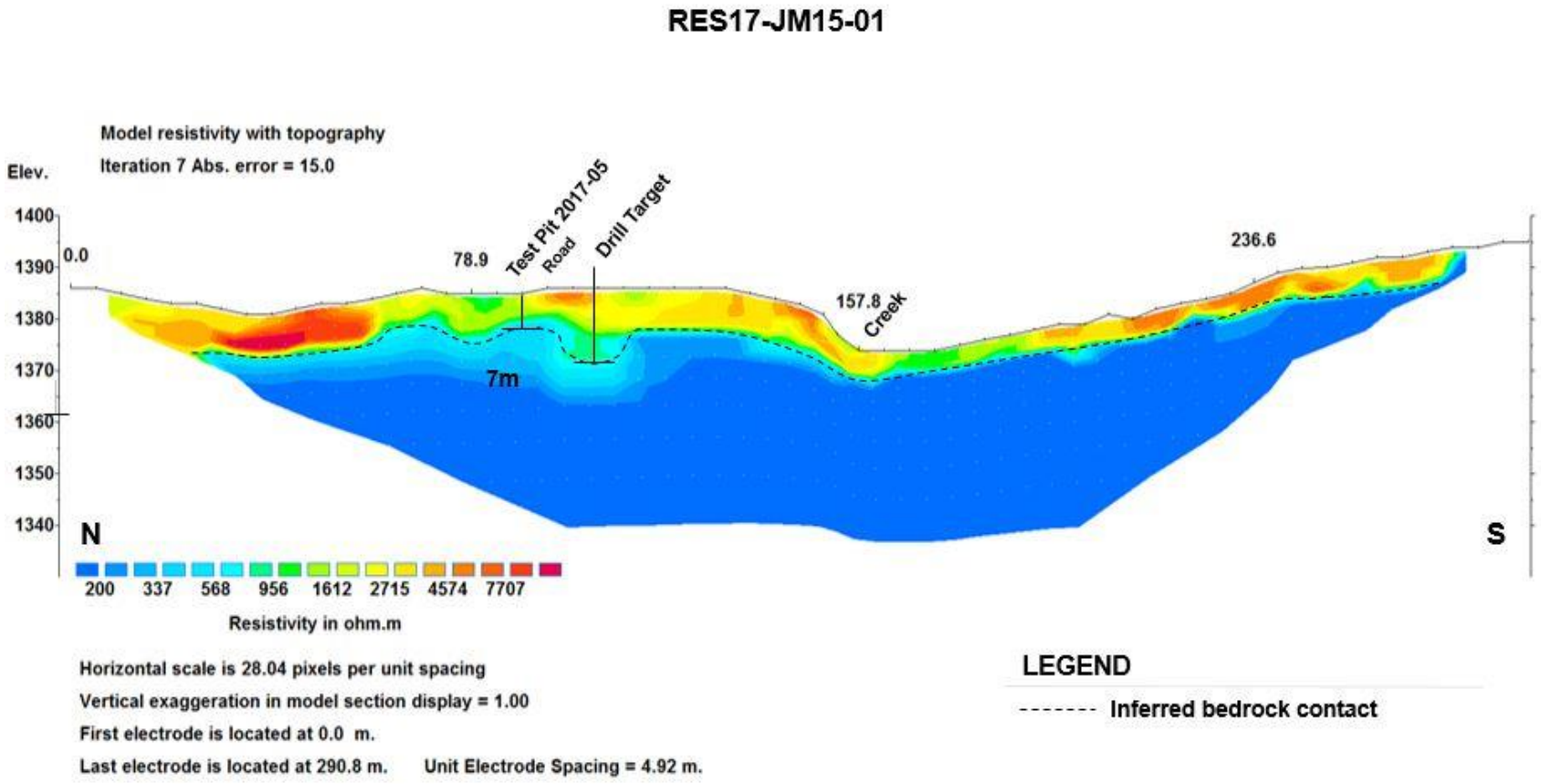

Figure 14 - RES17-JM15-01 is located downstream of RES17-JM14-01 to which it bears a strong resemblance. Test Pit 2017-05 confirmed bedrock depth in one location at 7 m, and a drill target is proposed nearby.

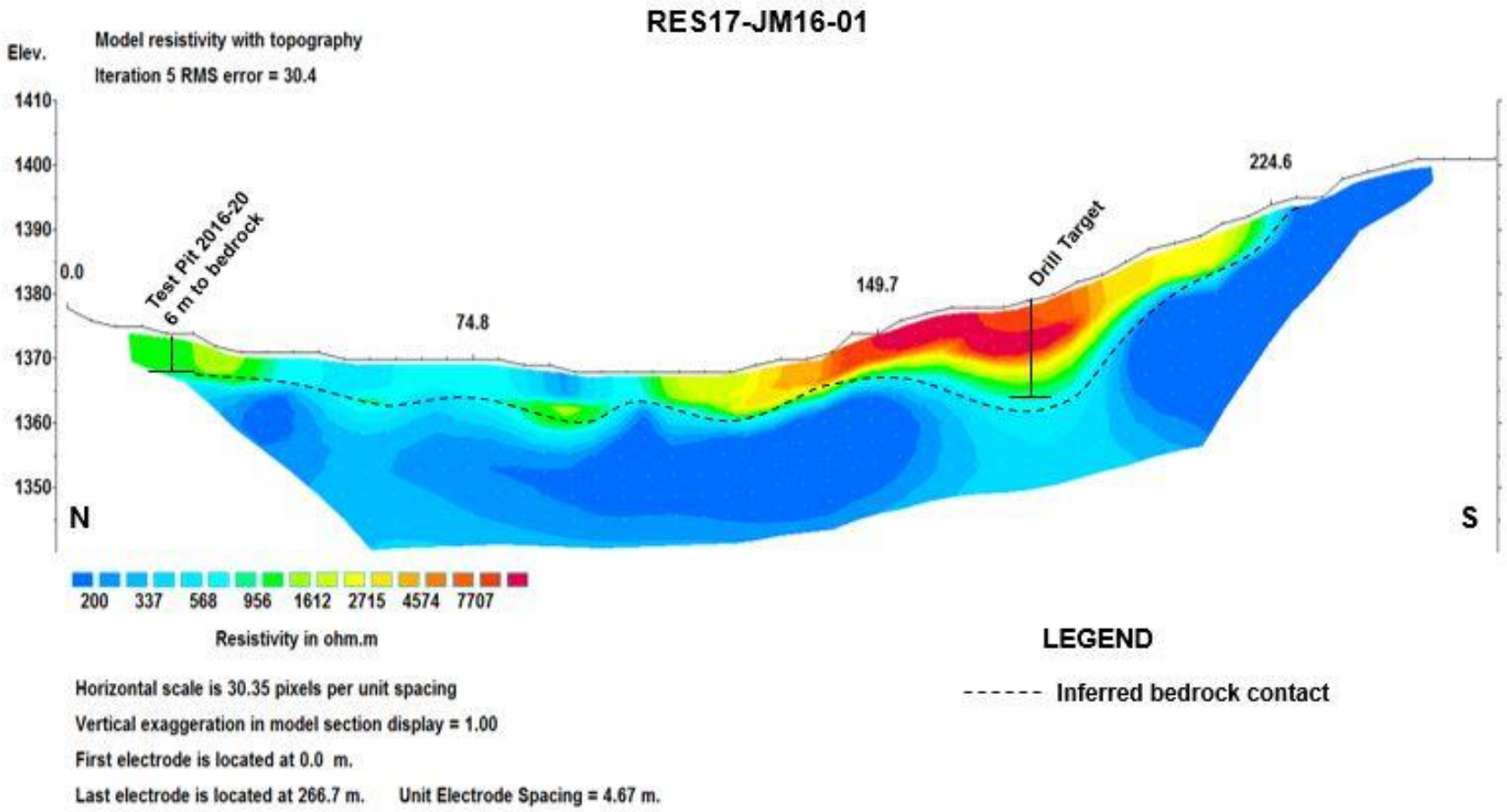

Figure 15 - RES17-JM16-01 was surveyed just upstream of Test Pit 2016-20, which encountered bedrock at 6 m. A drill target is proposed on this profile in an area of an apparent bedrock depression.

Izzie Claims

The IZZIE claims include the reaches of Upper Duncan Creek upstream of the SAM claims, and downstream of the James claims. They encompass an area at the confluence of the upper moraine (James claims) tributary and the confluence with the Lindsay claims tributary. The IZZIE claims lie mainly within the Hyland Group phyllite although the thrust fault contact with the Keno Hill quartzite lies just upstream (Roots 1997a, 1997b). The main IZZIE claims surveyed lie at the terminus of the alpine McConnell glacial moraines, which originate in the headwaters of Mt. Hinton to the east (Bond, 1998).

A total of 13 resistivity profiles were surveyed on the IZZIE 13 to IZZIE 16 placer claims, shown on Figure 16. The profiles are arranged in the figures following roughly upstream to downstream. The lines are:

RES17-IZ16-01, RES17-IZ15-02, RES17-IZ15-01, RES17-IZ15-05, RES17-IZ14-02, RES17-IZ14-06, RES17-IZ14-04, RES17-IZ14-03, RES17-IZ13-01, RES17-IZ15-04, RES17-IZ15-03, RES17-IZ14-01 and RES17-IZ14-05.

A distinctive bedrock bench is noticeable on the left limit in profiles RES17-IZ16-01, RES17-IZ15-02, RES17-IZ15-01, RES17-IZ15-05, RES17-IZ14-02, RES17-IZ14-06, RES17-IZ14-04, RES17-IZ14-03, and RES17-IZ13-01. As well, a narrow bedrock depression can be seen on the same series of profiles – this depression was exposed in the IZZIE test pit, and is described in the section on excavator test pitting.

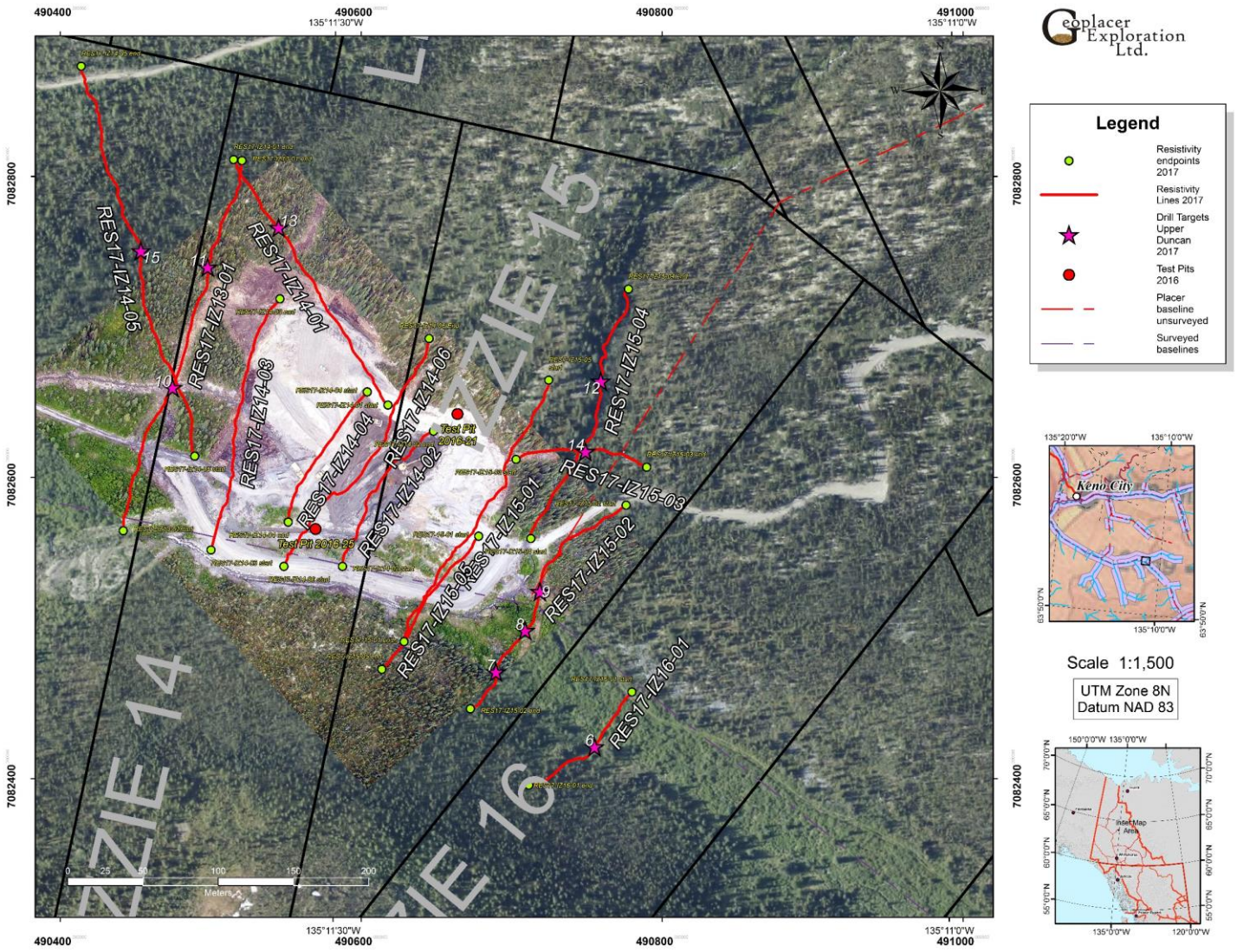

Figure 16 - Map showing 2017 resistivity profiles at the IZZIE claims, overlain on a georeferenced drone image of the IZZIE excavator test pit. Potential drill targets are also shown.

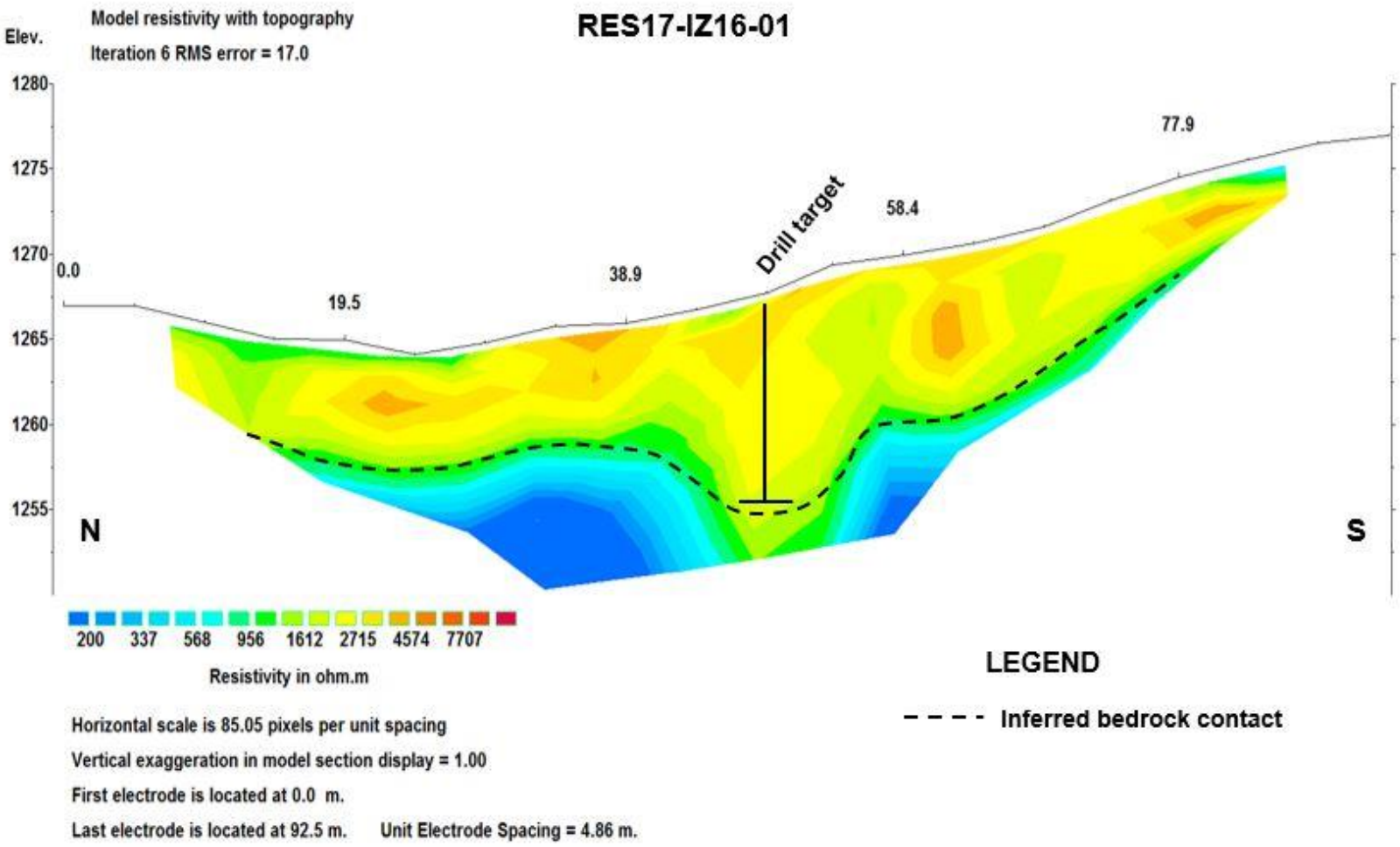

Figure 17 - RES17-IZ16-01 is located upstream of the excavated test pit and exhibits a narrow depression and a zone of high resistivity in the centre. A drill target is proposed.

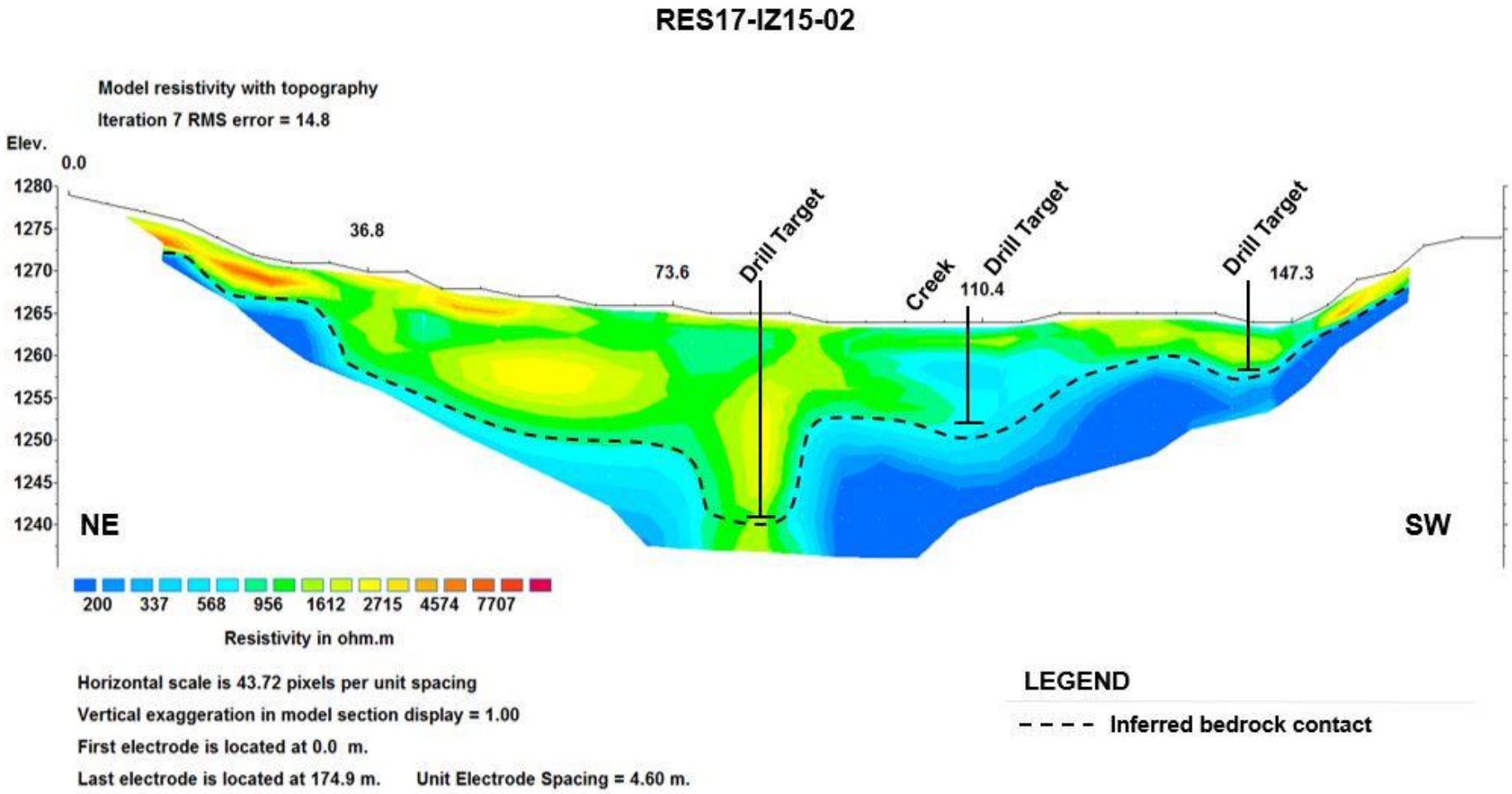

Figure 18 – Profile RES17-IZ15-02 was surveyed just upstream of the IZZIE test pit, and it showed a narrow depression which was seen in downstream profiles and confirmed by excavation in the pit. A distinctive bedrock bench is apparent on the left limit, in the right side of this profile. Several drill targets are proposed.

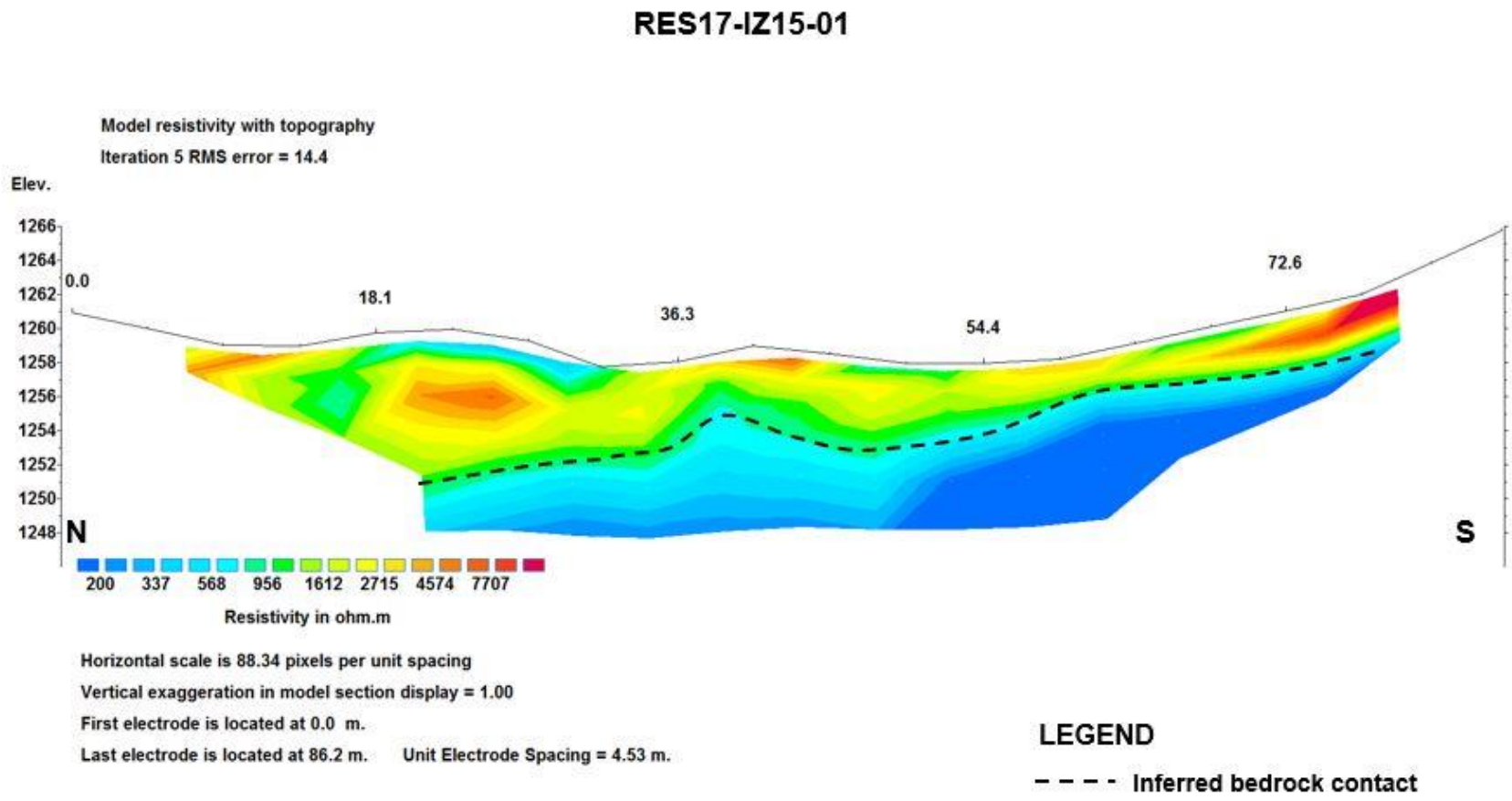

Figure 19 - RES17-IZ15-01 was surveyed across the main Izzie test pit. Bedrock was distinctive as well as the possible left limit bedrock bench seen on other profiles.

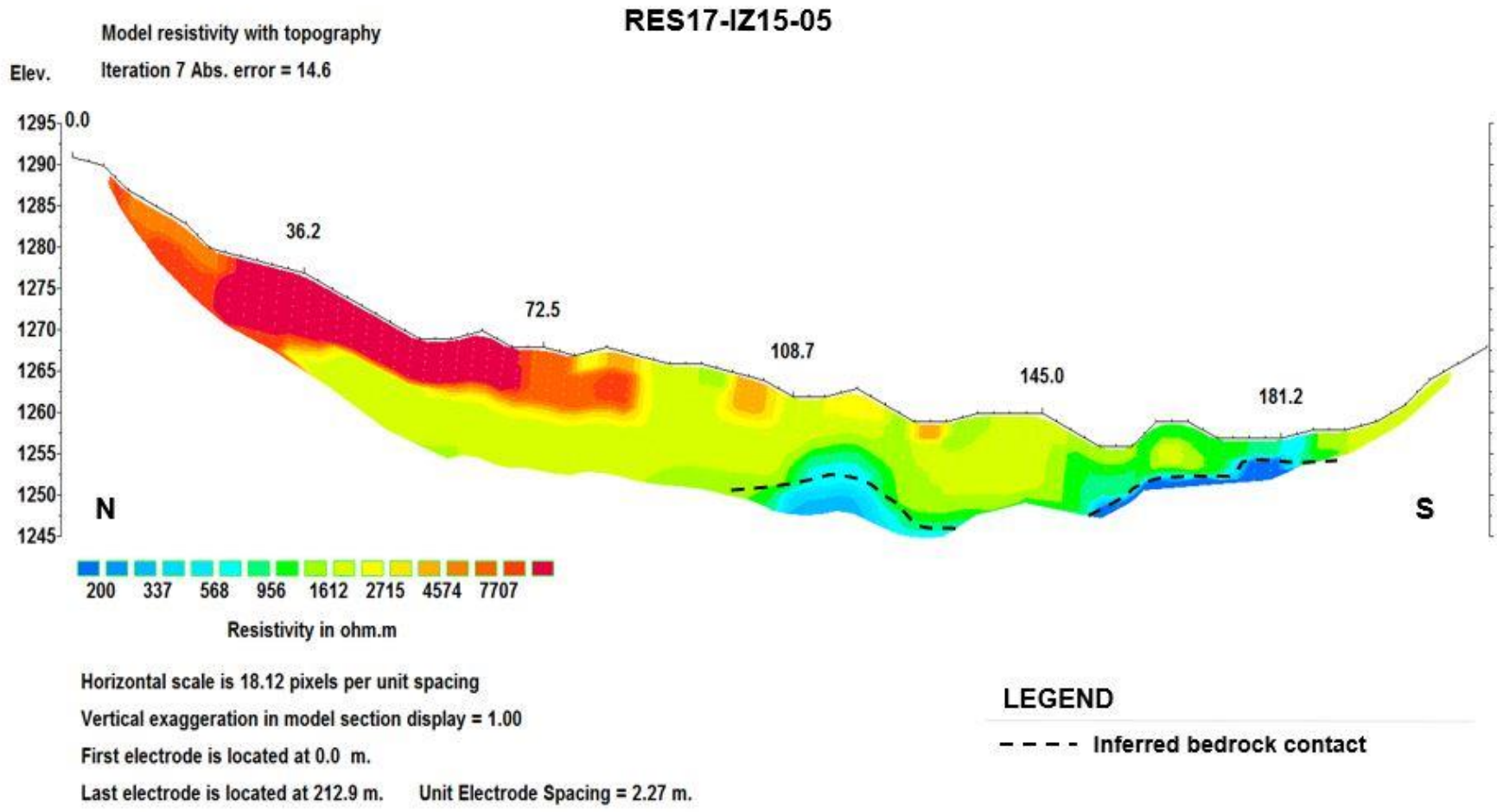

Figure 20 - RES17-IZ15-05 is located just upstream of the IZZIE test pit and shows limited depth due to large increase in elevation within the survey. The high resistivity area on the north side of the survey represents rocky colluvium and disturbed material. The distinctive bedrock bench can be seen as the dark blue zone on the left limit (south side) of the profile.

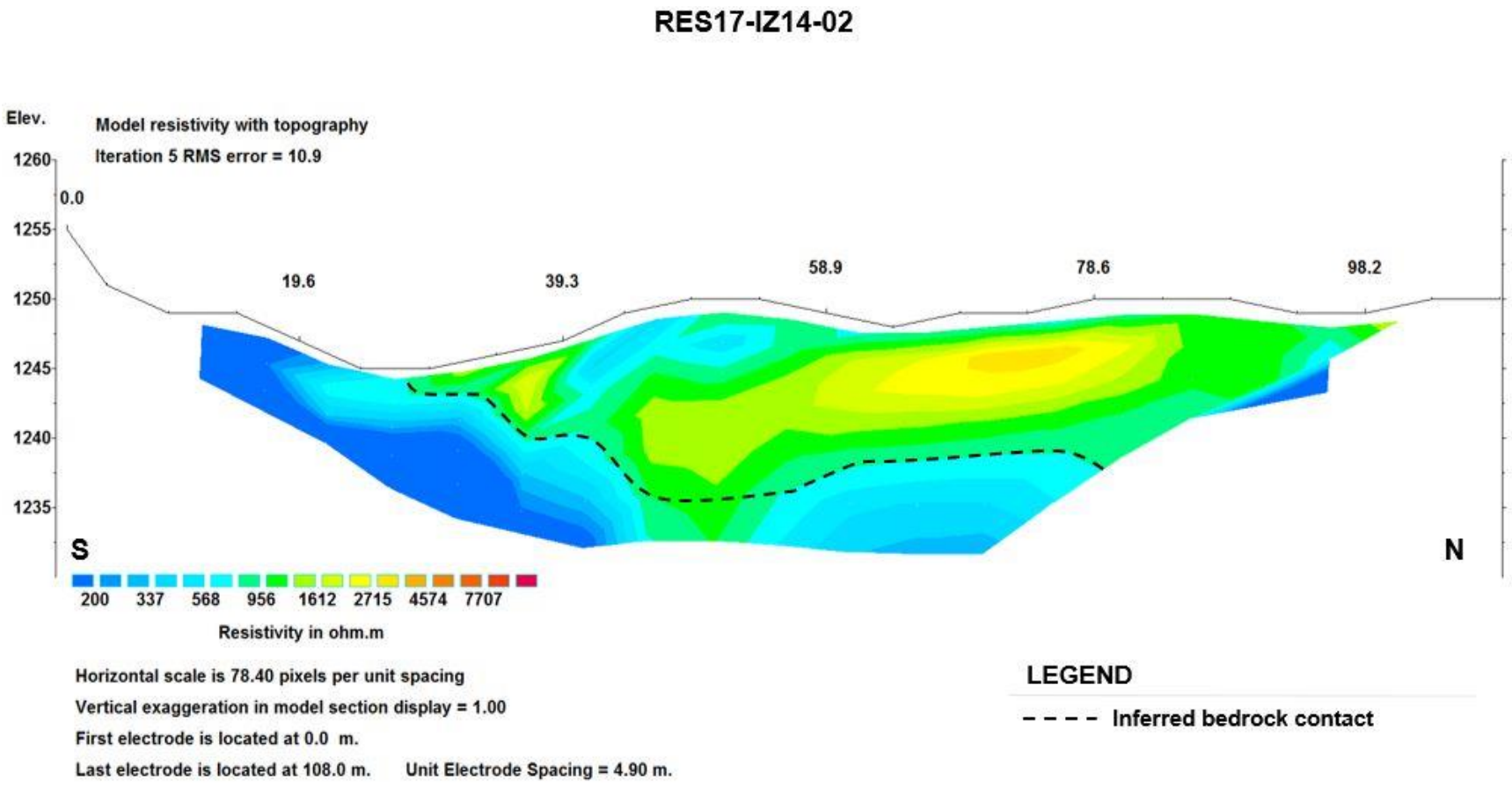

Figure 21 - Profile RES17-IZ14-02 was located in the active IZZIE exploration pit, and it showed the left limit bedrock bench distinctly on the left (south) side of this profile.

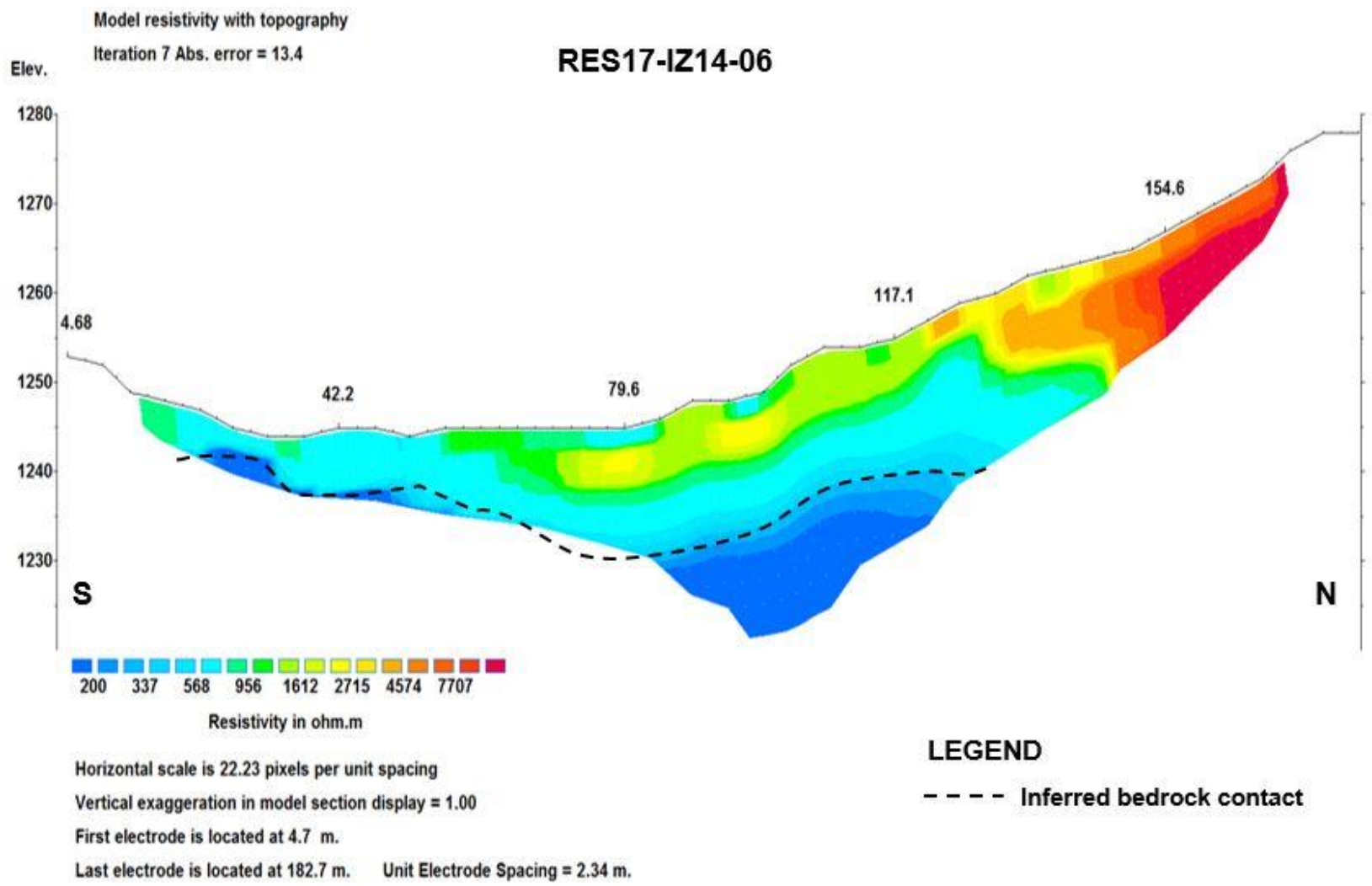

Figure 22 - RES17-IZ14-06 was surveyed across the IZZIE excavated test pit, and it showed the left limit bedrock bench on the south side of the profile. A high resistivity zone on the north side is due to rocky, frozen till.

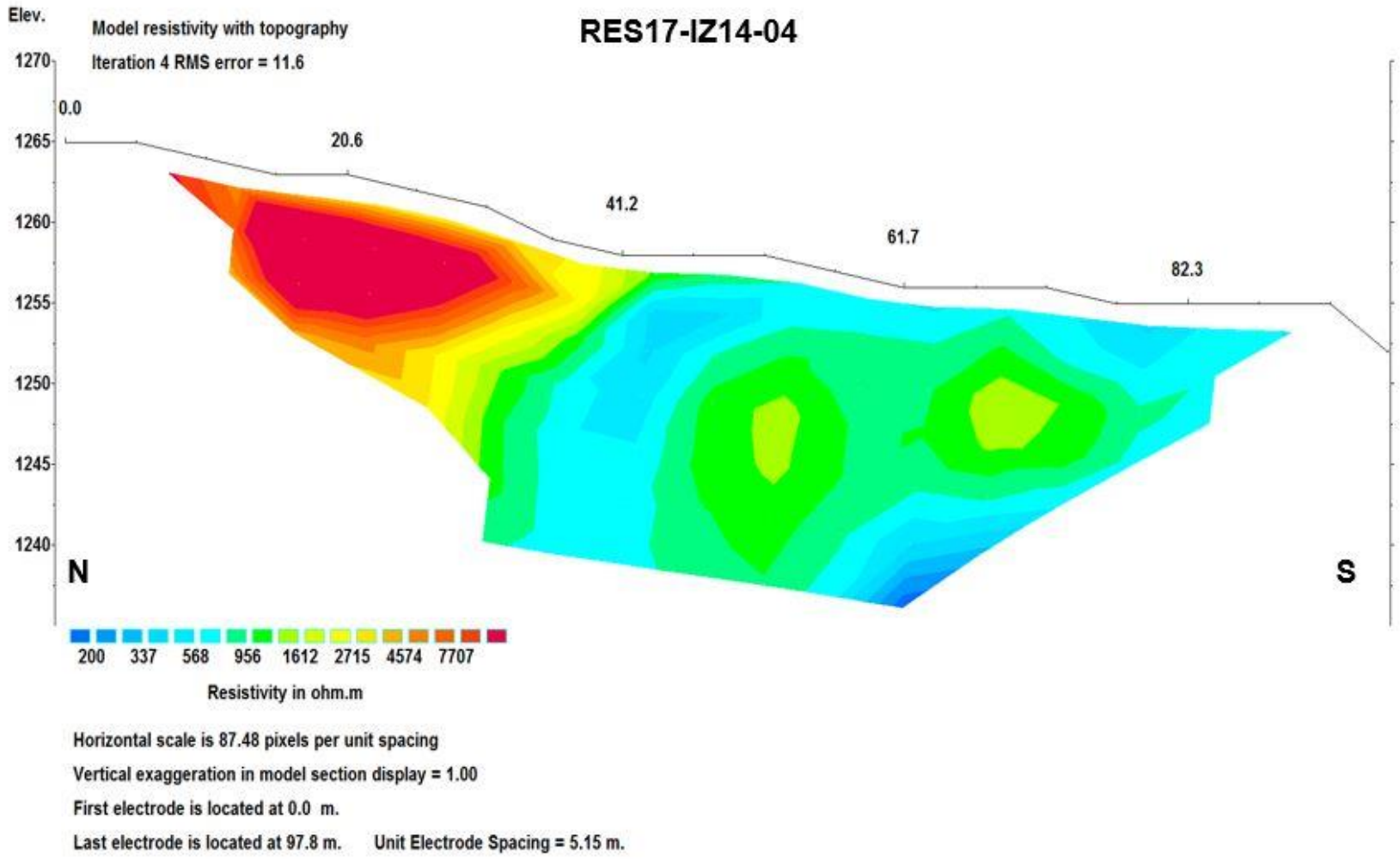

Figure 23 - RES17-IZ14-04 did not have good data results but still appeared to show the possible bedrock bench (dark blue) on the south side of the profile.

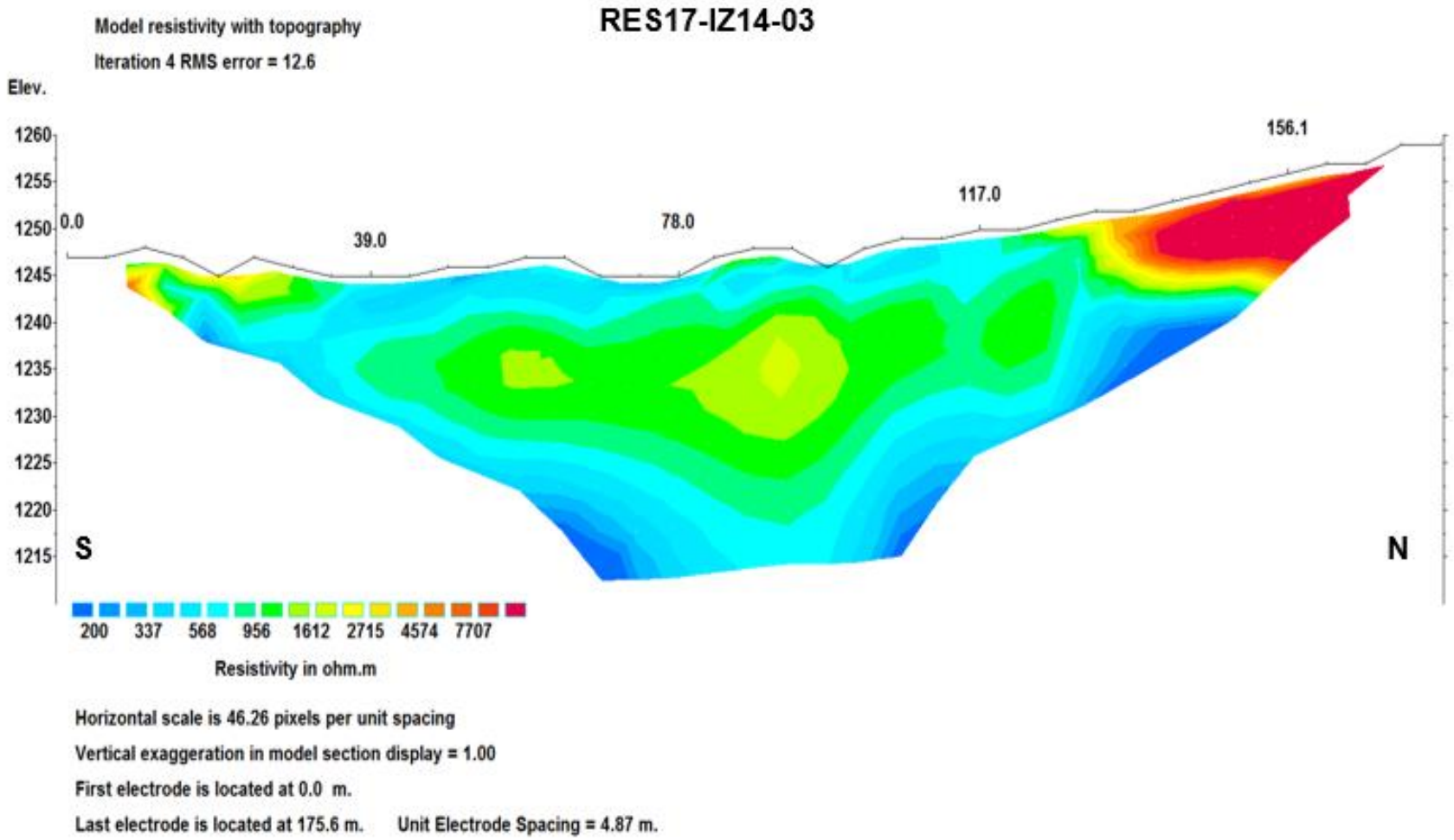

Figure 24 - RES17-IZ14-03 was surveyed on the far west side of the IZZIE test pit. It displays an area of high resistivity in the north that represents disturbed ground, as well as a central depression that resembles the bedrock depression seen in upstream profiles and confirmed in the IZZIE test pit.

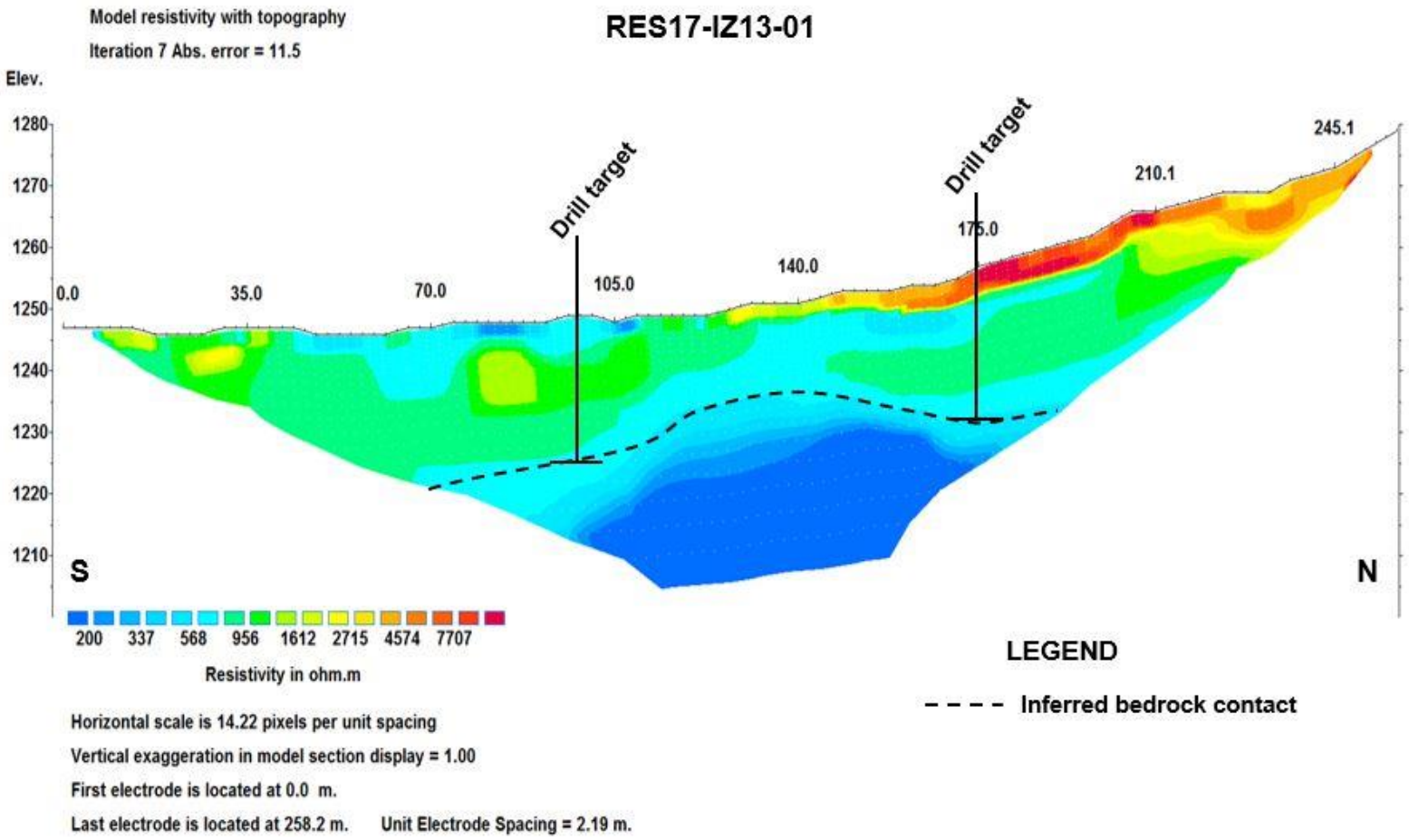

Figure 25 - RES17-IZ13-01 was surveyed downstream of the mapped McConnell glacial limit. A layer of colluvium on the hillslope is displayed as a high resistivity layer on the northeast side, and two drill targets are proposed on either side of an interpreted bedrock high.

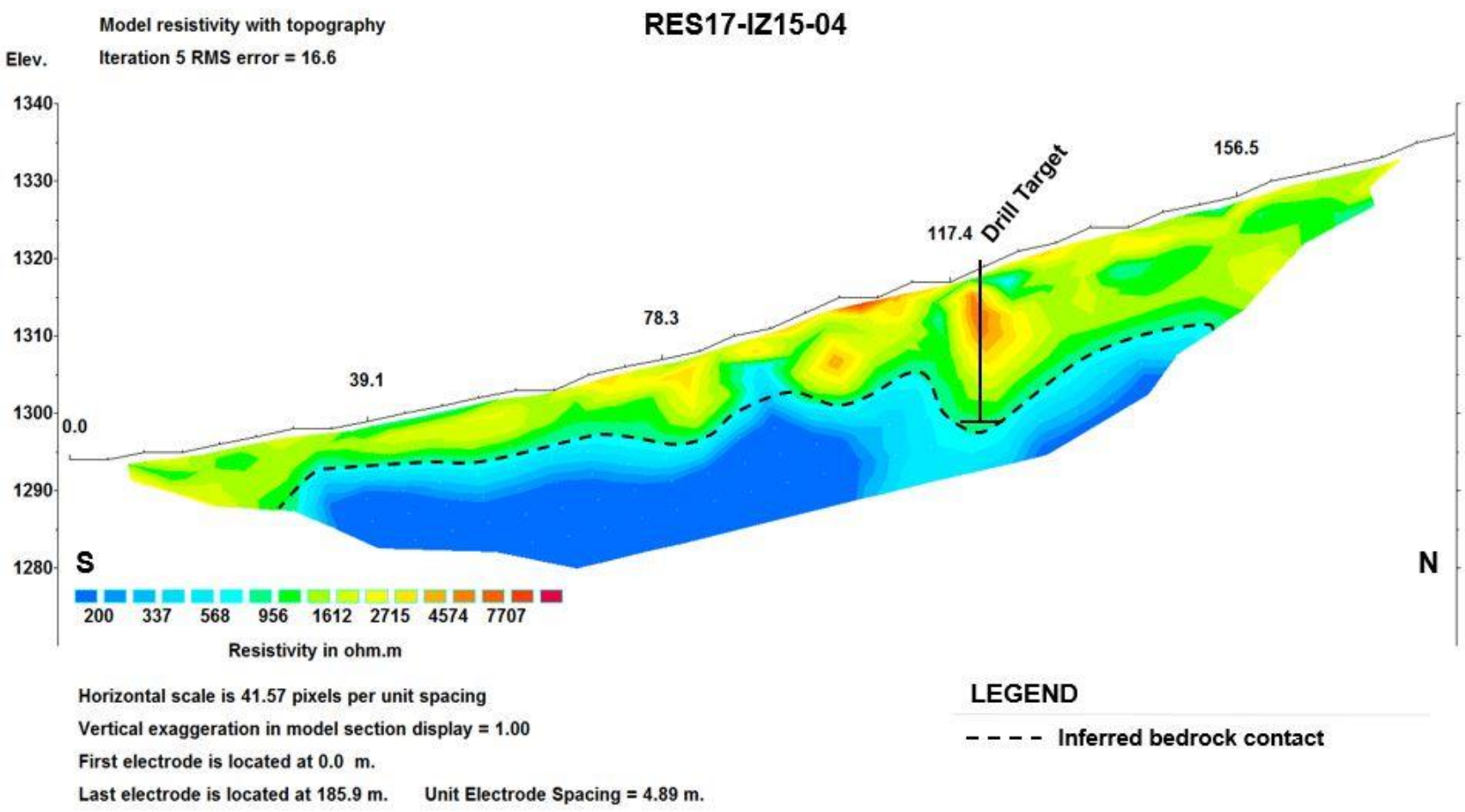

Figure 26 - RES17-IZ15-04 has an undulating bedrock contact interpreted with a deep anomaly and possible drill target located around 120m along the survey line.

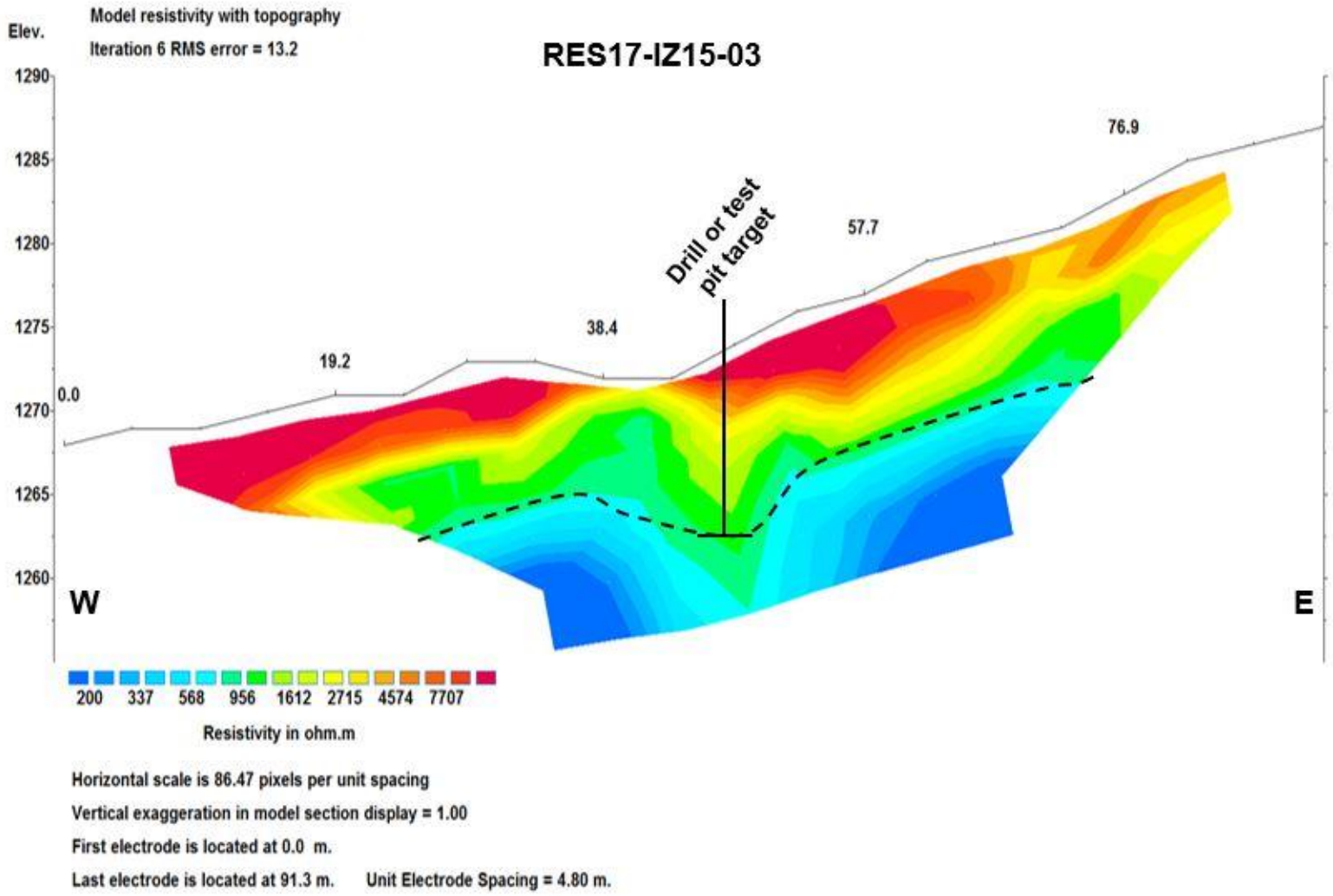

Figure 27 - RES17-IZ15-03 was oriented perpendicular to the main valley and the bedrock contact is interpreted as slightly undulating with a deep section located in the middle of the pseudosection. A test pit or drilling target is proposed.

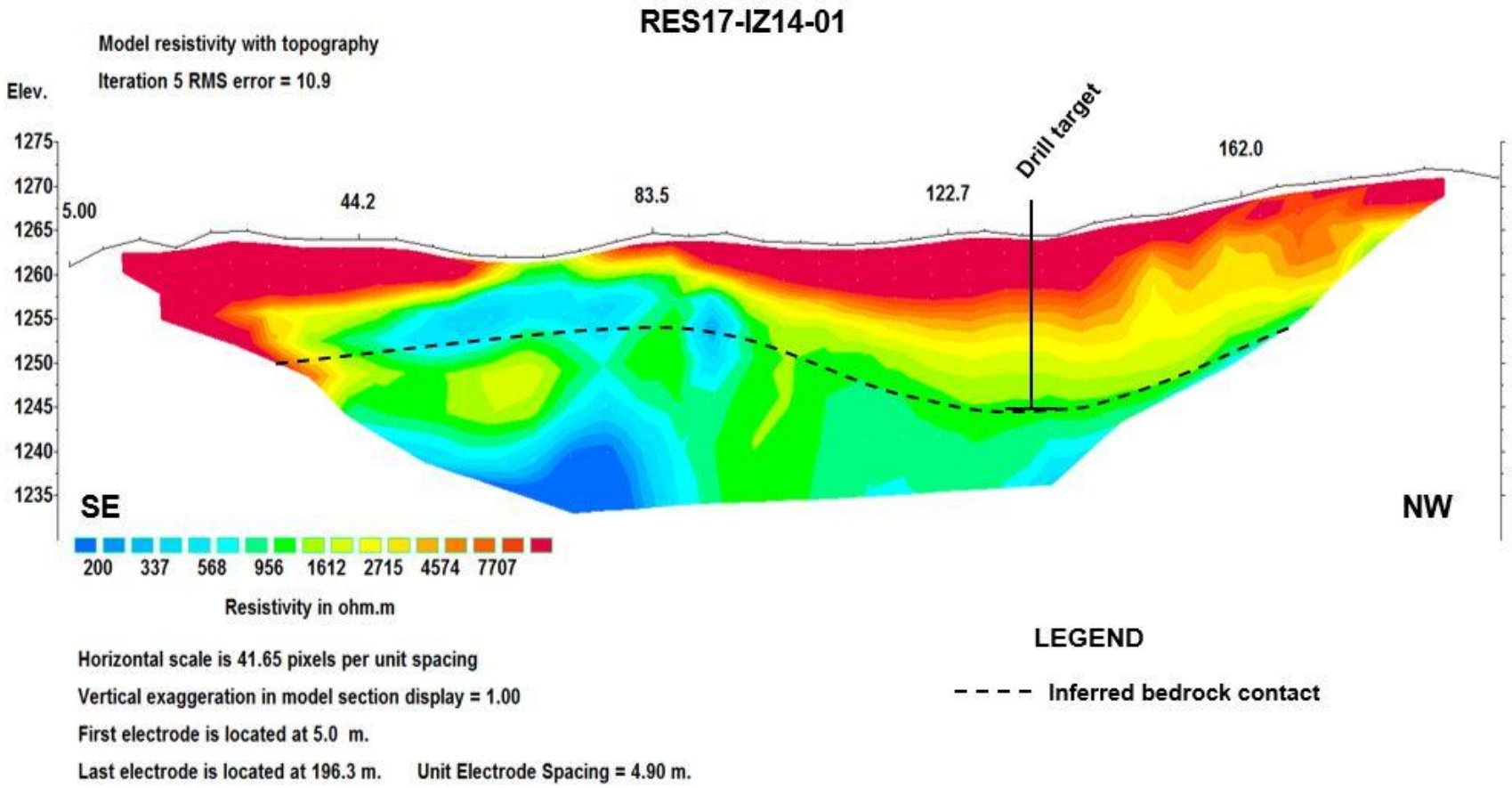

Figure 28 - RES17IZ14-01 is located upstream of RES17-IZ14-05, and is roughly parallel to it and to line RES17-JM16-01 on the upstream James moraines. Areas of high resistivity at the surface can be attributed to permafrost as well as large boulders at the ground surface. Areas adjacent to the small creek running through the section have been thawed, and therefore are shown by areas of low resistivity. A drill target has been identified in within the pseudosection in an area of an apparent bedrock depression.

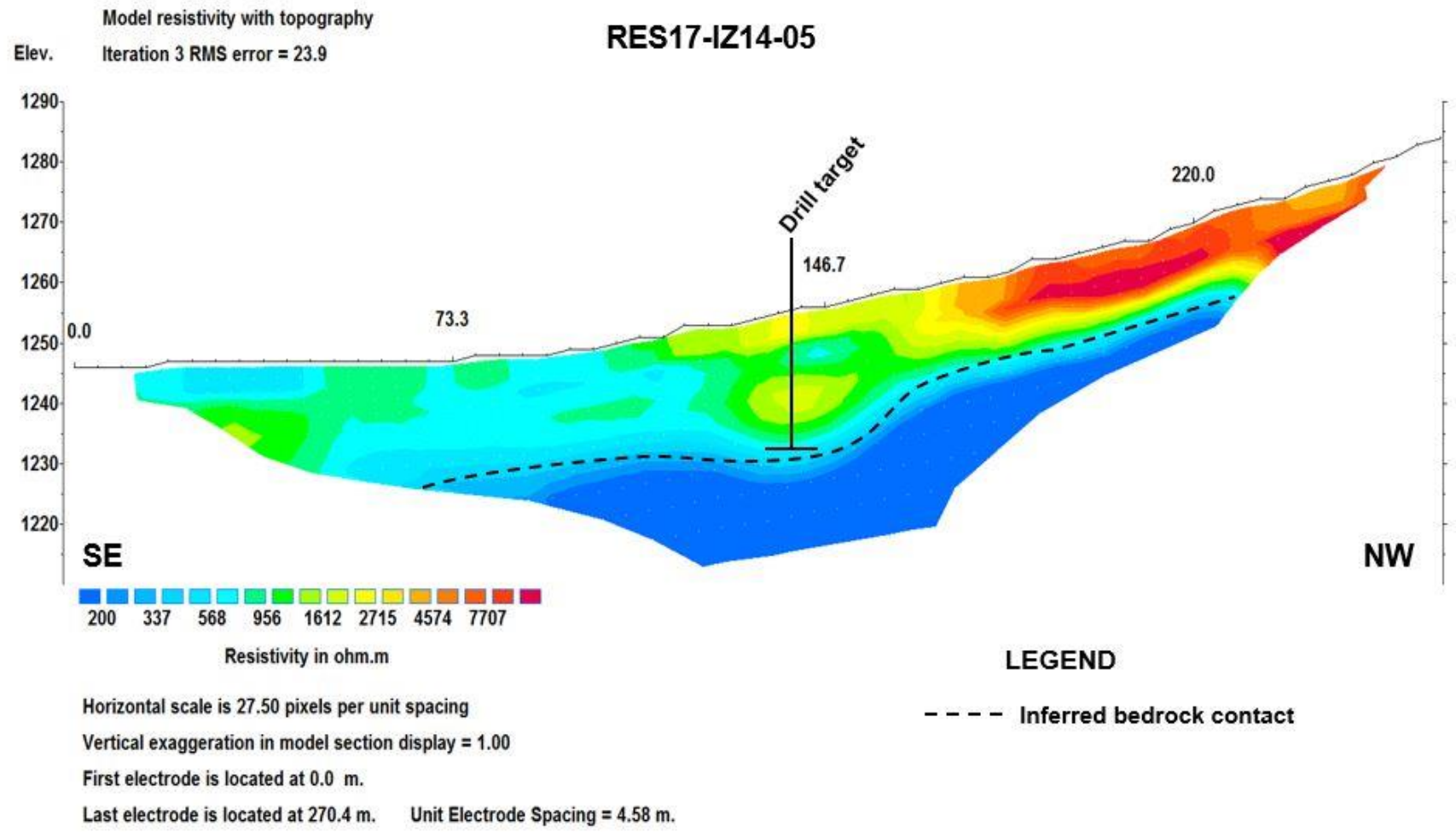

Figure 29 - RES17-IZ14-05 was surveyed downstream and parallel to RES17-IZ14-01. A drill target is proposed in an apparent bedrock depression.

Lindsay Claims

The Lindsay claims tributary on upper Duncan Creek follows the trace of a mapped thrust fault, which is the contact between the Keno Hill quartzite to the east and the Hyland Group phyllite to the west. Resistivity lines were targeted to cross this contact as a potential gold-bearing structure.

Resistivity line RES17LN4-01 was surveyed across this potential structure, as well as resistivity line RES17IZ16-01 downstream. These are shown in Figure 30.

Both profiles appear to show a depression in the profile, which could represent a bedrock depression corresponding to a fault. This is a target for further placer gold exploration and bedrock depth calibration.

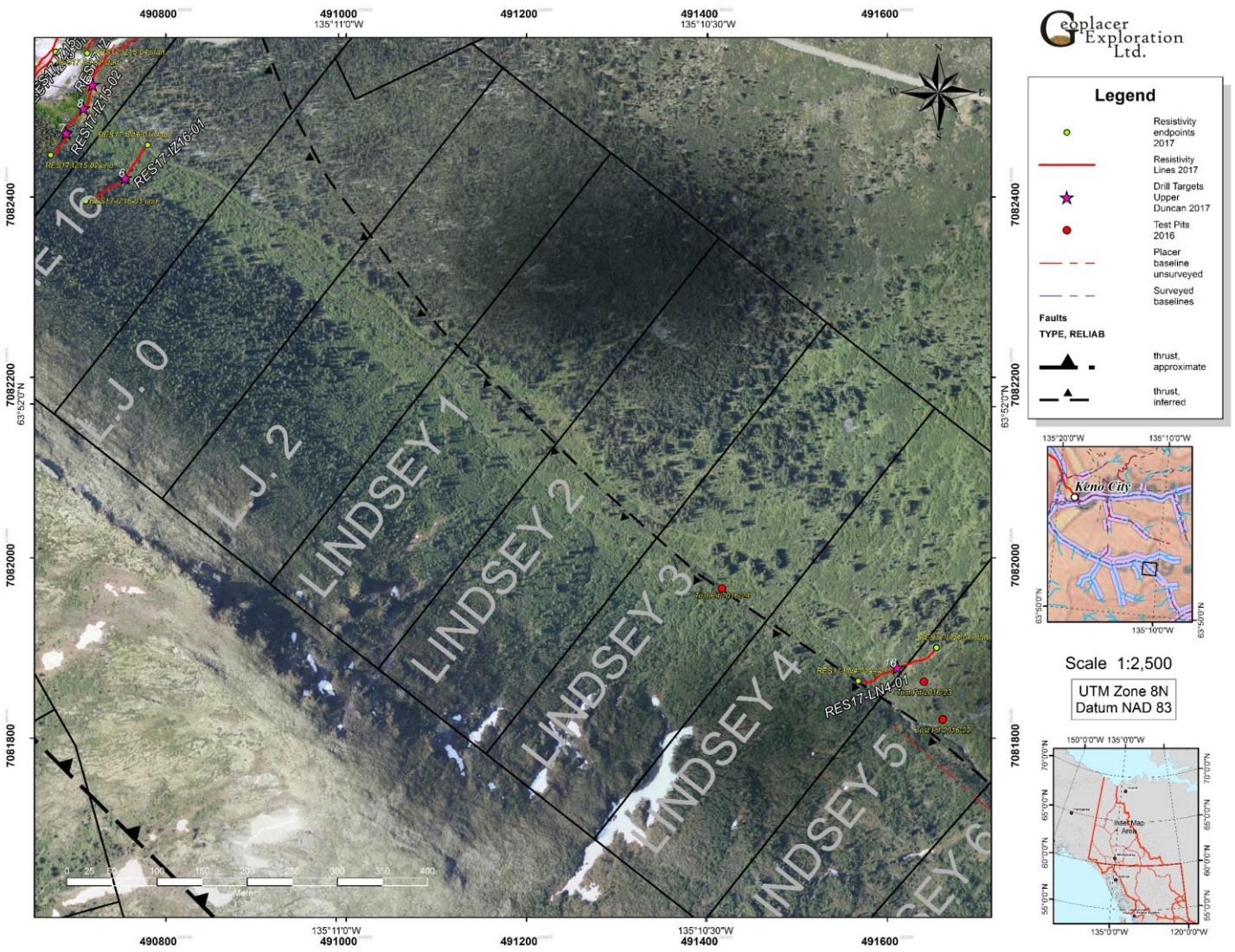

Figure 30 – Map showing 2017 resistivity lines on the Lindsey claims, with local bedrock faults and potential drill targets.

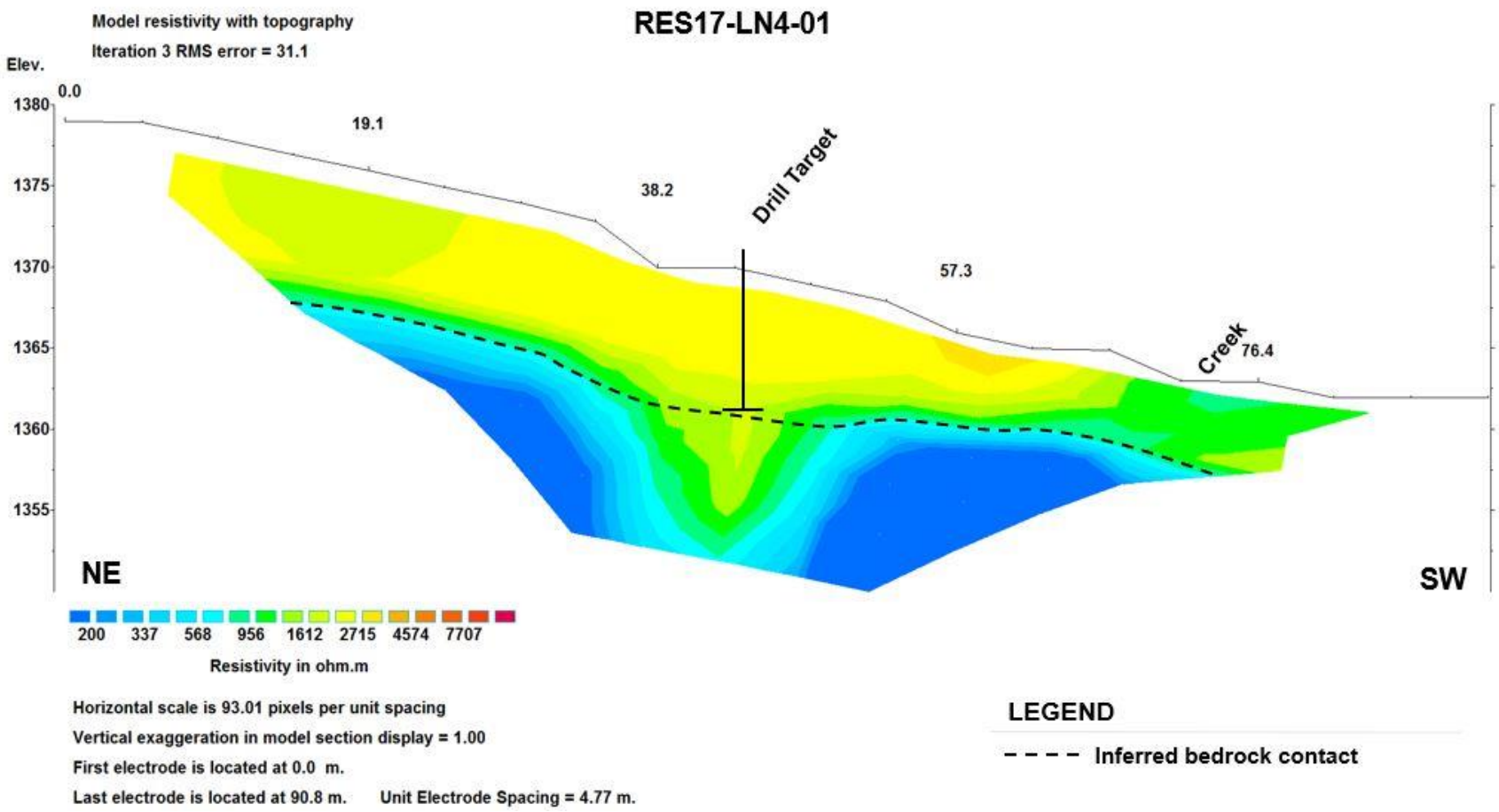

Figure 31 - RES17-LN4-01 is located upstream of the IZZIE pit. This survey appears to have a depression in the centre that is a candidate for further drill testing to confirm bedrock depths and test gold values in the Lindsay claims.

Gray Claims

The Gray claims tributary originates in a steep cirque, and is a relatively narrow valley. A glacial moraine, which has been mapped as McConnell age (Bond, 1998), forms much of the landscape in the lower reaches of the valley where it joins the main Upper Duncan valley. Bedrock includes both Keno Hill quartzite and Hyland Group phyllite, and two major thrust fault contacts transect this tributary (Roots, 1997a, 1997b). These contacts have a high potential to be mineralized and thus the Gray claims tributary is highly prospective for placer gold.

A total of six resistivity surveys were conducted in the Gray Claims area, including the mouth. These are shown on Figure 32.

Although there is evidence of small hand pits and old sluiceboxes, there are no known historic or recent excavator test pits or drill holes. Profiles RES17-GRAY1-01 and RES17-GRAY2-01 both transect the moraine in its mid-reaches, while RES17-IZ12-01, RES17-IZ12-02 and RES17-IZ8-02 cross the moraine at its farthest downstream extent. Profile RES17-IZ8-01 crosses the main upper Duncan valley downstream of the termination of the moraine.

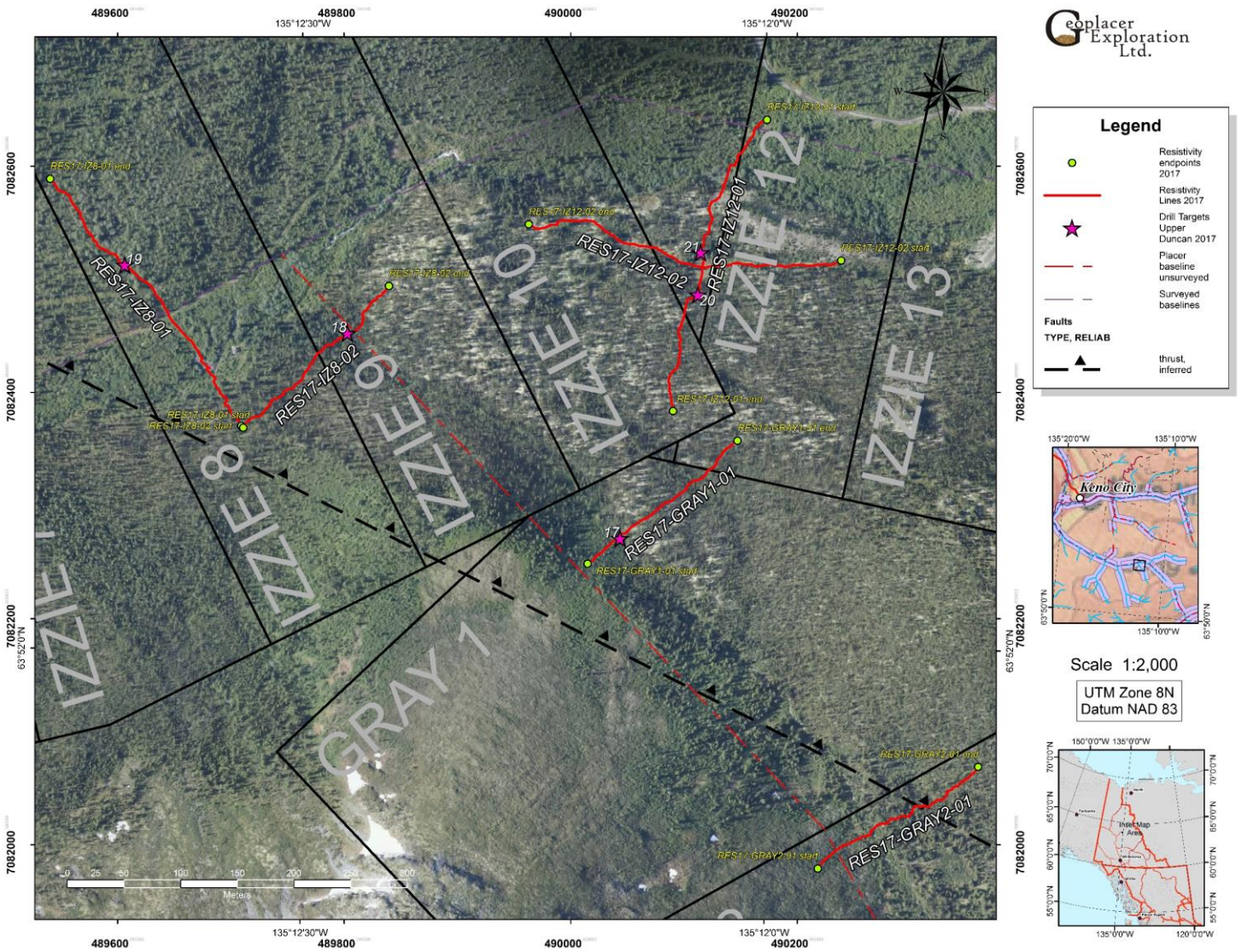

Figure 32 – Map showing the left limit tributary with the Gray claims and the location of 2017 resistivity lines.

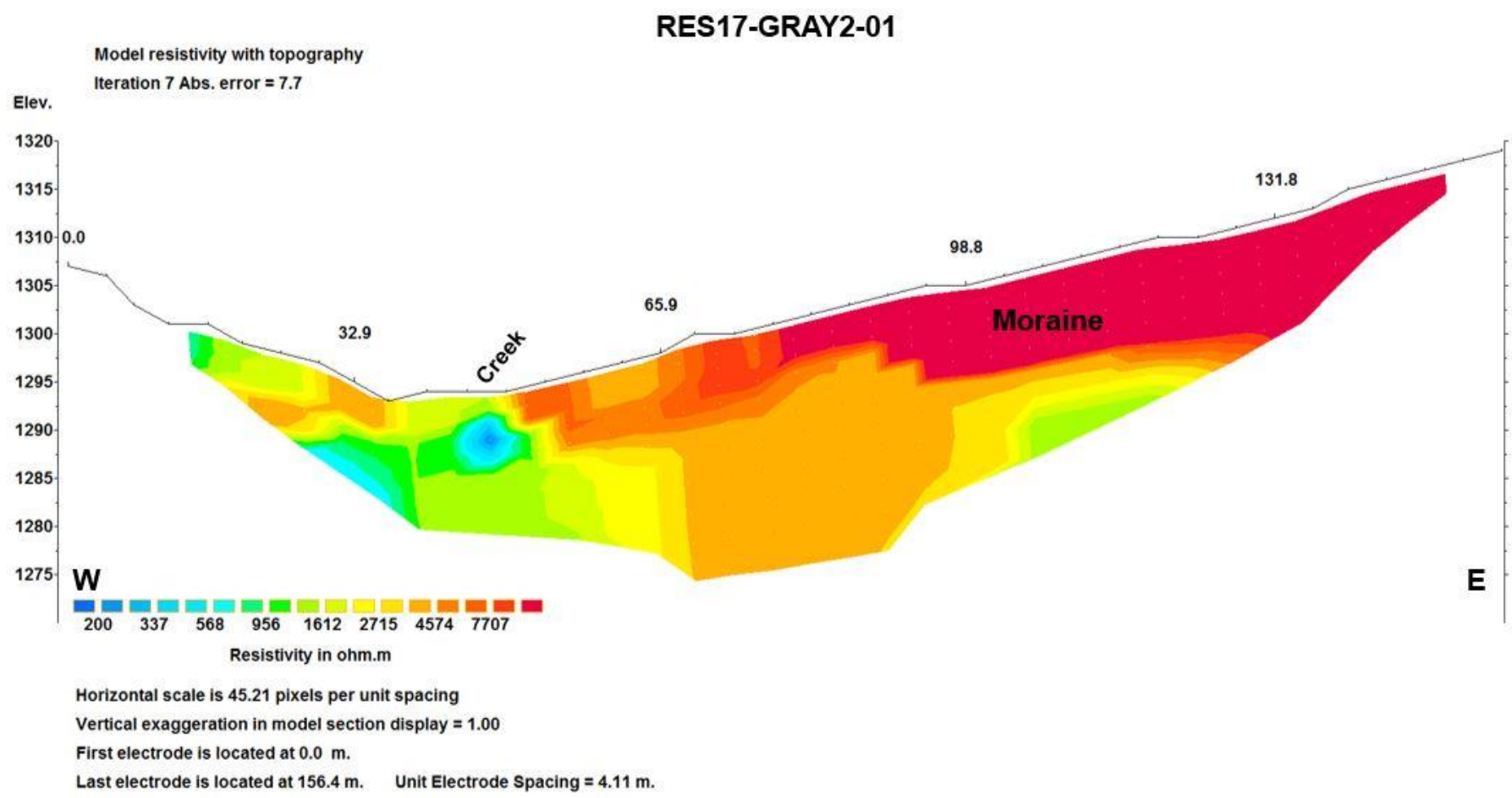

Figure 33 - RES17-GRAY2-01 was surveyed across a moraine composed of rocky glacial till, which displays high resistivity. No clear bedrock contact is evident in this section.

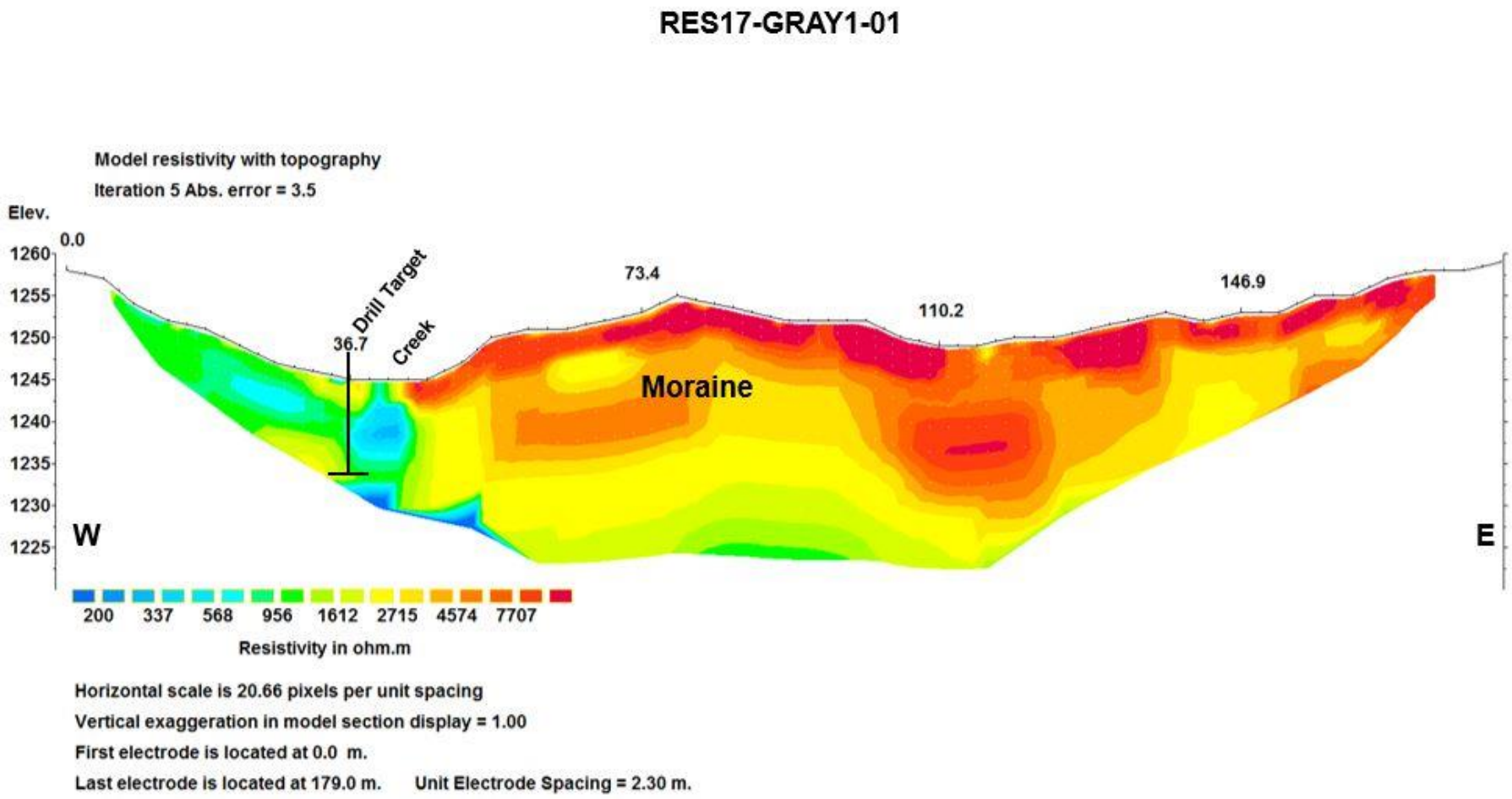

Figure 34 - RES17-GRAY1-01 was surveyed across a moraine composed of rocky till, which displays as high resistivity. A drill target is proposed to calibrate bedrock depth and test placer gold values.

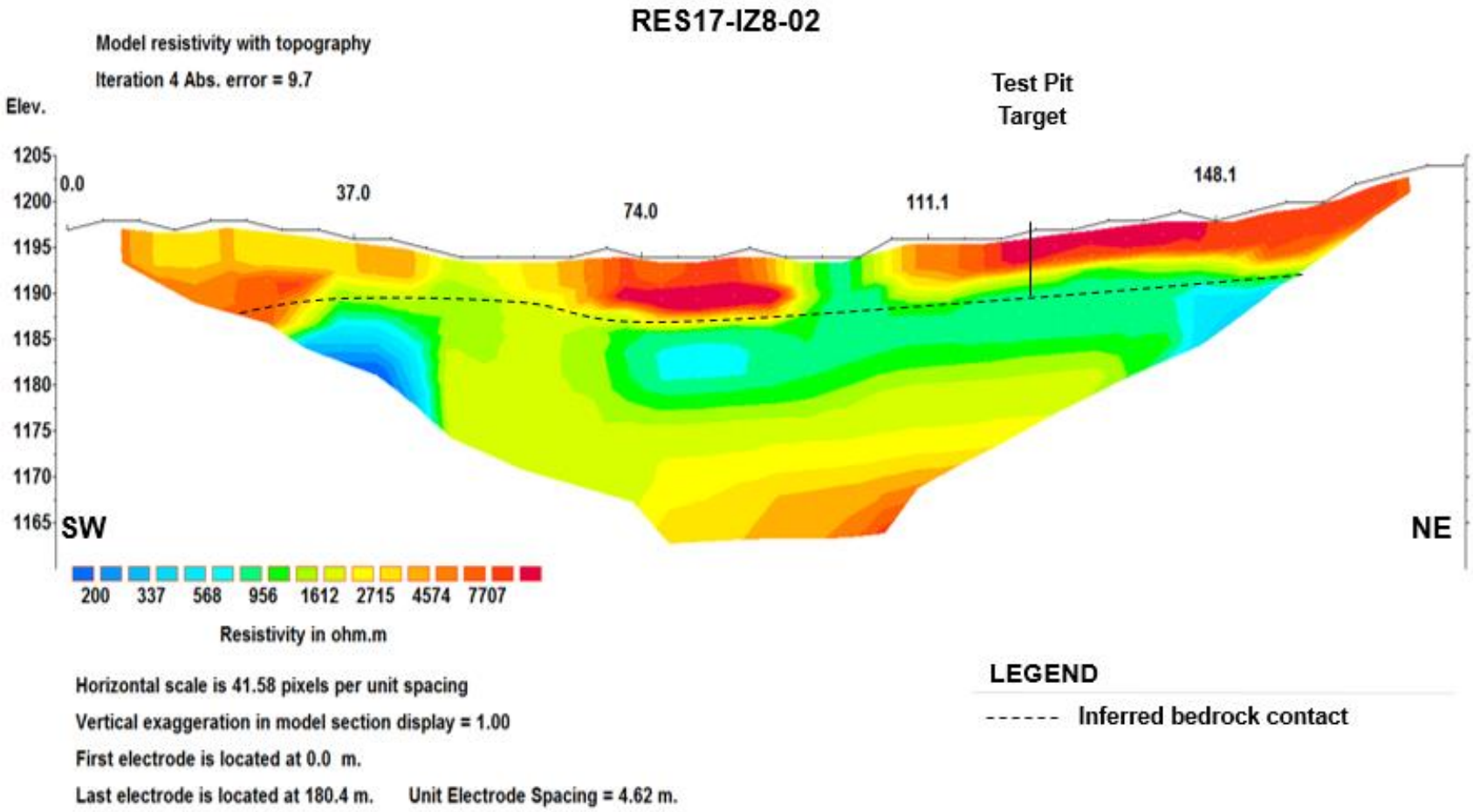

Figure 35 - RES17-IZ8-02 is oriented perpendicular to the creek of Gray tributary and is located in the area of confluence with the creek in the Izzie claims. The section shows a relatively flat bedrock contact, but a target has been identified on the survey line to calibrate bedrock depth. Discovering the depth in the area will allow for calibration in the surrounding areas.

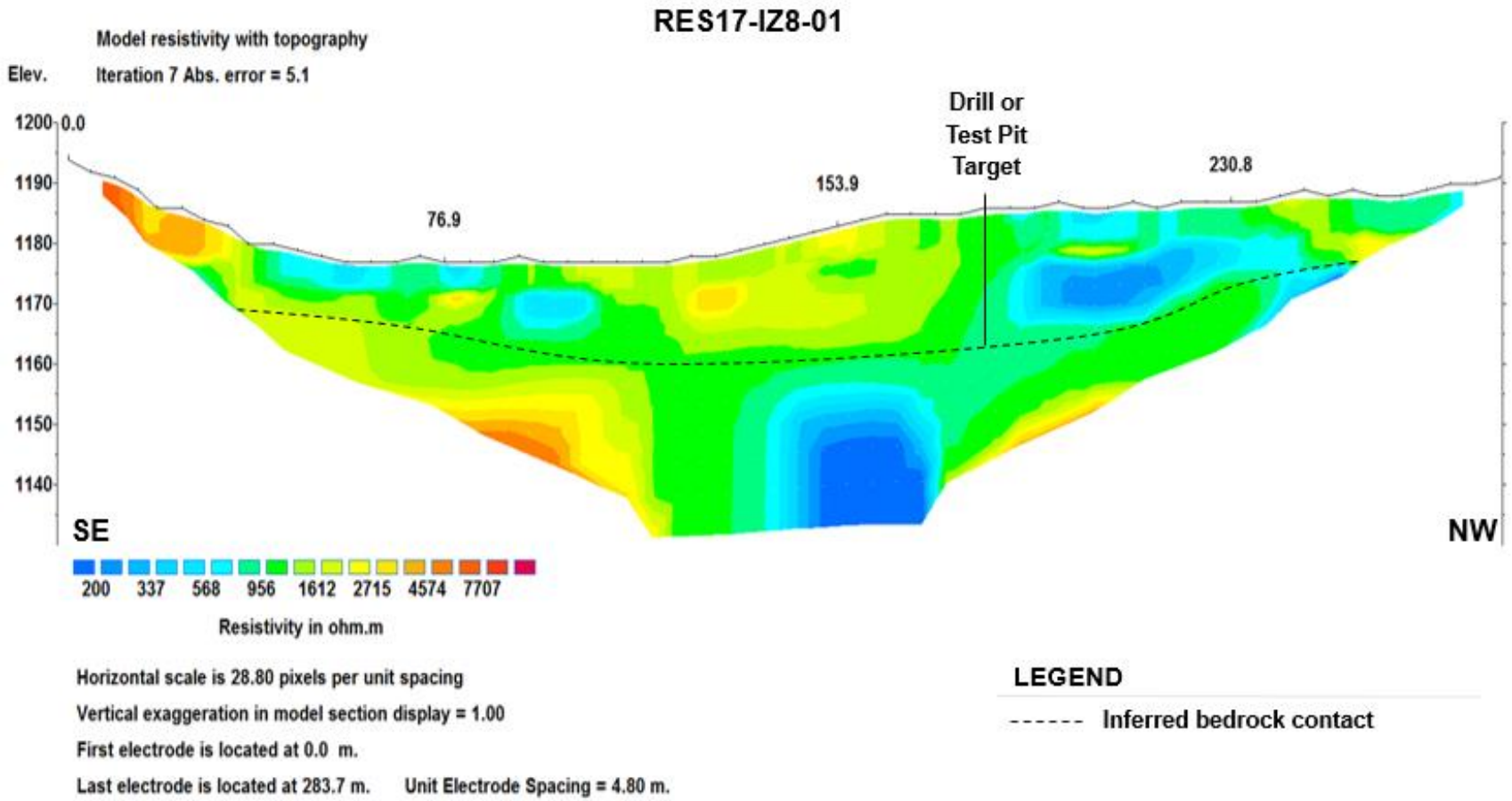

Figure 36 - RES17-IZ8-01 is oriented across the Upper Duncan valley just downstream of the confluence with the Gray claims tributary. The section shows a relatively flat potential bedrock contact. A large area of thawed, wet ground can be seen as the light blue low resistivity zone near the surface. A target is proposed to calibrate bedrock depth and test gold values.

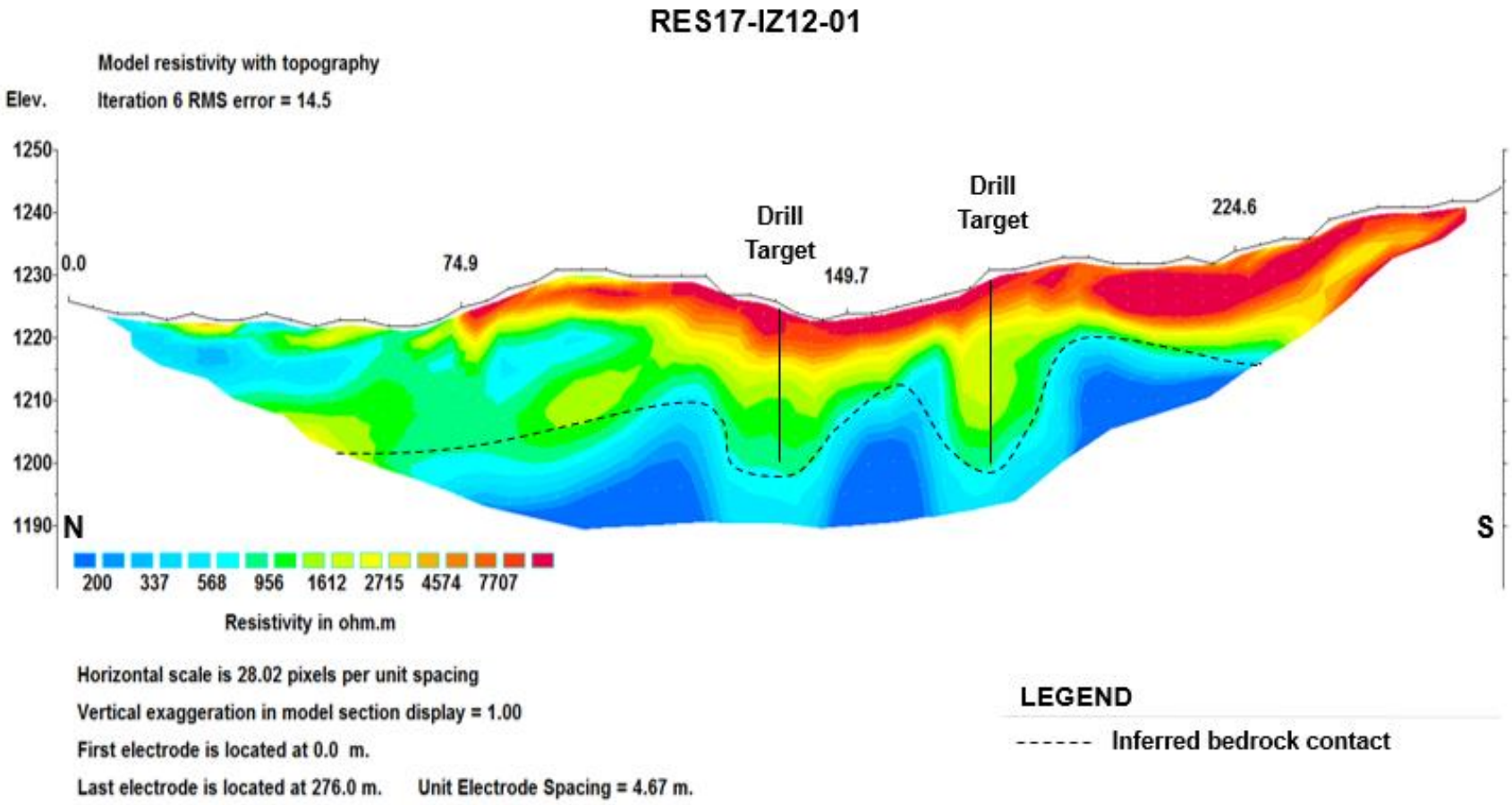

Figure 37 - RES17-IZ12-01 was surveyed across a moraine and appears to display large undulations in the bedrock contact. The large undulations are drilling targets for depth calibration and to examine possible gold values.

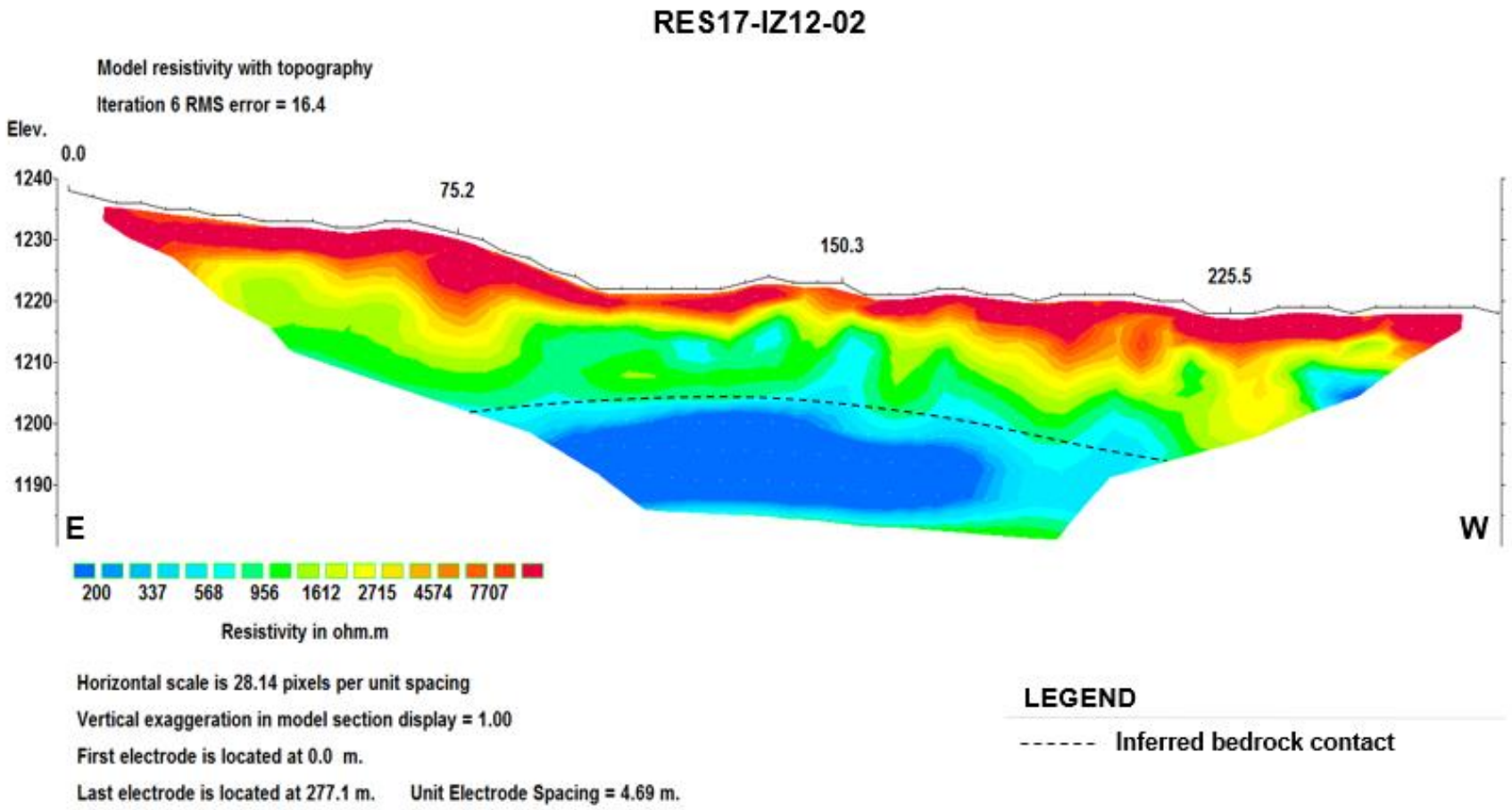

Figure 38- RES17-IZ12-02 was surveyed perpendicularly across the same terminal moraine as RES17-IZ12-01, and does not display the same undulations in the inferred bedrock contact. The lack of undulations could indicate that they primarily occur in a direction oblique to this profile.

Stuart Tributary (including Sam Claims at mouth)

The Stuart claims tributary lies within the mapped extent of the Proterozoic Hyland Group (Roots 1997a, 1997b) and observed bedrock in the area mainly consists of phyllite and shale. The Stuart claims tributary lies outside of the McConnell glacial limit as mapped by Bond (1998).

Seven resistivity lines were surveyed in the Stuart claims tributary and mouth area. These are shown in Figure 39, and include RES17-ST14-01, RES17-ST13-01, RES17ST9-01, RES17ST4-01, RES17ST2-01, RES17-SM216-01 and RES17-SM217-01. Since this drainage was not glaciated during the McConnell glaciation, it has significant potential for older placer-gold bearing glacial and interglacial sediments and paleochannels. In fact, test pitting in 2016 recovered placer gold in several locations, and these pits were also used to calibrate depths to bedrock during the 2017 geophysical program.

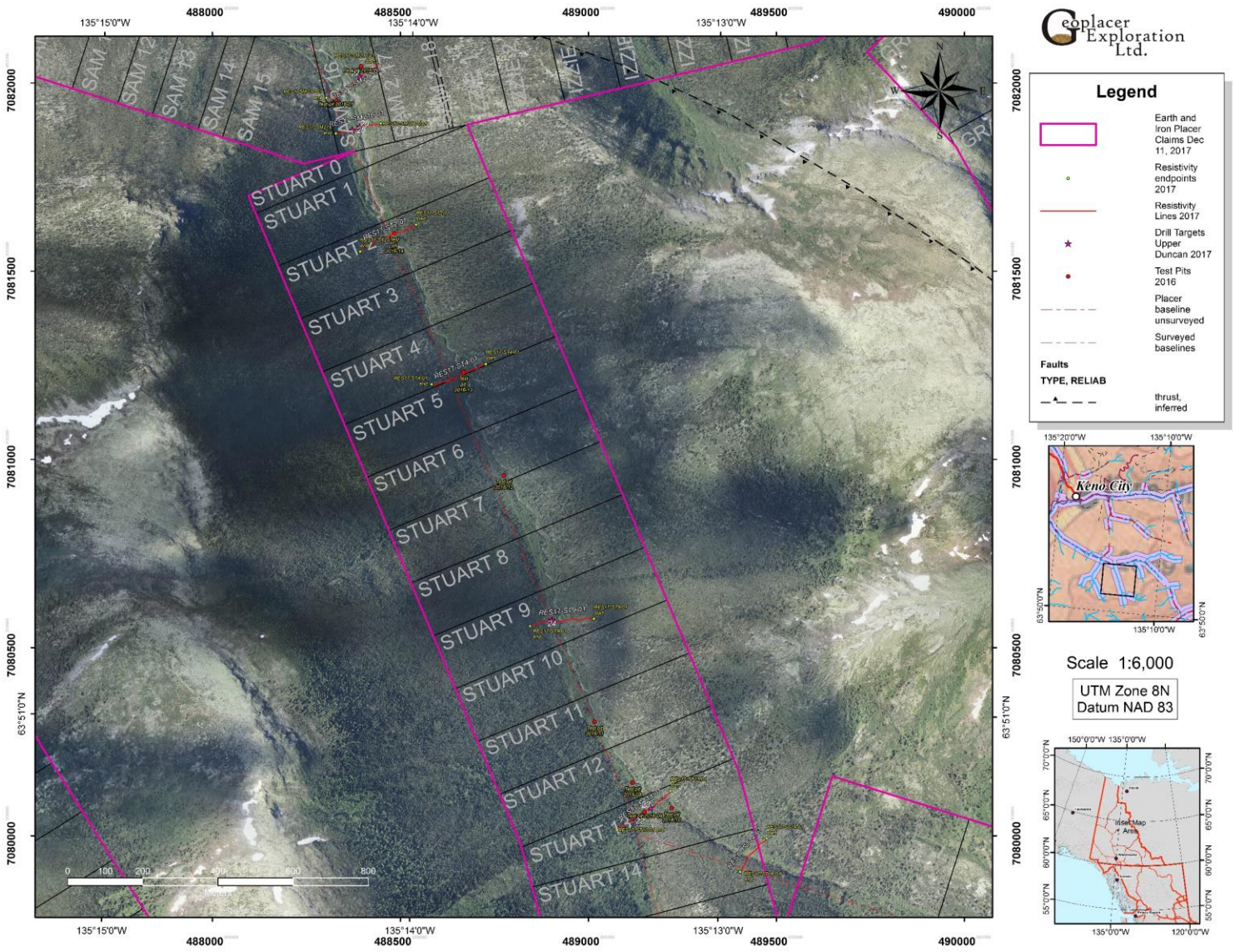

Figure 39 – Map showing 2017 resistivity surveys on the Stuart claims tributary. Also shown is the location of the 2016 test pits.

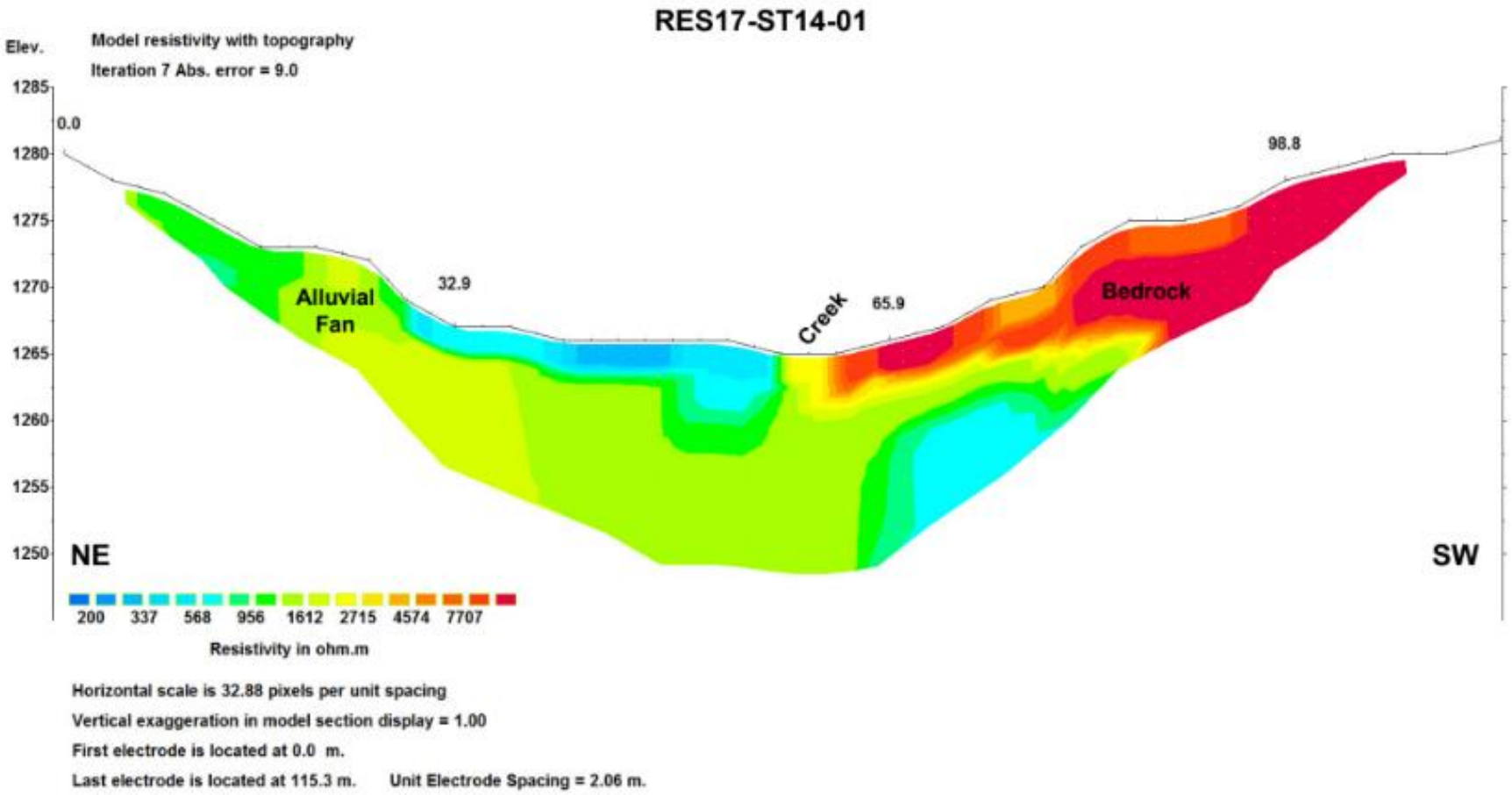

Figure 40 - RES17-ST14-01 displays bedrock/colluvium on surface as a high resistivity zone on the southwest side of the profile. Bedrock outcrop was observed in this location in the field. An alluvial fan overlies the surface on the NE side of the profile.

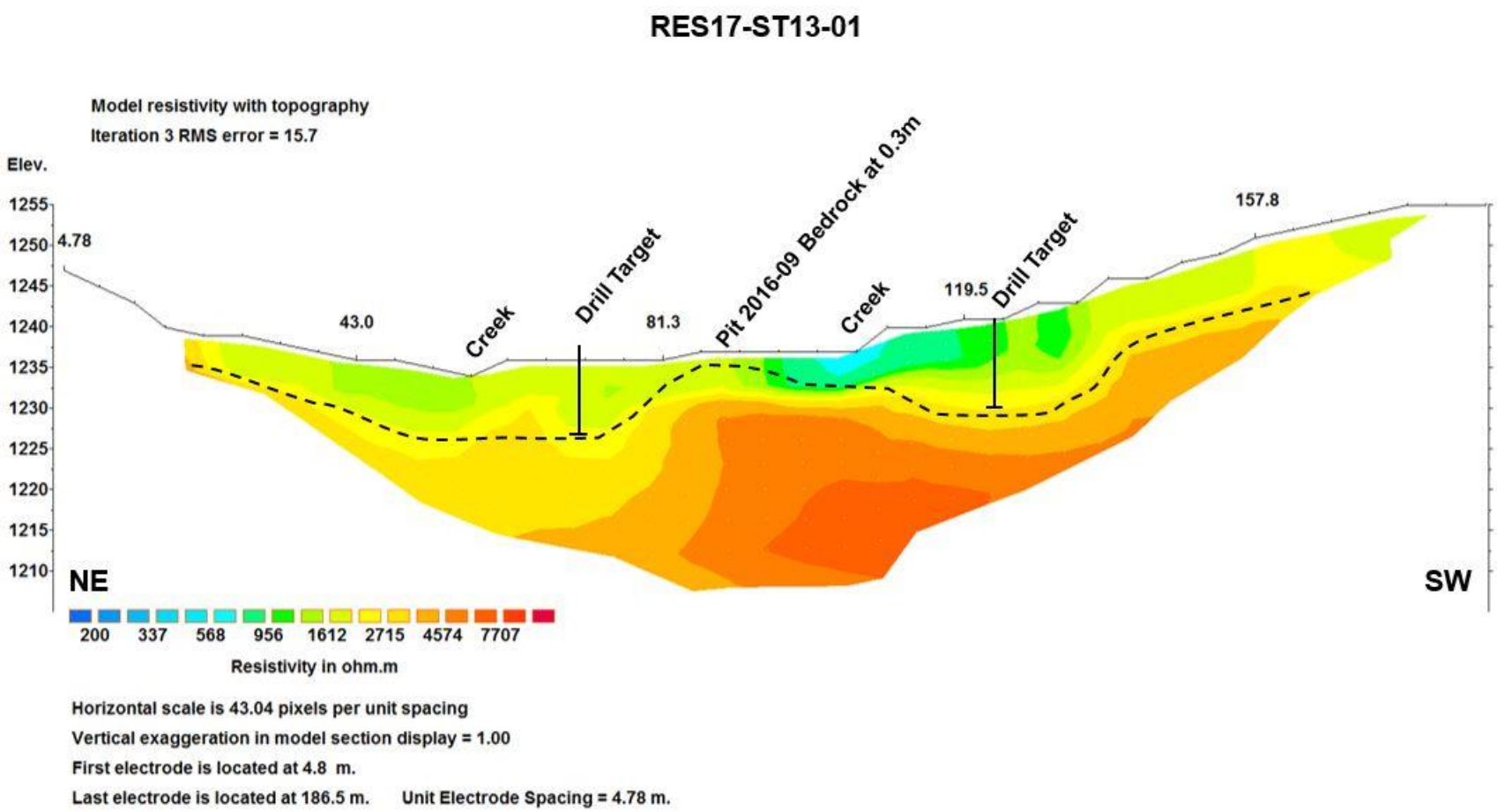

Figure 41 - RES17-ST13-01 is at the confluence of two upper valleys, and crosses an existing test pit excavated in 2016 (2016-09) which found bedrock to be only 0.3 metres below surface. However, two possible channels lie on each side of the profile, which may represent paleochannels from each respective valley.

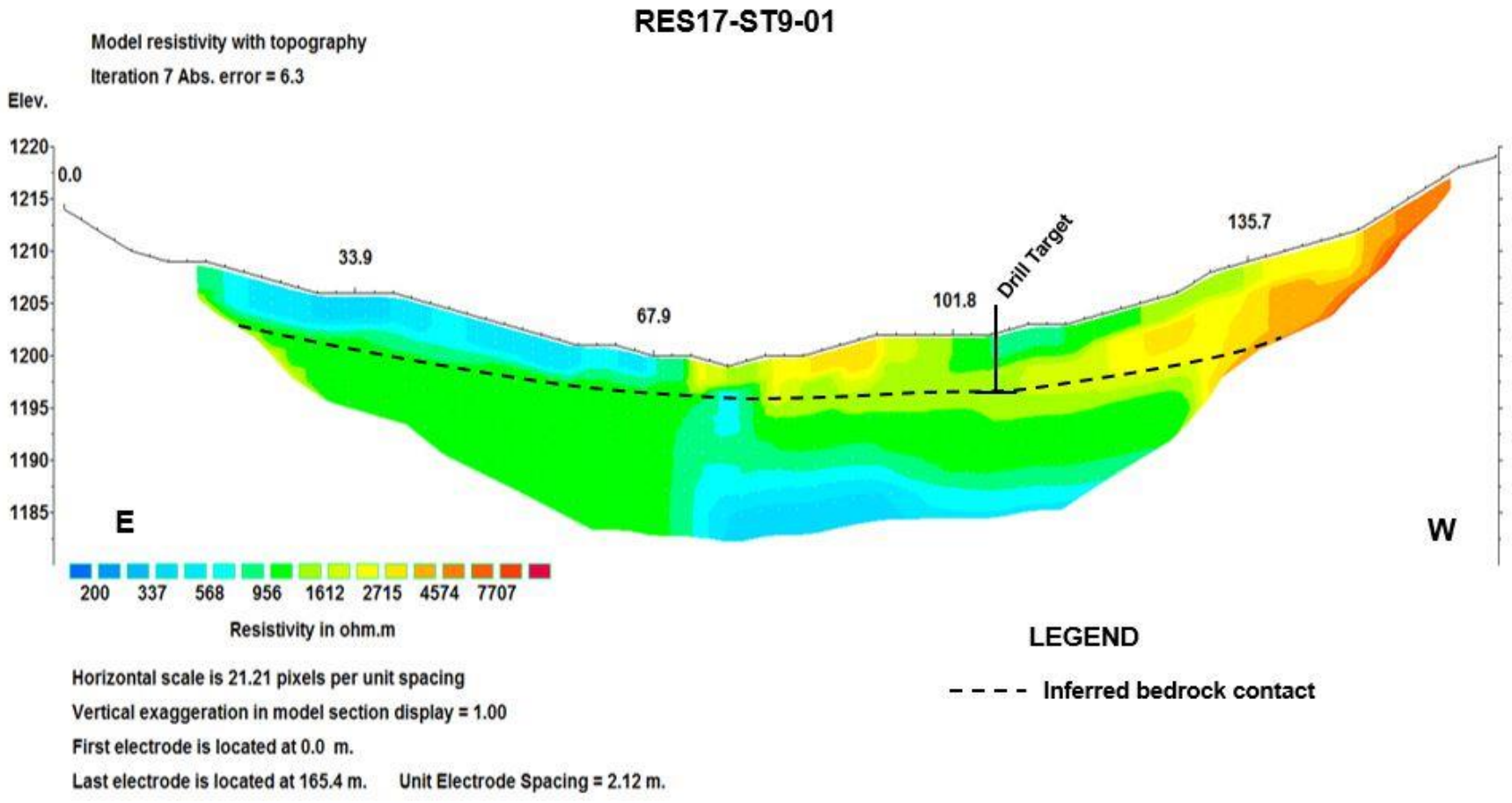

Figure 42 - RES17-ST9-01 was surveyed downstream of Test pit 2016-11, which recovered significant amounts of placer gold. A bedrock contact is inferred from downstream and upstream pits, and a proposed drill target is shown on the profile.

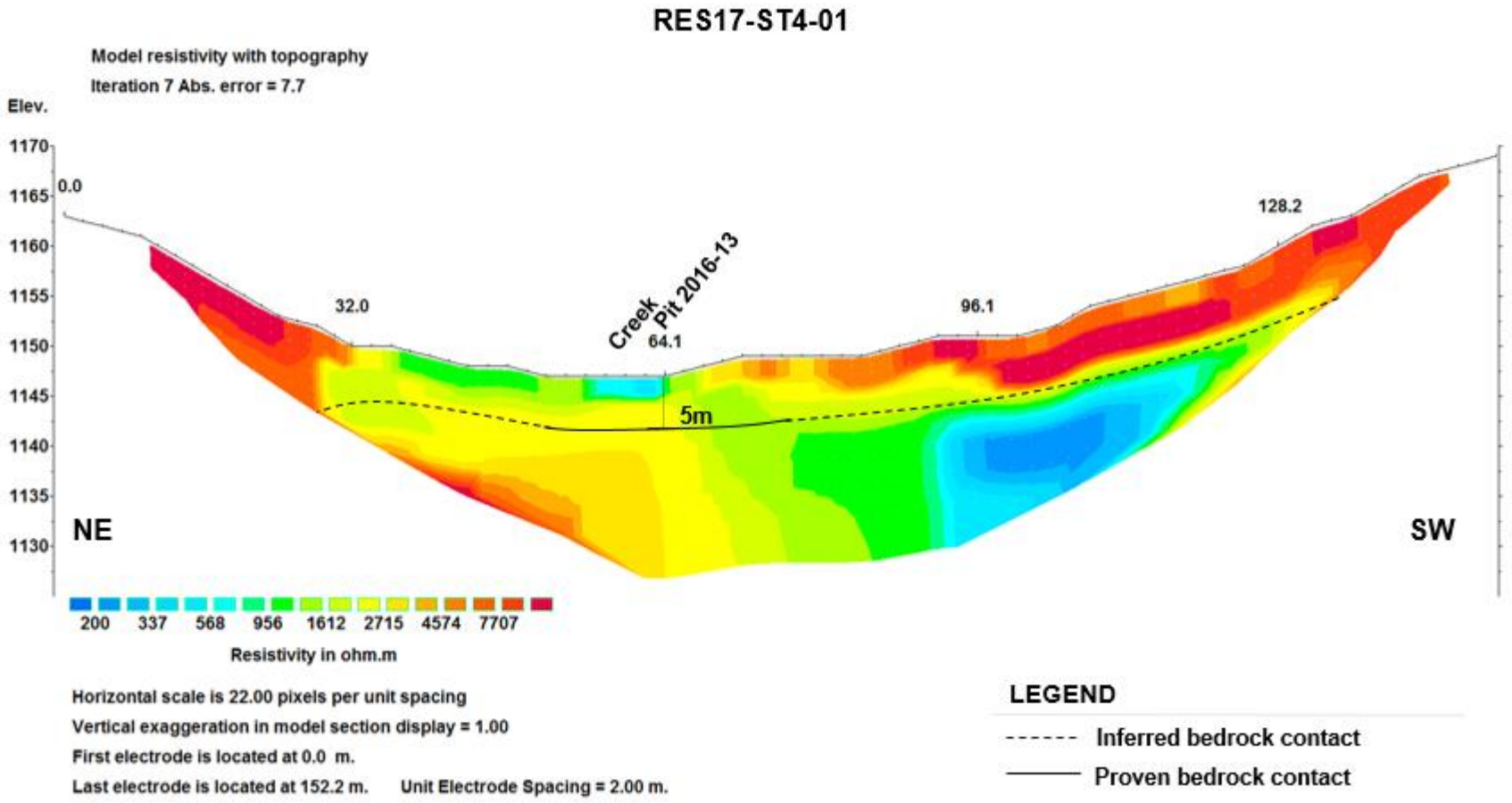

Figure 43 - RES17-ST4-01 intercepts Test Pit 2016-13, which reached bedrock at 5 metres. The bedrock contact has been interpreted as gently sloping at approximately 5 metres below the surface.

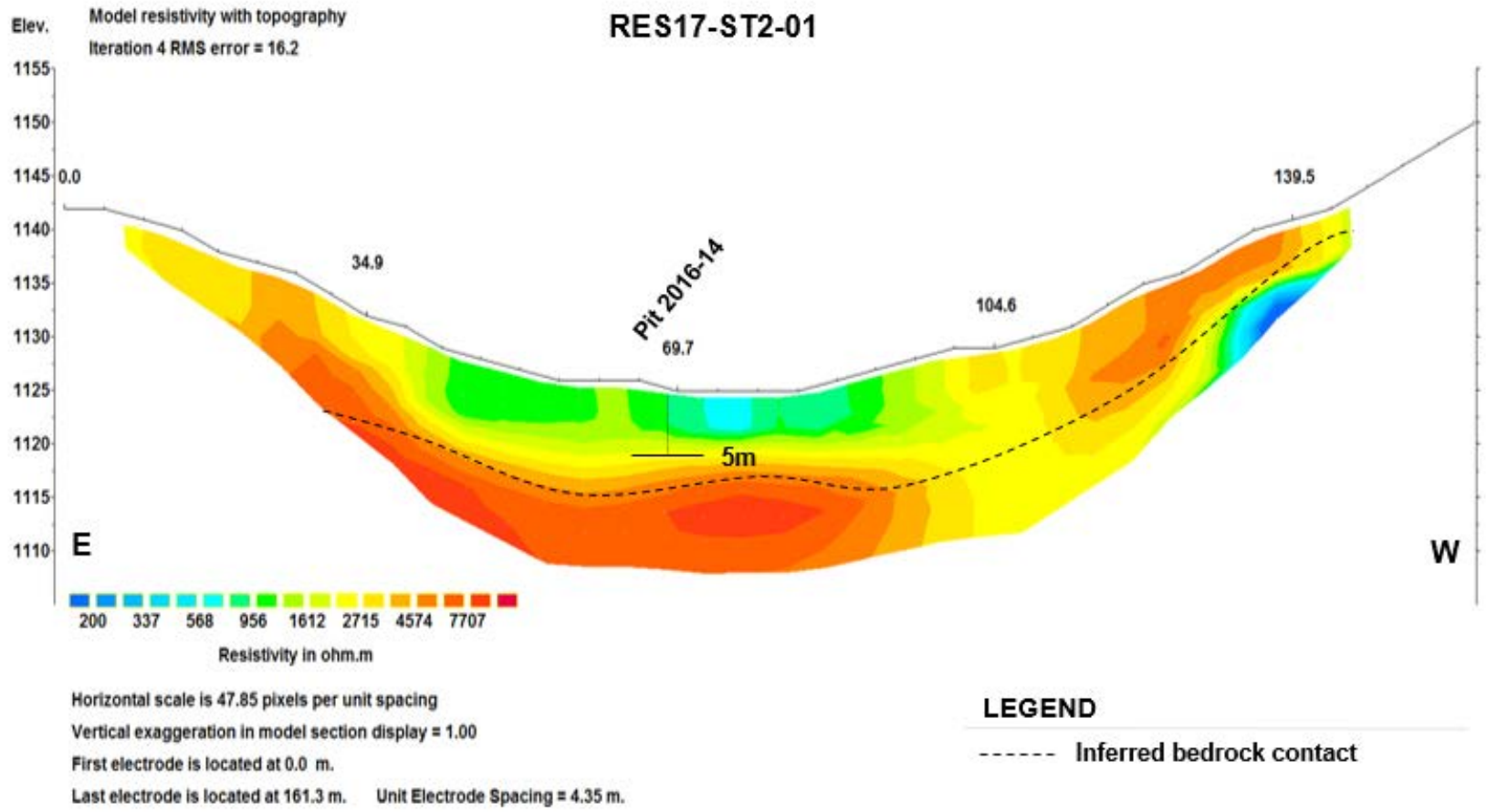

Figure 44 - RES17-ST2-01 is located in the lower Stuart tributary and intercepts Test pit 2016-14. The existing test pit did not reach bedrock, but a bedrock contact has been interpreted as just below this pit.

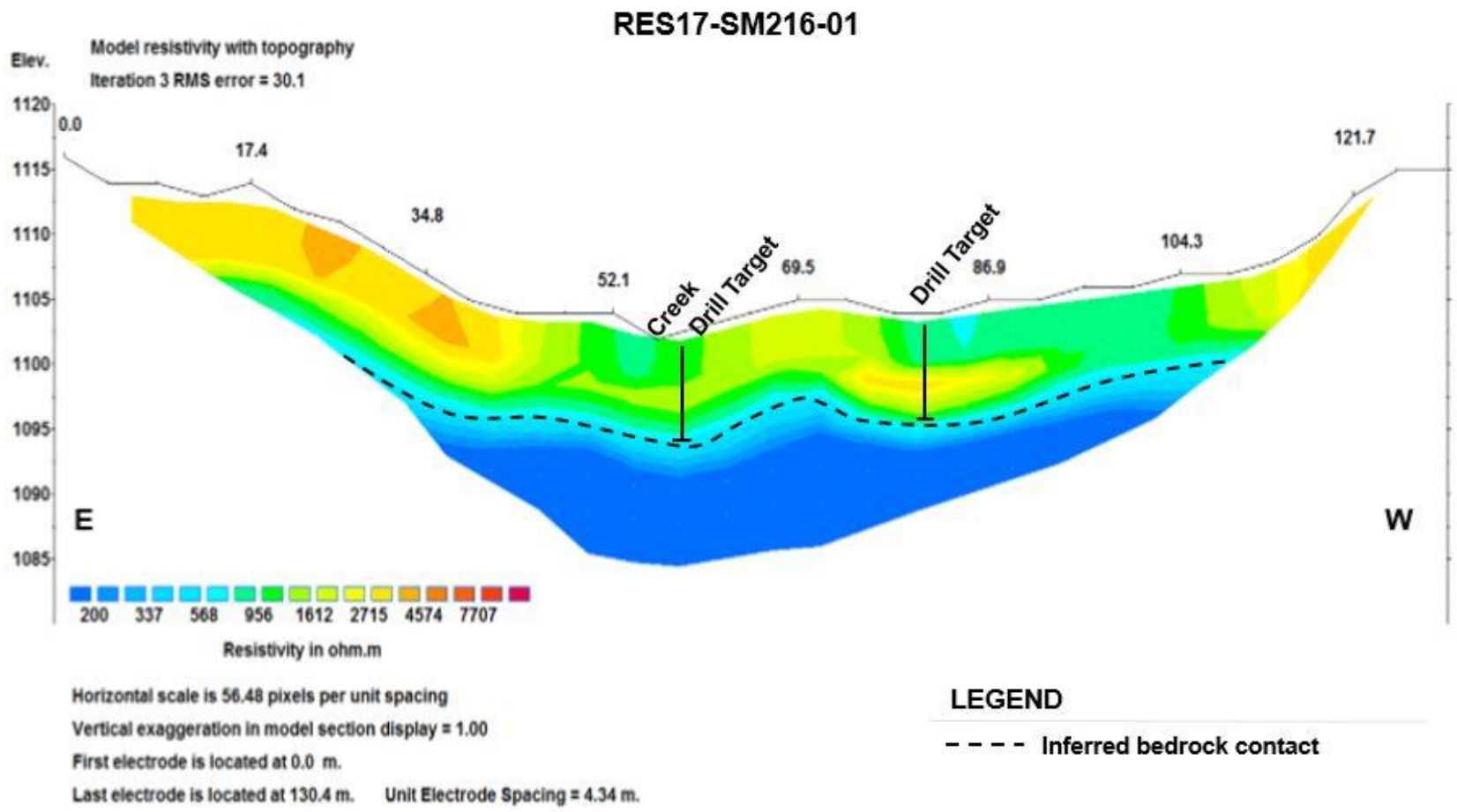

Figure 45 - RES17-SM216-01 is located upstream of RES17-SM217-01 and in the same general orientation. The pseudosection has an interpreted undulating bedrock contact with two possible paleochannels for investigation.

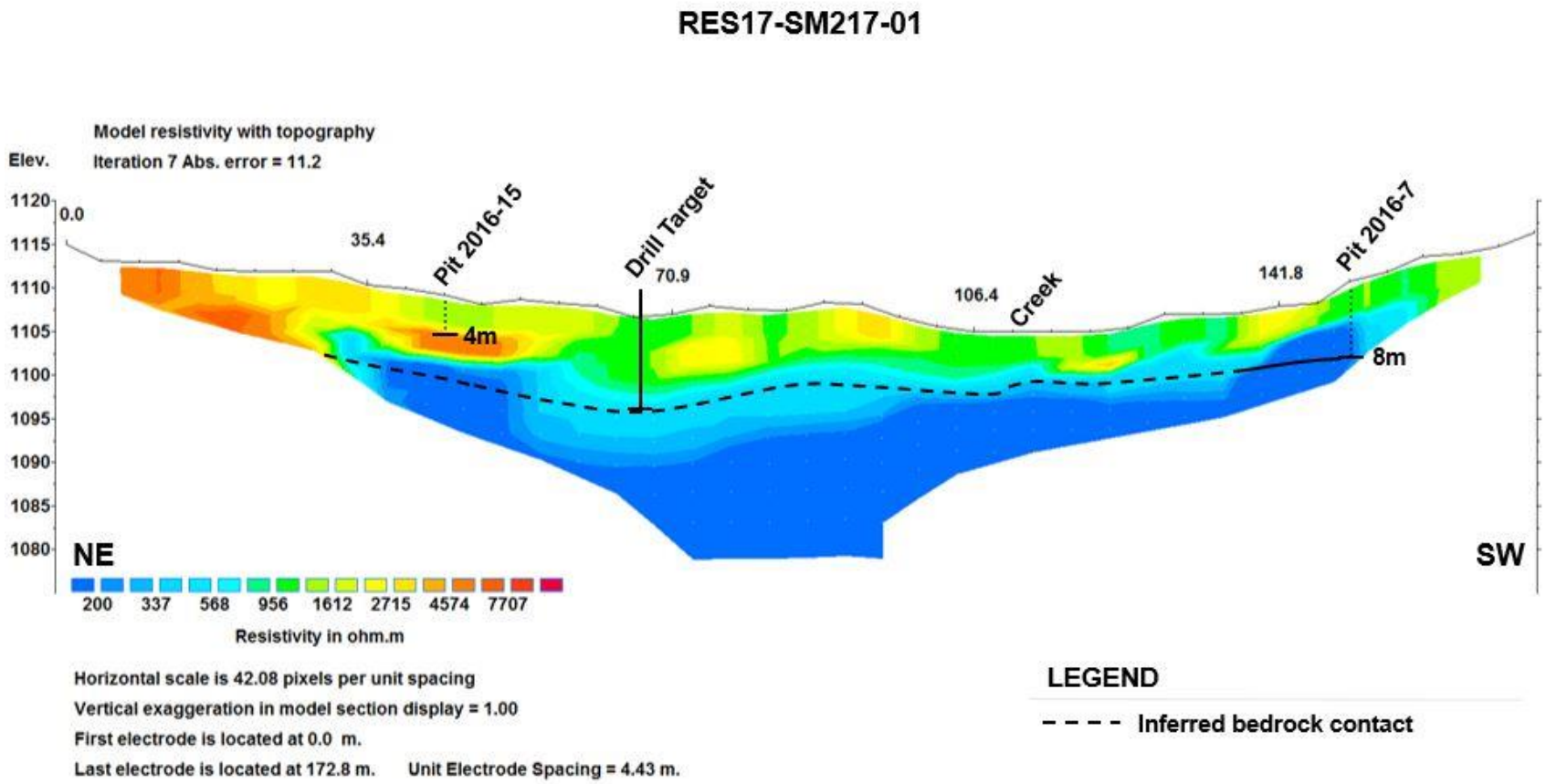

Figure 46 - RES17-SM217-01 was located perpendicular to the mouth of the Stuart claims tributary and crosses near two test pits: 2016-15 and 2016-7. Pit 2016-7 reached bedrock at 8m and pit 2016-15 did not reach bedrock, however it ended in gravel just below sand at 4 m. This may be the high resistivity zone (orange) just below the pit location in the profile. A drill target is shown in the location of the deepest interpreted bedrock.

Excavator Test Pitting

Excavator test pitting was conducted in the Izzie and James claim areas to investigate the depth to bedrock based on resistivity profiles. The depths were used to calibrate the images and to predict bedrock profiles within the pseudosections. In addition, a large test pit was excavated on the IZZIE 14 placer claim and several resistivity profiles were located through and adjacent to the pit.

IZZIE Test Pit

Figure 47 is a compilation diagram showing the excavator test pit on placer claim IZZIE 14. Overlain on this figure are resistivity profile RES17-IZ14-02 and a stratigraphic section which describes the sedimentology of the units overlying the pit on the north side. Profile RES17-IZ14-02 is also shown in a previous section of this report as Figure 21.

The stratigraphy is described as follows:

Bedrock consisting of Hyland Group schist, overlain by 4 metres of subrounded to subangular, boulder cobble gravel (Unit 1), a thin layer (1 metre) of clay-altered yellow pebble cobble diamict (Unit 2), 5 metres of silty, massive to crudely-stratified boulder cobble diamict (Unit 3), followed by 4 metres of blocky, matrix-poor angular boulder cobble diamict (Unit 4) and finally 8 metres of black, silty, boulder cobble diamict (Unit 5).

Units 1 and 2 may be an older glacial till, possibly Reid age, which is remnant and preserved in the bedrock depression in the centre of the test pit and evident in resistivity profile RES17-IZ14-02. Unit 3 is either proximal glaciofluvial outwash gravel (McConnell age) or glacial till (McConnell age). Units 4 and 5 are McConnell age glacial till, which forms most of the landform above the test pit due east towards the upper cirques at Mt. Hinton.

Several bulk samples were processed at the IZZIE pit. Angular grains of gold were recovered but values were deemed uneconomic (S. Gray, pers. comm.). However, the pit was located at the mouth of the Lindsay tributary, and any placer gold values would originate only from that drainage to the south. Any placer gold values originating from the James claims tributary (to the east) would not have been intersected in the IZZIE pit, and therefore this area remains a prospective placer exploration target.

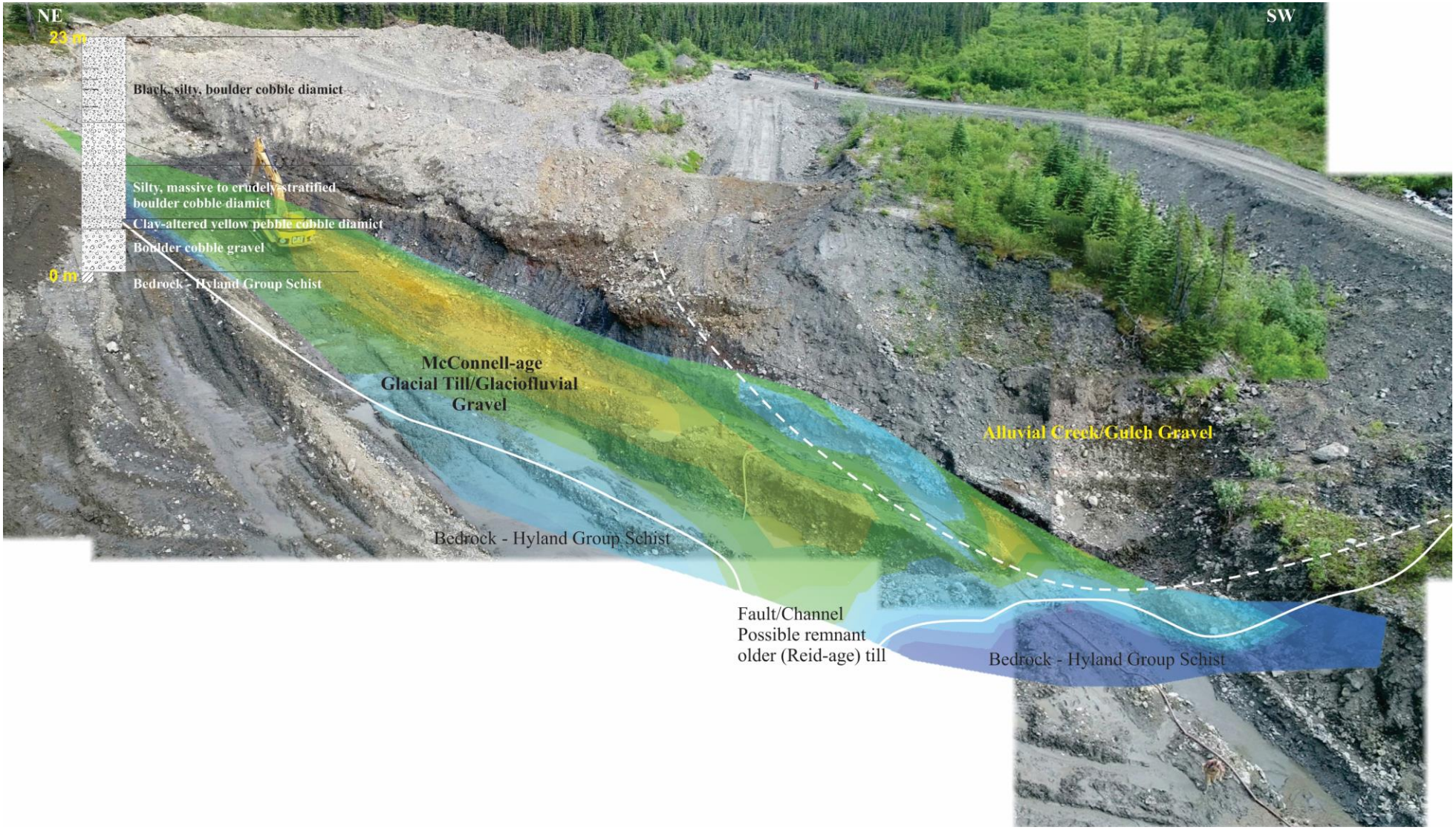

Figure 47 – View looking east of IZZIE test pit, showing interpreted contacts, stratigraphy and resistivity profile RES17-IZ14-02. The resistivity profile is reversed from the original surveyed direction to match the orientation of this view of the pit. A bedrock bench is discernable on the right side of the profile.

Conclusions and Recommendations – 2017 Exploration Program

The resistivity surveys were successful in identifying contrasting zones of high, moderate and low resistivity, which were attributable in varying degrees to permafrost, alluvial gravel, glacial till and bedrock units. Limited test pitting assisted in the bedrock profile interpretations.

The resistivity geophysical surveys were also able to define contacts including potential paleochannels that were traceable from one profile to the next, up and down-valley. This was evident in the area of the IZZIE pit on claim IZZIE 14, where bedrock was exposed and was used to calibrate the bedrock contacts in adjacent and overlapping resistivity surveys. Discontinuous permafrost and variable groundwater saturation complicated interpretation of the geophysical results.

Several drill and test pit targets were chosen in each area for further exploration. The purpose of these are to examine potential interpreted paleochannels and to calibrate bedrock contacts, as well as to evaluate placer gold values. The geographic coordinates of these exploration targets are shown in Table 6, and are also shown on the maps accompanying each target area.

Table 6 - Coordinates, resistivity line numbers and claim location of 2017 drill targets, Upper Duncan Creek.

Target Number	Number on maps	Resistivity Line	Claim Location	Latitude DD	Longitude DD	UTM_N	UTM_E	Zone
2017-01	1	RES17-JM11-01	James 11	63.876917	-135.161734	7083309	492054	8
2017-02	2	RES17-JM11-01	James 11	63.877284	-135.162219	7083350	492031	8
2017-03	3	RES17-JM14-01	James 14	63.875229	-135.173343	7083122	491484	8
2017-04	4	RES17-JM15-01	James 15	63.875259	-135.176694	7083126	491319	8
2017-05	5	RES17-JM16-01	James 16	63.874084	-135.178634	7082995	491223	8
2017-06	6	RES17-IZ16-01	Izzie 16	63.868919	-135.188131	7082421	490755	8
2017-07	7	RES17-IZ15-02	Izzie 15	63.869364	-135.189467	7082471	490690	8
2017-08	8	RES17-IZ15-02	Izzie 15	63.869611	-135.189073	7082498	490709	8
2017-09	9	RES17-IZ15-02	Izzie 15	63.869844	-135.188875	7082524	490719	8
2017-10	10	RES17-IZ13-01	Izzie 14	63.871053	-135.193852	7082660	490475	8
2017-11	11	RES17-IZ13-01	Izzie 14	63.871772	-135.193382	7082740	490498	8
2017-12	12	RES17-IZ15-04	Izzie 15	63.871097	-135.18806	7082664	490759	8
2017-13	13	RES17-IZ14-01	Izzie 14	63.872008	-135.192424	7082766	490545	8
2017-14	14	RES17-IZ15-03	Izzie 15	63.870679	-135.188265	7082617	490749	8
2017-15	15	RES17-IZ14-05	Izzie 13	63.871867	-135.194286	7082751	490454	8
2017-16	16	RES17-LN4-01	Lindsey 4	63.864069	-135.170685	7081878	491611	8
2017-17	17	RES17-GRAY1-01	Gray 1	63.867552	-135.2026	7082271	490044	8
2017-18	18	RES17-IZ8-02	Izzie 8	63.869173	-135.207509	7082452	489803	8
2017-19	19	RES17-IZ8-01	Izzie 8	63.869708	-135.211513	7082513	489606	8
2017-20	20	RES17-IZ12-01	Izzie 11	63.869487	-135.201215	7082486	490112	8
2017-21	21	RES17-IZ12-01	Izzie 11	63.869822	-135.201169	7082524	490115	8
2017-22	22	RES17-ST13-01	Stuart 13	63.847576	-135.221148	7080048	489124	8
2017-23	23	RES17-ST13-01	Stuart 13	63.847812	-135.220312	7080074	489166	8
2017-24	24	RES17-ST9-01	Stuart 9	63.852278	-135.22569	7080573	488903	8
2017-25	25	RES17-SM216-01	Sam 2_16	63.864026	-135.236172	7081884	488392	8
2017-26	26	RES17-SM216-01	Sam 2_16	63.863947	-135.236568	7081875	488373	8
2017-27	27	RES17-SM217-01	Sam 2_16	63.865215	-135.236185	7082016	488392	8

2018 Placer Exploration Program

Overview

In 2018, exploration took place in two main areas; the Stuart, Sam and Jill claims; and the James, Lew and Izzie claim area. A total of 22 resistivity lines totalling 5.225 km were conducted and interpreted by Allegra Webb, Selena Magel and William LeBarge between May 25 and June 24, 2018. Figure 48 shows the location of the survey areas, and Figures 50 and 62 are detailed maps showing the location of the surveys within each exploration area. Additionally, a total of 8 RC drill holes were drilled to determine bedrock depth, materials intersected, and placer gold content. Figure 49 displays the locations of drill holes UD18-01 to UD18-08. While the drill logs are included in Appendix 2 for reference, these have been filed separately for assessment credit and they are not described further in this report.

General Results

The lengths and locations of the resistivity surveys conducted in Upper Duncan claims are shown in Table 7. Good data and contact resistance were obtained in most surveys due to a combination of water saturated ground and the process of adding salt water to each electrode location to improve the conductivity to the ground.

Extensive permafrost in some survey areas increased the uncertainty of the interpreted results. Permafrost was more continuous on north facing slopes and was discontinuous on south-facing slopes and in parts of the valleys with high water saturation. In these areas, contrasts between low and high resistivity values may have been partially or wholly a reflection of varying groundwater and permafrost conditions rather than strictly lithological boundaries, however there is enough information to identify drill targets for further exploration.

In most of the surveys conducted, there is a bedrock contact interpreted. The bedrock contact appears undulating in most surveys and this could be indicative of paleochannels in the valleys and benches. The bedrock features identified with resistivity surveys are recommended to be drilled to confirm depths and placer gold values.

Drill holes completed in 2016, 2017 and 2018 assisted in the estimation of bedrock depths. In many cases, the nature of the overburden material was interpreted from information derived from past excavator test- pitting.

Drill targets have been chosen on the resistivity survey pseudosections and indicated with a yellow star. These targets were generally picked in low areas of the bedrock profile which could be interpreted as paleochannels.

Detailed interpretations of the surveys in each targeted area are in the section following. The lines are plotted on Figures 50 and 62.

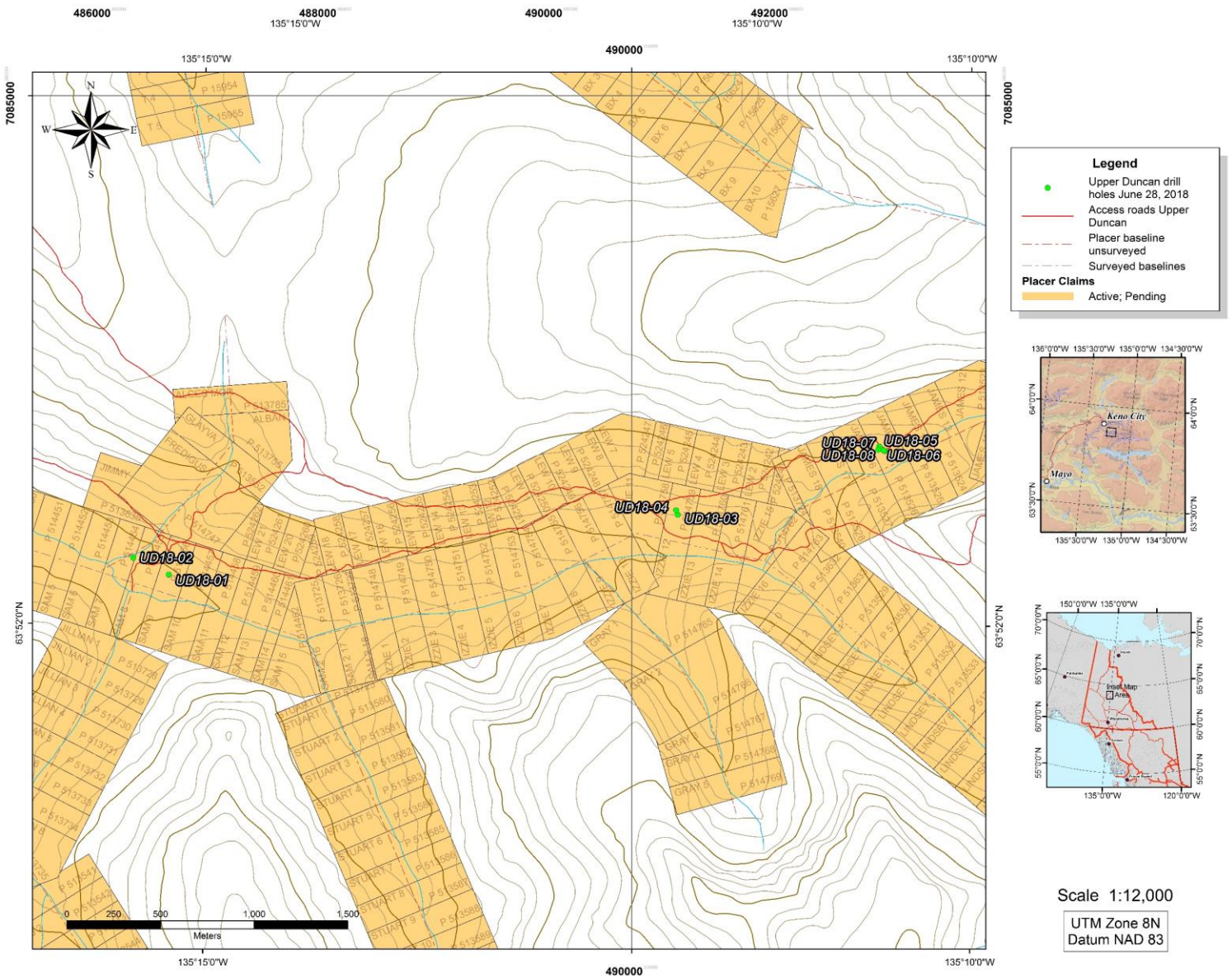

Figure 48 - Claim map of Upper Duncan Creek showing the location of R/C drill holes drilled during the 2018 exploration program.

Table 7 - 2018 Resistivity line names with lengths and start and end GPS points.

Line Name	Start Point				End Point				Line length (m)	Date surveyed
	Latitude	Longitude	UTM N	UTM E	Latitude	Longitude	UTM N	UTM E		
RES18-IZ11-01	63.8721	-135.2019	7082777	490078	63.8698	-135.2018	7082520	490085	300	June 3/18
RES18-IZ11-02	63.8726	-135.2007	7082835	490141	63.8719	-135.2003	7082750	490156	100	June 3/18
RES18-IZ12-01	63.8727	-135.1990	7082842	490224	63.8711	-135.1979	7082664	490274	200	June 3/18
RES18-IZ12-03	63.8733	-135.1977	7082913	490288	63.8709	-135.1977	7082647	490283	300	June 4/18
RES18-IZ13-01	63.8732	-135.1958	7082896	490382	63.8710	-135.1958	7082650	490377	275	June 4/18
RES18-JL1-01	63.8653	-135.2609	7082035	487178	63.8647	-135.2572	7081963	487357	200	May 27/18
RES18-JL2-01	63.8644	-135.2612	7081928	487161	63.8638	-135.2584	7081866	487300	200	May 28/18
RES18-JM17-01	63.8747	-135.1840	7083068	490958	63.8735	-135.1817	7082934	491073	200	June 6/18
RES18-JM17-02	63.8756	-135.1818	7083170	491067	63.8741	-135.1809	7083000	491114	200	June 7/18
RES18-JM18-01	63.8745	-135.1869	7083048	490818	63.8729	-135.1845	7082867	490933	250	June 6/18
RES18-LEW2-01	63.8743	-135.1882	7083024	490756	63.8728	-135.1875	7082851	490786	200	June 5/18
RES18-LEW2-02	63.8735	-135.1908	7082938	490624	63.8722	-135.1889	7082791	490718	200	June 5/18
RES18-LEW3-01	63.8732	-135.1930	7082899	490516	63.8718	-135.1910	7082746	490616	200	June 5/18
RES18-SM215-01	63.8658	-135.2396	7082085	488222	63.8658	-135.2339	7082083	488507	200	May 29/18
RES18-SM216-01	63.8656	-135.2383	7082059	488289	63.8655	-135.2343	7082051	488483	200	May 28/18
RES18-SM216-02	63.8645	-135.2373	7081933	488339	63.8645	-135.2336	7081941	488518	300	May 29/18
RES18-SM6-01	63.8725	-135.2597	7082830	487239	63.8702	-135.2619	7082575	487130	300	May 25/18
RES18-SM7-01	63.8664	-135.2606	7082156	487192	63.8654	-135.2555	7082045	487445	300	May 27/18
RES18-SM7-02	63.8675	-135.2596	7082272	487244	63.8666	-135.2537	7082172	487531	300	May 30/18
RES18-ST0-01	63.8629	-135.2380	7081763	488301	63.8633	-135.2345	7081801	488474	200	May 31/18
RES18-ST1-01	63.8617	-135.2364	7081628	488379	63.8623	-135.2331	7081676	488547	200	May 31/18
RES18-ST2-01	63.8638	-135.2365	7081863	488378	63.8607	-135.2335	7081508	488522	400	May 31/18

Targeted Areas and Interpreted Profiles

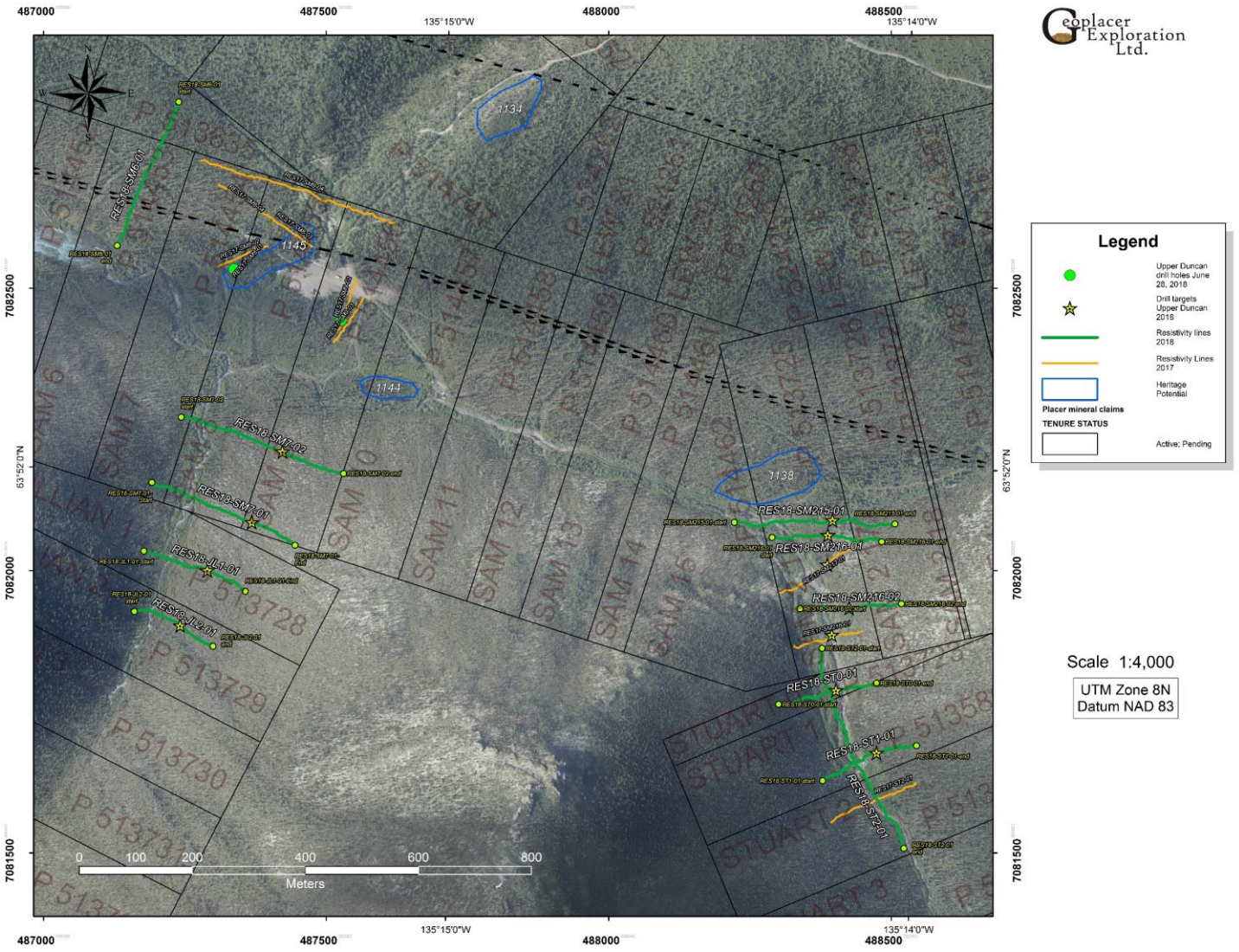

Figure 50 - Location of 2018 Resistivity surveys on the Stuart, Sam and Jill claims, Upper Duncan Creek.

Stuart, Sam and Jill Claims

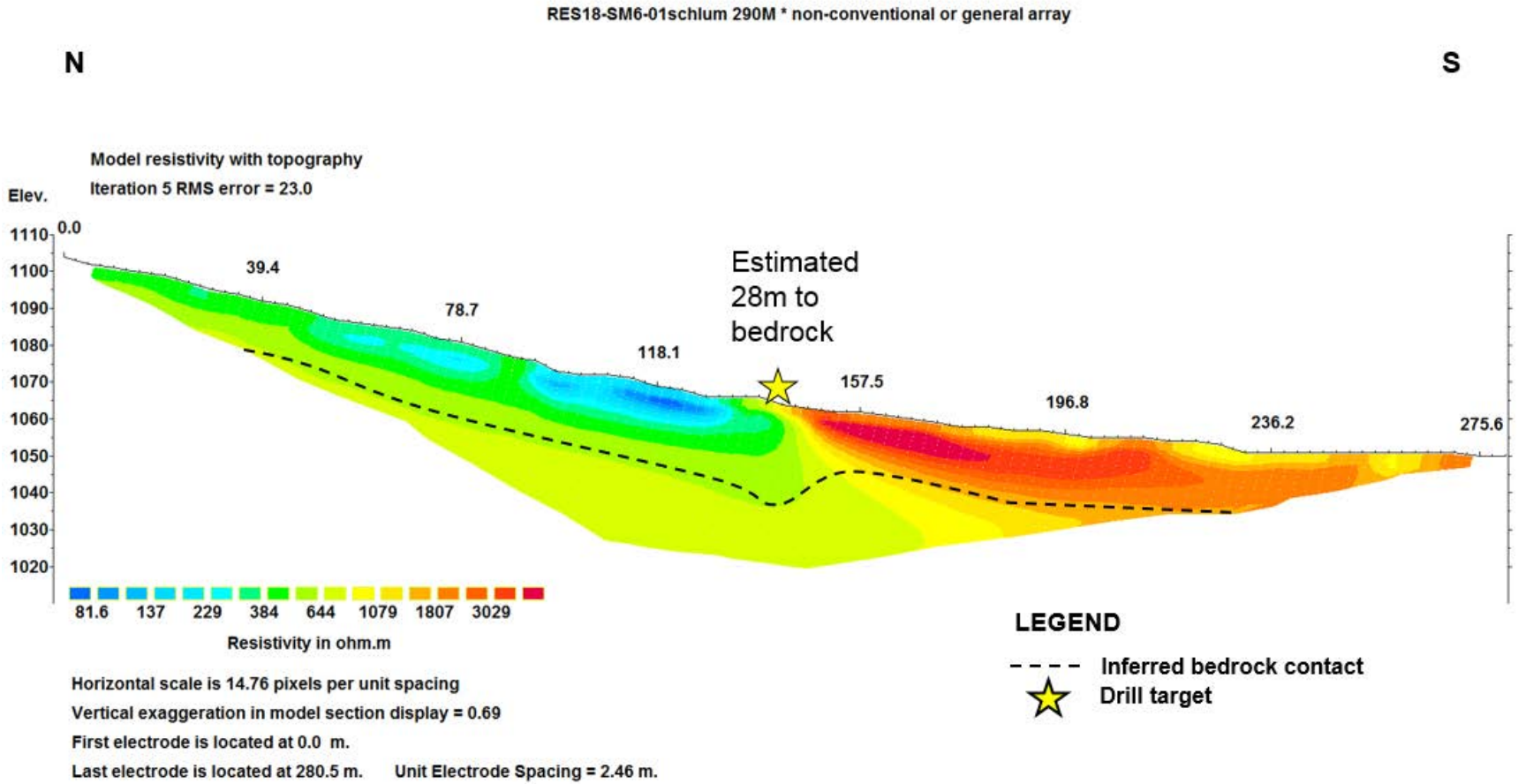

Figure 51 - RES18-SM6-01 is surveyed downstream of the alluvial fan material on the right limit of Upper Duncan Creek. The survey is primarily interpreted to show zones of frozen permafrost (red) and thawed areas (blue). The target chosen in the center interpreted bedrock undulation of the profile could indicate a paleochannel in the till unit with placer gold potential in the valley.

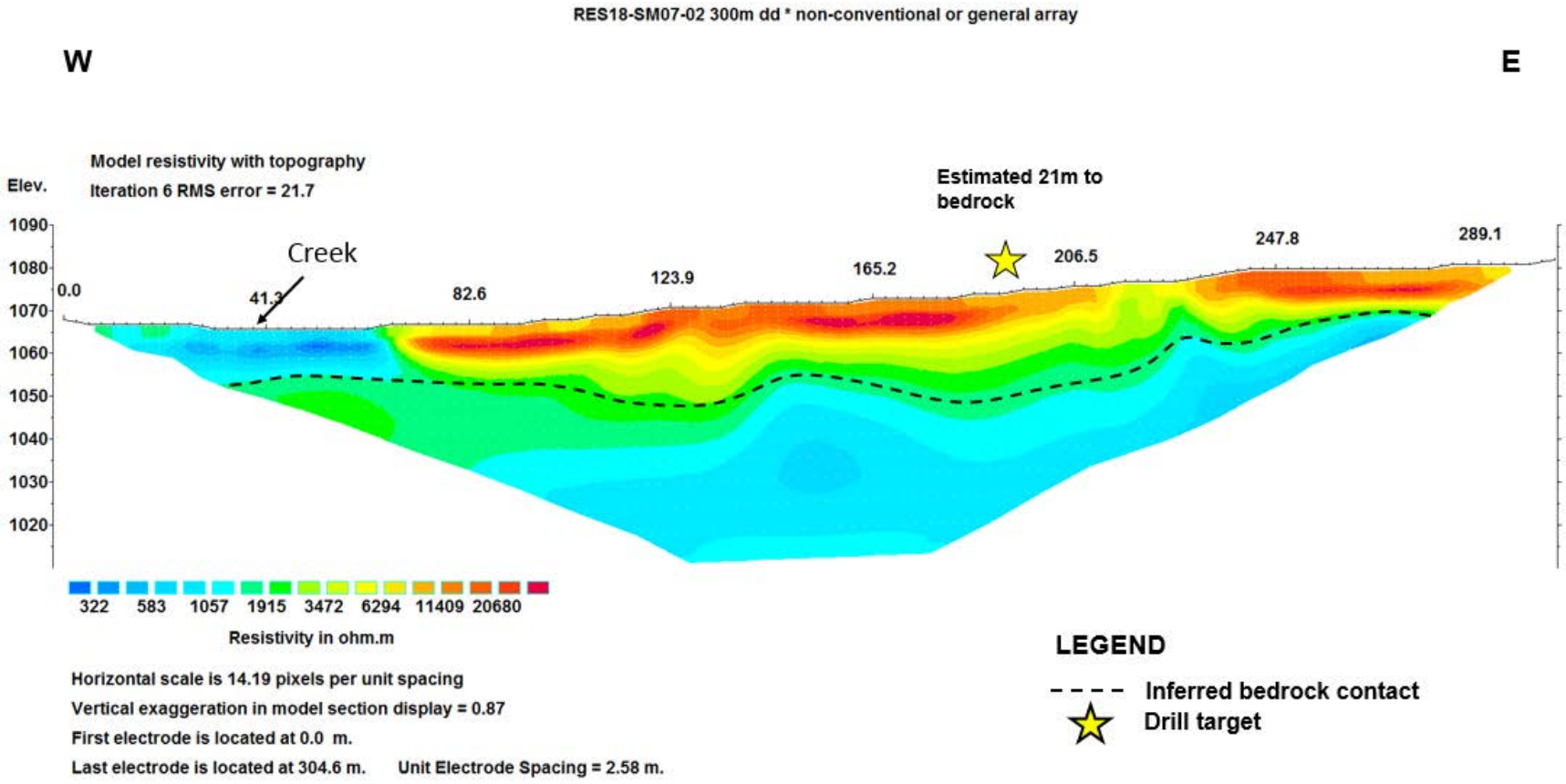

Figure 52 - RES18-SM7-02 is surveyed across the mouth of the Jill tributary. The interpreted bedrock profile shows a distinct undulation on the right limit bench that could host placer gold. This bedrock undulation has been identified as a future drill target.

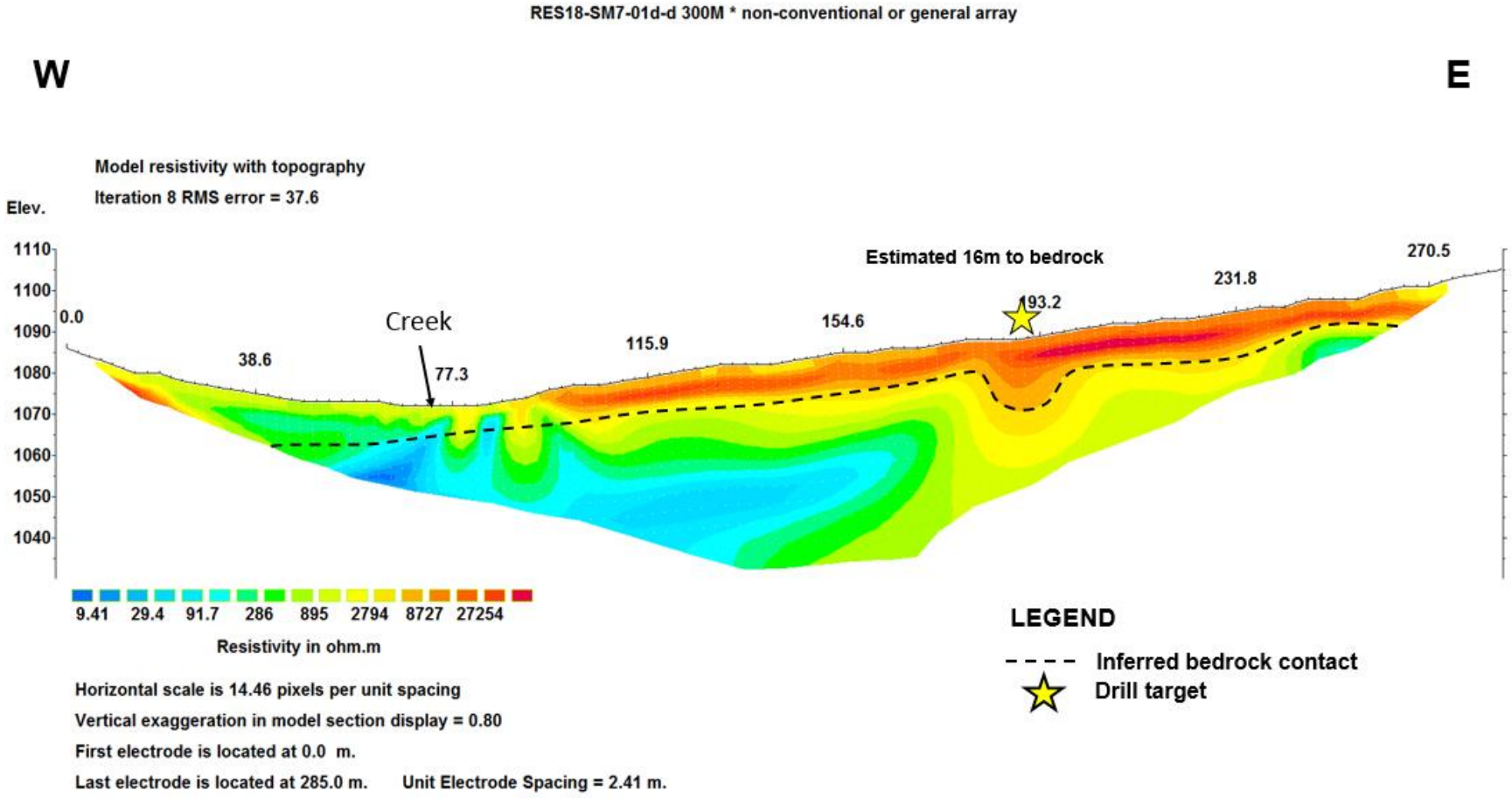

Figure 53 - RES18-SM7-01 is surveyed across the mouth of the Jill tributary. The interpreted bedrock profile shows a distinct undulation on the right limit bench that could host placer gold. This bedrock undulation has been identified as a future drill target.

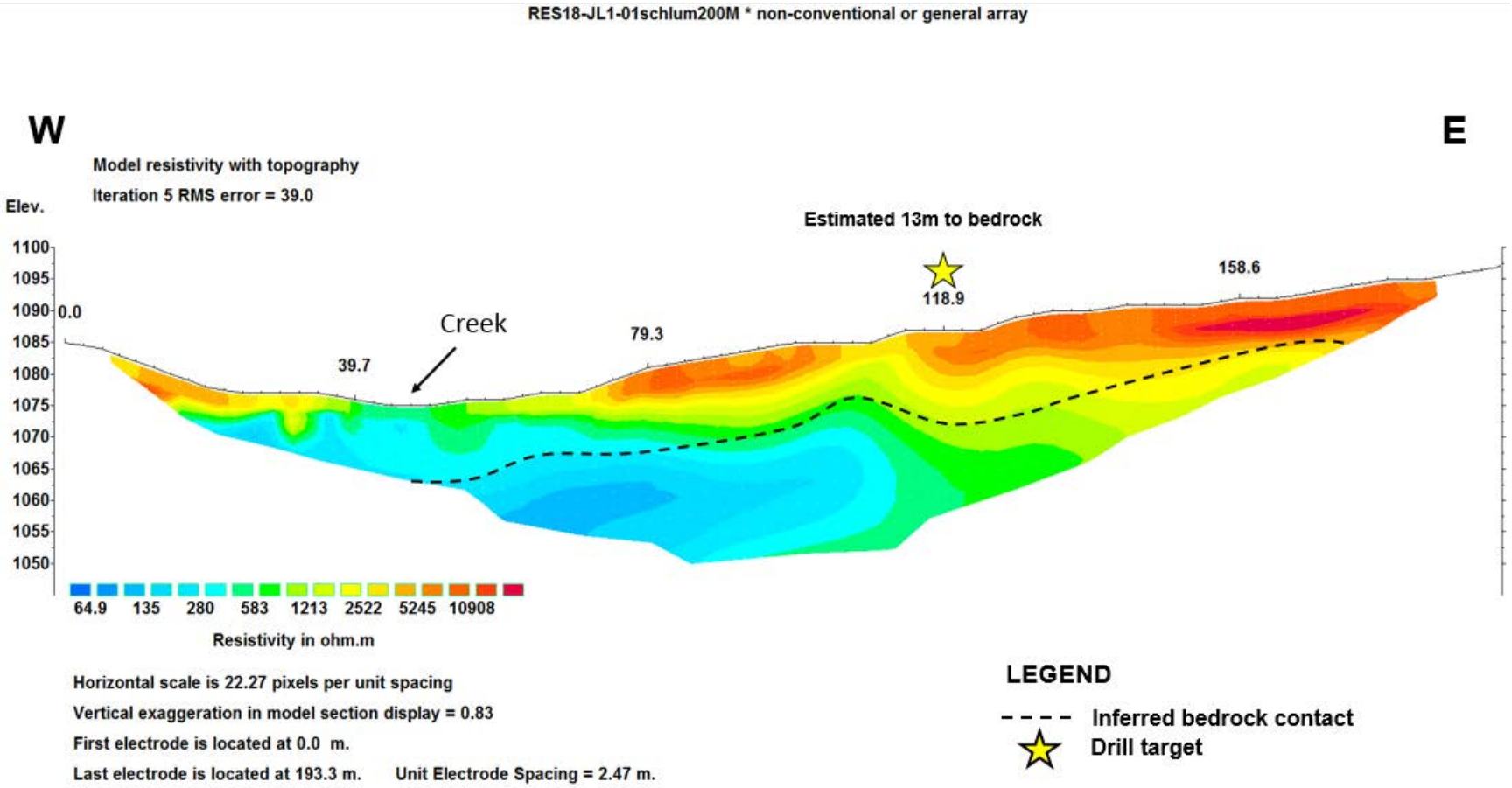

Figure 54 - RES18-JL1-01 is surveyed across the Jill tributary. The interpreted bedrock profile shows a distinct undulation on the right limit bench that could host placer gold. This bedrock undulation has been identified as a future drill target.

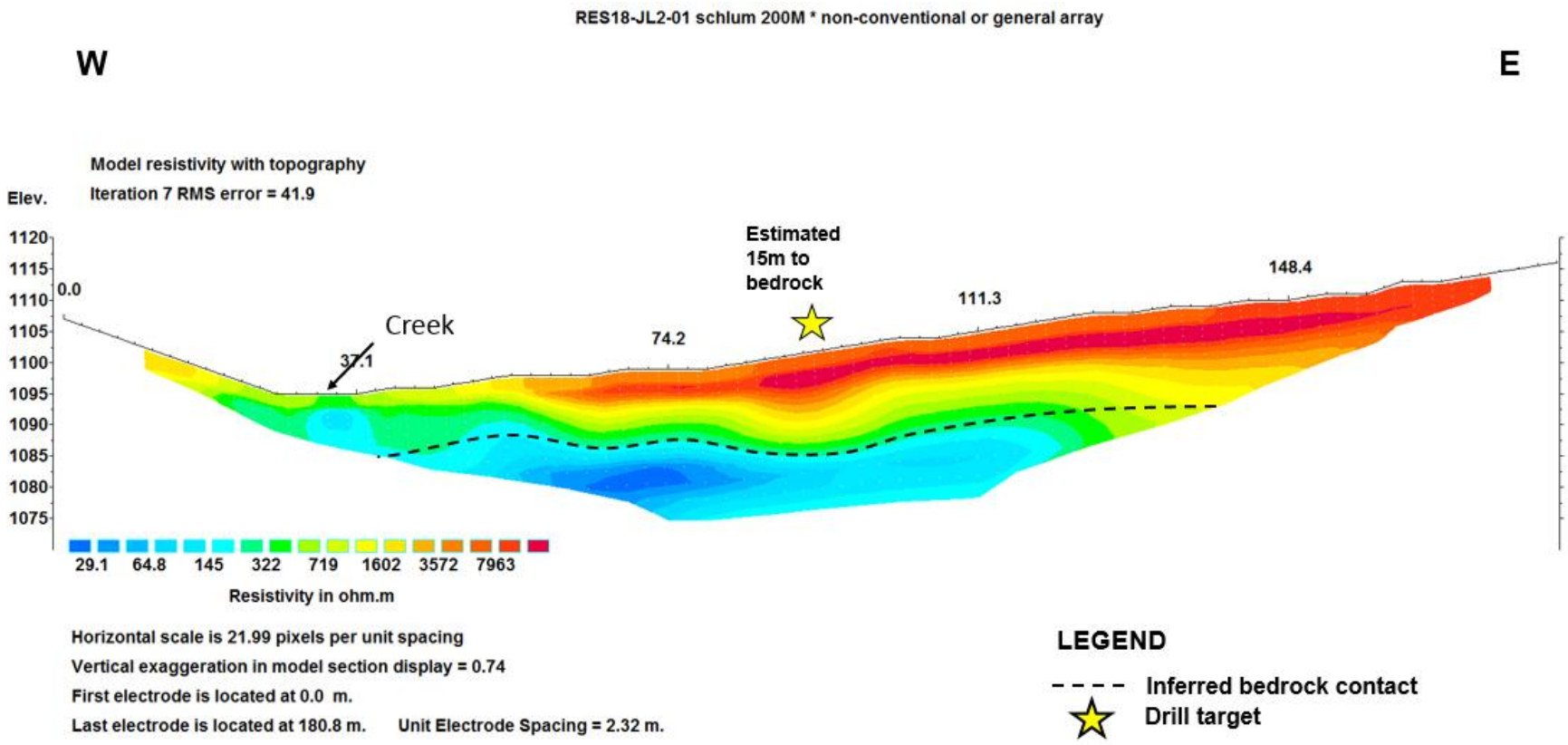

Figure 55 - RES18-JL2-01 is surveyed across the mouth of the Jill tributary. The interpreted bedrock profile shows a undulation on the right limit bench that could host placer gold. This bedrock undulation has been identified as a future drill target.

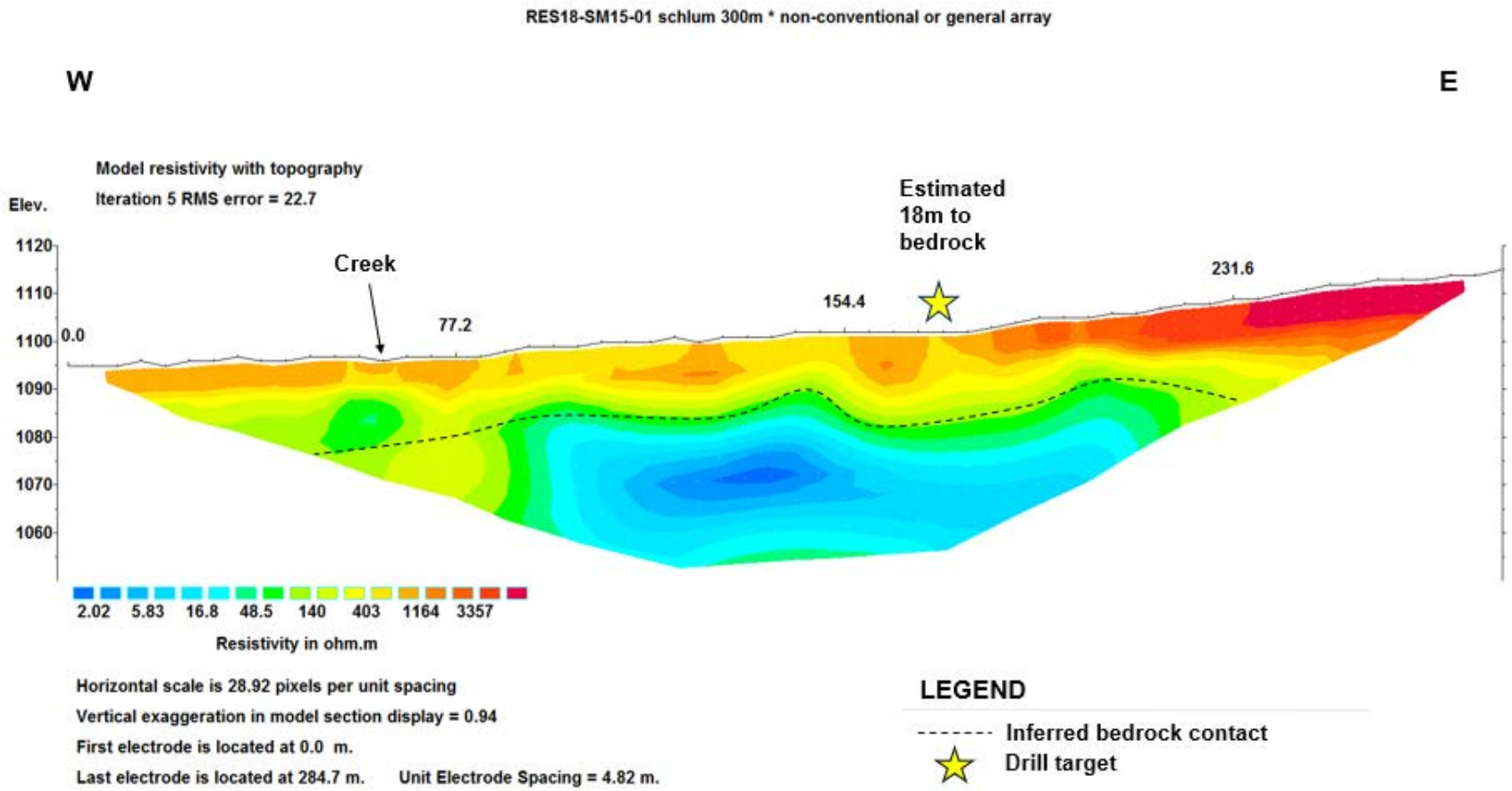

Figure 56 - RES18-SM215-01 is surveyed across the mouth of the Stuart tributary in the Upper Duncan valley. The interpreted bedrock profile shows minor undulations and a drill target has been identified on the right limit of the tributary for future exploration.

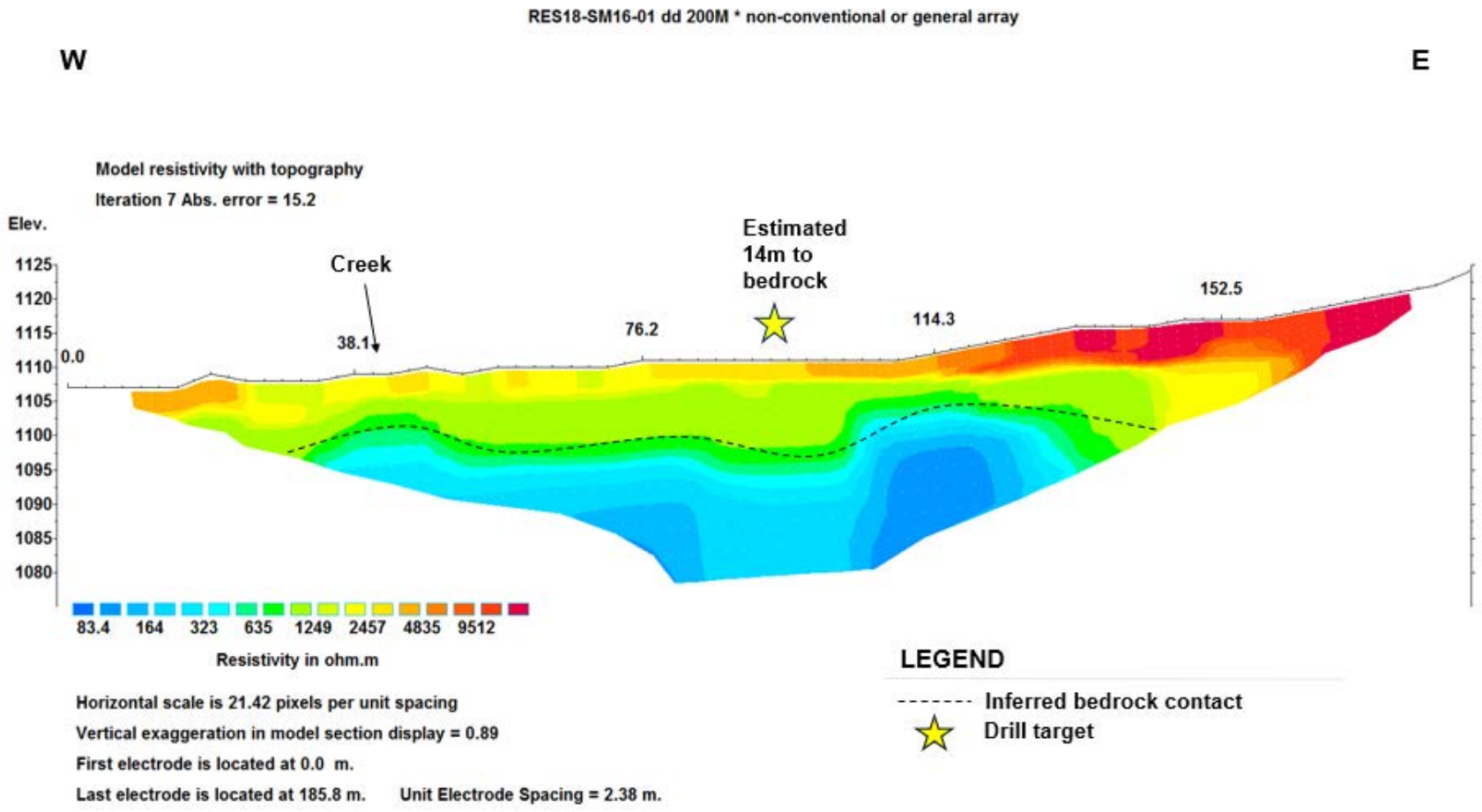

Figure 57 - RES18-SM216-01 is surveyed across the mouth of the Stuart tributary in the Upper Duncan valley. The interpreted bedrock profile shows minor undulations and a drill target has been identified on the right limit of the tributary for future exploration.

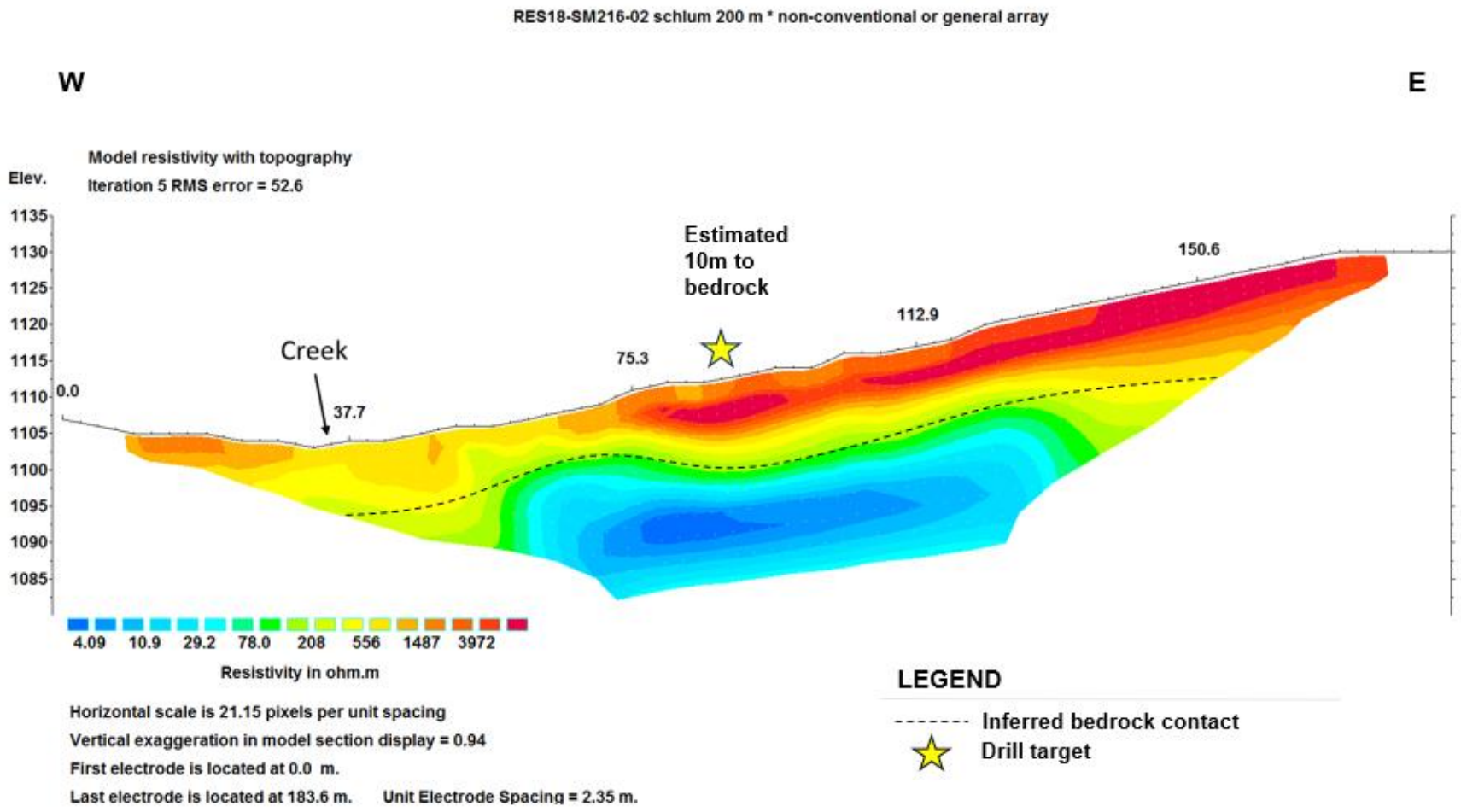

Figure 58 - RES18-SM216-02 is surveyed across the mouth of the Stuart tributary in the Upper Duncan valley. The interpreted bedrock profile shows minor undulations and a drill target has been identified on the right limit of the tributary for future exploration.

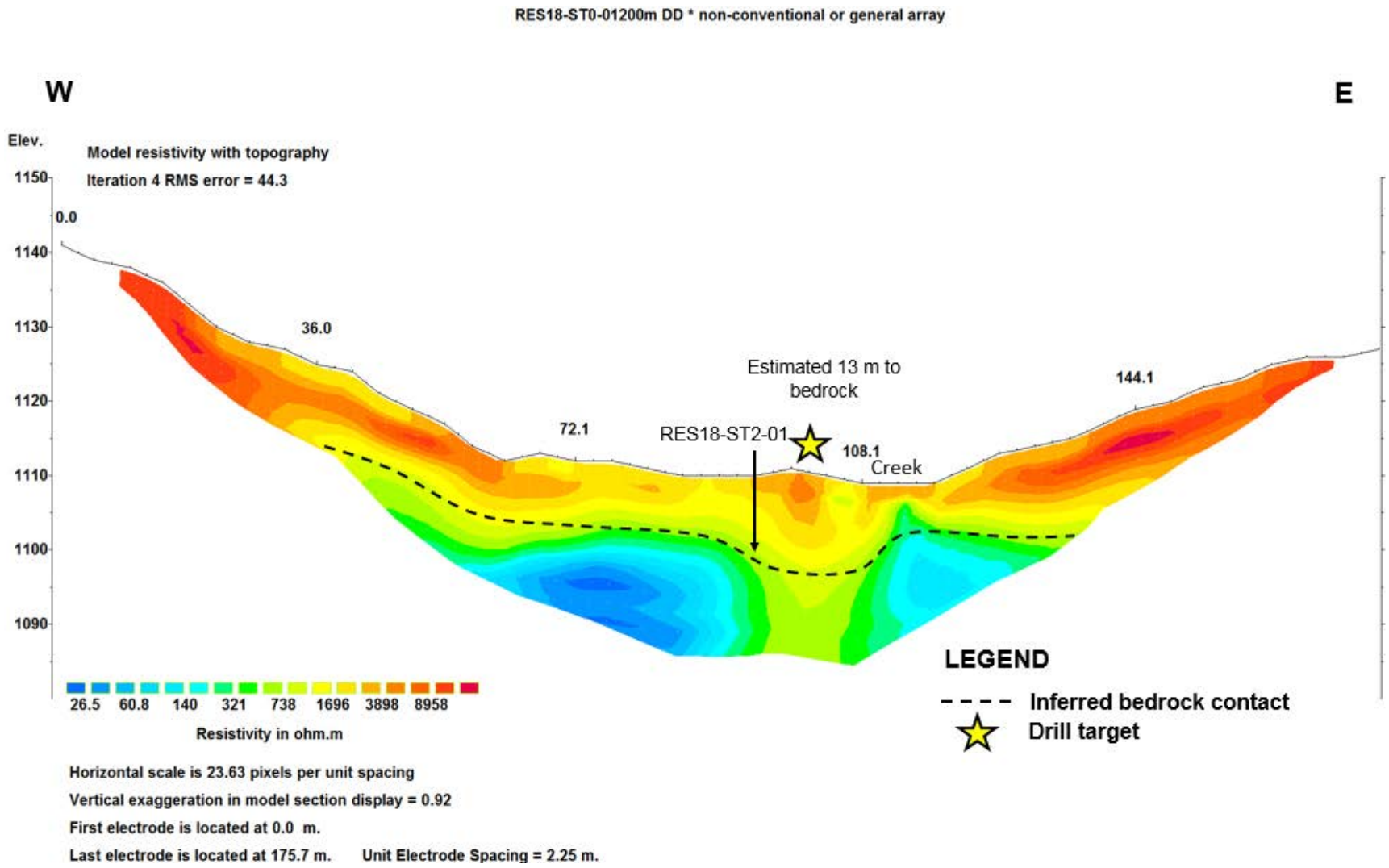

Figure 59 - RES18-ST0-01 is surveyed across the Stuart tributary in the Upper Duncan drainage. The interpreted bedrock profile is undulating with a drill target identified in the middle of the valley. Longitudinal profile line RES18-ST2-01 intersects this line on the left limit of the creek.

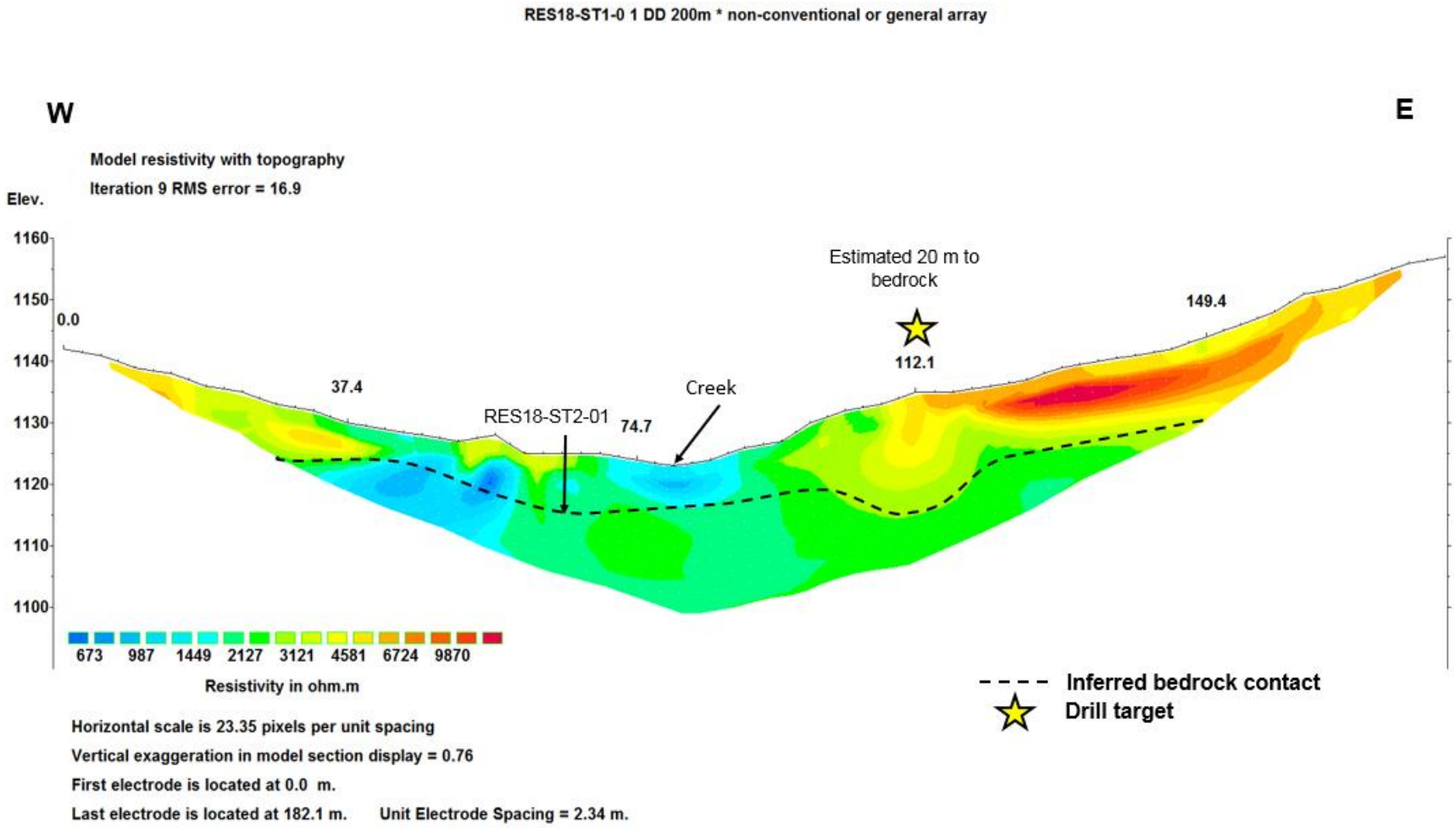

Figure 60- RES18-ST1-01 is surveyed across the Stuart tributary in the Upper Duncan drainage. The interpreted bedrock profile is undulating with a drill target identified in the right limit side of the valley. Longitudinal profile line RES18-ST2-01 intersects this line on the left limit of the creek.

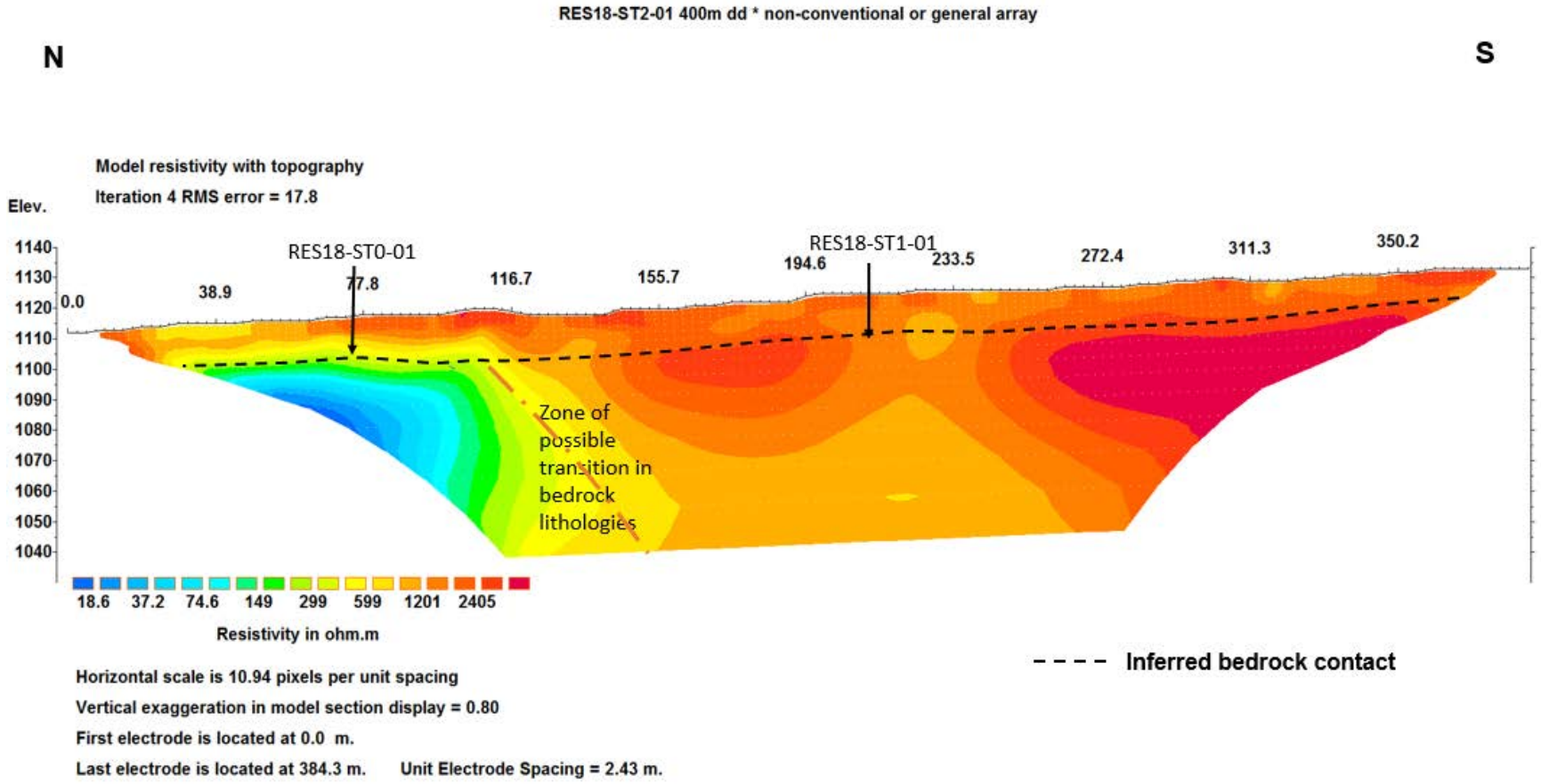

Figure 61 - RES18-ST2-01 is surveyed along the creek in the Stuart tributary in the Upper Duncan drainage, and intersects lines RES18-ST0-01 and RES18-ST1-01. The interpreted bedrock profile is relatively flat, however there is a possible change in bedrock lithology between the upstream and downstream extent.

James, Lew, and Izzie Claims (Upper Duncan Moraines)

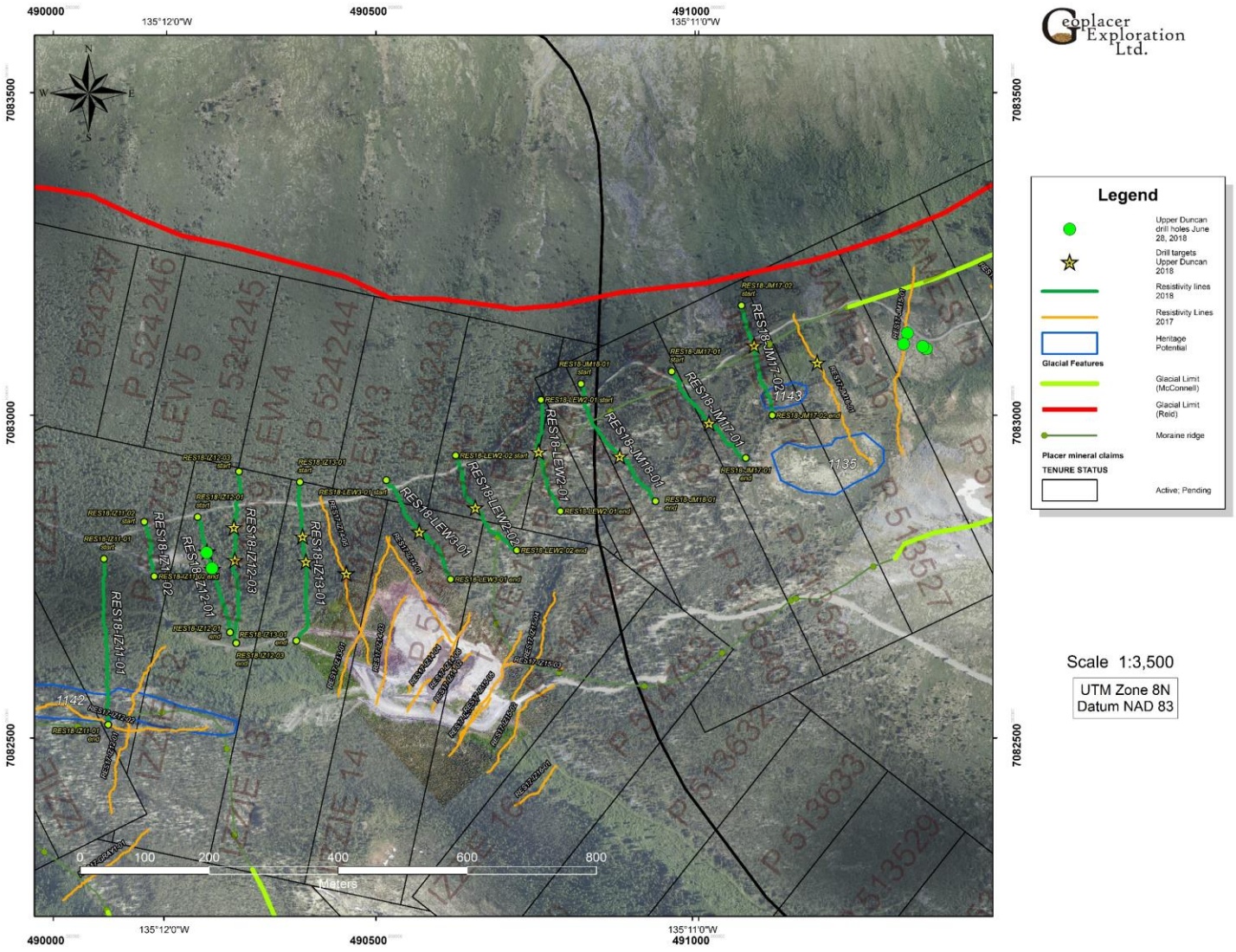

Figure 62 - Location of 2018 Resistivity surveys on the James, Lew and Izzie claims, Upper Duncan Creek.

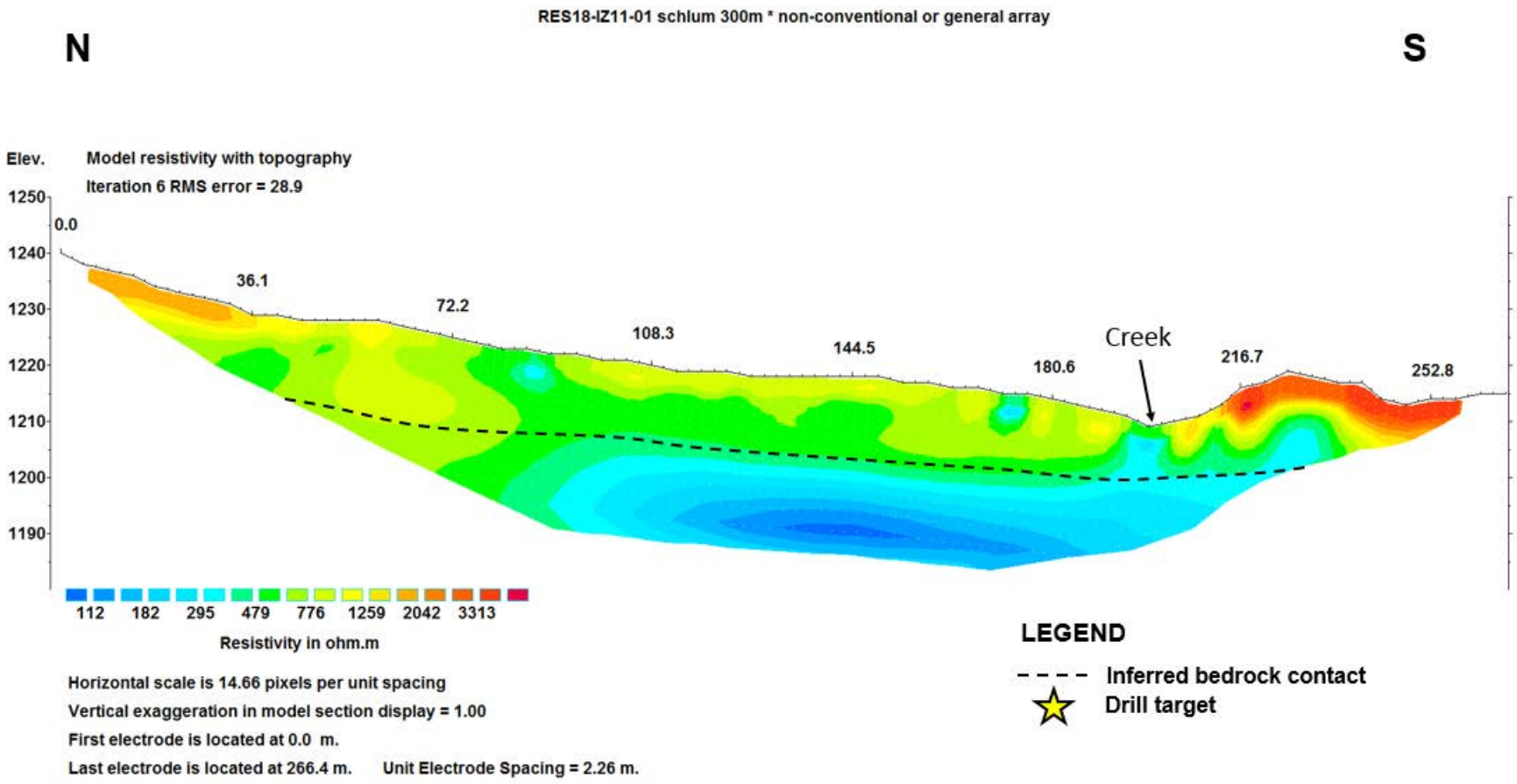

Figure 63 - RES18-IZ11-01 is surveyed across Upper Duncan Creek near the confluence of the James claims and Izzie claims. The red zone on the south side is McConnell moraine, which originates in the Gray claims valley. This interpreted bedrock profile is slightly undulating with no drill targets identified.

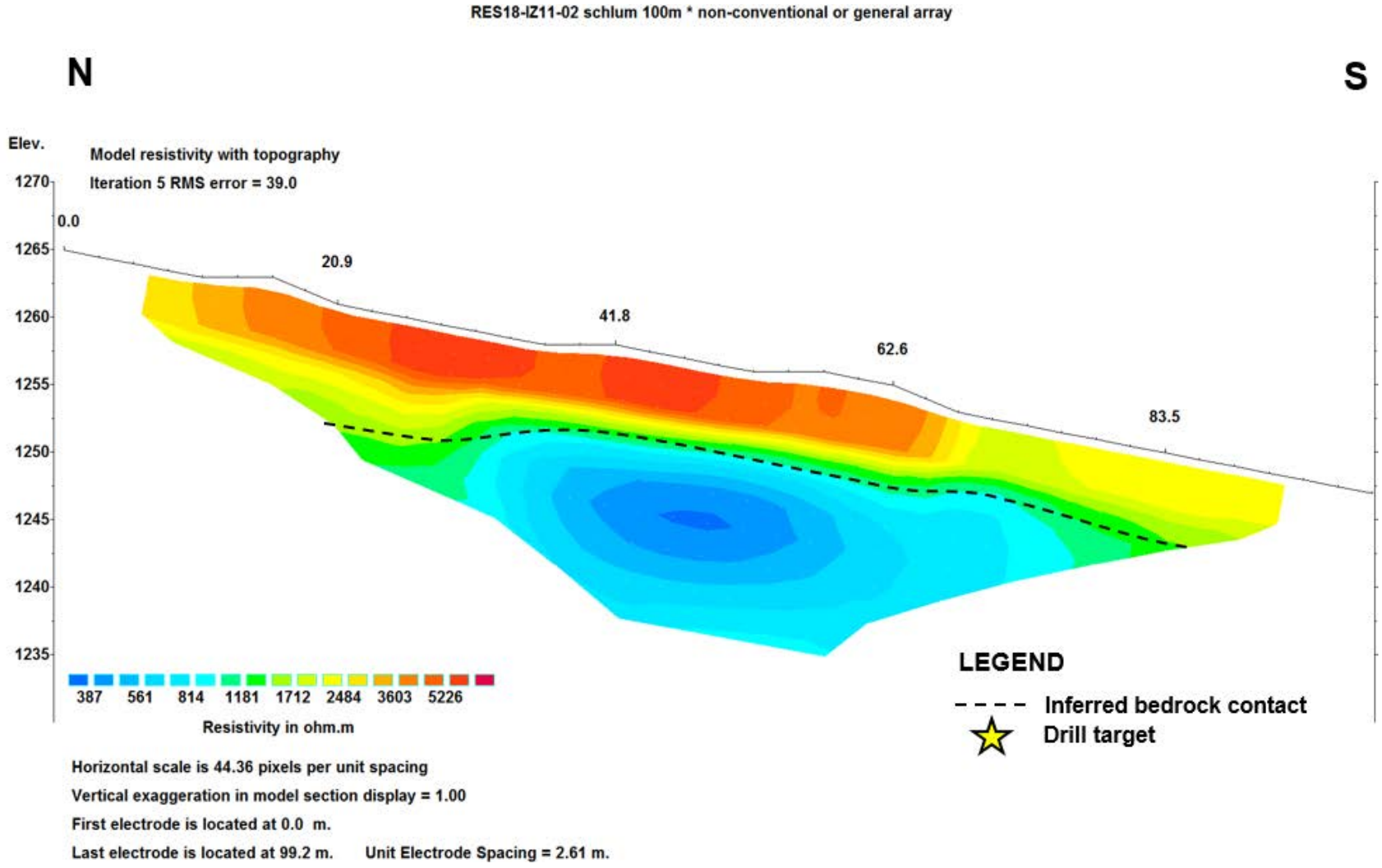

Figure 64 - RES18-IZ11-02 is a short survey done on the right limit of the Upper Duncan valley slope. There were no drill targets identified with this profile.

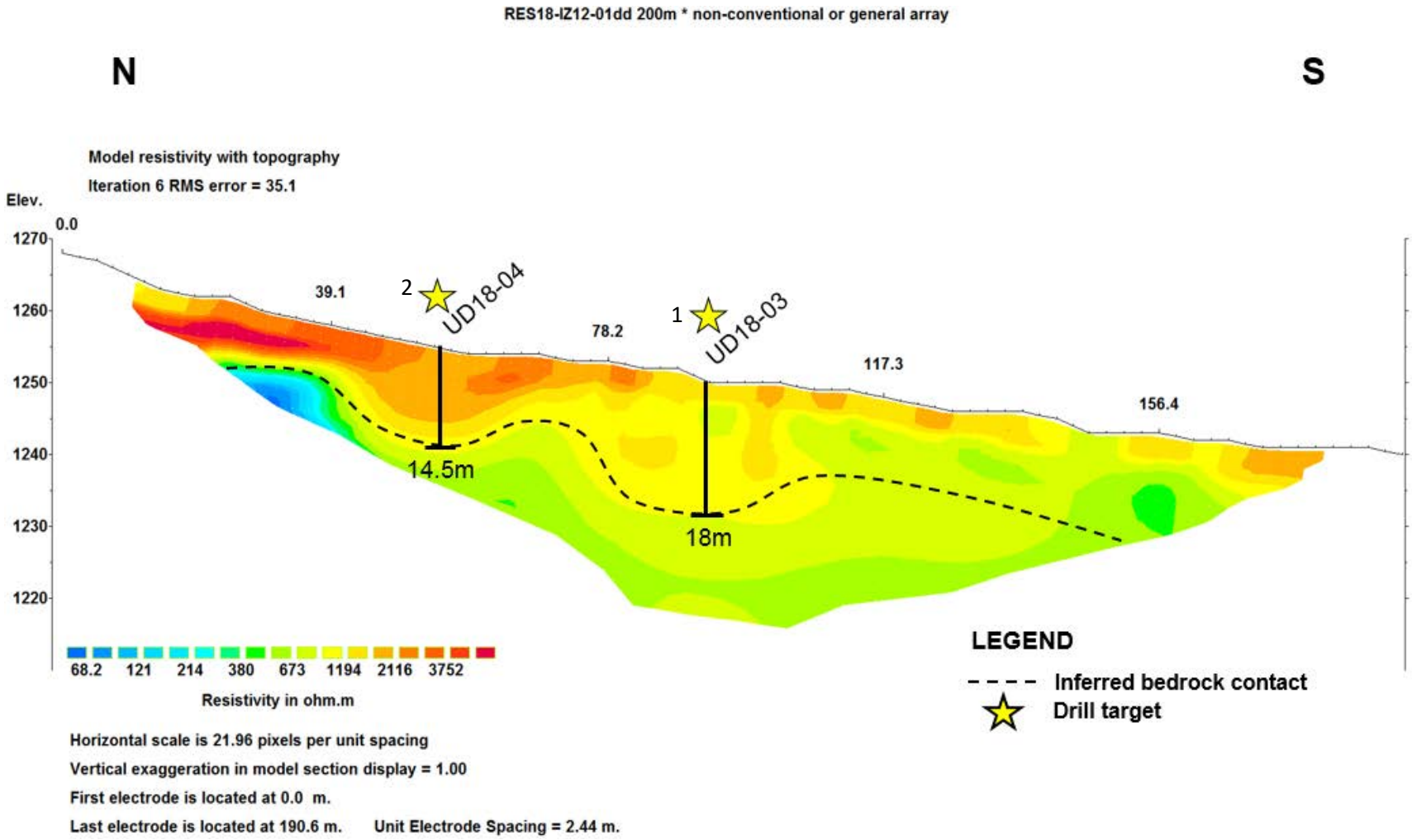

Figure 65 - RES18-IZ12-01 is surveyed along the slope in the valley just downstream of the Izzie test pit dug in 2017. This resistivity profile had two drill targets identified, which were subsequently drilled. Drilling confirmed the interpreted bedrock depths.

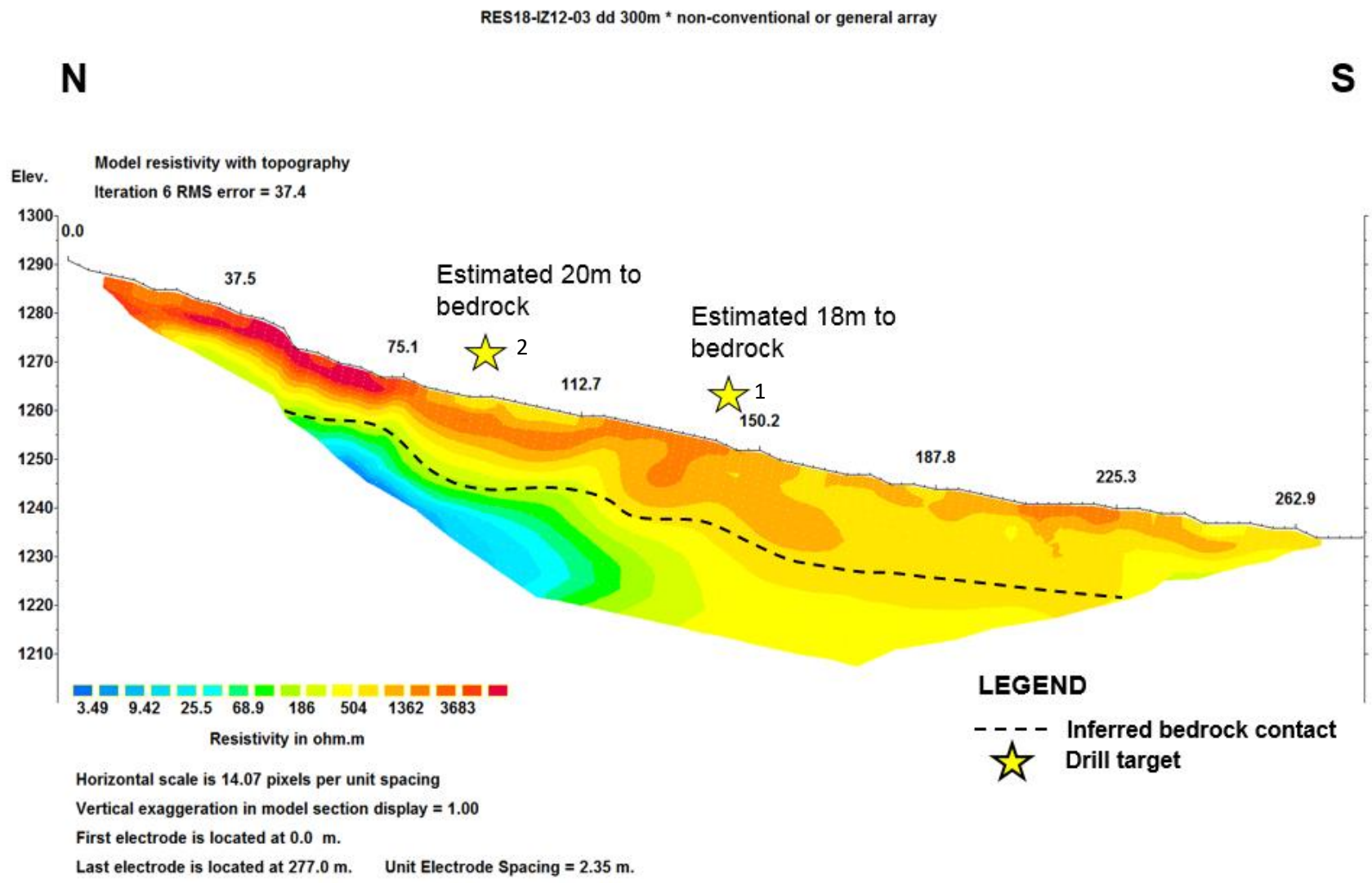

Figure 66 - RES18-IZ12-03 is located directly upstream and parallel to line RES18-IZ12-01. An undulating bedrock contact is interpreted, and two prospective drill targets are identified.

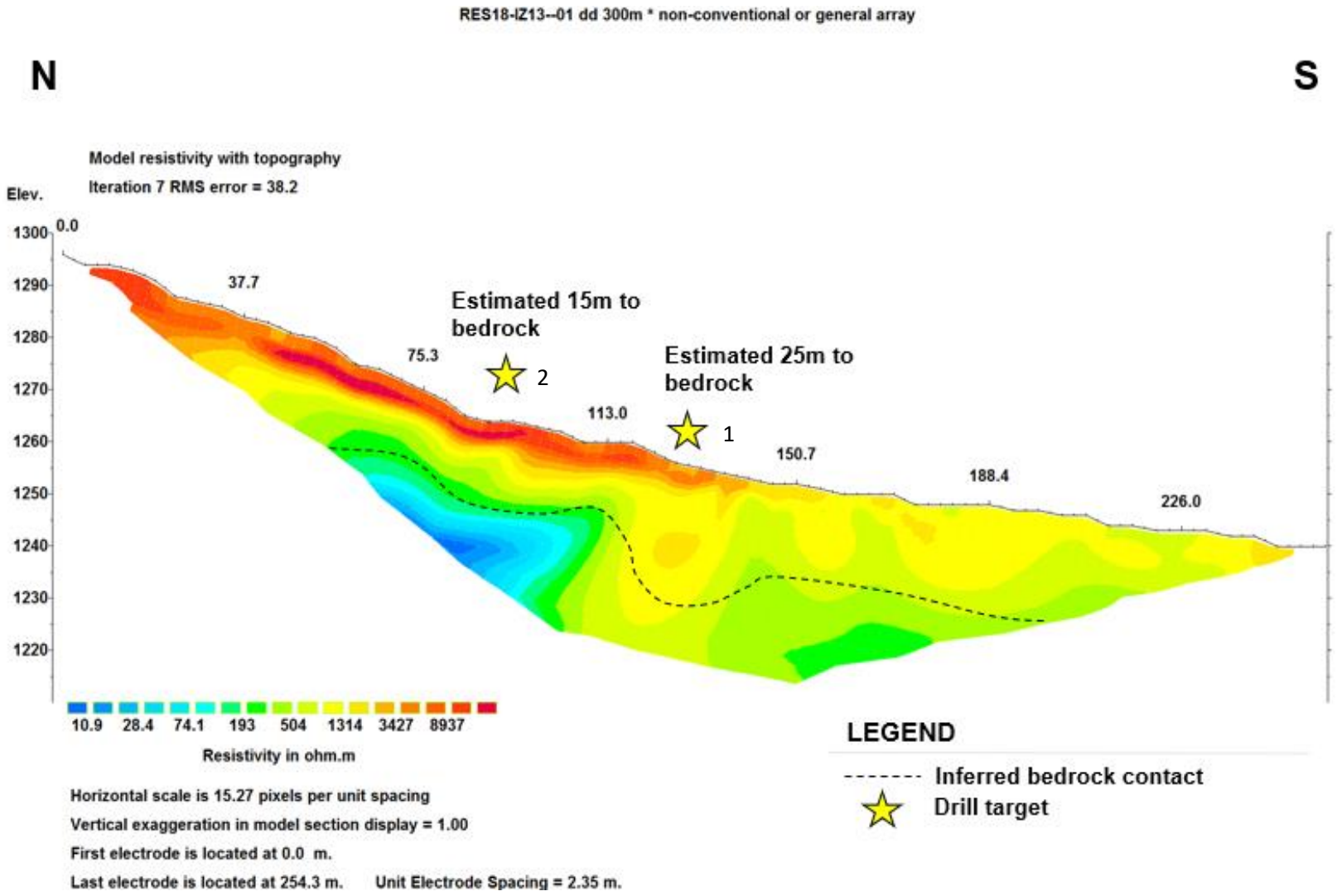

Figure 67 - RES18-IZ13-01 is located directly upstream and parallel to line RES18-IZ12-03. An undulating bedrock contact is interpreted with two drill targets identified.

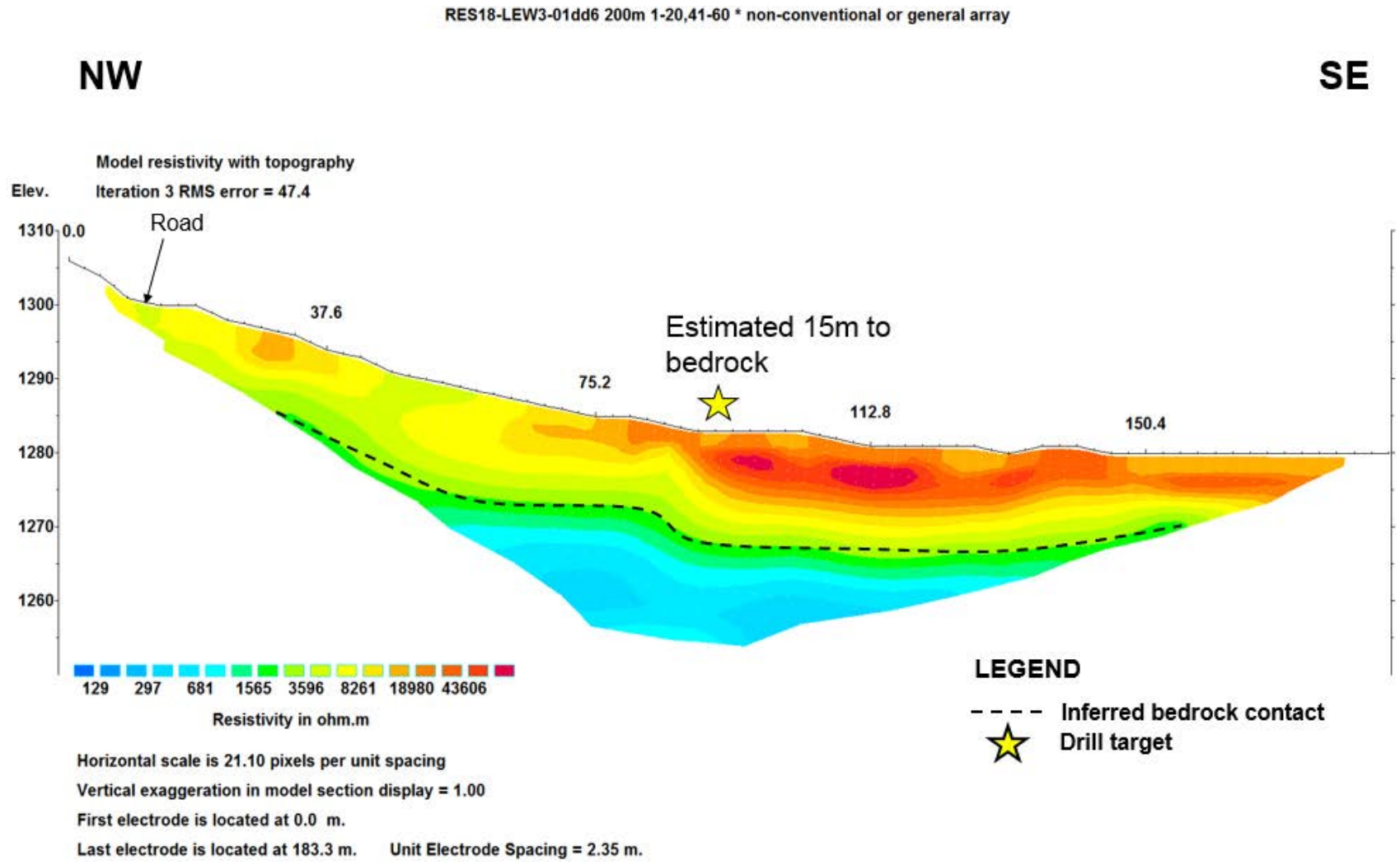

Figure 68 - RES18-LEW3-01 is located on the right limit of Upper Duncan Creek. The ground in this narrow gulch-like valley is very rock, which shows as high resistivity values (red) on the surface. A slightly undulating bedrock contact is interpreted with a drill target identified in the deepest undulation.

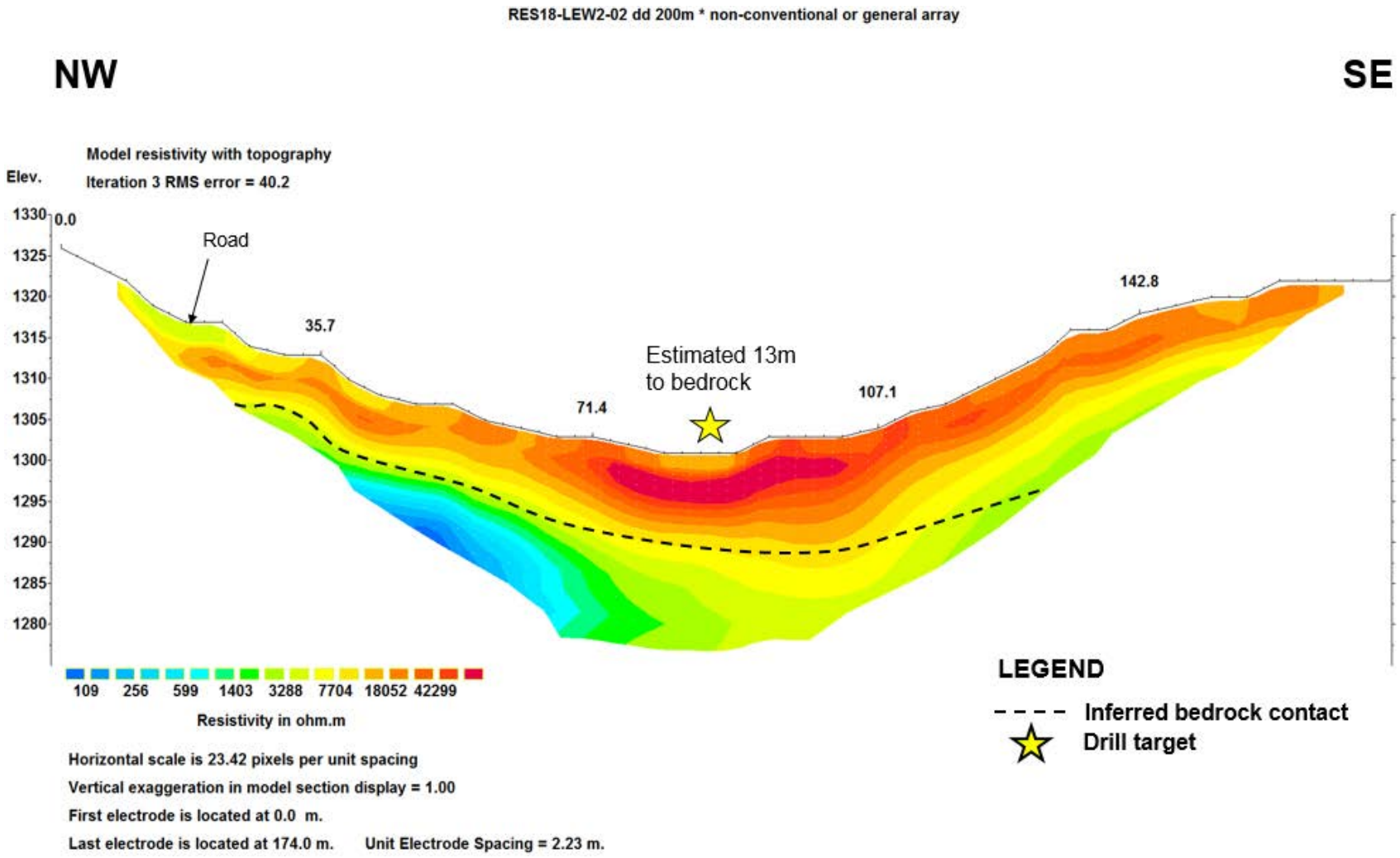

Figure 69 - RES18-LEW2-02 is located on the right limit of Upper Duncan Creek. The ground in this narrow gulch-like valley is very rocky and the resistivity profile displays the rocky ground with the high surface values (red) on the profile. An undulating bedrock contact is interpreted, and a drill target chosen in the valley bottom for further exploration.

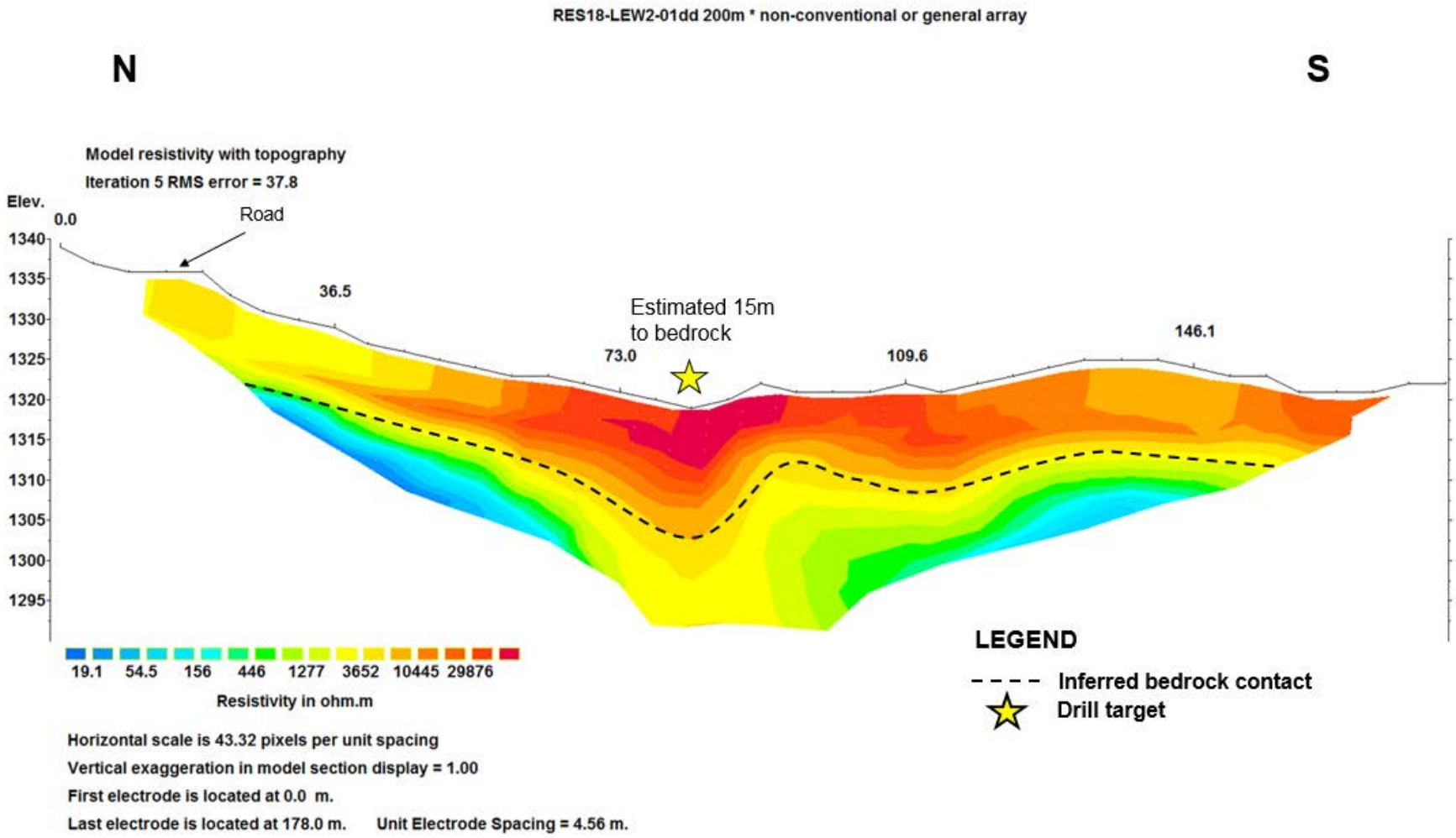

Figure 70 -RES18-LEW2-01 is located on the right limit of Upper Duncan Creek. The ground in this narrow gulch-like valley is very rocky and the resistivity profile displays the rocky ground with the high surface values (red) on the profile. An undulating bedrock contact is interpreted, and a drill target was chosen in the valley bottom.

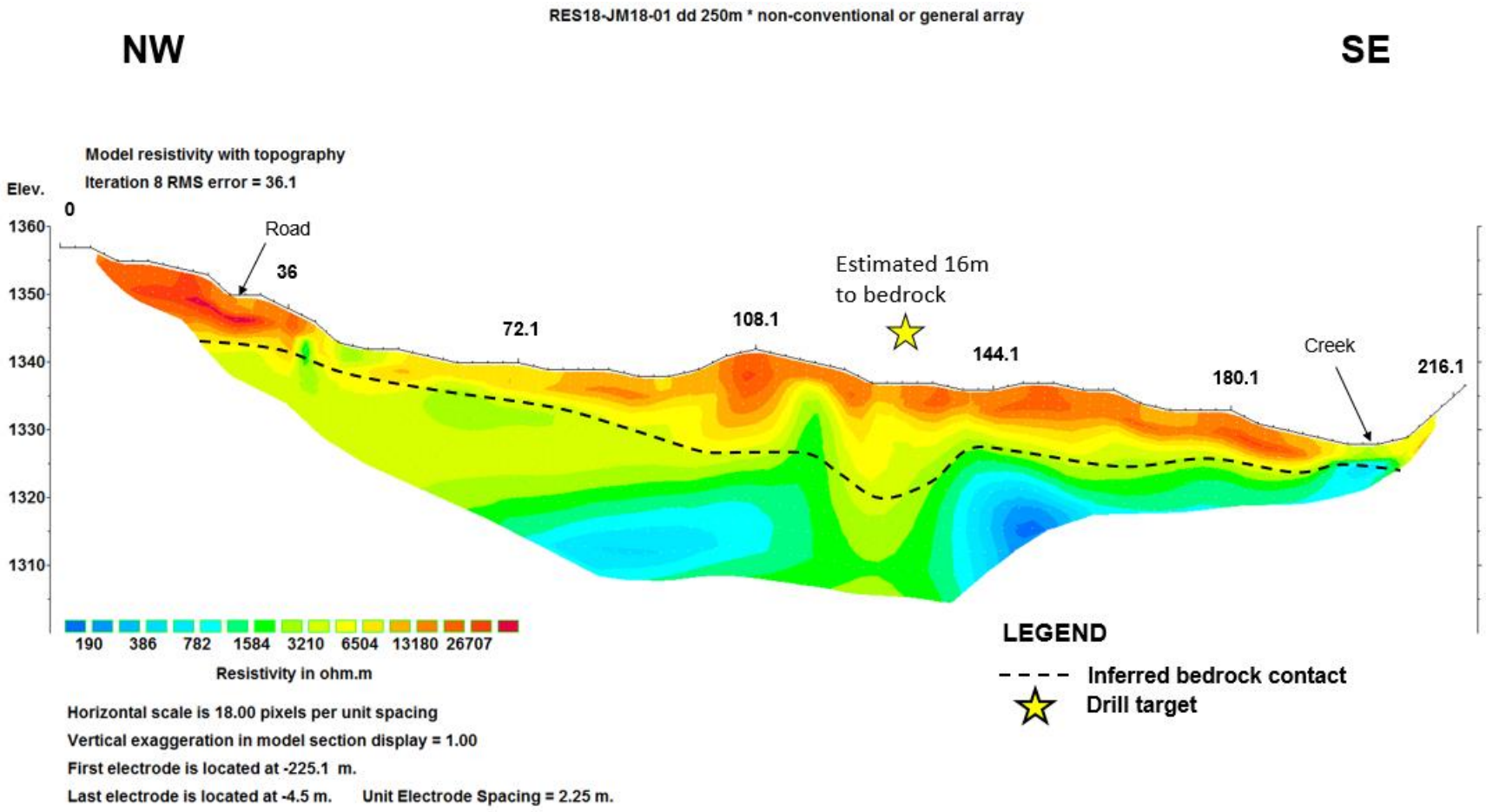

Figure 71 - RES18-JM18-01 is surveyed on the right limit of Upper Duncan Creek, on the James claims tributary. The ground in this tributary is very rocky and the high resistivity (red) displays this. In this profile, the bedrock contact is undulatory. A drill target has been chosen in the deepest interpreted bedrock.

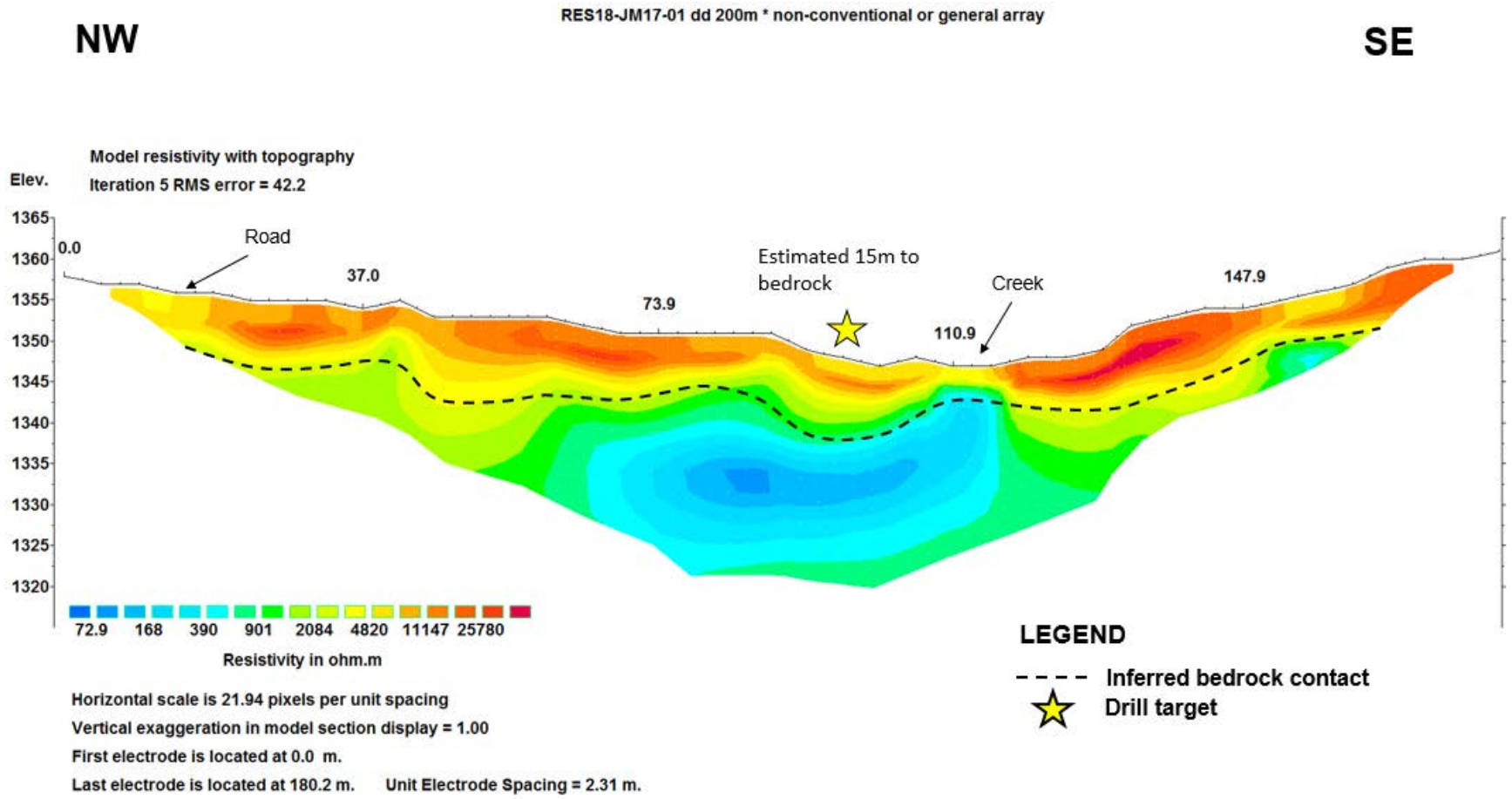

Figure 72 - RES18-JM17-01 is surveyed on the right limit of Upper Duncan Creek, on the James claims tributary. The ground in this tributary is very rocky and the high resistivity (red) displays this. In this profile, the bedrock contact is very undulatory and a drill target is identified near to the current creek.

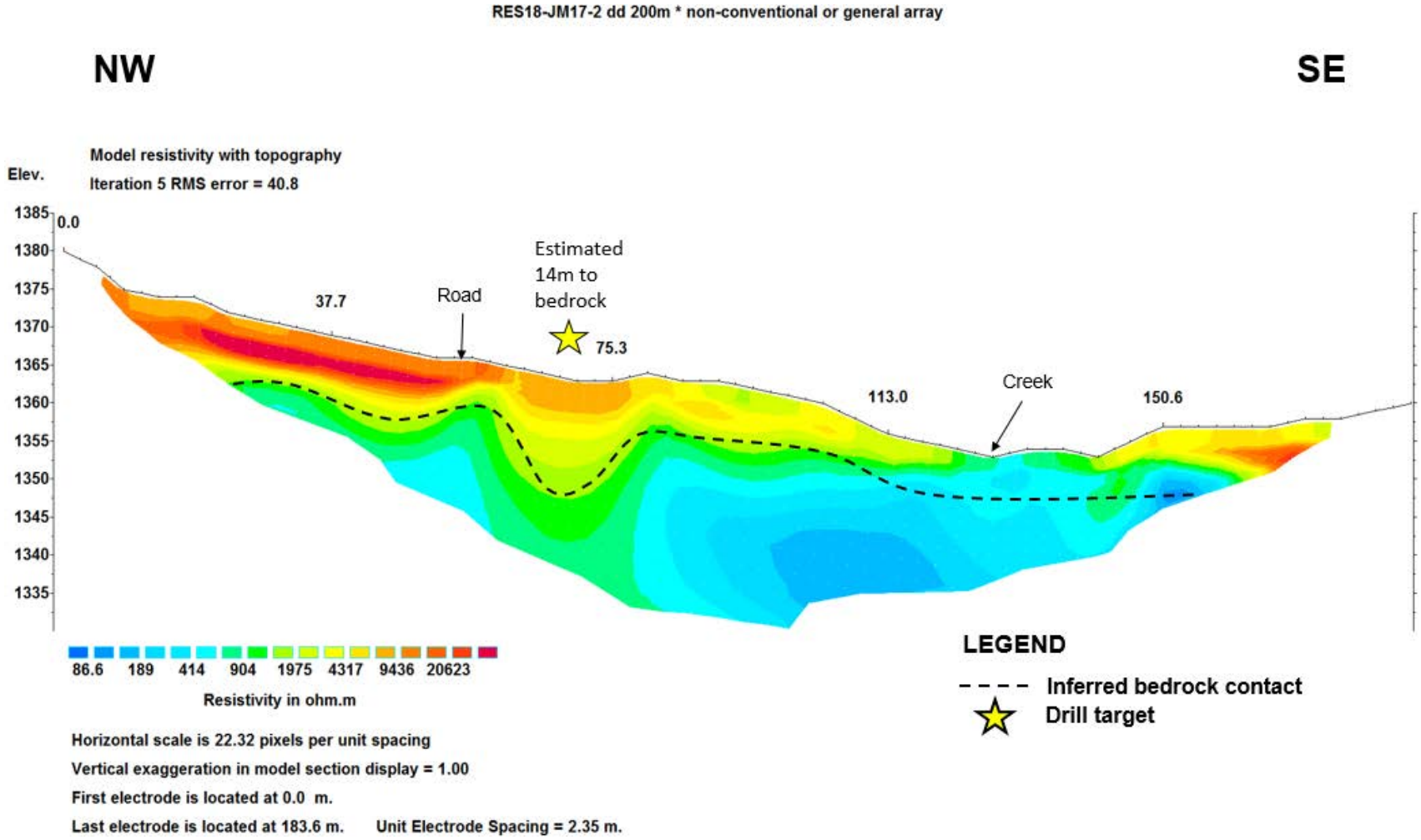

Figure 73 - RES18-JM17-02 is surveyed on the right limit of Upper Duncan Creek on the James claims tributary. The ground in this tributary is very rocky and the high resistivity (red) displays this. In this profile, the interpreted bedrock contact is undulatory. A drill target has been chosen within a possible paleochannel feature.

Conclusions and Recommendations – 2018 Program

The resistivity surveys were successful in identifying contrasting zones of high, moderate and low resistivity, which were attributable in varying degrees to permafrost, alluvial gravel, glacial till and bedrock units. Limited test pitting and drilling from previous years assisted in the bedrock profile interpretations. The resistivity geophysical surveys were also able to define contacts including potential paleochannels that were traceable from one profile to the next, up and down-valley.

On the 2018 resistivity profiles, ten drill targets were identified in the Stuart, Sam, and Jill claims, and 9 drill targets were identified in the James, Lew, and Izzie claims. Four additional targets were identified by a re-examination of the 2017 resistivity profiles.

The geographic coordinates and claim locations of the drill targets are shown in Table 8. The targets are also plotted on Figure 74, as well as on each profile (Figures 51 to 61, and Figures 63 to 73) and on the maps accompanying each target area (Figures 50 and 62).

Figure 74 shows that the drill targets align in a direction which is subparallel to the tributaries and main valley trends. In particular, the targets chosen in the Stuart and Jill tributaries (on the right limit) show an alignment subparallel to the modern creek. These could be indicative of right-limit paleochannels which have a high potential for placer gold.

For further exploration, shallower targets may be evaluated using excavator test-pits, while deeper targets should be drilled using either a RAB (rotary air-blast) drill or R/C (reverse circulation) drill. Materials obtained should be carefully sampled for placer gold content, and bedrock depths. Lithological contacts once confirmed by drilling should be used to recalibrate the 2018 resistivity profile interpretations wherever possible.

Table 8 - 2018 Drill target locations identified from both 2017 and 2018 resistivity surveys.

Target	Latitude	Longitude	UTM_N	UTM_E	Claim	Tributary
RES18-JL2-01	63.864159	-135.259584	7081903	487242	JILLIAN 2	Jill
RES18-JL1-01	63.865035	-135.258612	7082001	487290	JILLIAN 1	Jill
RES18-SM7-01	63.865804	-135.257017	7082086	487369	SAM 9	Jill
RES18-SM7-02	63.866928	-135.255922	7082211	487423	SAM 9	Jill
RES17-SM217-01	63.865161	-135.236288	7082010	488387	SAM 216	Stuart
RES18-SM216-01	63.865632	-135.236274	7082063	488388	SAM 216	Stuart
RES17-SM216-01	63.864048	-135.236119	7081886	488395	SAM 216	Stuart
RES18-SM215-01	63.865869	-135.236107	7082089	488396	SAM 216	Stuart
RES18-ST0-01	63.863168	-135.235959	7081788	488402	STUART 0	Stuart
RES18-SM216-02	63.864476	-135.235499	7081934	488426	SAM 216	Stuart
RES18-ST1-01	63.862175	-135.234494	7081677	488474	STUART 1	Stuart
RES18-IZ12-01-1	63.871959	-135.198501	7082761	490246	IZZIE 12	Izzie
RES18-IZ12-01-2	63.872202	-135.198674	7082789	490238	IZZIE 12	Izzie
RES18-IZ12-03-1	63.872089	-135.197792	7082776	490281	IZZIE 12	Izzie
RES18-IZ12-03-2	63.872544	-135.197825	7082827	490280	IZZIE 12	Izzie
RES18-IZ13-01-1	63.872072	-135.195552	7082774	490391	IZZIE 13	Izzie
RES18-IZ13-01-2	63.872421	-135.195658	7082813	490386	IZZIE 13	Izzie
RES17-IZ14-05	63.871906	-135.194276	7082755	490454	IZZIE 13	Izzie
RES18-LEW3-01	63.87249	-135.191979	7082820	490567	IZZIE 14	Lew bench
RES18-LEW2-02	63.872829	-135.190212	7082857	490654	LEW 2	Lew bench
RES18-LEW2-01	63.873607	-135.188221	7082944	490752	LEW 2	Lew bench
RES18-JM18-01	63.873548	-135.185663	7082937	490878	JAMES 18	James
RES18-JM17-01	63.874015	-135.182848	7082988	491016	JAMES 17	James
RES18-JM17-02	63.875095	-135.181431	7083108	491086	JAMES 17	James
RES17-JM16-01	63.874859	-135.17944	7083082	491184	JAMES 16	James

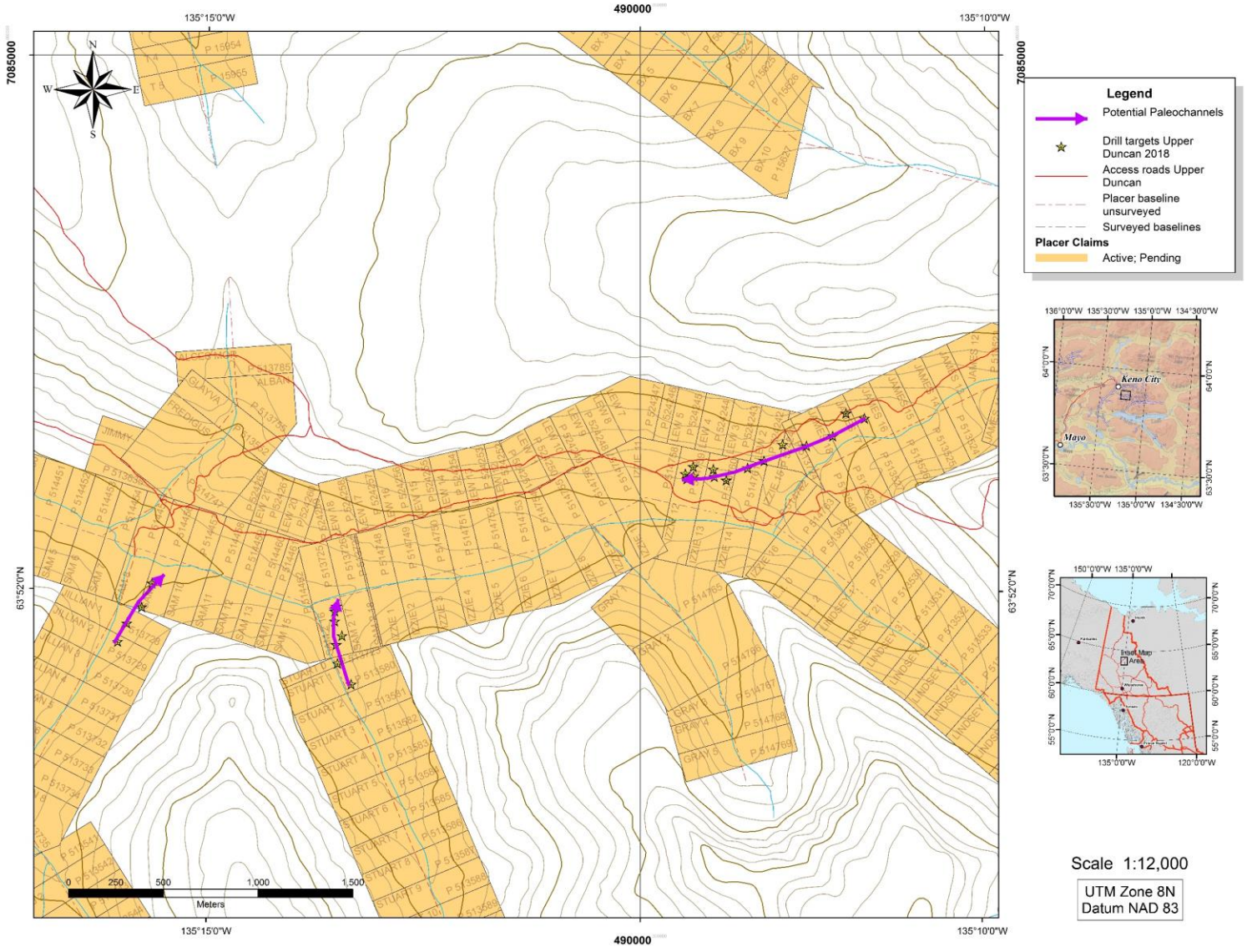

Figure 74 - Claim map of Upper Duncan Creek showing the location of drill targets outlined by geophysics during the 2018 exploration program.

2020 Exploration Program

Overview

The 2020 exploration program included resistivity, R/C drilling and aerial drone surveying. Some of the targets proposed were not reached due to drill access and alternative targets were completed in lieu of the original planned targets.

A total of 1 km of resistivity geophysics was done to further explore the Stuart and Lindsey Claims. In the project area on the Stuart, Izzie and James claims 12 R/C drill holes totalling 170m were completed. The drone surveys cover a total of 5.32 creek-miles over the targeted areas.

Resistivity Geophysics Methodology

The resistivity technique injects an electrical current into the subsurface through stainless steel spikes and then measures the remaining voltage at various distances away from the injection point. Ground materials have different resistances to the current and give data points in a cross section of the subsurface. With the data points, a tomogram or pseudo section can be created representing changes of resistivity in the ground. Data was collected using Geotest software, while the inversion and data filtering was completed with RES2DINV software. Data points with poor data quality were exterminated and noisy data was filtered statistically with root mean squared data trimming. Two-dimensional tomograms were produced using least squares damped inversion parameters to display the resistivity properties and to display potential contacts.

The two-dimensional images are used for preliminary interpretations of bedrock structure. The images were interpreted by Selena Magel, Allegra Webb and William LeBarge.

General principles and assumptions of electrical resistivity are:

1. Low resistivity can indicate thawed and water saturated areas, as well as fine grained material.
2. Very high resistivity values can be due to ice rich material and frozen or highly disturbed ground.
3. Dry gravels, cobbles and boulders generally have high resistivity values.
4. The contrasts between values is more important in determining contacts than the absolute values found with resistivity data.

Limitations and Disclaimer

The interpreted sections provide an estimate of the conditions beneath the surface to the depths conducted and are within the accuracy of the system and methods. The data becomes more uncertain with depth and are more accurate toward the surface and is further complicated with permafrost present in the region. The materials are interpreted based upon local geology observed, as well as geologic knowledge of the area. Certain materials may be similar in composition and result in uncertain results. The accuracy of the information presented is not guaranteed and all mine development is the client's responsibility. William LeBarge, Allegra Webb and Selena Magel accept no liability for any use or application by any and all authorized or unauthorized parties.

Reverse Circulation Drill Sampling Methodology

Each meter of R/C drilling is sampled for lithology, heavy minerals, and gold content. Samples are collected from the R/C drill into sample bags. The samples are collected per meter. Each sample is measured by volume, and described visually for lithology. The descriptions are recorded in a drill log along with the volume. The samples are then run through a Letrap sluice, the concentrate is panned and the concentrate material is described again to notice any patterns in heavy mineral composition. Heavy minerals are noted such as magnetite, ilmenite, rutile, garnets, scheelite etc. The gold is also noted, described, and weighed if weighable. Small samples can also be tested using the above method.

Drone imagery Methodology

The drone used is a DJI Phantom 4 Pro. The images are collected by flying the drone in a grid shape over the desired area to be mapped. Once the flying is complete, the images are imported into a processing software called Pix4D. The program creates an orthomosaic, point cloud, digital surface and terrain models, contour lines and a Google Earth .kml file. The orthomosiac can be imported into mapping software and combined with other data.

Results

The drone surveys were useful in additional detailed geologic interpretation, and also provided imagery that aids in planning future drilling and geophysics surveys. The areas of the drone surveys are outlined in Figure 75, and the image compilation is included in Appendix 3.

Table 9 outlines the coordinates of the resistivity surveys which are shown on Figure 75. Figures 76-80 show the resistivity profiles and their interpreted bedrock depths as well as the targets which were identified. A total of 7 new drill targets were identified on the resistivity profiles, and these are plotted on Figure 75 and shown in Table 11. These targets are generally picked in low areas of the interpreted bedrock profiles that could be interpreted as paleochannels.

There were 12 R/C drill holes completed in the tributaries of Upper Duncan Creek totalling 170m of sampled holes. The drill holes are plotted on Figure 75 and the coordinates are in Table 10. The 2020 R/C drill holes were also used to re-calibrate previous year's resistivity surveys, which are shown as Figures 81-87. Generally, the correlations were accurate and confirmed previous interpretations.

Table 9 - 2020 resistivity geophysics line coordinates on the Upper Duncan property.

Resistivity Line	Start point		End point	
	Latitude	Longitude	Latitude	Longitude
RES20-LINDSEY01-01	63.8663536	-135.180492	63.86746774	-135.17821
RES20-LINDSEY02-01	63.8652538	-135.17756	63.86630922	-135.175223
RES20-LJ0-01	63.8692548	-135.184167	63.86793749	-135.185201
RES20-ST04-01	63.8581223	-135.232365	63.85865939	-135.22942
RES30-ST03-01	63.8593734	-135.234171	63.85990256	-135.231067

Table 10 - 2020 R/C Drill hole coordinates, Upper Duncan Creek.

Drill Hole	Depth (m)	Claim Location	Resistivity Line	Latitude	Longitude
UD20-01	13	Sam 2 16	RES18-SM216-01	63.8655732	-135.236577
UD20-02	16	Sam 2 16	RES18-SM216-01	63.8655871	-135.236266
UD20-03	7	Sam 2 16	RES18-SM216-01	63.8655456	-135.236028
UD20-04	13	Sam 2 16	RES17-SM216-01	63.8640031	-135.235881
UD20-05	12	Sam 2 16	N/A	63.8639161	-135.23581
UD20-06	11	Sam 2 16	RES17-SM216-01	63.863944	-135.236497
UD20-07	11	Stuart 0	RES18-ST0-01	63.8631715	-135.235968
UD20-08	11	Stuart 0	RES18-ST2-01	63.8631764	-135.236199
UD20-09	16	Izzie 14	RES17-IZ14-03	63.8703436	-135.193129
UD20-10	23	Izzie 14	RES17-IZ14-01	63.8712592	-135.1912
UD20-11	18	Izzie 14	RES17-IZ14-01	63.8713411	-135.191591
UD20-12	19	James 17	RES18-JM17-01	63.8740603	-135.182978

Table 11 - 2020 Drill Target Coordinates, Upper Duncan Creek Tributaries.

Target Name	Claim Location	Resistivity Line	Target Depth (m)	Latitude	Longitude
2020-UD01	Stuart 3	RES20-ST03-01	8	63.859536	-135.233135
2020-UD02	Stuart 3	RES20-ST03-01	7	63.859711	-135.232177
2020-UD03	Stuart 4	RES20-ST04-01	6	63.858396	-135.230945
2020-UD04	L.J. 0	RES20-L.J.0-01	16	63.868565	-135.184449
2020-UD05	Lindsey 1	RES20-LINDSEY01-01	15	63.866907	-135.179633
2020-UD06	Lindsey 2	RES20-LINDSEY02-01	15	63.865724	-135.176806
2020-UD07	Lindsey 2	RES20-LINDSEY02-01	16	63.865917	-135.176472

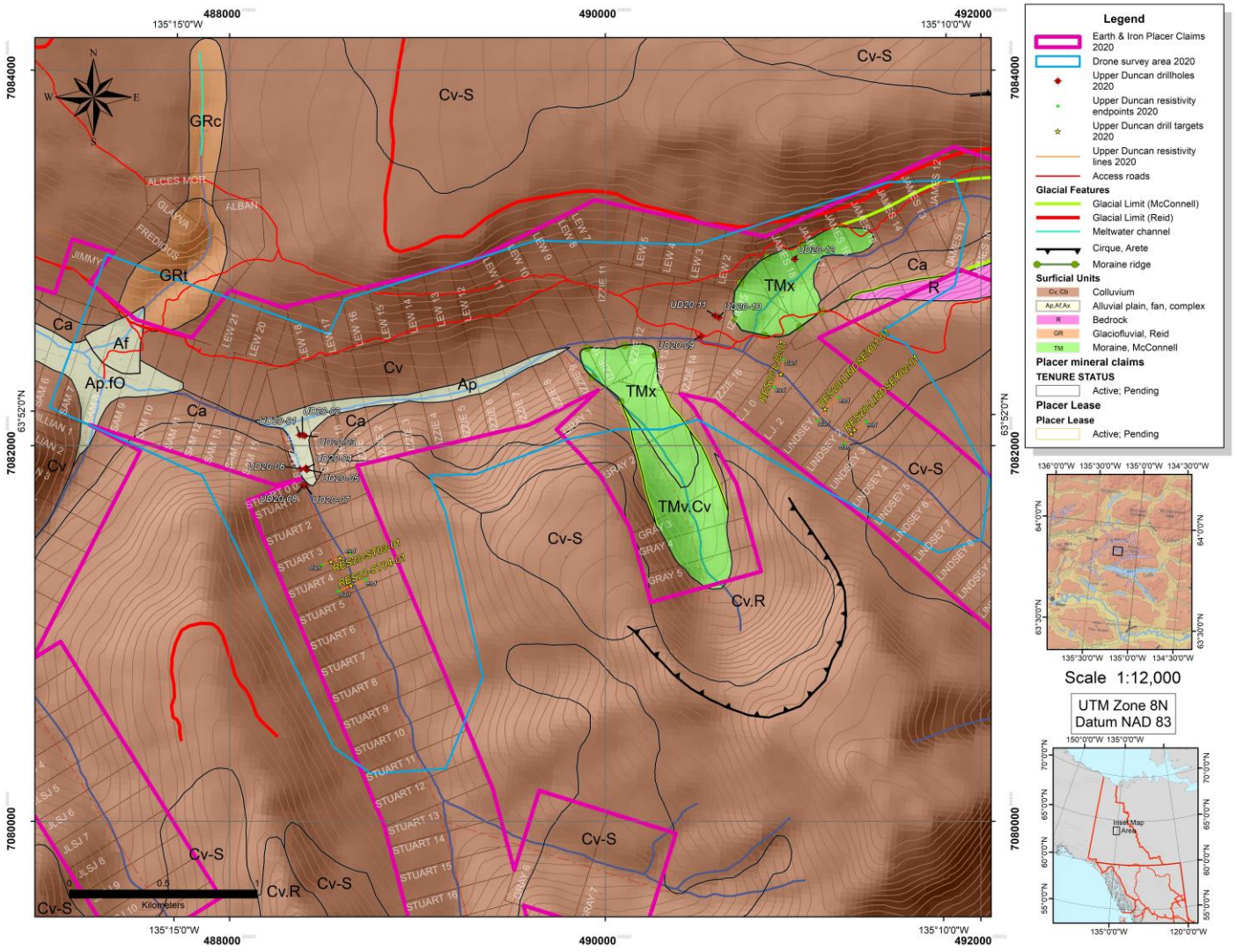

Figure 75 - Compilation map of Upper Duncan Creek showing surficial geology (after Bond, 1999), 2020 R/C drill holes, resistivity geophysical surveys, drill targets and drone imagery survey area.

2020 Resistivity Profiles

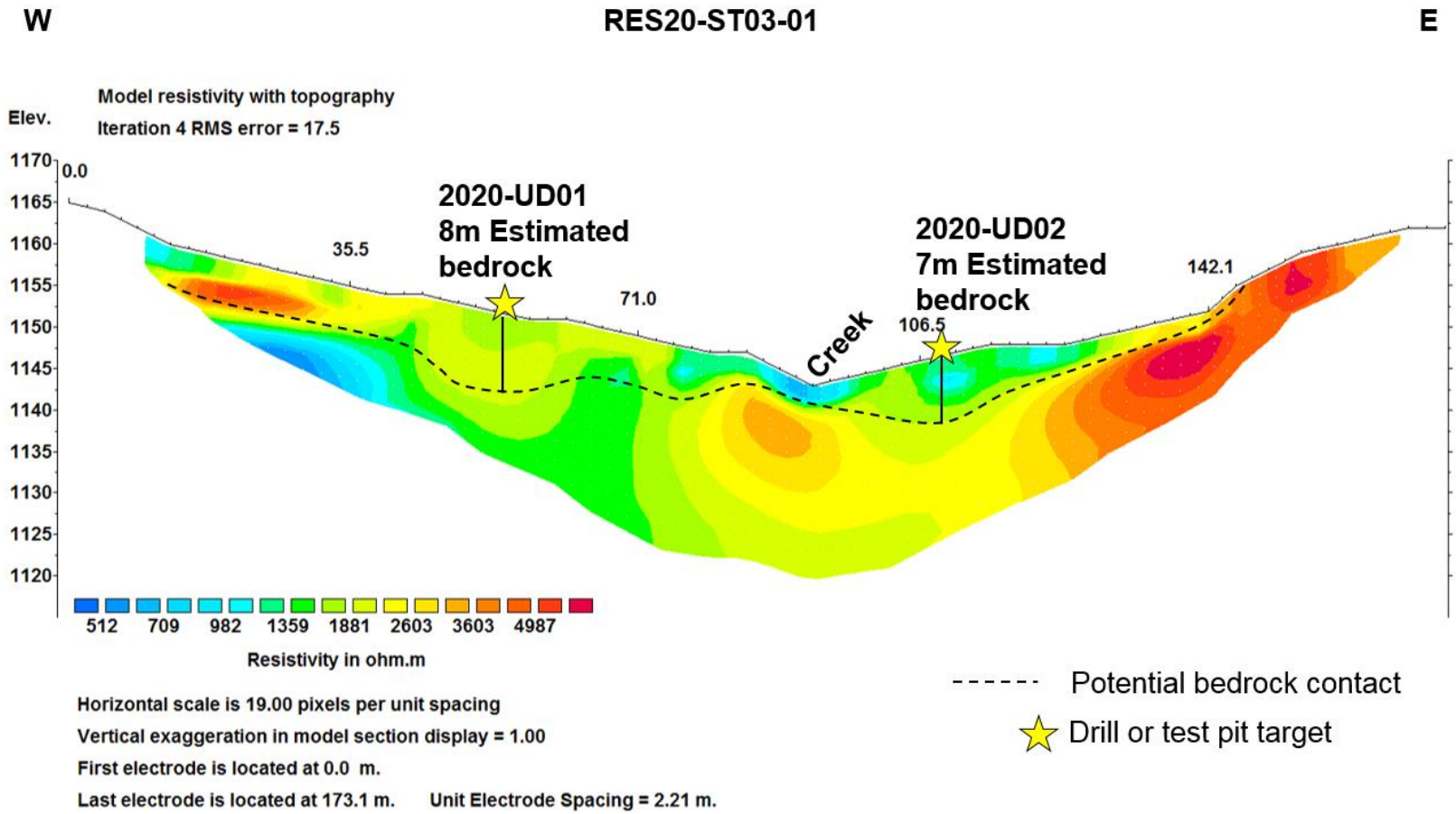

Figure 76 – RES20-ST03-01 is surveyed from west to east in the Stuart claims tributary of Upper Duncan Creek. The profile is viewed looking downstream. The bedrock profile interpreted has an undulating surface and there are 2 drill targets chosen in the deepest undulations with depths of 8m and 7m. The 7m target may be the continuing right limit channel that was targeted downstream. The expected surficial units encountered in the targets would be colluvium overlying paleochannels of reworked till that may host placer gold.

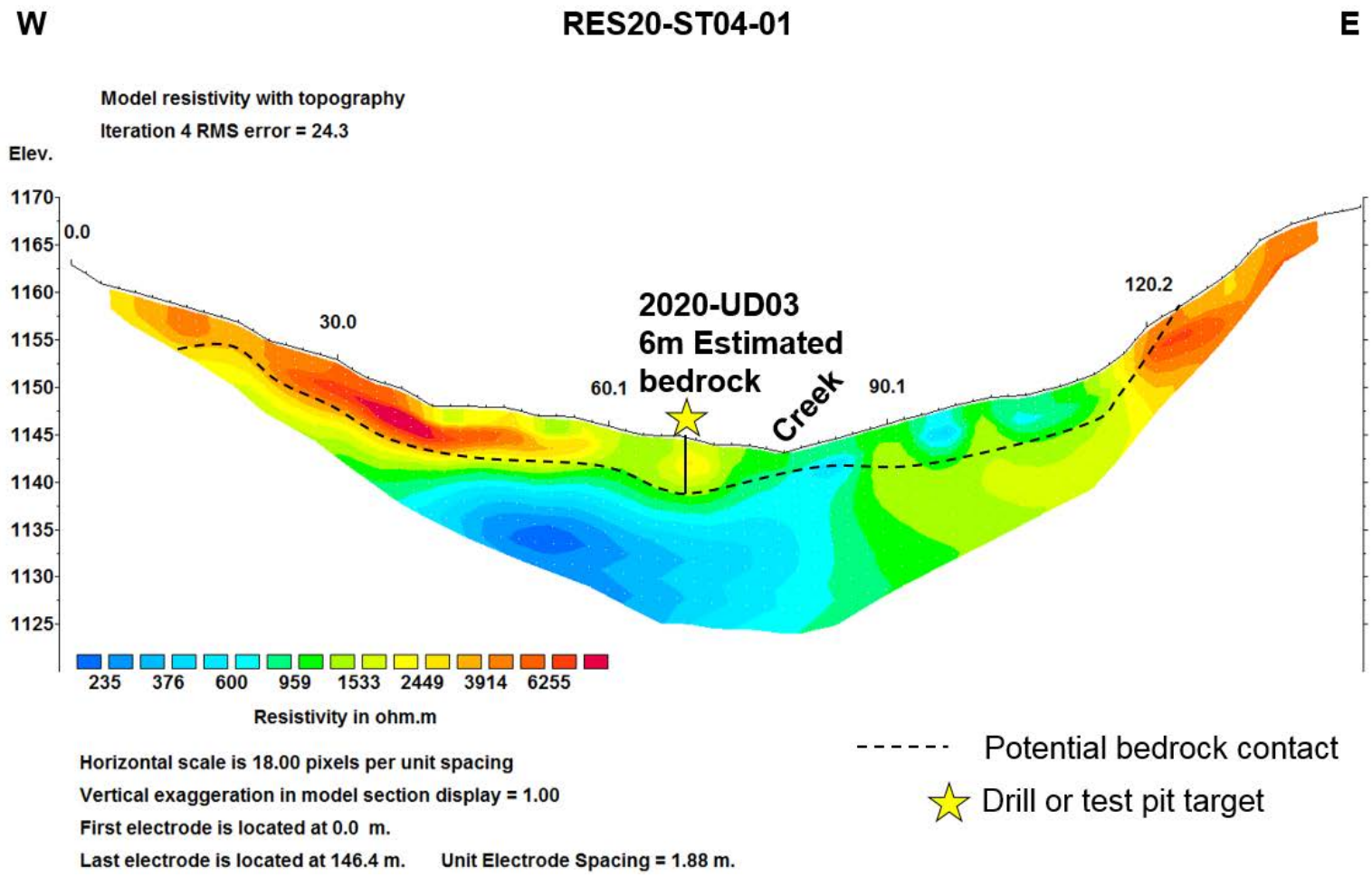

Figure 77 – RES20-ST04-01 is surveyed from west to east in the Stuart claims tributary of Upper Duncan Creek. The profile is viewed looking downstream. The bedrock profile interpreted has a slightly undulating surface and there is 1 drill target chosen in the deepest undulation with depth of 6m. The expected surficial units encountered in the targets would be colluvium overlying paleochannels of reworked till.

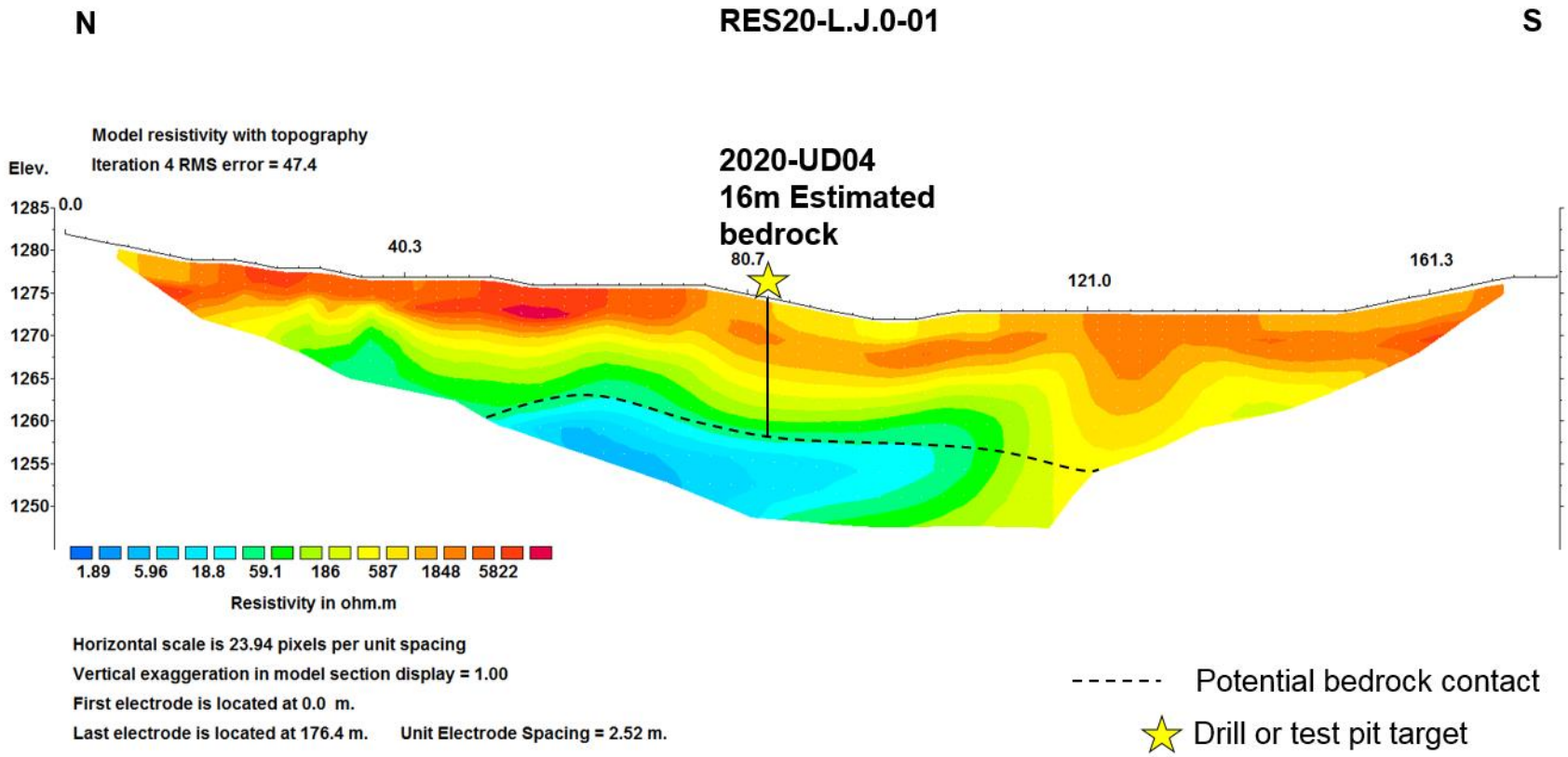

Figure 78 – RES20-L.J.0-01 is surveyed from north to south. The survey is viewed looking upstream in the Lindsey claim area. The bedrock contact is interpreted slightly undulating with 1 target picked on the right limit of the creek. The interpreted depth is 16m and the expected stratigraphy is colluvium overlying reworked Reid aged till on bedrock which could be a host to placer gold.

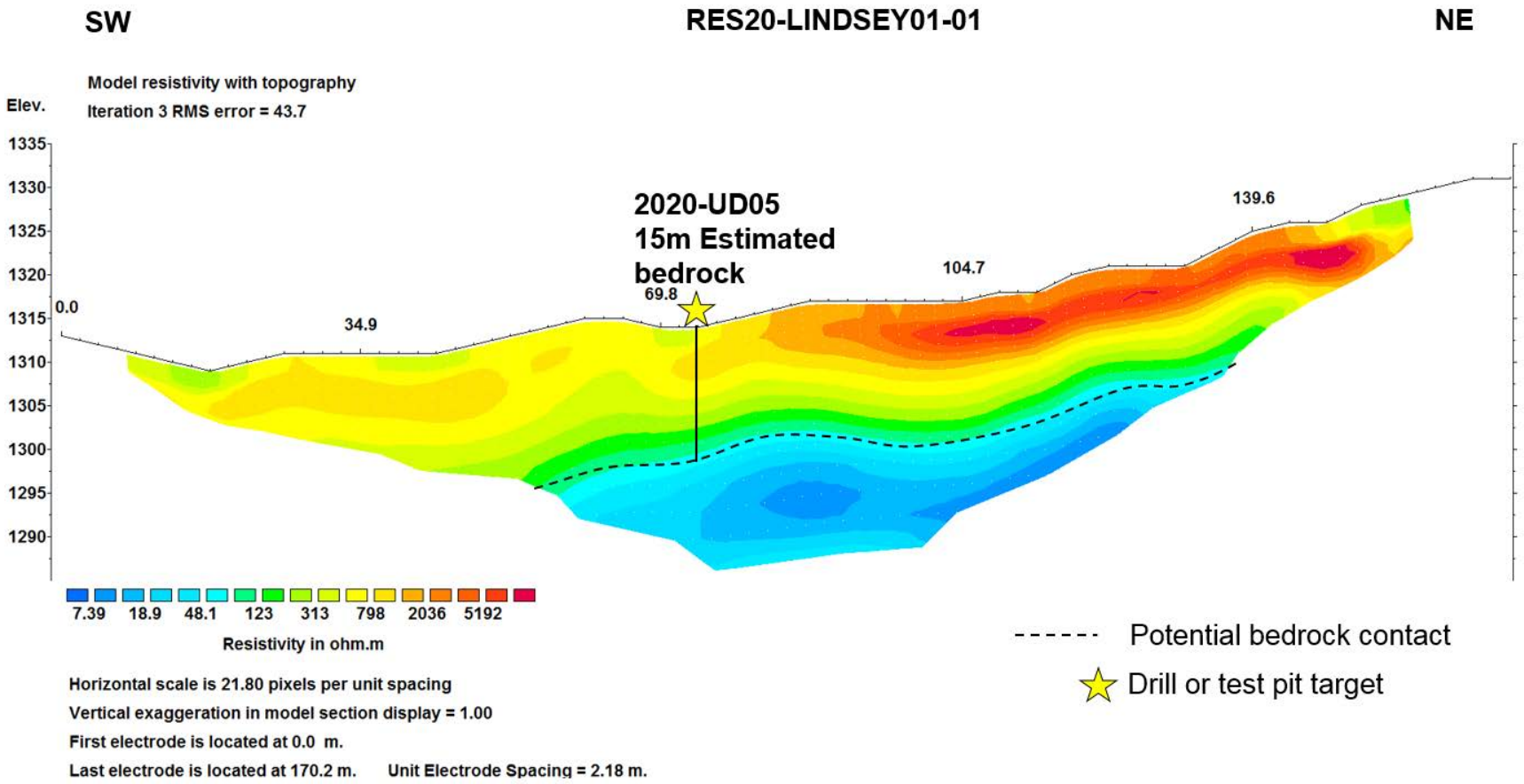

Figure 79 - RES20-LINDSEY01-01 is surveyed from southwest to northeast. The survey is viewed looking downstream in the Lindsey claim area. The bedrock contact is interpreted slightly undulating with 1 target picked on the right limit of the creek. The interpreted depth is 15m and the expected stratigraphy is colluvium overlying reworked Reid aged till on bedrock which could be a host to placer gold.

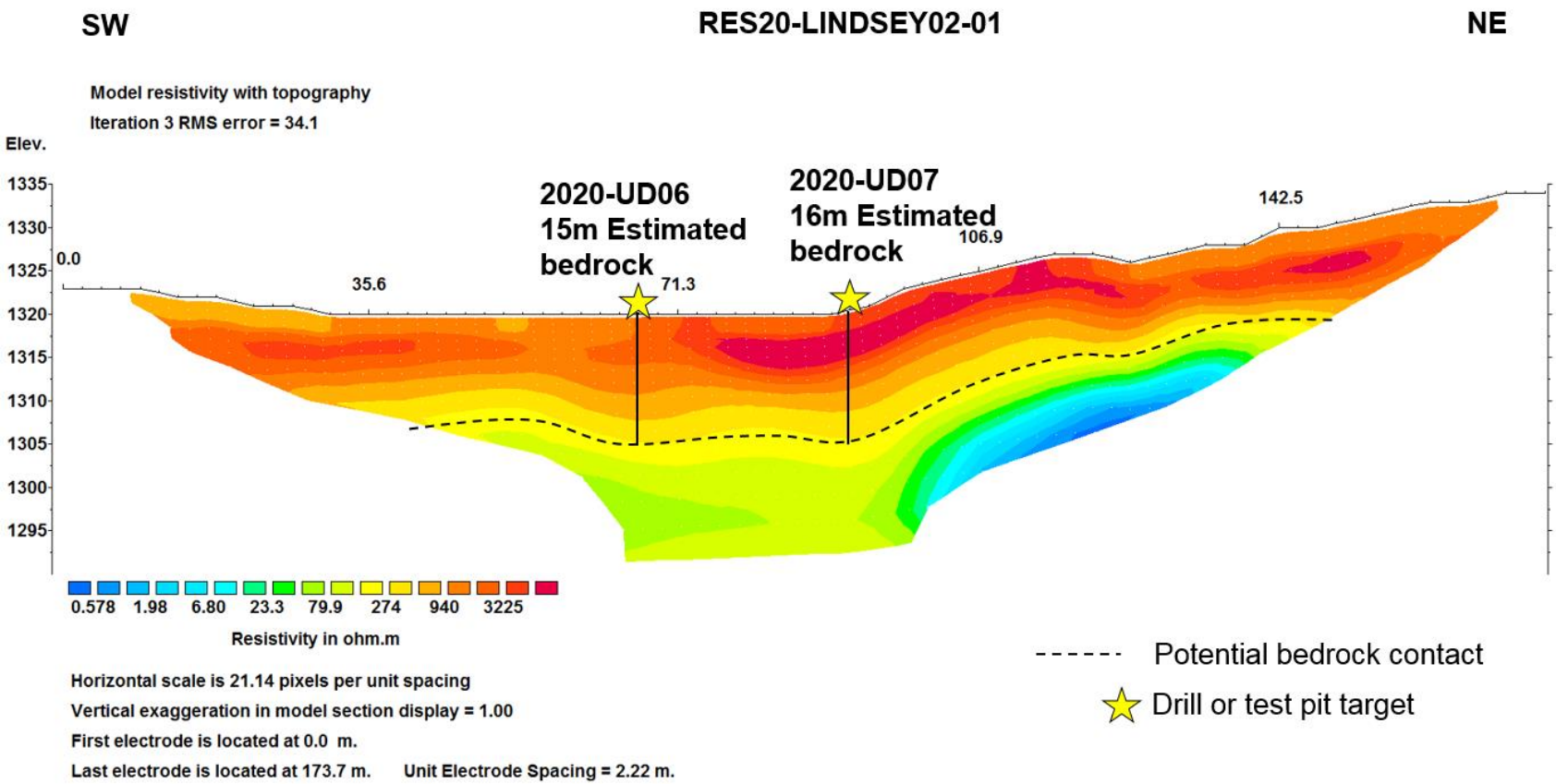

Figure 80 -RES20-LINDSEY02-01 is surveyed from southwest to northeast. The survey is viewed looking downstream in the Lindsey claim area. The bedrock contact is interpreted slightly undulating with 2 targets picked on the right limit of the creek in a flat topographical area. The interpreted depths are 15m and 16m and the expected stratigraphy is colluvium overlying reworked Reid aged till on bedrock which could be a host to placer gold.

Previous Years Resistivity Profiles with 2020 Drilling

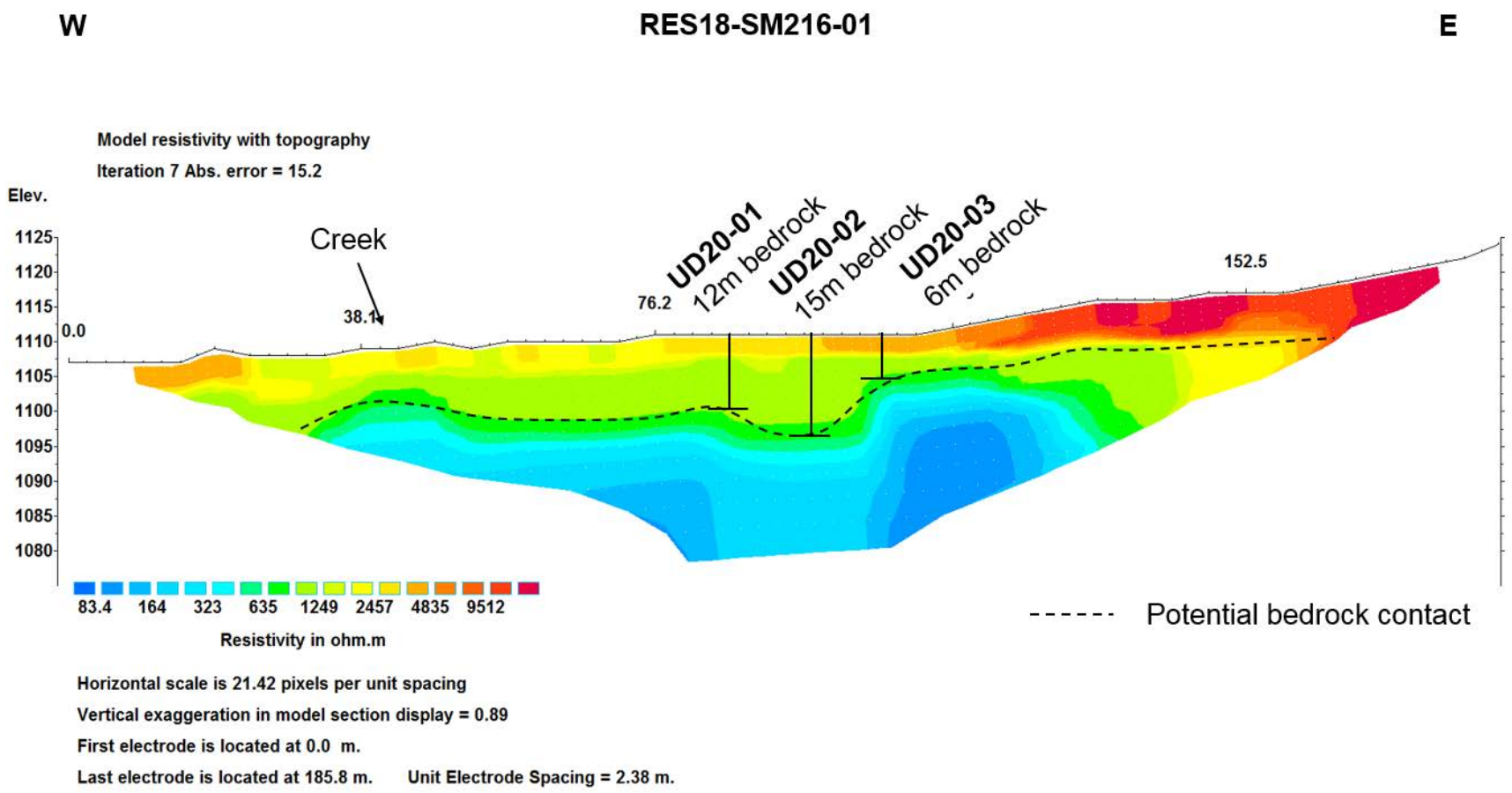

Figure 81 – RES18-SM216-01 had a target that was drilled in 2020 with UD20-01, 02 and 03. The respective depths reached are 12m, 15m, and 6m. UD20-01 yielded the best placer gold results with a 4m zone of gold content. The bedrock depth corelated nicely with the projected target bedrock depth.

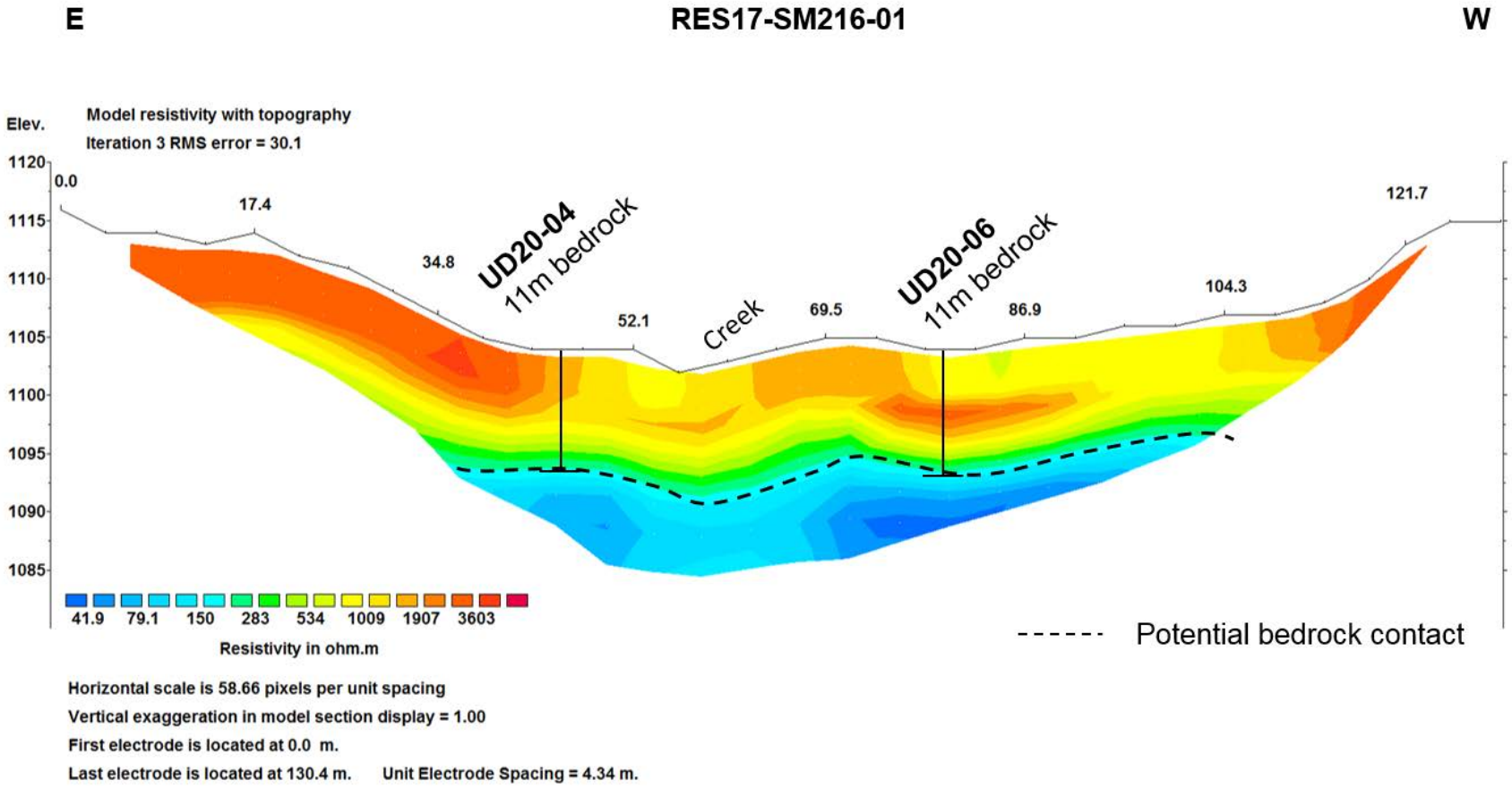

Figure 82 -RES17-SM216-01 had 2 drill holes (UD20-04 and UD20-06) along the survey line, with UD20-05 being drilled just 10m south of UD20-04. Drill hoes UD20-04 and 06 both had fine colours in the gravel just above bedrock.

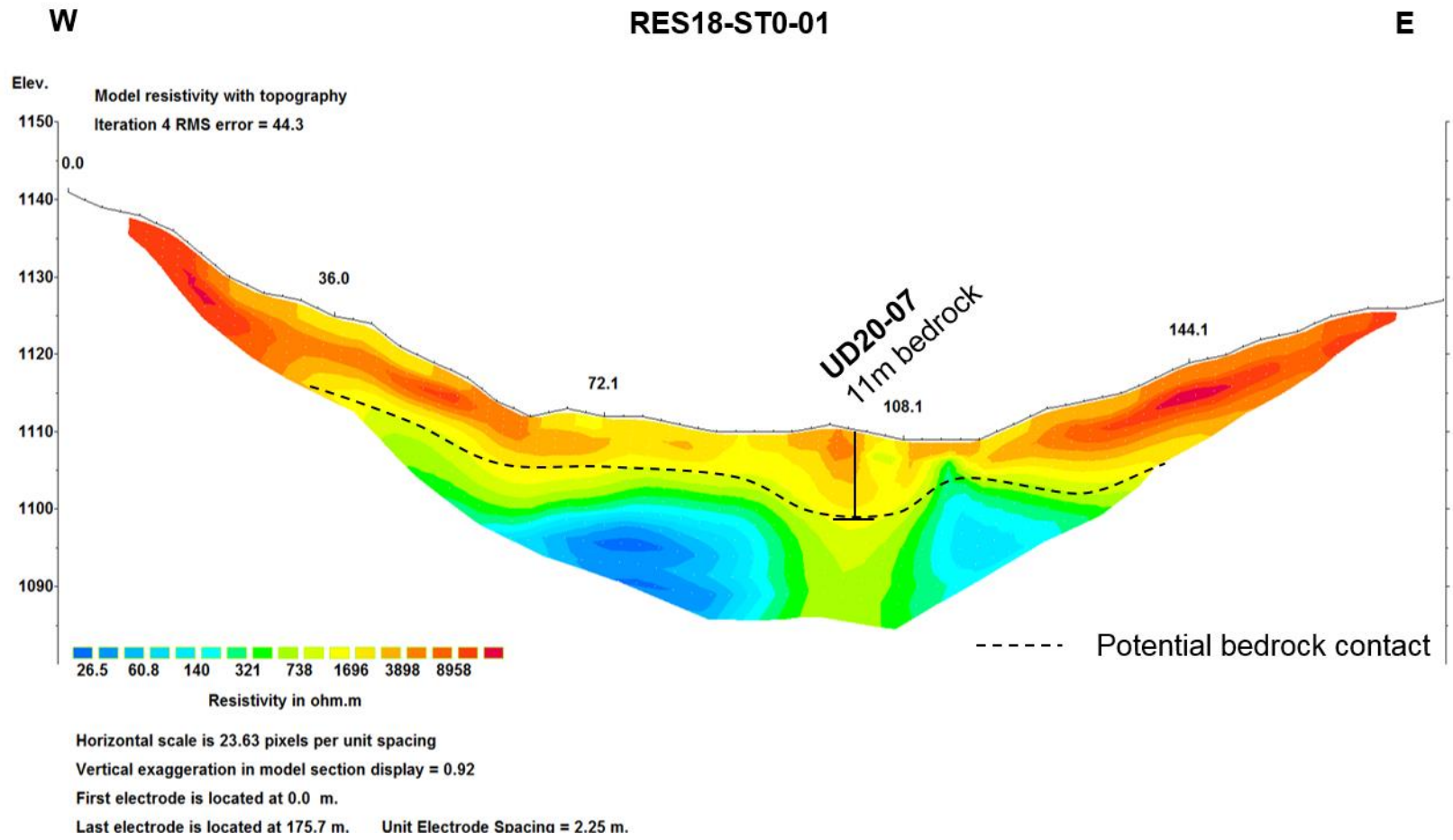

Figure 83 - RES18-ST0-01 has UD20-07 drilled on it reaching 11m with some fine placer gold from 9-11m in a gravel above bedrock.

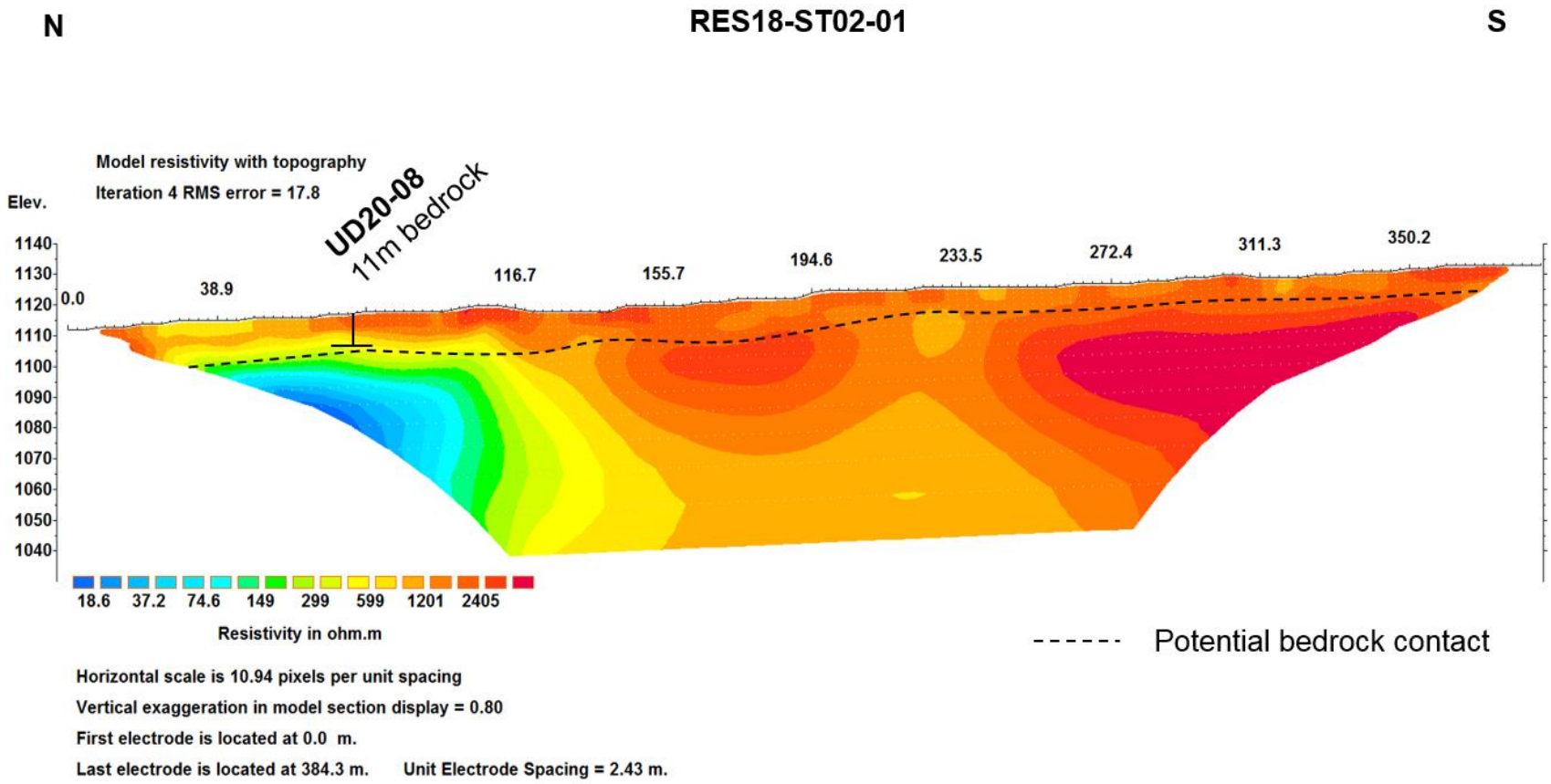

Figure 84 - RES18-ST02-01 has drill hole UD20-08 on it. There were no gold values found in this drill hole, however, the bedrock depth calibrates the geophysics.

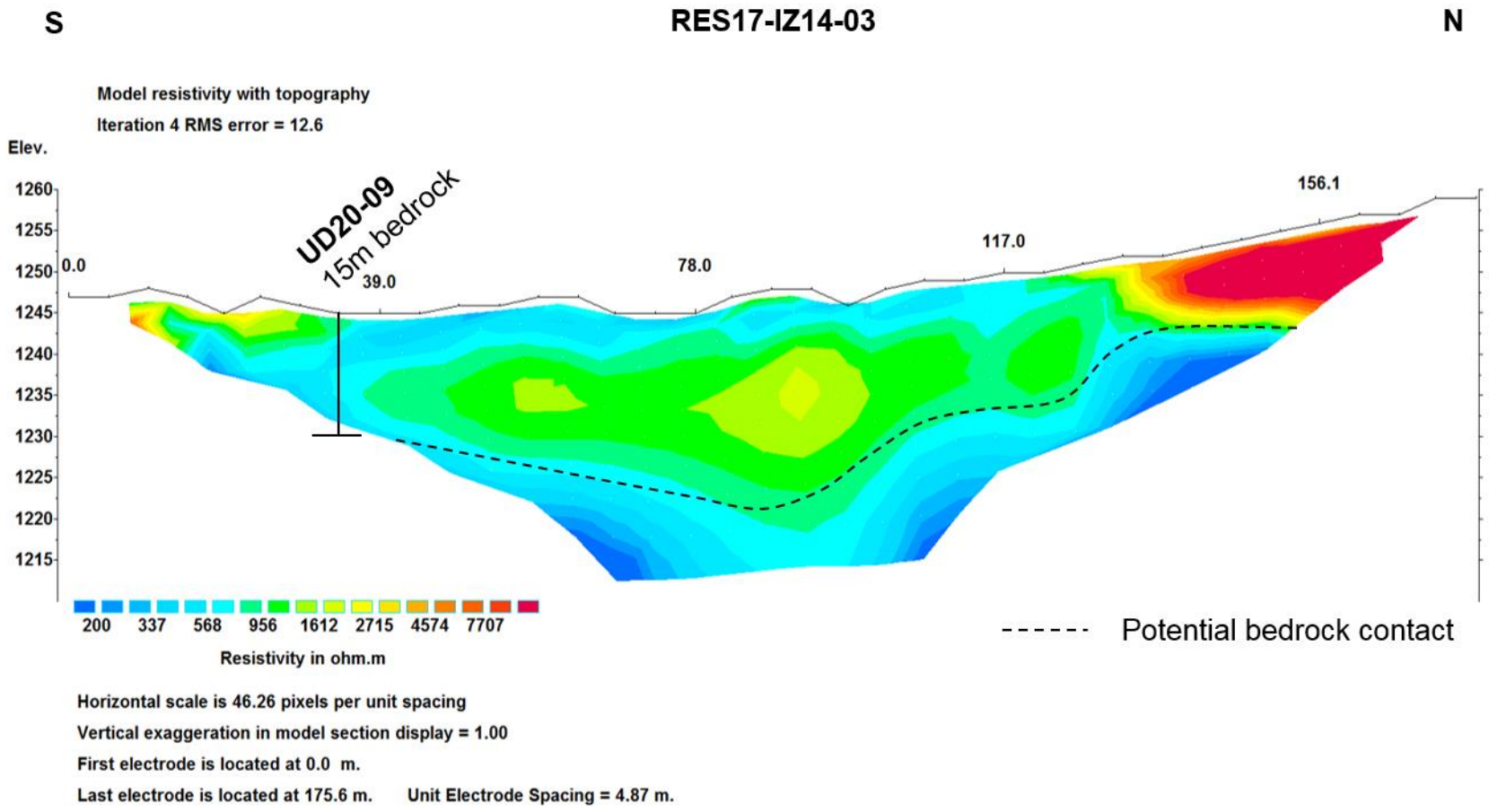

Figure 85 – RES17-IZ14-03 has UD20-09 drilled on it. The bedrock depth assists in calibrating the profile image. Fine and medium colours were found in the samples from 11-13m. Bedrock was hit at 15m.

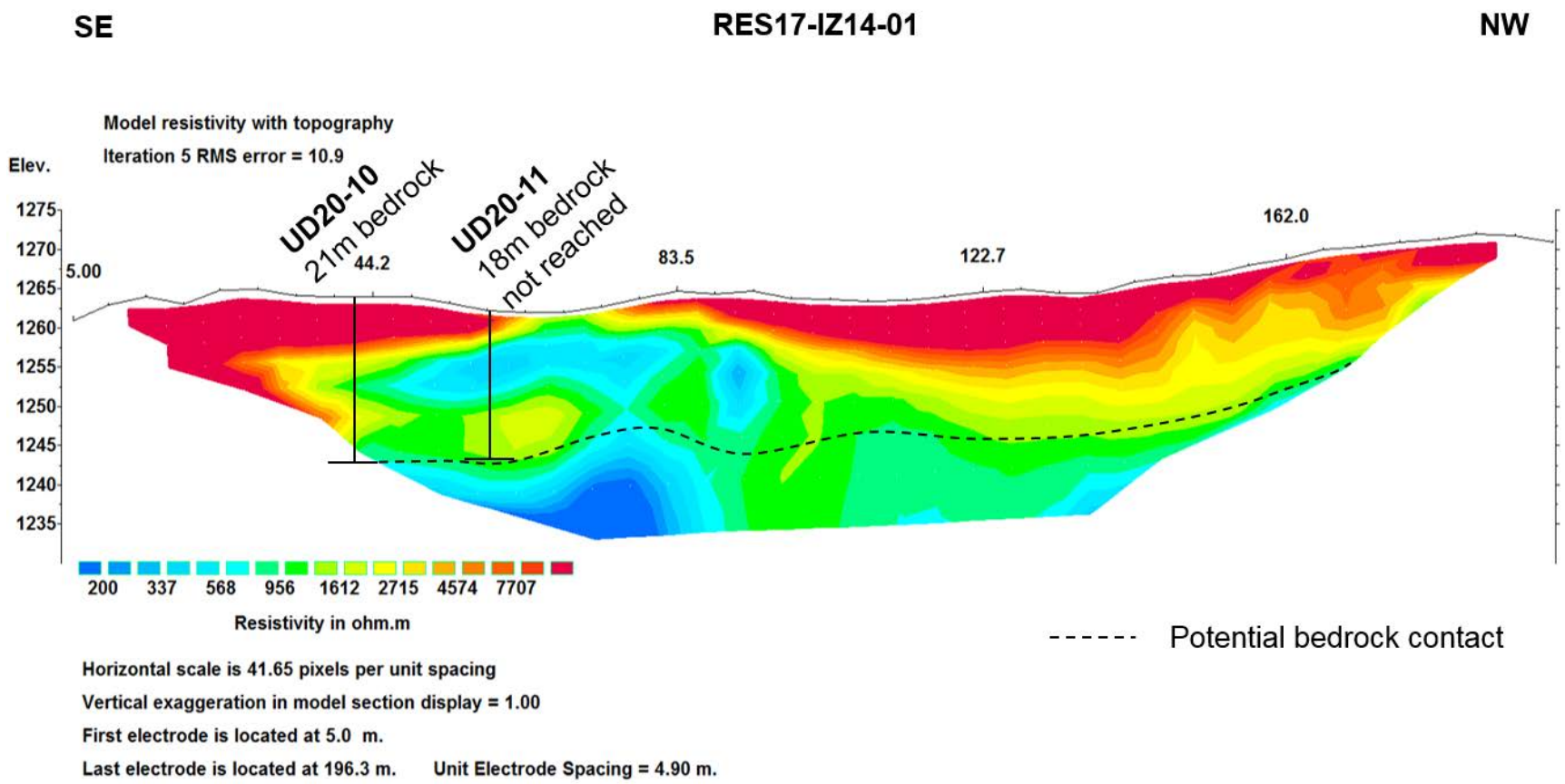

Figure 86 – RES17-IZ14-01 has 2 drill holes (UD20-10 and UD20-11) drilled on it. The bedrock was reached at 21m in UD20-10 and was not reached due to drill problems and excess water pressure while drilling. UD20-10 has good gold content from 16m-22m, the layer above bedrock. The gold was found in a brown sandy gravel overlaid by a black gravel with silt.

a

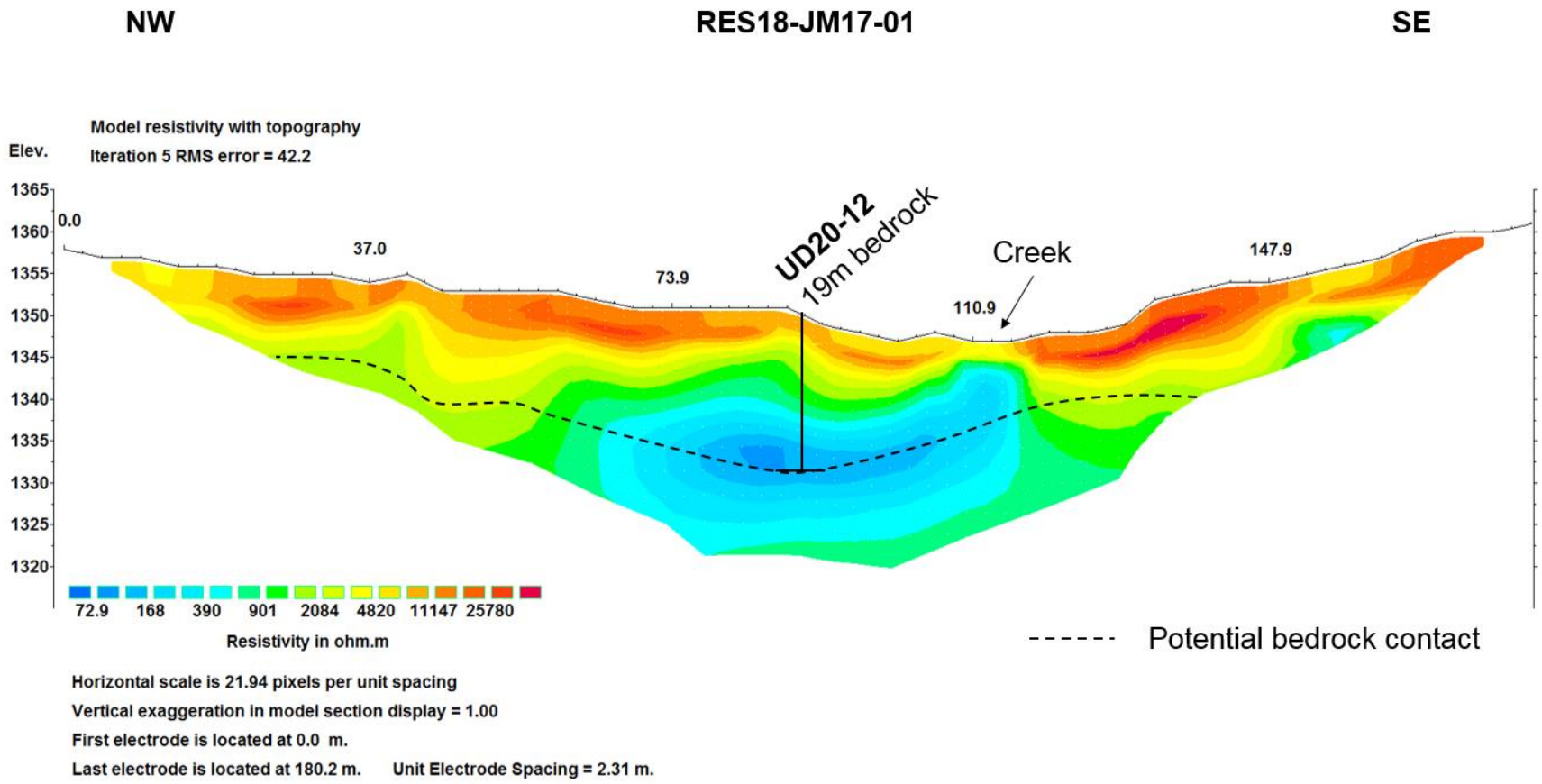

Figure 87 - RES18-JM17-01 has drill hole UD20-12 drilled on it. The drill hole had no gold in it. The material drilled is interpreted as McConnell age till.

Conclusions and Recommendations

The updated drone surveys provided a good base map for geologic interpretations and mapping of the project area, and they will be valuable for future exploration programs.

The two resistivity surveys conducted in 2020 in the Stuart claims area (RES20-ST03-01 and RES20-ST04-01) had 3 new drilling or test pit targets identified in the low points of the interpreted bedrock profile (Figures 76 and 77). The deep undulations may be paleochannels and hosts to placer gold values. There were 3 new resistivity surveys conducted in the Lindsey claim area (RES20-L.J.0-01, RES20-LINDSEY01-01, and RES20-LINDSEY02-01), and these had 4 new drilling targets identified (Figures 78-80).

The first area targeted in 2020 for R/C drilling was the previous years geophysics targets on the Stuart claims tributary, where drill holes UD20-01 to UD20-08 correlated well with the bedrock depths anticipated by the geophysics. Prospective amounts of placer gold were found (see drill logs in Appendix 2), mostly in layers which were above bedrock.

Previous resistivity surveys outlined a possible right-limit interglacial paleochannel on the Stuart claims tributary. R/C drilling results in 2020 continue to support this idea: drill hole UD20-1 encountered an oxidized, reddish brown gravel layer (resembling an interglacial paleosol) which had promising placer gold values; and drill hole UD20-04, located near a previously identified geophysics target on the right limit, returned significant amounts of fine-grained, wiry placer gold, which could also indicate a right limit paleochannel from a proximal gold source. The bedrock identified in the bottom of most of the drill holes was a pyrite-rich graphitic schist, which had a soft, decomposed zone above more competent bedrock.

Due to poor access, the Jill claims tributary was not drilled in 2020, although this tributary has a possible right limit channel defined by the geophysics done in previous years. The tributary warrants further exploration to focus on this channel, which bears resemblance to the paleochannel in the nearby Stuart claims tributary.

The second area targeted with the R/C drill in 2020 was the moraines of Upper Duncan creek in the James, Lew, and Izzie claim area. There were 4 holes (UD20-09 to UD20-12) drilled and sampled for placer gold (see drill logs in Appendix 2). The best placer gold values were from UD20-10, which was drilled at the toe of the McConnell age moraine. The gold was found in the bottom 6m above bedrock in a brown sandy gravel layer. This unit may be interpreted as an oxidized, possibly interglacial paleochannel. The overlying black gravel and silt is likely McConnell aged till, which had very little gold but abundant pyrite. Drill hole UD20-12 was centred on a previous geophysics target upstream, but yielded no gold.

Overall, the exploration results on the Upper Duncan creek tributaries continue to be promising and further exploration is warranted. This should include access construction (drill roads), additional resistivity geophysics, R/C drilling of new and previous targets, and excavator test-pitting with increasingly larger-scale bulk sampling of promising targets.

Statement of Costs – 2020 Exploration Program

Table 12 – 2020 placer exploration expenses, Tributaries of Upper Duncan Creek.

2020 Upper Duncan Creek YMEP expenses	Rate	Subtotal	GST	Total
Drilling, Reverse Circulation of 2017 and 2018 targets, 12 holes	170m @$260/m	$44,200.00	$2,210.00	$46,410.00
Access construction, Caterpillar Bulldozer D7	30 hours @$220/hr	$6,600.00	$330.00	$3,300.00
Drill Rig Moves	30 hr @$250/hr	$7,500.00	$375.00	$7,875.00
Compressor rental	16 days @ $300/day	$4,800.00	$240.00	$5,040.00
Processing of drill samples for placer gold	2 people x 6 days @$400/day	$4,800.00	$240.00	$5,040.00
Drone Imagery Survey	5.32 creek miles @$1000/mile	$5,320.00	$266.00	$5,586.00
Resistivity geophysical surveys - contractor rates for 2 days	1km @$12,000/line km	$12,000.00	$600.00	$12,600.00
Geoplacer Exploration Ltd.- Geological mapping, targeting and supervision of drilling and geophysical program, report writing	3 days@$550/day	$1,650.00	$82.50	$1,732.50
Camp costs (YMEP rates)	70 person days@$100/day	$7,000.00	$350.00	$7,350.00
Report Writing	2 people x 3 days @ $400/day	$2,400.00	$120.00	$2,520.00
Total		$96,270.00	$4,813.50	$101,083.50

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Statements of Qualifications

William LeBarge

I, William LeBarge, of 13 Tigereye Crescent, Whitehorse, Yukon, Canada, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist with current address at 13 Tigereye Crescent, Whitehorse, Yukon, Canada, Y1A 6G6.
2. I am a graduate of the University of Alberta (B.Sc., 1985, Geology) and the University of Calgary (M.Sc., 1993, Geology – Sedimentology)
3. I am a Practicing Member in Good Standing (#37932) of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).
4. I have practiced my Profession as a Geologist continuously since 1985.

Dated this 16th day of January, 2021

William LeBarge, P. Geo.

Selena Magel

I, Selena Magel, of 80B - 18 Azure Road, Whitehorse, Yukon, Canada, DO HEREBY CERTIFY THAT:

1. I am a Geologist in Training, registered with APEGA with current address at 80B - 18 Azure Road, Whitehorse, YT, Y1A 0L2
2. I am a graduate of the University of Calgary (B.Sc., 2017, Geology).
3. I have practiced Geology since May 2017.
4. I have conducted and interpreted over 100 km of resistivity surveys since the summer of 2017.

Dated this 16th day of January, 2021

Selena Magel, G. I. T.

Allegra Webb

I, Allegra Webb of Box 27, Site 7, RR#1, Okotoks, AB, DO HEREBY CERTIFY THAT:

1. I am a graduate of the University of Calgary (B.Sc., 2020, Geophysics).
2. I have practiced Geology and geophysics since May 2018.
3. I have conducted and interpreted over 40 km of resistivity surveys since the summer of 2018.

Dated this 16th day of January, 2021

Allegra Webb

Appendix 1 – Placer Claim Status, Earth & Iron Inc. and affiliates, Upper Duncan Creek Property

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 514765	Active	Gray 1	Gray	1	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514766	Active	Gray 2	Gray	2	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514767	Active	Gray 3	Gray	3	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514768	Active	Gray 4	Gray	4	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514769	Active	Gray 5	Gray	5	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514770	Active	Gray 6	Gray	6	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514771	Active	Gray 7	Gray	7	Earth & Iron Inc. - 100%	22/04/2016	22/04/2016	30/11/2021
P 514748	Active	Izzie 1	Izzie	1	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514749	Active	Izzie 2	Izzie	2	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514750	Active	Izzie 3	Izzie	3	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514751	Active	Izzie 4	Izzie	4	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514752	Active	Izzie 5	Izzie	5	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514753	Active	Izzie 6	Izzie	6	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514754	Active	Izzie 7	Izzie	7	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514755	Active	Izzie 8	Izzie	8	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514756	Active	Izzie 9	Izzie	9	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514757	Active	Izzie 10	Izzie	10	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514758	Active	Izzie 11	Izzie	11	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514759	Active	Izzie 12	Izzie	12	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514760	Active	Izzie 13	Izzie	13	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514761	Active	Izzie 14	Izzie	14	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514762	Active	Izzie 15	Izzie	15	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 514763	Active	Izzie 16	Izzie	16	Earth & Iron Inc. - 100%	04/04/2016	05/04/2016	30/11/2021
P 513512	Active	James 1	James	1	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513513	Active	James 2	James	2	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513514	Active	James 3	James	3	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 513515	Active	James 4	James	4	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513516	Active	James 5	James	5	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513517	Active	James 6	James	6	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513518	Active	James 7	James	7	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513519	Active	James 8	James	8	Earth & Iron Inc. - 100%	10/07/2016	13/07/2016	30/11/2021
P 513520	Active	James 9	James	9	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513521	Active	James 10	James	10	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513522	Active	James 11	James	11	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513523	Active	James 12	James	12	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513524	Active	James 13	James	13	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513525	Active	James 14	James	14	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513526	Active	James 15	James	15	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513527	Active	James 16	James	16	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513528	Active	James 17	James	17	Earth & Iron Inc. - 100%	11/07/2016	13/07/2016	30/11/2021
P 513540	Active	James 18	James	18	Earth & Iron Inc. - 100%	13/07/2016	15/07/2016	30/11/2021
P 513724	Active	James 19	James	19	Earth & Iron Inc. - 100%	11/09/2016	12/09/2016	30/11/2021
P 513728	Active	Jillian 1	Jillian	1	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513729	Active	Jillian 2	Jillian	2	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513730	Active	Jillian 3	Jillian	3	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513731	Active	Jillian 4	Jillian	4	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513732	Active	Jillian 5	Jillian	5	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513733	Active	Jillian 6	Jillian	6	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513734	Active	Jillian 7	Jillian	7	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513735	Active	Jillian 8	Jillian	8	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513736	Active	Jillian 9	Jillian	9	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513737	Active	Jillian 10	Jillian	10	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513738	Active	Jillian 11	Jillian	11	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513739	Active	Jillian 12	Jillian	12	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 513740	Active	Jillian 13	Jillian	13	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513741	Active	Jillian 14	Jillian	14	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513742	Active	Jillian 15	Jillian	15	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513743	Active	Jillian 16	Jillian	16	Earth & Iron Inc. - 100%	14/09/2016	15/09/2016	30/11/2021
P 513635	Active	Jimmy	Jimmy		Earth & Iron Inc. - 100%	11/08/2016	22/08/2016	30/11/2021
P 513541	Active	JLSJ 1	JLSJ	1	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513542	Active	JLSJ 2	JLSJ	2	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513543	Active	JLSJ 3	JLSJ	3	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513544	Active	JLSJ 4	JLSJ	4	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513545	Active	JLSJ 5	JLSJ	5	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513546	Active	JLSJ 6	JLSJ	6	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513547	Active	JLSJ 7	JLSJ	7	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513548	Active	JLSJ 8	JLSJ	8	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513549	Active	JLSJ 9	JLSJ	9	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513550	Active	JLSJ 10	JLSJ	10	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513551	Active	JLSJ 11	JLSJ	11	Earth & Iron Inc. - 100%	14/07/2016	15/07/2016	30/11/2021
P 513632	Active	L.J. 0	L.J.	0	Earth & Iron Inc. - 100%	05/08/2016	05/08/2016	30/11/2021
P 513633	Active	L.J. 2	L.J.	2	Earth & Iron Inc. - 100%	05/08/2016	05/08/2016	30/11/2021
P 524241	Active	Lew 1	Lew	1	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524242	Active	Lew 2	Lew	2	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524243	Active	Lew 3	Lew	3	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524244	Active	Lew 4	Lew	4	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524245	Active	Lew 5	Lew	5	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524246	Active	Lew 6	Lew	6	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524247	Active	Lew 7	Lew	7	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524248	Active	Lew 8	Lew	8	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524249	Active	Lew 9	Lew	9	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524250	Active	Lew 10	Lew	10	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 524251	Active	Lew 11	Lew	11	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524252	Active	Lew 12	Lew	12	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524253	Active	Lew 13	Lew	13	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524254	Active	Lew 14	Lew	14	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524255	Active	Lew 15	Lew	15	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524256	Active	Lew 16	Lew	16	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524257	Active	Lew 17	Lew	17	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524258	Active	Lew 18	Lew	18	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524259	Active	Lew 19	Lew	19	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524260	Active	Lew 20	Lew	20	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524261	Active	Lew 21	Lew	21	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 524262	Active	Lew 22	Lew	22	Earth & Iron Inc. - 100%	06/09/2017	08/09/2017	30/11/2021
P 513786	Active	Lindsay 12	Lindsay	12	Earth & Iron Inc. - 100%	05/12/2016	06/12/2016	30/11/2021
P 513787	Active	Lindsay 13	Lindsay	13	Earth & Iron Inc. - 100%	05/12/2016	06/12/2016	30/11/2021
P 513529	Active	Lindsey 1	Lindsey	1	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513530	Active	Lindsey 2	Lindsey	2	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513531	Active	Lindsey 3	Lindsey	3	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513532	Active	Lindsey 4	Lindsey	4	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513533	Active	Lindsey 5	Lindsey	5	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513534	Active	Lindsey 6	Lindsey	6	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513535	Active	Lindsey 7	Lindsey	7	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513536	Active	Lindsey 8	Lindsey	8	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513537	Active	Lindsey 9	Lindsey	9	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513538	Active	Lindsey 10	Lindsey	10	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 513539	Active	Lindsey 11	Lindsey	11	Earth & Iron Inc. - 100%	13/07/2016	13/07/2016	30/11/2021
P 514448	Active	Sam 1	Sam	1	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514449	Active	Sam 2	Sam	2	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514450	Active	Sam 3	Sam	3	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 514451	Active	Sam 4	Sam	4	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514452	Active	Sam 5	Sam	5	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514453	Active	Sam 6	Sam	6	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514454	Active	Sam 7	Sam	7	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514455	Active	Sam 8	Sam	8	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514456	Active	Sam 9	Sam	9	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514457	Active	Sam 10	Sam	10	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514458	Active	Sam 11	Sam	11	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514459	Active	Sam 12	Sam	12	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514460	Active	Sam 13	Sam	13	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514461	Active	Sam 14	Sam	14	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 514462	Active	Sam 15	Sam	15	Earth & Iron Inc. - 100%	10/07/2015	13/07/2015	30/11/2021
P 513725	Active	Sam 2 16	Sam 2	16	Earth & Iron Inc. - 100%	28/08/2016	12/09/2016	30/11/2021
P 513726	Active	Sam 2 17	Sam 2	17	Earth & Iron Inc. - 100%	28/08/2016	12/09/2016	30/11/2021
P 513727	Active	Sam 2 18	Sam 2	18	Earth & Iron Inc. - 100%	28/08/2016	12/09/2016	30/11/2021
P 513580	Active	Stuart 1	Stuart	1	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513581	Active	Stuart 2	Stuart	2	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513582	Active	Stuart 3	Stuart	3	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513583	Active	Stuart 4	Stuart	4	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513584	Active	Stuart 5	Stuart	5	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513585	Active	Stuart 6	Stuart	6	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513586	Active	Stuart 7	Stuart	7	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513587	Active	Stuart 8	Stuart	8	Earth & Iron Inc. - 100%	12/07/2016	22/07/2016	30/11/2021
P 513588	Active	Stuart 9	Stuart	9	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513589	Active	Stuart 10	Stuart	10	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513590	Active	Stuart 11	Stuart	11	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513591	Active	Stuart 12	Stuart	12	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513592	Active	Stuart 13	Stuart	13	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021

Grant Number	Tenure Status	Claim Label	Claim Name	Claim Number	Owner Name	Staking Date	Recorded Date	Expiry Date
P 513593	Active	Stuart 14	Stuart	14	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513594	Active	Stuart 15	Stuart	15	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513595	Active	Stuart 16	Stuart	16	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513596	Active	Stuart 17	Stuart	17	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513597	Active	Stuart 18	Stuart	18	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513598	Active	Stuart 19	Stuart	19	Earth & Iron Inc. - 100%	14/07/2016	22/07/2016	30/11/2021
P 513723	Active	Stuart 0 0	Stuart 0	0	Earth & Iron Inc. - 100%	11/09/2016	12/09/2016	30/11/2021

Appendix 2 – Tributaries of Upper Duncan Drill Logs

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-01**	
DATE DRILLED	08-Aug-20	**TOTAL DEPTH REACHED**	13m	**DATE PROCESSED**	08-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	4	flat and round schist gravel, brown silt	Pyrite / no gold	wet	N
3-4	5	brown silt with some schist gravel	Pyrite / no gold		N
4-5	8	small gravels with brown silt	Pyrite / no gold		N
5-6	8	grey small gravels with sand and silt	magnetite, Pyrite / no gold	wet	N
6-7	10	grey small gravels with coarse sand and silt	Pyrite / 3FC	wet	N
7-8	10	reddish brown gravel with silt	magnetite, Pyrite / 2FC		N
8-9	17	reddish brown gravel with silt	Pyrite / 3FC	wet	N
9-10	25	grey coarse sand with silt and gravel	/ 2FC		N
10-11	25	brown gravel with silt	/ 1FC		N
11-12	30	grey-brown gravel and sand	galena / 1FC		N
12-13	20	grey sandy gravel - bedrock	Pyrite / no gold		

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-02**	
DATE DRILLED	08-Aug-20	**TOTAL DEPTH REACHED**	16m	**DATE PROCESSED**	08-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	4	brown schist gravel	no gold		N
3-4	8	grey gravel and silt	no gold		N
4-5	13	grey gravel and silt (quartzite and schist)	2FC		N
5-6	10	grey gravel and silt	1FC		N
6-7	10	grey gravel and silt	no gold		N
7-8	2	brown gravel	no gold		N
8-9	18	grey silty gravel and sand	pyrite 1FC	wet	N
9-10	18	grey silty sand and gravel	no gold		N
10-11	20	grey-brown silt and gravel	pyrite no gold		N
11-12	36	grey silt with small gravel	1FC	dry	N
12-13	25	grey silt with coarse sand and small gravel	abundant pyrite no gold	dry	N
13-14	33	grey silt with coarse sand and small gravel	abundant pyrite no gold	decomposed bedrock	N
14-15	30	grey silt with rock chips and sand	abundant pyrite no gold	decomposed bedrock	N
15-16	21	grey powdery silt not much sand	abundant pyrite no gold	decomposed bedrock	Y

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-03**	
DATE DRILLED	09-Aug-20	**TOTAL DEPTH REACHED**	7m	**DATE PROCESSED**	09-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	9	Grey gravel with sand	pyrite 1FC		N
3-4	32	grey silt with some gravel	pyrite 3FC, 5VFC	wet, mixed qrzite,schist	N
4-5	19	grey powdery and silty with small gravel	pyrite 1FC	dry	N
5-6	30	grey and brown silt with some rockchips/gravel	pyrite no gold	dry	N
6-7	6	grey powder	pyrite no gold	dry, bedrock	N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-04**	
DATE DRILLED	09-Aug-20	**TOTAL DEPTH REACHED**	13m	**DATE PROCESSED**	09-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	5	brown mixed gravel	no gold	wet	N
2-3	no sample				N
3-4	no sample				N
4-5	8	brown mixed gravel and sand	no gold		N
5-6	10	dark brown gravel with coarse sand	no gold		N
6-7	10	brown mixed gravels	no gold	wet	N
7-8	18	brown mixed gravels with coarse sand	no gold	wet	N
8-9	18	dark grey silt and gravel with sand	no gold	wet	N
9-10	16	grey gravel with silt	6FC, 19VFC	wiry gold	Y
10-11	36	light grey silt with gravel	1FC		N
11-12	34	grey silt with gravel	oxidized pyrite no gold	dry bedrock	N
12-13	6	grey powdery silt	fresh pyrite no gold	dry bedrock	N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-05**	
DATE DRILLED	09-Aug-20	**TOTAL DEPTH REACHED**	12m	**DATE PROCESSED**	10-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	10	grey gravel (rounded) and silt	no gold		N
3-4	no sample				N
4-5	12	grey gravel with sand	no gold		N
5-6	18	grey gravel with coarse sand and silt	no gold		N
6-7	10	grey brown gravel and silt	no gold		N
7-8	18	grey brown gravel and silt	pyrite no gold		N
8-9	10	grey brown gravel with some silt	galena, pyrite 1FC		N
9-10	33	transition between brown gravel and black silt with	rusty pyrite 1VFC		N
10-11	18	black silt with gravel	rusty pyrite no gold		N
11-12	30	powdery grey with rock chips	rusty pyrite no gold		N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Sam 2 16		**DRILL HOLE NAME**	**UD20-06**	
DATE DRILLED	11-Aug-20	**TOTAL DEPTH REACHED**	11m	**DATE PROCESSED**	11-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	8	schist gravel with coarse sand	no gold	wet	N
3-4	8	tan grey silty shist gravel	no gold	wet	N
4-5	5	brown grey silty schist gravel	no gold	wet	N
5-6	12	grey brown gravel with silt	no gold	dry	N
6-7	14	tan grey silt with some gravel	no gold	wet	N
7-8	25	brown grey gravel with silt and coarse sand	no gold	dry	N
8-9	15	dark grey/black silty with gravel	no gold	dry	N
9-10	19	dark grey with silt gravel	pyrite no gold	dry	N
10-11	24	light powdery grey with rock chips	pyrite 3FC	bedrock	N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Stuart 0		**DRILL HOLE NAME**	**UD20-07**	
DATE DRILLED	11-Aug-20	**TOTAL DEPTH REACHED**	11m	**DATE PROCESSED**	12-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	1	brown gravel with silt	no gold		N
3-4	10	brown gravel with silt	no gold		N
4-6	6	brown gravel with silt	1FC		N
6-7	no sample			water made for bad seal	N
7-8	25	tan and black gravel (schist) with silt and sand	no gold		N
8-9	16	tan schisty gravel	no gold		N
9-10	45	grey tan schisty gravel	1FC, 1VFC		N
10-11	18	grey tan schisty gravel and sand	Abundant pyrite 2FC		N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Stuart 0		**DRILL HOLE NAME**	**UD20-08**	
DATE DRILLED	11-Aug-20	**TOTAL DEPTH REACHED**	11m	**DATE PROCESSED**	13-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	4	grey gravel and sand	pryite / no gold	wet	N
3-4	4	brown schisty gravel and sand	/ no gold	wet	N
4-5	4	brown schisty gravel and sand	/ no gold	wet	N
5-6	2	brown schisty gravel and sand	/ no gold	wet	N
6-7	4	brown schisty gravel and sand with silt	/ no gold	wet	N
7-8	15	brown schisty gravel and sand with silt	/ no gold	dry	N
8-9	10	black sandy gravel	rusty pyrite / no gold	dry	N
9-10	25	black gravel with sand and silt	abundant pyrite / no gold	pyrite and graphitic schist	N
10-11	10	black silt with gravel	abundant pyrite / no gold	graphitic schist	N

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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Izzie 14		**DRILL HOLE NAME**	**UD20-09**	
DATE DRILLED	13-Aug-20	**TOTAL DEPTH REACHED**	16m	**DATE PROCESSED**	13-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-2	5	brown gravel with sand schist	no gold	wet	N
2-3	2	brown gravel with sand schist	no gold	wet	N
3-4	4	brown schist gravel with silt	pyrite no gold	wet	N
4-5	5	brown schist gravel with silt	pyrite no gold	wet	N
5-6	5	brown schist gravel with silt	pyrite 1FC	wet	N
6-7	6	grey brown schist gravel with silt	no gold	wet	N
7-9	4	silt with gravel	no gold	wet	N
9-10	10	brown grey mixed gravels	no gold	wet	N
10-11	19	brown grey mixed gravels	no gold	dry	N
11-12	15	grey gravel with silt	pyrite 2FC, 1VFC	dry	N
12-13	18	grey gravel with silt	pyrite 1MC	wet	N
13-14	18	grey gravel with silt and sand	no gold	wet	N
14-15	3	brown silt with gravel	no gold	wet	N
15-16	4	brown silt with rock chips	1FC	wet	N


16-17m


21-22m

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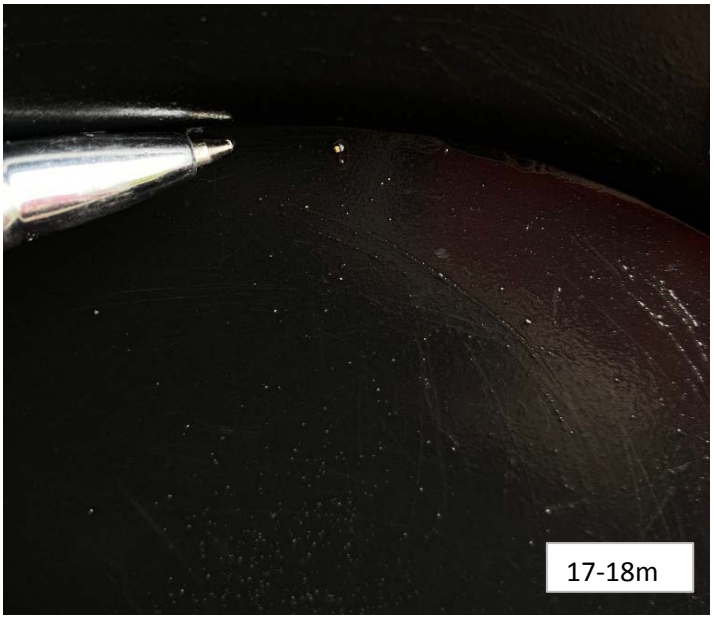
DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Izzie 14		**DRILL HOLE NAME**	**UD20-10**	
DATE DRILLED	14-Aug-20	**TOTAL DEPTH REACHED**	23m	**DATE PROCESSED**	18-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-2	16	tan grey sand with gravel	no gold	dry	N
2-3	18	tan grey sand with gravel		ran with 3-4,dry	N
3-4	18	grey sand with gravel (rounded)	pyrite no gold	dry	N
4-5	25	brown fine sand with rounded gravel	pyrite no gold	dry	N
5-6	20	grey gravel with silt		ran with 6-7, damp	N
6-7	2	grey gravel with silt	pyrite no gold	damp	N
7-8	10	brown silt with gravel	no gold	wet	N
8-9	18	grey gravel with silt and sand	no gold	dry	N
9-10	18	grey gravel with silt and sand	no gold		N
10-11	18	grey sand, gravel and silt	ferracrete no gold	wet	N
11-12	11	grey silty sand with gravel	pyrite 1FC	dry	N
12-13	20	grey silty sand with gravel	Abundant pyrite no gold	dry	N
13-14	14	silty gravel	Abundant pyrite no gold	wet	N
14-15	23	black gravel with silt	1FC	dry	N
15-16	16	black gravel with silt	ferracrete 1FC	damp	N
16-17	20	grey brown gravel, silt and sand	pyrite 1CC, 4FC, 3VFC	wet	N

17-18	30	grey brown gravel, silt and sand	pyrite 1FC, 4VFC	wet	N
18-19	20	grey brown gravel, silt and sand	 1MC, 1FC, 1VFC	wet	N
19-20	8	brown sandy gravel	not many heavys no gold	wet	N
20-21	10	brown sandy gravel with silt	no many heavys 1FC	wet	N
21-22	10	dark brown coarse sand, gravel	pyrite 1CC, 1FC	dry, bedrock	N
22-23	15	dark brown coarse sand with silt	 1FC	dry, bedrock	N



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DRILL SAMPLE PROCESSING LOG

CLAIM NAME	Izzie 14		**DRILL HOLE NAME**	**UD20-11**	
DATE DRILLED	19-Aug-20	**TOTAL DEPTH REACHED**	18	**DATE PROCESSED**	19-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-3	10	brown silty gravel with coarse sand	1CC	dry	N
3-5	20	brown silty gravel with coarse sand	no gold	dry	N
5-6	18	grey brown sand and gravel	no gold	dry	N
6-7	19	grey brown sand and gravel	no gold	dry	N
7-9	15	silty gravel and sand	no gold	wet (gravel quartz and schist)	N
9-10	8	brown silt with gravel	no gold		N
10-11	16	grey brown silt and gravel	no gold		N
11-13	19	grey brown silt and gravel	no gold		N
13-14	18	grey brown silt and gravel	no gold		N
14-15	18	grey brown silt and gravel	no gold		N
15-16	16	grey brown silt and gravel	no gold		N
16-17	5	grey brown silt and gravel	no gold		N
17-18	5	grey brown silt and gravel	pyrite no gold	bedrock not reached	N

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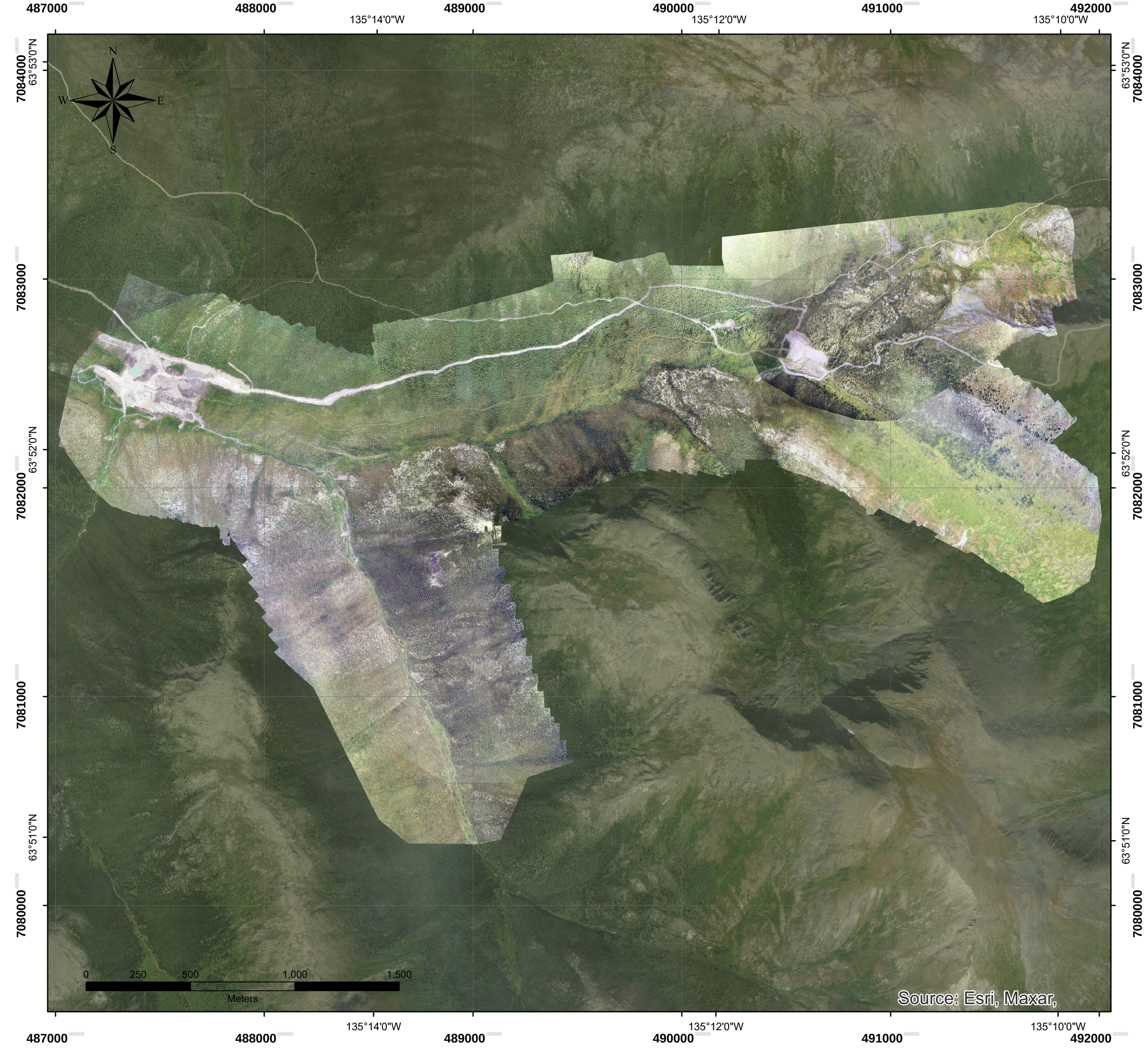
DRILL SAMPLE PROCESSING LOG

CLAIM NAME	James 17		**DRILL HOLE NAME**	**UD20-12**	
DATE DRILLED	20-Aug-20	**TOTAL DEPTH REACHED**	19m	**DATE PROCESSED**	20-Aug-20
DRILLER	Mark Bayne	**INSIDE DIAMETER OF DRILL**	115mm	**COMPLETED BY**	Geos
HELPER	Allan Dutchak	**TYPE OF DRILL**	RC	**METHOD**	LeTrap

DEPTH (m)	SAMPLE SIZE (L)	LITHOLOGY DESCRIPTION	FINAL CONCENTRATE DESCRIPTION / GOLD DESCRIPTION	COMMENTS	SAMPLE ON FILE (Y/N)
0-2	14	Black rounded silty gravel	rusty pyrite / no gold	graphitic schist and quartz	
2-3	16	Black rounded silty gravel	rusty , chunky pyrite / no gold	quartzite and graphitic unit	
3-4	18	Black rounded silty gravel	pyrite / no gold	dry	
4-5	18	grey tan silty with some gravel	pyrite, non-magnetic black sand / no gold	dry	
5-6	16	grey tan silty with some gravel	pyrite / no gold	dry	
6-7	10	brown silty gravel	/ no gold	dry	
7-8	15	grey brown silty gravel	/ no gold	light schist	
8-9	16	grey gravel with silt	/ no gold	orange quartz	
9-10	23	grey brown gravel with silt	/ no gold	wet	
10-11	19	grey brown gravel with silt	/ no gold	silvery schist wet	
11-12	16	grey brown gravel with silt	/ no gold	silvery schist dry	
12-13	28	brown -black silty sand with gravel	pyrite / no gold		
13-14	19	black silty gravel	/ no gold	graphitic schist dry	
14-15	18	black gravel with silt and sand	/ no gold	dry	

15-16	36	brown gravel silt and sand	no gold	dry	
16-17	16	brown gravel silt and sand	no gold		
17-18	10	brown gravel	no gold		
18-19	13	black silt	no gold		

Appendix 3 – Tributaries of Upper Duncan Drone Images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