ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Geological and Geochemical Assessment Report on the Ecstall Property

TOTAL COST: $103,193.74

AUTHOR(S): Paul Stewart, Kanan Sarioglu
SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5835566

YEAR OF WORK: 2020

PROPERTY NAME: Ecstall

CLAIM NAME(S) (on which work was done):

1065568, 1065561,1065567, 1070867

COMMODITIES SOUGHT: Gold, Silver, Copper, Zinc, Lead

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN: 103H 085, 103H 036, 103H 014, 103H 013, 103H 056, 103H 071, 103H 055, 103H 054, 103H 052, 103H 070, 103H 053, 103H 069, 103H 050, 103H 054, 103H 077

MINING DIVISION: Skeena
NTS / BCGS: 104H11, 104H13, 104H14
LATITUDE: 53° 51’ 2.7"
LONGITUDE: 129° 31’ 2.3" (at centre of work)
UTM Zone: 9 EASTING: 465969 NORTHING: 5967024

OWNER(S): Kingfisher Resources Ltd.

MAILING ADDRESS: 885 W Georgia St #2040, Vancouver, BC V6C 3E8

OPERATOR(S) [who paid for the work]: Kingfisher Resources Ltd.

MAILING ADDRESS: 885 W Georgia St #2040, Vancouver, BC V6C 3E8

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)
Volcanogenic Massive Sulfide, Ecstall pluton, Metavolcanic, Metasediment,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:
25862, 15491, 26168, 15756, 16600, 24605, 38410, 15488, 15328, 15014, 05510, 34128, 24368, 01804, 15306

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	5,000 m^2 1:1,000	1065567	23,602.44
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne	Interpretation report	1065568, 1065561	6,125
GEOCHEMICAL (number of samples analysed for …)			
Soil			
Silt			
Rock	77 samples for base and precious metals, whole rock.	1065567, 1070867	25,609.07
Other			
DRILLING (total metres, number of holes, size, storage location)			22,454.78
Core	27.35 m; 7 holes; BQ core	1065567	
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)	2 km^2	1065567, 1070867	9 379.7
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			

Trench (number/metres)		
Underground development (metres)		
Other		
	TOTAL COST	87,171

GEOLOGICAL and GEOCHEMICAL

ASSESSMENT REPORT

on the

ECSTALL PROPERTY

Tenure No's:

1061192, 1061193, 1061194, 1061195, 1061196, 1063430, 1063804, 1065561, 1065567, 1065568, 1065569, 1065570, 1065571, 1065572, 1065573, 1065574, 1065575, 1065576, 1065583, 1069361, 1069363, 1070111, 1070867, 1070868, 1071829, 1071830, 1072798, 1072799, 1081199, 1081200, 1081201

Skeena River Area

Skeena Mining Division

NTS: 104H11, 104H13, 104H14

Latitude: 53° 51' 2.7"N; Longitude: 129° 31' 2.3"W

UTM (NAD83 – Zone 9): 465969E, 5967024N

Owner/Operator: Kingfisher Resources Ltd. (100%)

Kingfisher
RESOURCES

Authors: P. Stewart (GIT), K. Sarioglu P.Geo

July 28, 2021

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2020 Rock Samples Whole Rock

2020 Channel Samples Assay

2020 Channel Samples Whole Rock

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LIST OF ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
Ag	Silver
ATV	All Terrain Vehicle
Au	Gold
BQ	36.5-millimeter diameter
Cu	Copper
EM	Electromagnetic
g/t	grams per ton
GPS	Global Positioning System
Ha	Hectare
ICP-ES	Inductively Coupled Plasma Emission Spectrometer
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
kg	kilogram
km	kilometer
m	meter
mm	millimetre
Ma	Million years
masl	meters above sea level
Mt	Million tonnes
OD	Outer Diameter
ppb	parts per billion
ppm	parts per million
UTM NAD83	Universal Transverse Mercator NAD83 projection
VMS	Volcanogenic Massive Sulphide
VTEM	Versatile Time-Domain Electromagnetic
XRF	X-ray fluorescence
Zn	Zinc

1.0 SUMMARY

Geological mapping, prospecting, rock sampling, backpack drilling and channel sampling were performed between August 18 and 29, 2020, by Kingfisher Resources Ltd. (Kingfisher) on the Ecstall Property (the Property). This document summarizes the 2020 work, results, and provides recommendations for further exploration on the Property.

The Property is located approximately 56 km southeast of Prince Rupert, 83 km southwest of Terrace, and 60 km west of Kitimat, British Columbia, within the Skeena Mining Division. The Ecstall Property consists of 31 mineral claims totalling 28,406 Ha and is 100% owned by Kingfisher.

The Property is situated within the Ecstall Greenstone Belt, a north-northwest trending, high-grade metamorphic belt bounded by the elongate mid-Cretaceous Ecstall pluton on the west and the Paleocene Quottoon pluton on the east. The Ecstall Greenstone Belt itself has been divided into four principal units: metavolcanic rocks, metasedimentary rocks, quartzite and layered gneiss. The Ecstall Greenstone Belt hosts 36 known sulphide mineral occurrences, the most prolific being the Ecstall VMS Deposit which is located off the Property.

Exploration work performed in 2020 focused on the Shiner Zone, which was discovered by Kingfisher in 2019. Notable 2019 grab samples from the Shiner Zone returned grades of up to 3.27% Cu, 7.45% Zn, 2.106 g/t Au and 53.2 g/t Ag.

In 2020, detailed geological mapping and whole-rock geochemistry were undertaken to understand the host rock lithology and alteration assemblages present around the Shiner Zone. Nineteen rock samples, seven BQ sized backpack drillholes totalling of 27.35 m and 22.6 m of channel samples were also collected in the vicinity of the Shiner Zone at highlight areas identified in 2019.

Geological mapping and whole rock lithogeochemistry at the Shiner Zone identified an intercalated sequence of quartz veined, altered metavolcanic and metasedimentary rocks. Most rock samples collected during the 2020 program displayed weak to moderately elevated concentrations of silver, gold, copper and zinc with maximum concentrations of 2.1 g/t, 0.326 g/t, 655.6 ppm and 1,003 ppm, respectively. Strongly anomalous silver, gold, copper and zinc concentrations were intersected in backpack drillhole ECBPD20-04 up to 7.1 g/t Ag, 0.176 g/t Au, 8,606.7 ppm Cu and 2,393 ppm Zn over 0.80 m. Moderate to strongly anomalous silver, gold, copper and zinc concentrations were identified in channel samples, with maximum values of 4.6 g/t, 0.111 g/t, 5,732.9 ppm and 2,107 ppm, respectively.

The focused exploration work performed in 2020 has further enhanced the prospectivity of the Shiner Zone. Additional 3D modelling, ground gravity, soil sampling and geological mapping is recommended to further de-risk the project before diamond drilling should commence.

2.0 INTRODUCTION

The following report has been prepared by Kingfisher Resources Ltd. and summarizes work completed on the Ecstall Property during the 2020 field season.

The 2020 exploration program consisted of 1:1,000 scale geological mapping, prospecting, rock sampling, backpack drilling and channel sampling focused near the Shiner Zone, which was discovered in 2019 by Kingfisher.

Field crews were housed in a temporary camp on the Property for the duration of the 2020 work program.

2.1 Property

The Ecstall Property is located within the Ecstall Greenstone Belt in northwest British Columbia (Figure 1). The Property is favourably located approximately 56 km southeast of Prince Rupert, 83 km southwest of Terrace, and 60 km west of Kitimat, BC (Figures 1 and 2). The Property consists of 31 mineral claims comprising 28,406 Ha (Figure 3 and Appendix C) and is 100% owned by Kingfisher Resources Ltd.

2.2 Accessibility

The Property is most readily accessed by helicopter from either Terrace, Prince Rupert, or Kitimat, British Columbia. For the 2020 field program, Yellowhead Helicopters Ltd. based in Terrace were contracted to provide helicopter support. The Kingfisher field crew mobilized to the Ecstall Property from a temporary staging area near Jesse Lake, approximately 10 km west of Kitimat. Access to the very southern end of the Property is possible via water taxi from Kitimat but due to the rough terrain, not recommended.

2.3 Physiography and Climate

The Ecstall Property lies within a coastal climate characterized by high precipitation and moderate temperatures. Winters are mild and wet with precipitation occurring mostly as rain, snowfall is generally restricted to higher elevations. Winter temperatures reach lows of about -10°C. Summer weather is variable, typically with mixed rain and cloud, and temperatures from 10°C to 25°C. Lakes are generally ice-free by early April and freeze-up typically occurs in mid-November.

Heavy forest cover is restricted to parts of main valley floors, with sparse coniferous growth on hillsides up to about 1,000 masl. Fir, hemlock, spruce, and willows dominate with lesser poplar, birch and alder. Short brush and lichen dominate above 1,000 masl.

2.4 Local Resources and Infrastructure

Historical logging roads are present at the north end of the Property, however, they have since been deactivated and are impassible by truck. The historical logging roads are suitable for walking and could be made passable for ATV with hand brushing.

The nearest infrastructure to the Property lies on the Skeena River with Provincial Highway 16 and the Canadian National Rail line being located on the north bank of the river. The nearest power lines occur approximately 10 km west of the Property at BC Hydro's Big Falls Dam.

Deep water ports are located at both Prince Rupert and Kitimat.

Figure 1: Ecstall Property location map

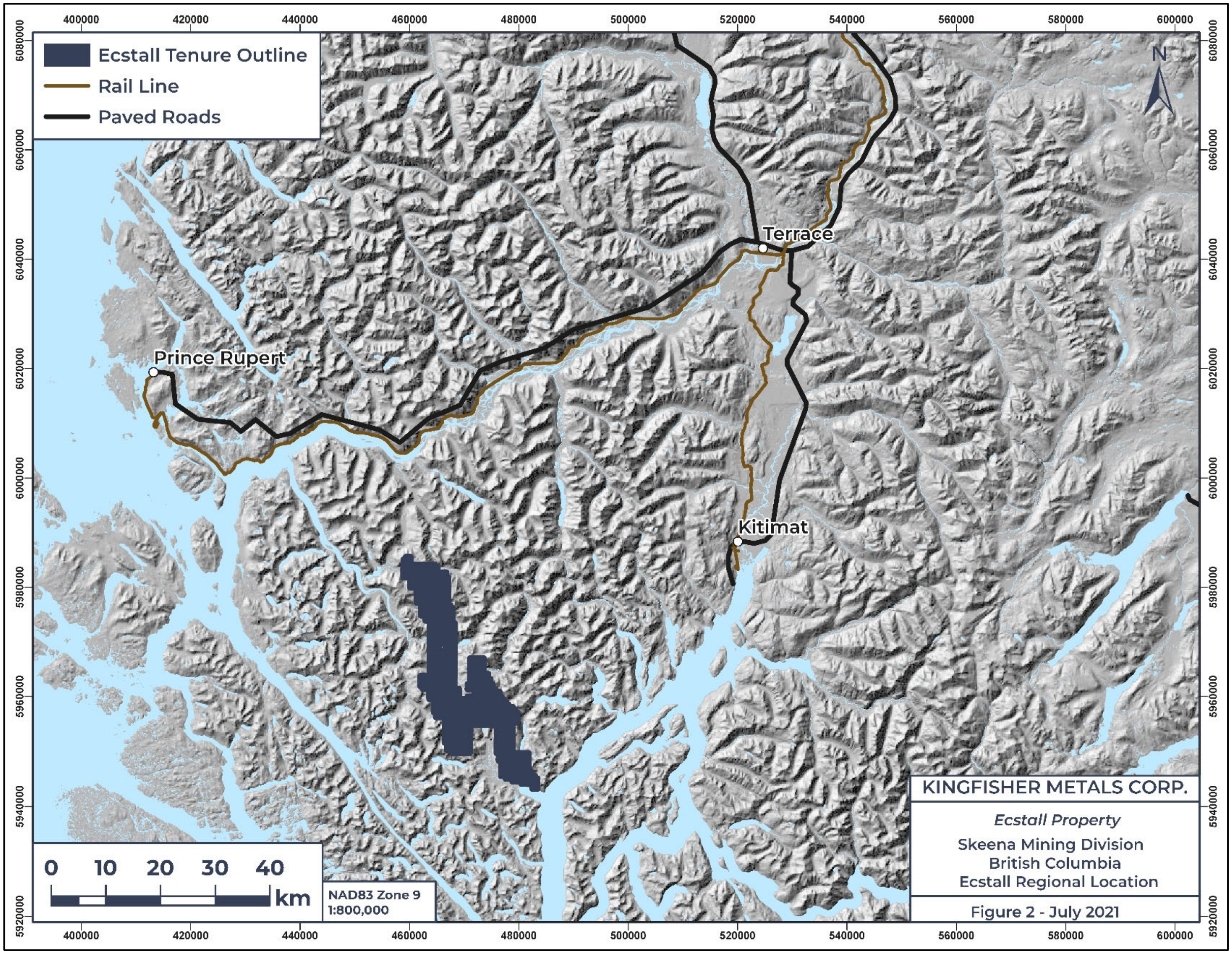

Figure 2: Ecstall Property and nearby infrastructure

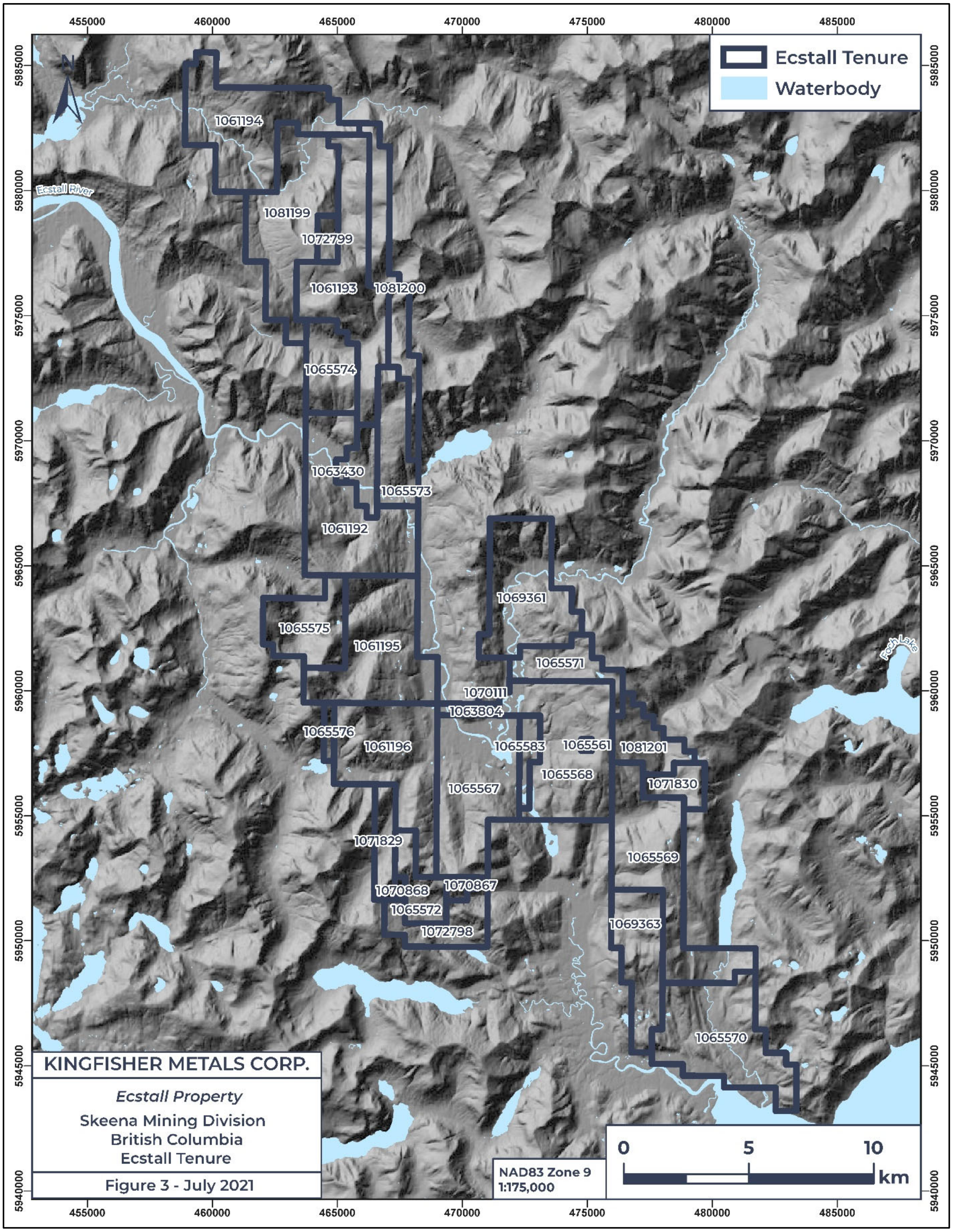

Figure 3: Ecstall Property mineral tenure

3.0 HISTORY

The first documented mineral exploration within the Ecstall Belt occurred around 1890 when the Ecstall Deposit was discovered. Granby Mines performed several exploration programs on the Property throughout the first half of the 20th century. Their work included surface and underground drilling as well as the construction of several tunnels on the Ecstall Deposit.

During the 1950's and 1960's, Texas Gulf completed extensive work on the Ecstall Deposit. They also completed regional exploration which led to the discovery of the Packsack, Scotia, and Horsefly deposits.

The Property lay dormant until 1981 when the Ecstall Joint Venture explored at a regional scale. A total of 600 stream sediment samples were taken throughout the Ecstall Belt.

From 1985 to 1988 Falconbridge and Noranda completed a significant amount of work within the Ecstall Belt including soil sampling, rock sampling, lithogeochemical sampling, airborne and ground-based EM as well as diamond drilling five (5) holes east of the Thirteen Creek Zone.

In 1994, Atna Resources completed a program on the Thirteen Creek Zone consisting of geological mapping, soil sampling, line cutting, and rock chip sampling. Their work outlined a zone of disseminated and stringer hosted copper and gold mineralization over a 150 by 2,000 m area.

In 1995, Atna Resources completed a program of geological mapping, Max-Min EM surveying and diamond drilling at the Horsefly Zone. In total eight (8) holes were drilled for a total of 1,076 m. Significant massive sulfide and disseminated base metal mineralization was intersected during these programs.

From 1998-1999 Bishop Resources worked the northern portion of the Ecstall Property. They discovered the F13 showing in addition to covering the majority of the northern portion of the Property with stream sediment samples. During this program, they identified a strong zone of copper and gold anomalism at the Marmot Zone.

In 2002, Praxis Goldfields reconnaissance prospecting and stream sediment sampling in the southwestern part of the current Ecstall tenure. One sample collected just north of the Shiner Zone assayed 3,512 ppm Zn.

In 2018, Kingfisher completed a small program of confirmation rock sampling at the 13 Creek Zone. The program served to confirm historical grades and alteration noted in historical report, add additional sample inventory to a zone of interest, and to determine future logistical possibilities.

Earlier in 2019 a phase one field program was completed by Kingfisher at the Channel Zone, Marmot Zone and Friday the 13th showing. This program consisted of rock, soil and stream sediment sampling that revealed new zones of mineralization and anomalous soil geochemistry.

A 1,501 line-km heliborne VTEM survey covering the current Ecstall tenure was undertaken just before the 2019 phase two program. This survey identified numerous conductive horizons, some of which correlate with historically known zones of mineralization.

The 2019 phase two program was focused on the Horsefly Zone and the newly discovered Shiner Zone. It consisted of 173 rock samples, 565 soil samples and 9 stream sediment sample. Select rock samples focused on the lithogeochemistry to help define alteration indices that are useful in the Ecstall Belt.

4.0 GEOLOGY

4.1 Regional Geology

The Ecstall Property lies within the Ecstall Greenstone Belt. The Ecstall Greenstone Belt is located within the southernmost section of the Yukon-Tanana Terrane (Figure 4) in British Columbia. The Ecstall Belt is part of the Central Gneiss Complex which is enclosed by younger granitoid rocks of the Coast Crystalline Belt. The following summary is adapted from Alldrick (2011), Greenwood *et al.* (1992), Woodsworth *et al.* (1992), Read *et al.* (1991) and Gareau (1991b, c):

Plutonic rocks of the Coast Plutonic Complex (CPC) make up more than 80% of the Coast Belt; the remainder is metavolcanic rocks, metasedimentary rocks and granitoid gneisses of the Central Gneiss Complex (CGC). Plutonic rocks of the CPC range in age from Late Silurian to Eocene (Woodsworth et al., 1992). In general, the oldest plutons are exposed along the western edge of the CPC and the ages of plutons young progressively to the east. Rocks range in composition from granite to gabbro, but 70% of all plutonic rocks lie within the compositional range of tonalite-quartz diorite-diorite. Among the circum-Pacific plutonic terranes, the CPC is the largest, the most mafic, and the most deficient in K-feldspar.

Metamorphic rocks of the Central Gneiss Complex range in age from Proterozoic through Paleozoic and typically occur as screens or pendants surrounded or intruded by the plutonic rocks of the CPC. Evidence of Paleozoic regional metamorphism is preserved locally (e.g., Alldrick and Gallagher, 2000; Gareau and Woodsworth, 2000), but intense mid-Mesozoic and early Tertiary metamorphism, deformation and plutonism have obscured evidence of earlier events in many places. Most metamorphic effects can be attributed to regional metamorphism, but contact metamorphism from the adjacent plutons can also create a metamorphic overprint (e.g., Gareau, 1991a).

The Prince Rupert-Terrace corridor is the most extensively studied and best understood area of the Coast Crystalline Belt (Greenwood et al., 1992; Stowell and McClelland,2000). This is also the most deeply exhumed part of the Central Gneiss Complex; metamorphic grades range up to kyanite-amphibolite, sillimanite-amphibolite and granulite facies in different parts of this area (Read et al., 1991). Within the Ecstall belt, Gareau (1991b, c) has documented a southwest to northeast progression from lower amphibolite facies to granulite facies, with most rocks falling within the kyanite-amphibolite (upper amphibolite) facies.

The mid-Devonian volcanic arc that evolved into the Ecstall Greenstone Belt likely developed in a similar setting as the extensive volcanosedimentary successions of the Yukon-Tanana terrane (Gareau and Woodsworth, 2000). The regional geologic history of the Ecstall belt is outlined in a separate report (Alldrick et al., 2001); Devonian volcanism, sedimentation and comagmatic intrusions are followed by three or four poorly-constrained phases of deformation and four well-dated plutonic episodes. The Jurassic to Eocene plutonic and metamorphic history of the Coast Crystalline Belt is consistent with a model of east-dipping subduction beneath a single, allochthonous Alexander-Wrangellia-Stikinia superterrane, emplaced against North America in Middle Jurassic time (van der Heyden, 1989).

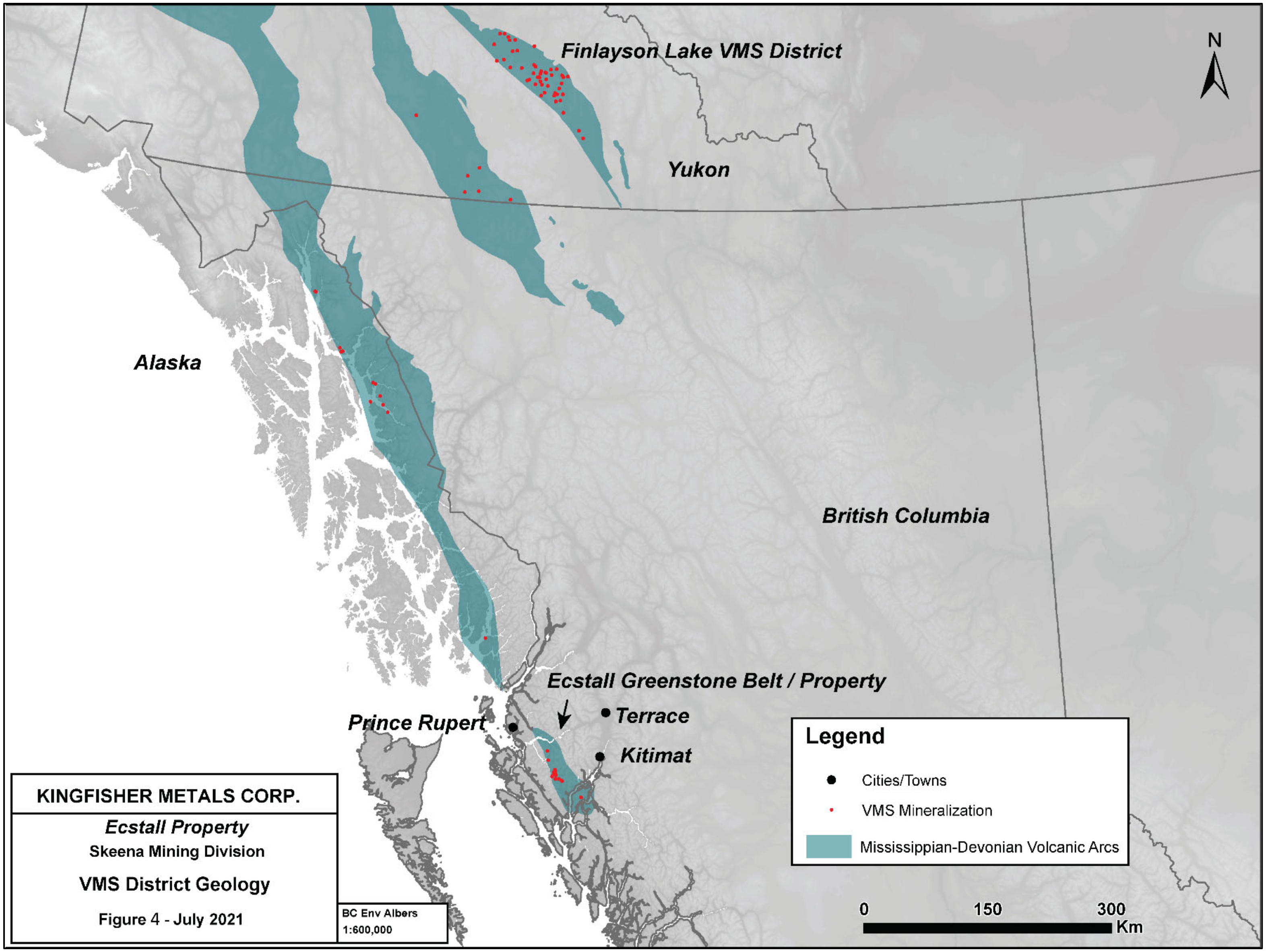

Figure 4: Location of Ecstall Property and associated VMS terranes

4.2 Property Geology

The following summary of the Property geology of the Ecstall Belt is taken from Alldrick (2001).

The Ecstall belt is a north-northwest trending, high-grade metamorphic belt bounded by the elongate mid-Cretaceous Ecstall pluton on the west and the Paleocene Quottoon pluton on the east (Map 1). Gareau (1991a) divided stratified rocks of the belt into four principal units: metavolcanic rocks, metasedimentary rocks, quartzite and layered gneiss. The metavolcanic unit consists of mafic and intermediate composition metavolcanic rocks, interlayered with lesser felsic metavolcanic and metasedimentary rocks.

Metavolcanic rocks are intruded by two large, elongate, mid-Devonian plutons called the Big Falls tonalite. Recent geochronology studies(Alldrick *et al.*, (2001) confirm Gareau's (1991a) interpretation that the main metavolcanic sequence in the belt is also of mid-Devonian age. The metavolcanic package and its coeval subvolcanic stocks are overlain by a regionally extensive package of metasedimentary rocks, consisting of a lower metapelitic unit and an upper quartzite unit. These strata are overlain in turn along the eastern margin of the Ecstall belt by mafic gneiss. The protolith for this black and white banded gneiss is interpreted as a mafic volcanic package of Late Devonian age.

The geologic history of the Ecstall Greenstone Belt is outlined in Alldrick *et al.* (2001). At least four plutonic events post-date the middle to upper Devonian stratigraphic succession. An extensive suite of small, weakly deformed diorite stocks are scattered throughout the central Ecstall belt. One stock has yielded an Early Mississippian age, which may indicate the age for all these plugs. In addition to Paleozoic intrusions, two elongate plutonic bodies of Early Jurassic age, the Johnston Lake and the Foch Lake tonalites, intrude the eastern part of the belt. The two bounding plutons, the mid-Cretaceous Ecstall on the west and the Paleocene Quottoon on the east, have associated dikes, sills and small stocks which cut the Ecstall belt rocks.

4.2.1 Stratified Rocks

The regional stratigraphic components have been well established by Gareau (1991a, b, c and 1997) and are reviewed in Gareau and Woodsworth (2000) and Alldrick *et al.*, (2001); however, the sense of stratigraphic tops is not resolved. The sense of 'tops' used in this report is based on: 1) the conspicuous absence of the extensive Big Falls tonalite intrusion within the widespread and locally adjacent stratigraphic units of metasiltstone and quartzite (e.g., Gareau, 1997) which suggests that the intrusion pre-dates the sedimentary rocks, and on 2) the abundant "granitoid" (tonalite) clasts within conglomeratic members of the metasiltstone unit (Gareau, 1991a and Gareau and Woodsworth, 2000).

Unit 1 - Metavolcanic Rocks (Big Falls Igneous Complex)

The base of the stratigraphic sequence is the metavolcanic unit which consists mafic to intermediate to felsic metavolcanic and derived metasedimentary rocks. The unit has been isoclinally folded (Gareau, 1991a, p.46), consequently apparent stratigraphic thicknesses, which range from 1 to 10 kilometres, are at least double their original value. This sequence is the largest unit defined by Gareau (1997), and extends the entire length of the belt, averaging four kilometres in thickness. Metavolcanic rocks are in gradational contact with the Big Falls tonalite and have sharp, but interlayered contacts with metasedimentary rock units. Metavolcanic rocks of the Ecstall belt host all but 3 of the 36 mineral occurrences.

The metavolcanic unit is heterogeneous. Biotite schist, hornblende-biotite schist and semi-schist comprise 70% of the unit. Interlayered with these lithologies are lenses of pyrite-quartz-sericite schist up to

100 metres thick, as well as amphibolite, quartzite, metasiltstone and calcareous muscovite-biotite schist layers. These smaller lenses may extend along strike for several kilometres.

Manojlovic and Fournier (1987) studied volcanic rock chemistry on the Scotia property. They concluded that most rocks are subalkalic, ranging in composition from basalt to rhyolite. The majority of mafic to intermediate rocks were tholeiitic, felsic rocks were dominantly calc-alkalic.

U-Pb zircon ages for a felsic metavolcanic member of this unit, for a quartz diorite sill at the Ecstall deposit, and for the Big Falls tonalite, are identical within error limits (Alldrick *et al.*, this volume). These contemporaneous rocks are components of a Middle Devonian age intrusive-extrusive complex consisting of a suite ofsubvolcanic, synvolcanic stocks and sills; coeval,comagmatic volcanic rocks; and associated sedimentary rocks. These comagmatic rocks and their locally derived, intercalated sedimentary rocks are informally referred to as the Big Falls Igneous Complex to denote the rocks most important for the formation and preservation of volcanogenic massive sulphide deposits within the belt.

Unit 1a - Mafic Metavolcanic Rocks

Mafic metavolcanic rocks are preserved as strongly deformed pillow lavas and fragmental basalts, and as intensely foliated mafic schists or amphibolites. Subtle fragmental textures are preserved in some amphibolite outcrops. Hornblende-biotite schist is a black to greenish black recessive rock that is fissile and commonly highly weathered. It is the thickest of the metavolcanic units, averaging several hundred meters in thickness, and displays gradational boundaries with surrounding metavolcanic and metasedimentary lithologies. Also present within the mafic metavolcanics are lenses of resistant, homogeneous, black to rusty-coloured, garnet-hornblende amphibolite interlayered on a 5 to 20 metre scale.

Compositional layering is typically non-existent, or is very weak and defined by discontinuous millimetre-thick laminae. The rock contains more than 50% medium-grained biotite and 10% to 20% hornblende. Granular, fine to medium-grained plagioclase comprises up to 20% of the rock and is typically polygonal. Disseminated pyrite locally constitutes up to 5% of the rock and accessory skeletal garnet porphyroclasts are preserved. Euhedral titanite, that makes up to 10% of some thin sections, is a common mineral associated with sulphide grains. Titanite occurs as well-defined layers, as radial masses cored by pyrite, or as interstitial clusters or individual grains. Epidote-hornblende knots or pods are common within this unit; when present these knots make up 5% to 15% of the rock. The schist locally displays discontinuous, orange, medium-grained, calcareous lenses that are highly recessive.

The abundance of hornblende and biotite and the lack of quartz are consistent with a mafic volcanic protolith. The lithologic heterogeneity observed in the unit suggests a highly dynamic depositional environment. Discontinuous carbonate lenses appear to be primary and are indicative of a subaqueous environment.

Unit 1b - Intermediate Metavolcanic Rocks

Gareau (1991a) concluded that hornblende-diopside-biotite-quartz-plagioclase semi-schist is the dominant lithology in the northern part of the Ecstall belt. Semi-schist is fine to medium-grained, granular, well indurated and weathers dark grey to black. Thisquartz-plagioclase rock has medium-grained biotite partings spaced 1 to 5 centimetres apart. Plagioclase and diopside microlithons have 5% to 10% interstitial biotite. Titanite occurs as euhedral interstitial grains making up less than 2% of the rock. Fine to medium-grained prismatic hornblende, ranging from 5% to 10% by volume, is concentrated along biotite parting surfaces.

The presence of biotite semi-schist members within the mafic metavolcanic schists marks a decrease in mafic minerals, and an increase in quartz from near zero to 10% to 20%. This mineral assemblage suggests that the protolith was a metamorphosed intermediate volcanic rock, or a volcaniclastic sedimentary rock.

Unit 1c - Felsic Metavolcanic Rocks

These heterogeneous units are composed of pyritic quartz-sericite (muscovite) schist interlayered with 10 to 20 metre thick bands of muscovite-bearing quartzite and hornblende-biotite schist. Local thin units (1 to 5 metres) of thinly laminated (1 to 2 centimetres) quartz-rich rock that grades into the quartz-sericite schist are likely metamorphosed chert. Contacts with adjacent lithologies are typically sharp but may be gradational over half a metre to a metre.

Quartz-muscovite schist is a medium to coarse grained rock with significant sulphides, containing on average 5% to 15% pyrite. These rocks also locally display relict clastic or fragmental volcanic textures. Primary compositional layering, on a 1 to 10 centimetre scale, is defined by alternating quartz and phyllosilicate layers. Pyrite seams or layers, up to 4 millimetres thick, are concordant with compositional layering and characterize the lithology. Subhedral garnet, with an average diameter of 5 millimetres, is commonly associated with the sulphides, as is biotite. Chlorite can be seen in hand sample surrounding the garnet porphyroblasts. Quartz-rich metasediments associated with the felsic metavolcanic rocks are similar in composition to quartzites described below in Unit 2.

Pyritic quartz-sericite schists are interpreted as metamorphosed felsic volcanic flows, tuf fs and fragmental rocks associated with subaqueous extrusion.

Unit 1d - Intercalated Metasedimentary Rocks

Minor metasedimentary members within the metavolcanic unit include metapelites, metasiltstones, granitoid-clast conglomerates, and rare chert or metaquartzite. South of Big Falls Creek, quartzite is interlayered with lenses of fine to very fine-grained garnet-biotite-quartz schist. The gradational contact be-tween the quartzite and schist is marked by quartz-rich rock with partings of medium-grained biotite and rare subhedral garnets ranging from 0.3 to 1.0 centimetres in diameter.

Unit 2 - Metasedimentary Rocks

The Big Falls igneous complex is overlain by a regionally extensive package of metasedimentary rocks, consisting of a lower metasiltstone (metapelitic) unit and an upper quartzite unit.

Unit 2a - Metasiltstone

The volcanic succession is overlain regionally by a metasiltstone unit of medium to dark grey to black metapelite to metasiltstone to metaquartzite that is locally pyritic. This is the "metasedimentary unit" of Gareau (1991a) and the "metaclastic unit" of Gareau and Woodsworth (2000, p.27). The hornblende-biotite-quartz-feldspar-epidote rock has a mafic mineral content ranging from 20% to 70% (Gareau, 1991a). Rare intervals with fine disseminated magnetite grains have been noted. The thickness of this unit ranges from 10 metres near the Packsack deposit to over 5 kilometres along Douglas Channel; much of this increase is due to structural thickening near the axis of a regional scale fold in the Douglas Channel-Hawkesbury Island area. Gareau (1991a, p.10-13) describes contacts between the metasiltstone unit and the metavolcanics ranging from gradational to sharp.

This unit is significant in the regional stratigraphic construction because no dikes, sills or stocks correlated with the Big Falls magmatic complex have been identified within it, although younger intrusive rocks are common within this unit. Also, this unit includes repeated, extensive, granitoid clast conglomerate members (Gareau, 1991a). Clasts average 10 centimetres in diameter and typically make up 10% of the rock. Gareau (1991a) reports an exposure of conglomerate on the ridgecrest north of Johnston

Lake that is 300 metres thick. Mafic mineral content of the granitoid clasts ranges from 20% to 70%, and K-feldspar is absent, indicating a tonalite composition.

Unit 2b - Quartzite

The black metapelite unit is overlain regionally by an extensive unit of quartzite (metasandstone). This white to light grey, well-laminated rock resembles thin-bedded sandstone, but the thin micaceous partings, rhythmic spaced at 5 to 10 centimetre intervals, are interpreted as a metamorphic effect. Minor associated lithologies include dark grey to black metapelite, black phyllite, dark grey metasiltstone and rare marble. Thickness of this unit ranges from 600 metres near Gareau Lake to more than 7 kilometres around the upper Ecstall River where the unit has been structurally thickened.

Gareau (1991a) describes the contact between this unit and the underlying metasiltstone unit as gradational over a 20 to 100 metre interval. Along the eastern margin of the Ecstall belt, the unit is in contact with a black and white layered gneiss. Gareau (1991a) describes the contact between these units as sharp to gradational over an interval of 500 metres.

Like the subjacent metasiltstone unit, this quartzite unit is an important component in the regional stratigraphic construction because no dikes, sills or stocks correlated with the Big Falls magmatic complex have been identified within it.

The quartzite unit consists predominantly of muscovite-bearing quartzite, but also includes minor units of metasiltsone. Quartzite contains greater than 95% quartz and is very well indurated, resistant, homogeneous, light to medium grey, and fine to very fine grained. The rock typically weathers light grey, but is rusty red when pyrite is present. The map unit is described as a:

"white to grey, locally pyritic quartzite, interlayered with lesser amounts of biotite-hornblende gneiss, fissile mica schist, black phyllite to meta-argillite, semi-pelite to pelite and marble. The unit locally contains lenses of matrix-supported conglomerate composed of stretched metatonalite and other granitoid cobbles with an aspect ratio of 10:2:1 or more. Finely laminated compositional layering is defined by light grey quartz-rich layers alternating with dark grey to black layers of quartz, biotite and graphite(?). Pyrite commonly occurs along partings as disseminations or semi-continuous laminae, not exceeding 5% of the rock." (Gareau, 1991a)

The quartzite is a granoblastic rock; biotite is present in thin layers or partings less than 1 millimetre thick, or as minor interstitial grains. Accessory minerals are plagioclase, zoisite, cummingtonite, muscovite and carbonate. Gareau (1991a) concluded that these potassium and calcium-rich accessory minerals are consistent with a protolith of quartz arenite rather than chert.

Unit 3 – Layered Gneiss

Gareau (1991a, b, c and 1997) defined a major stratigraphic unit of layered gneiss along the eastern edge of the Ecstall belt, lying between the regionally extensive quartzites (map unit 2b) and the Quottoon pluton (map unit E). The metamorphic grade here is higher than the rest of the belt and lies within the upper amphibolite to granulite range (Gareau, 1991a).

The layered gneiss is interpreted as a metavolcanic rock (Gareau, 1991a). The protolith to this gneiss might be a repeated fold limb of the metavolcanic sequence of the Big Fall igneous complex (map unit 1), or a different, younger mafic volcanic rock unit. Gareau and Woodsworth (2000) report a ~370 Ma U-Pb zircon age for this rock, which confirms that this unit is a younger volcanic package which stratigraphically overlies the quartzite unit (map unit 2b). The layered gneiss is the youngest (uppermost) stratigraphic unit preserved in the Ecstall Greenstone Belt (Alldrick *et al.*, (2001).

4.2.2 Intrusive Rocks

Five intrusive episodes are recorded in the rocks of the Ecstall belt. Two large, elongate, mid-Devonian plutons that are comagmatic with the host metavolcanic sequence and at least four plutonic suites post-date the mid to late Devonian stratigraphic succession. Small, weakly deformed diorite stocks are scattered throughout the central Ecstall belt. One stock has yielded an Early Mississippian age, which may indicate the age for all these plugs. In addition to Paleozoic intrusions, two elongate Early Jurassic plutons, the Johnston Lake and the Foch Lake tonalites, intrude the eastern part of the belt. Two bounding plutons, the mid-Cretaceous Ecstall on the west and the Paleocene Quottoon on the east, have associated dikes, sills and small stocks which cut the rocks of the Ecstall Greenstone Belt.

Unit A – Big Falls Tonalite

Gareau (1997) mapped out two large bodies of foliated tonalite, the Big Falls tonalite, which are enclosed mainly by the metavolcanic sequence of the Ecstall Greenstone Belt, and locally by the overlying metasiltstone unit. A sample from the eastern lens of this rock produced a U-Pb zircon age of 385 Ma, leading Gareau (1991a, b) to conclude that the tonalite bodies are coeval, synvolcanic, subvolcanic intrusions that fed the overlying volcanic pile. Recent global research into the geologic setting of VMS deposits has stressed the importance of subvolcanic plutons of tonalite/trondhjemite composition as the heat source which concentrates VMS deposits at the overlying paleosurface (Galley, 1996; Large *et al.*, 1996).

The Big Falls Tonalite is a Middle Devonian (385 Ma; Gareau, 1991a), foliated, medium to coarse-grained epidote-biotite-hornblende tonalite that crops out as two separate elongate plutons. The plutons have a maximum structural thickness of 3.5 kilometres. This homogeneous, resistant, light grey rock is in gradational contact with the surrounding metavolcanic unit. This contact zone is several hundred metres wide and characterized by decreasing grain size and increasing biotite content outward from the tonalite (Gareau, 1991a).

Textural variations range from weakly foliated to porphyroclastic to mylonitic. Gareau (1991a) reports gneissic zones tens of metres thick with 5 to 10 centimetre bands of alternating quartz-plagioclase and biotite-hornblende layers. Porphyroclastic tonalite consists of 0.5 to 1 centimetre diameter plagioclase porphyroclasts in a medium grey, fine to medium-grained matrix consisting of biotite, hornblende, quartz and plagioclase. Minor epidote pods and layers are common. Up to 2% garnet is locally present. A 20-metre-thick mylonite zone crops out south of Big Falls Creek. Within this zone, millimetre-scale plagioclase porphyroclasts are set in a very fine-grained matrix.

The composition, homogeneity, and presence of clear, colourless, euhedral zircons led Gareau (1991a) to conclude that this is an intrusive rock. The gradational contacts, showing a progressive variation from medium to fine grain size, were interpreted as evidence of a large coeval subvolcanic pluton which fed the surrounding and overlying volcanic pile.

Childe (1997) analysed a sample of foliated quartz diorite sill that crops out just to the west of the North Lens of the Ecstall massive sulphide deposit (Alldrick *et al.*, (2001), and Schmidt, 1995). The U-Pb zircon age of 377 Ma provides a Late Devonian minimum age for the nearby, syngenetic sulphide deposit, and indicates that this sill is comagmatic with the two stocks of Big Falls tonalite.

Unit B - The Central Diorite Suite

An extensive suite of small, weakly deformed diorite stocks are scattered throughout the central Ecstall belt (Holyk *et al.*, 1958; Gareau, 1991c, 1997). One stock has yielded an Early Mississippian age, which may indicate the age for all these plugs. Gareau (1991a) describes a series of mafic and ultramafic stocks intruded through the central Ecstall belt, to which she ascribes a Jurassic or Cretaceous age. These rocks crop out in three main areas: as two stocks on Allaire Ridge, 10 kilometres south-southwest of Johnston Lake; as six small stocks scattered along Prospect Ridge, immediately west and uphill of the Packsack VMS deposit; and as a small body mapped on the peak of Red Gulch Mountain, 2.7 kilometres north-northeast of the Ecstall VMS deposit. These mafic rocks are dominantly diorite, but range in composition from quartz diorite to diorite to gabbro to hornblendite. The age of intrusion of all these rocks is unknown, although they must be younger that the quartzite host rock with a probable Late Devonian depositional age and older than the Early Cretaceous metamorphism. It is possible that these scattered clusters of weakly foliated mafic to ultramafic stocks are all comagmatic with the weakly foliated Gareau Lake diorite stock, described below, in which case they would have a mid-Mississippian age in the range of 337 Ma.

Unit B-1 - Gareau Lake Stock

Gareau (1991a, p.173-175) describes a small (<100 metres diameter) weakly foliated quartz diorite stock that intrudes the layered gneiss (map unit 3) on a ridgecrest 2 kilometres southeast of Gareau Lake. The rock is composed of 75% plagioclase, 10% quartz, 5% biotite and 3% hornblende with accessory titanite, apatite, zircon and opaque minerals. The U-Pb zircon age for this rock is 337 Ma (Gareau, 1991a). This date is consistent with intrusion into the 370 Ma layered gneiss host rock and indicates a mid-Mississippian magmatic episode of quartz diorite to diorite composition.

Unit B-2 - Allaire Ridge Mafic Complex

A large, irregular, mafic complex (JKum) is outlined on Gareau's map (1997) along the north-trendingridgecrest at the head of Allaire Creek, 5 kilometres to 9 kilometres south of the Ecstall deposit. Detailed mapping this season shows that this intrusion consists of two separate, but adjacent stocks that intrude metasedimentary rocks in the south and metavolcanic rocks in the north. The intrusive rock is resistant and underlies three prominent peaks along the ridgecrests. Two main phases are mapped: medium to coarse-grained diorite and coarse-grained hornblendite. At the 1242-metre peak at the northern edge of the northern stock, coarse-grained diorite is intruded in turn by tonalite of the Ecstall batholith, forming extensive intrusion breccias.

Diorite is medium to coarse-grained, and only weakly foliated. Massive hornblendite (hornblende gabbro) intrudes metasiltstone and quartzite. The fresh rock is black and weathers rusty brown. Hornblendite is medium- to coarse-grained, with hornblende (var. pargasite) crystals ranging up to 1.4 centimetres diameter. Metasediments within 1 to 2 metres of the intrusive contact are buckled, and screens of quartzite are incorporated near the margin of the intrusion. This intrusive phase was mapped across a 100 metre wide exposure along the ridgecrest, where it forms a prominent resistant spire. Gareau sampled this coarse-grained hornblendite for a K-Ar analysis, and interpreted the 115 Ma K-Ar age as a thermally reset date due to early to mid-Cretaceous regional metamorphism.

Unit B-3 - Prospect Ridge Diorite

West and uphill from the Packsack prospect, six small diorite stocks have been mapped along the crest and flanks of Prospect Ridge by Padgham (1958), Holyk *et al.* (1958), Delancey and Newell (1973), Maxwell and Bradish (1987b), Payne (1990c) and Gareau (1991c and 1997).

Unit B-4 - Red Gulch Mountain Diorite

Holyk *et al.* (1958) and Gareau (1997) show a small hornblende diorite stock at the peak of Red Gulch Moun- tain, 2.7 kilometres north-northeast of the North Lens of the Ecstall deposit. This resistant igneous rock underlies the prominent peak.

Unit C - Foch Lake Stock and Johnston Lake Stock

Gareau (1991a) identified two large, elongate Early Jurassic age intrusions emplaced along the eastern margin of the Ecstall belt. These plutons are both weakly to strongly foliated tonalite, but one is medium-grained and equigranular while the other is plagioclase megacrystic. The northern, equigranular Johnston Lake pluton yielded U-Pb zircon ages of 193 Ma and 190 Ma (Gareau, 1991a). The southern, coarsely porphyritic, Foch Lake stock yielded a U-Pb zircon age of 192 Ma (Gareau, 1991a). These plutons suggest that the Ecstall belt strata were associated with Stikine Terrane before the Early Jurassic time (Gareau and Woodsworth, 2000, p.39-40).

Unit D - Ecstall Pluton

The Ecstall pluton is the largest of a series of magmatic-epidote-bearing plutons (Zen and Hammarstrom, 1984; Zen, 1985) in the western Cordillera called the Ecstall Suite (Woodsworth *et al.*, 1992, p.518-519). Regionally, the Ecstall suite includes diorite, tonalite and granodiorite phases (Gareau, 1991a). Along the western margin of the map area (Figure 3), the early Late Cretaceous Ecstall pluton is biotite-hornblende diorite to quartz diorite to tonalite. Age determinations span 98 Ma to 64 Ma, with the six most recent analyses averaging 93.5 Ma (unpublished data from van der Heyden, 1991, cited in Gareau, 1991a, p.161-164).

The rock is massive to moderately foliated, medium to coarse-grained, and weathers to a black and white, granular-textured surface. Foliation is defined by preferentially oriented biotite and hornblende. The rock is commonly equigranular, but locally displays plagioclase porphyroclasts. Hornblende-biotite-epidote tonalite ranges from light to medium grey on fresh surfaces. Grain size typically ranges from medium to coarse-grained equigranular, but local very coarse-grained phases were noted. Foliation is generally more intense near the pluton margins. Primary layering (flow-banding or cumulate layering) was noted in one location. The pluton is highly sheared in places; mylonitic and pyritic shear zones were mapped this season. Cobble to boulder size mafic xenoliths are locally abundant. Screens of metasedimentary rock up to 40 metres wide are typically incorporated near the margins.

A distinctive feature of the Ecstall pluton is the presence of magmatic epidote, which increases in abundance from the margins to the centre of the intrusion. Within 200 metres of the contact, no epidote is apparent; epidote becomes progressively more abundant moving into the pluton, appearing first in fractures, then as fine interstitial grains, finally as equigranular coarse grains making up to 5% of the rock volume. Prominent crystals and aggregates of magmatic epidote comprise 5% of the rock and are associated with knots of biotite. Dark grey to black mafic schlieren are common and parallel the foliation within the rock. Medium-grained, euhedral, transparent titanite is also present. Contacts are sharp and discordant to the foliation. The eastern contact of the pluton is also discordant to the regional trend of map units. No chilled margin or contact metamorphic aureole was noted.

Along the southwest edge of the Ecstall Greenstone Belt, a porphyritic phase of the Ecstall pluton, crops out as a satellite pluton, roughly 1 kilometre in diameter, and consists of dark grey massive diorite(?) with an aphanitic groundmass and feldspar phenocrysts 3 to 4 millimetres across. Swarms of narrow pegmatite dikes concentrated along the western margin of the Ecstall belt are also likely components of the Ecstall magmatic episode.

Unit E – Quottoon Pluton

The Quottoon pluton intrudes along the eastern margin of the Ecstall Greenstone Belt. It is a long narrow body that extends north through southeastern Alaska, where it is called the “foliated tonalite sill” (Brew and Ford, 1978; Gehrels *et al.*, 1991a). The Quottoon Pluton is a medium to coarse-grained hornblende quartz diorite to tonalite and is intensely foliated close to its contact with the gneissic rocks of the Ecstall belt. Age determinations from this extensive pluton span Late Cretaceous (80 Ma) to mid-Eocene (43 Ma) time (van der Heyden, 1989, p.158-160), with Gareau's (1991a,p.184-185) age of 57 Ma determined for a sample site closest to the present study area. This pluton is the focus of ongoing studies by the Keck Geology Consortium.

Gareau (1991a, p.182-184) reported a U-Pb zircon age of 59 Ma for an unfoliated pegmatite dike near the eastern edge of the belt, which indicates that the extensive swarm of pegmatite dikes that intrudes the eastern margin of the Ecstall belt is a component of the Quottoon magmatic episode.

4.2.3 Structure

The stratigraphic sequence has been isoclinally folded (Gareau, 1991a). Strata are exposed as a mirror-image sequence along the two margins of the belt (Gareau, 1997), although the layered gneiss (map unit 3) is missing along the western limb of the fold. The two plutons of Big Falls tonalite are likely repetitions of the same subvolcanic pluton duplicated by folding.

Rocks of the central Ecstall belt are highly deformed and characterized by north-striking, steeply dipping to vertical foliation defined by near-parallel compositional layering and cleavage. Detailed analyses of the structure of this belt are presented in Gareau (1991a) and Alldrick and Gallagher (2000). Coaxial, map-scale, upright, F_1 and F_2 isoclinal folds and upright to inclined F_3 open folds are identified (Alldrick and Gallagher, 2000). Mineral lineations and stretching lineations are steeply northwest to southeast plunging. The relative timing of thermal and dynamic metamorphic events deduced from analysis of textures, mineralogy and cross-cutting plutons are illustrated and discussed in Alldrick *et al*., (2001).

4.2.4 Metamorphism

Two metamorphic episodes have been documented; a peak regional prograde metamorphic event (M_1) and a much later regional retrograde metamorphic event (M_2). Gareau (1991a) demonstrated that peak metamorphic grades varied from lower amphibolite facies in the south-west part of the belt to granulite facies in the northeast part of the belt. In the central part of the Ecstall Belt, biotite, muscovite, garnet and kyanite are consistent with upper amphibolite facies metamorphism. No gneiss units were noted in the central part of the Ecstall belt, in sharp contrast to extensive gneiss units mapped further to the north (Alldrick and Gallagher, 2000) and the layered gneiss (map unit 3) mapped to the east (Gareau, 1997). Rocks are generally moderately to highly deformed, but local areas of relatively undeformed rocks are preserved. A 400-metre-long unit of pillow lava and adjacent pillow breccia were mapped south of Thirteen Creek cirque; Hassard *et al.* (1987b) report a similar exposure of pillow lava in the canyon of Red Gulch Creek, 1050 metres upstream from the north end of the North Lens, and Schmidt (1996a) reports graded beds, accretionary lapilli and bomb sags in outcrops near the Steelhead prospect.

Gareau (1991a) attributed a series of mid-Cretaceous K-Ar dates on hornblende from metavolcanic rocks, and metasedimentary rocks to thermal resetting by an early to mid-Cretaceous regional-scale metamorphic event. Still younger thermal resetting of the westernmost and easternmost samples in the transect were caused by the thermal envelopes of the Ecstall (94 Ma) and Quottoon (57 Ma) plutons respectively. A Paleocene metamorphic event is attributed to emplacement of the Quottoon pluton, which created metamorphic zircons and titanites. The metamorphic ages coincide well with U-Pb zircon ages of 57 Ma and 61 Ma that Gareau (1991a) obtained from samples of the Quottoon pluton and a related dike.

5.0 MINERALIZATION

5.1 Friday 13th (103H 077)

The Friday 13th showing was discovered on Friday August 13th, 1999, during a regional stream sediment sampling program by Bishop Resources. The showing occurs as a 130 m wide band of silicified rhyolites interbedded with chloritic gneiss. The showing contains several zones of massive pyrite up to one meter in width. Within the zone, historical sampling has returned values as high as 0.38% Cu.

5.2 Marmot

The Marmot Zone occurs along strike approximately 6 km to the north from the Ecstall Deposit. Two sub-vertical quartz-sericite-schist units outcrop in very steep terrain. There is no record of rock sampling on the target area although stream sediment samples indicate a favourable environment for VMS mineralization. One stream within the target area contains historical anomalous values up to 287 ppm Cu and 405 ppb Au.

5.3 Mark

The Mark showing occurs west of the Marmot Zone. Mineralization consists of quartz-sericite-schists with disseminated chalcopyrite and pyrite. The best historical rock sample from this zone returned 0.14% Cu.

5.4 Ecstall (103H 011)

The Ecstall VMS Deposit occurs within Red Gulch Creek just above where it enters the Ecstall River. The deposit is hosted in chloritic schists and quartz-sericite-pyrite schists. Three separate massive sulfide lenses are present, the North and South Lens of the Ecstall Deposit as well as the Third Outcrop Lens.

The Ecstall deposit has seen 8,265 m of drilling in 98 holes resulting in an unclassified historical resource of 6.87 Mt at an average grade of 0.65% Cu, 2.45% Zn, 17 g/t Ag, and 0.5 g/t Au. The Ecstall Deposit is not within the Property.

5.5 Thirteen Creek (103H 54, 103H 53, 103H 69)

The Thirteen Creek Zone comprises the Phoebe, Elaine, and Thirteen Creek showings. The zone comprises a quartz-sericite±kyanite schist unit ranging from 50-130 m wide. Mineralization is widespread along the strike of the unit with values up to 8.05% Cu and 2.4 g/t Au.

Mineralization occurs as disseminated and stringer hosted chalcopyrite. Alteration within the zone includes silicification, sericite, and chlorite. Geochemical results from the zone include widespread Cu, Au, Ag, Zn, Pb, Ba soil anomalies, some of the strongest Cu and Au stream sediment anomalies within the Ecstall Belt, and widespread Cu and Au mineralization in outcrop. Historical sampling by Atna Resources (1994) includes channel samples of 0.2% Cu over 124 m and 0.65% Cu over 7.5 m

5.6 Horsefly (103H 14, 103H 36)

The Horsefly showing comprises the Horsefly and Steelhead Minfile showings. These showings comprise several quartz-sericite-schist units that contain abundant disseminated pyrite mineralization. Additionally, narrow massive sulfides occur in outcrop in several creeks as well as in drill intercepts.

5.7 Strike

The Strike showing is located at the south end of the Property. The showing has received limited exploration; however, historical work has returned samples up to 0.17% Cu and 2.83% Zn.

5.8 Shiner

The Shiner showing was discovered by Kingfisher in 2019 and represents a zone of base metal enrichment hosted within a quartz-chlorite-biotite-schist. Notable grab samples from the Shiner Zone returned grades of up to 3.27% Cu, 7.45% Zn, 2.106 g/t Au and 53.2 g/t Ag.

6.0 2020 FIELD PROGRAM

During the summer of 2020, a 10-day field program, beginning on August 18th and ending on August 29th, was carried out at the Ecstall Property by Kingfisher. Work efforts were concentrated at the recently discovered Shiner Zone and consisted of detailed geological mapping, prospecting, rock sampling, backpack drilling and channel sampling. Geological mapping was carried out at 1:1,000 scale to gain a better understanding of the lithology, alteration and structures controlling the mineralization at the Shiner Zone. Prospecting, backpack drilling and channel sampling focused on the more prospective areas of the Shiner Zone identified in 2019.

The area of 2020 work is outlined in Figure 5, below. Analytical certificates and methods are provided in Appendix D. Backpack drill logs are provided in Appendix E. Geochemical sample notes are provided in Appendix F. Geology station notes are provided in Appendix G. Geophysical compilations are provided in Appendix H. Large format maps (Map 1 – 7d) displaying rock sample locations, geology stations, sample Cu, Zn, Pb, Au, Ag geochemistry are provided in a separate folio. Digital data submissions include all geochemistry (assay and whole rock), sample locations, geology and structural measurement notes, backpack drilling logs, geology shapefiles and geophysical products.

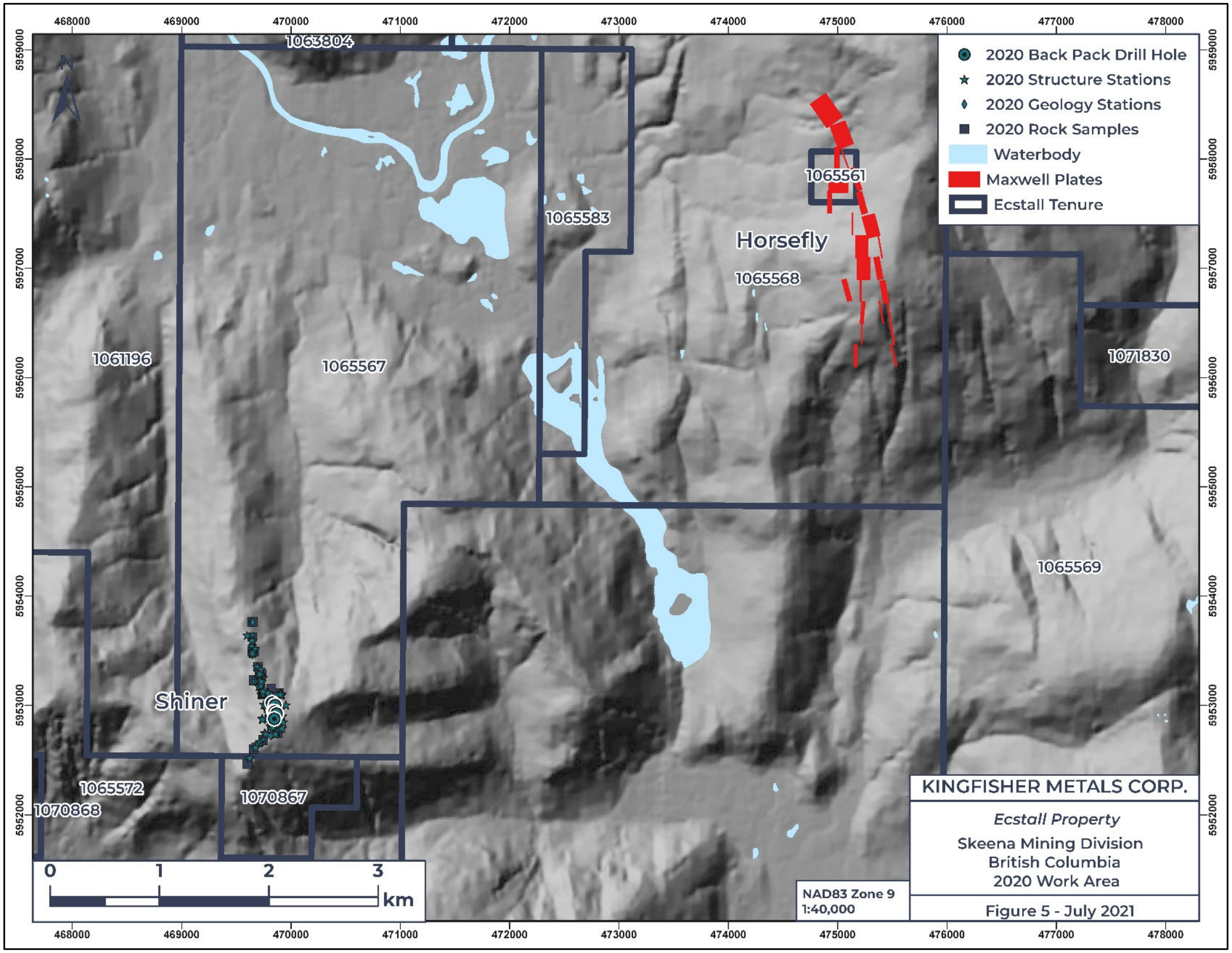

Figure 5: Location of 2020 exploration work on the Ecstall Property

6.1 Mapping

6.1.1 Mapping Methods

Mapping at the Shiner Zone was undertaken at 1:1,000 scale along four east-west oriented stratigraphic sections separated by 100 m (Maps 2 and 3). The stratigraphic sections are identified by northing: line 5953100, line 5953000, line 5952900, and line 5952800. The location of the lines was selected to focus on the principle mineralized zone and is limited by lack of outcrop to the west. Stratigraphic mapping nomenclature emphasizes interpreted protolith type as opposed to the metamorphic name. Detailed mapping of metamorphosed clast types was used to classify the lithological units.

6.1.2 Mapping Results

Results and interpretations of the 1:1,000 scale mapping around the Shiner Zone are summarized below and are presented in Map 6.

Bedding facing

The stratigraphic sections are overturned (i.e., young to the west) based on local younging indications in bedding, alteration zonation patterns and stratigraphic distributions. Sparse graded beds and cross-beds were identified that indicate westward younging. Alteration mineralogy in the east has high relative chalcopyrite:pyrite ratios and is commonly feldspar-dominant (e.g., sodic and potassic) consistent with higher relative temperature hydrothermal fluids. To the west, alteration mineralogy has low relative chalcopyrite:pyrite ratios and is sericite-dominant, consistent with relative lower temperature hydrothermal fluids. Although intermediate-mafic volcanic rocks are identified throughout the stratigraphic section, felsic fragmental material is only identified to the west of the most easterly rhyolite unit. This stratigraphic succession is also consistent with westward younging.

Structural geology

Lithological units are overprinted by a gneissic to schistose penetrative cleavage (S_1) that strikes north-south and dips steeply to the east (Figure 6a). Bedding (S_0) is transposed into this principal foliation geometry and also has a north-south strike and steep east dip (Figure 6b). The S_1 fabric can include gneissic foliation with phyllosilicate-rich and quartz-feldspar-rich bands. In some regions the S_1 fabrics is defined by elongate clasts with very high aspect rations of 1:10 to 1:20. Competent primary layers or beds are typically boudinaged along strike and can have variability in thickness between section lines. In finer-grained protolith types, the S_1 fabric is defined by a schistose foliation. In some domains the S_1 fabric is associated with shear indications defined by sigmoidal clasts. Most kinematic indicators are dextral, with some sinistral exceptions.

The main S_1 foliation is axial planar to F_1 isoclinal folds identified in laminated units. Two measured F_1 fold axes plunge moderately toward the northeast. One gentle fold is defined by folded S_1 fabric and plunges 70 toward 263 (Figure 6c).

Stratigraphic units

The stratigraphic sections are divided into two stratigraphic packages: 1) the eastern, lower package of intermediate to mafic volcanic breccias and related volcaniclastic sandstone to conglomerate; and 2) the western, upper package of rhyolite and basalt bimodal volcanic sequence and related volaniclastic siltstone and sandstone. The boundary between the upper and lower two stratigraphic successions is marked by a coherent basalt mapped on each of the four sections. Useful marker horizons for the map area include: 1) the base of the andesite breccia eastern contact, 2) the onset of rhyolite volcanism and 3) a coherent basalt in the western section. In general, stratigraphic units are thicker in the lower sequence and are thin in the upper sequence.

Lower stratigraphic sequence

Andesite to basalt units were identified in the eastern segments of all stratigraphic sections (Figure 7a, b). The thickest interval of andesite to basalt breccia measures ~120 m. Visual estimates of the abundance of mafic minerals in volcanic rocks was used to distinguish andesite (<30% mafic mineralogy) from basalt (>30% mafic mineralogy) in addition to the presence of plagioclase and absence of K-feldspar. Andesite to basalt breccia is monomictic and contains clasts in the range of 1-15 cm, which are commonly 10-40% abundant. Clast boundaries are angular with high aspect ratios parallel to main S_1 cleavage. Amphibole is the principle mafic mineral, which can range from 1 mm to 4 cm long and is most abundant in the clasts. Plagioclase typically comprises 40-80% of the rock and is white, recrystallized and is commonly more abundant in the matrix. Less common coherent andesite to basalt is fine-grained, with foliated amphibole and plagioclase. Clast alignment within the andesite to basalt breccia is subvertical within the S_1 foliation plane.

Laterally equivalent to the andesite to basalt breccia is a volcaniclastic sandstone unit, most abundant in the northern (5953100) and southern (5952800) stratigraphic sections. The unit is a foliated amphibole-feldspar-garnet schist, with notably lower mafic content than the andesite to basalt breccia. The sandstone is polymictic and can have conglomeritic lenses. Clast types include intermediate to mafic porphyritic and feldspar-rich clasts. The sedimentary rocks of the lower stratigraphic sequence lack quartz except for one anomalous unit at the base of line 5952900 with 20% quartz clasts up to 5 mm in size and mafic lenticular clasts. A dark grey coloured, foliated siltstone was also mapped on all section lines and is up to 9 m thick.

Upper stratigraphic sequence

The upper stratigraphic sequence is marked by the disappearance of the andesite to basalt breccia, and the appearance of volcaniclastic and coherent rhyolite and coherent basalt (Figure 8a, b). Sedimentary rocks in the upper sequence are characterized by bimodal componentry of both basalt and rhyolite.

Rhyolite in the map area is a white to cream coloured unit and is mapped in all western section lines ranging from 3-30 m thick intervals. Felsic volcanic rocks are predominantly volcaniclastic with lesser coherent rhyolite. Clastic intervals range from aphanitic and laminated to cm-scale, and coherent rhyolite is flowbanded, defined by recrystallized quartz and cream to pink bands.

Basalt crops out both above and below, to the east and west, of the rhyolite layers and is predominantly coherent. The unit is black in colour and can have 15% plagioclase phenocrysts ~2 mm in length in an aphanitic groundmass of mafic minerals. Basalt layers range between 2-7 m thick on the mapped section lines.

Volcaniclastic sandstone and minor siltstone are mapped in the northern three section lines within and overlying the rhyolite-basalt sequence. The volcaniclastic sandstone is composed of clasts of both rhyolite and basalt and contains abundant quartz. Volcaniclastic siltstone horizons are commonly banded cream-yellow and black, a reflection of felsic and mafic composition respectively

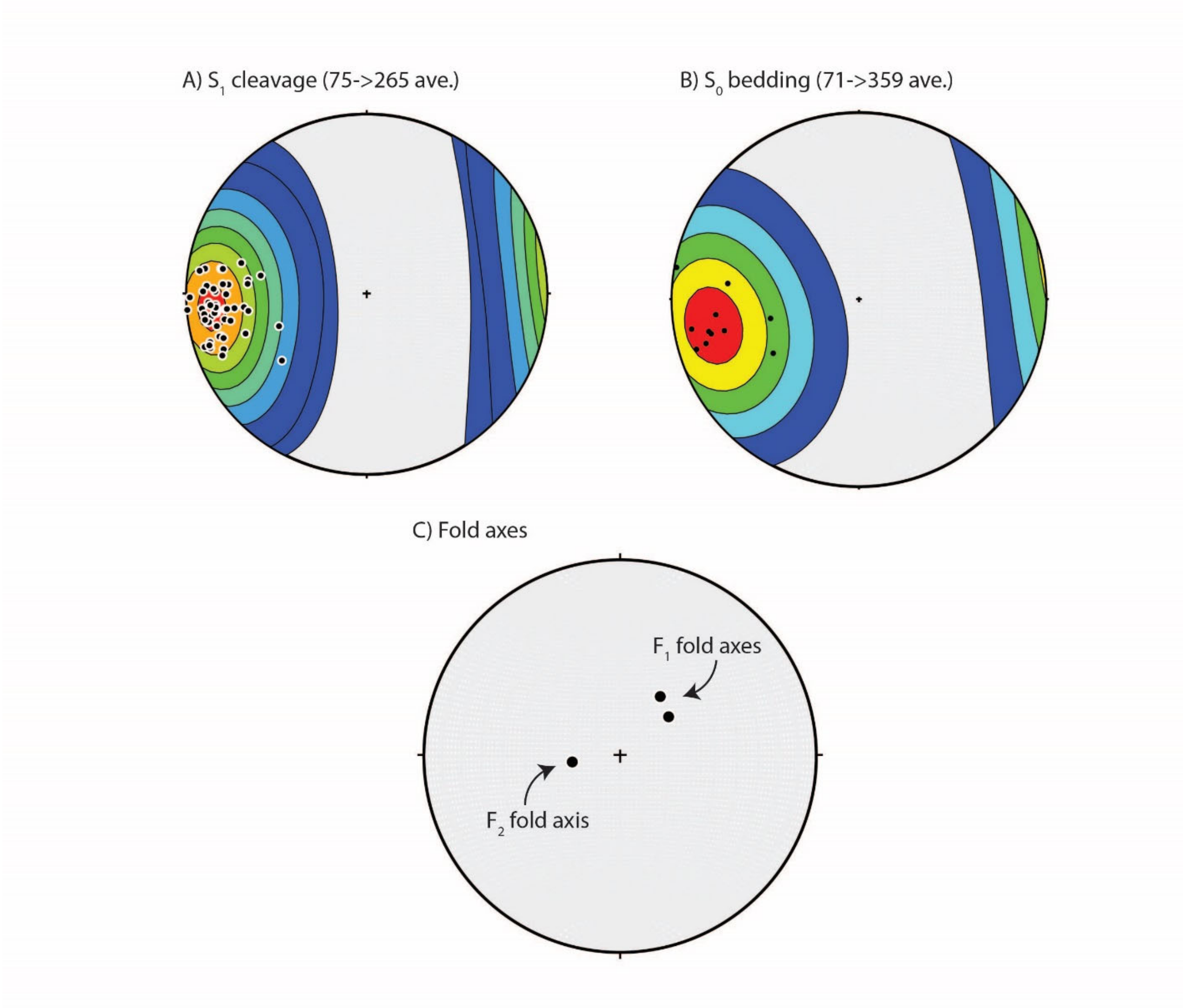

Figure 6: Stereographic projection of: A) poles to S1 cleavage, B) poles to S0 bedding, and C) F1 and F2 fold axes

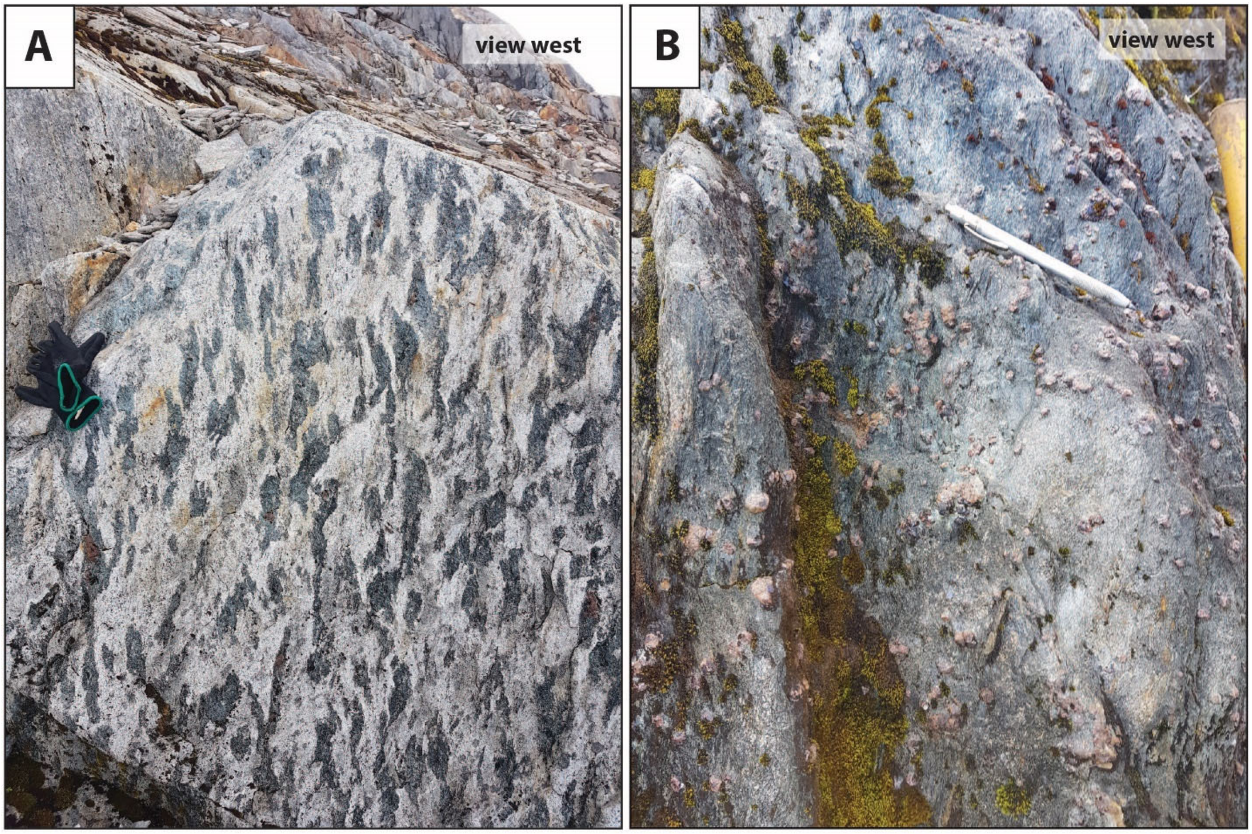

Figure 7: Field photographs of lower stratigraphic succession: A) andesite to basalt breccia, section 5952900 mN and 469880 mE; and B) volcaniclastic sandstone with garnet porphyroblasts, section line 5953100 mN and 469787 mE

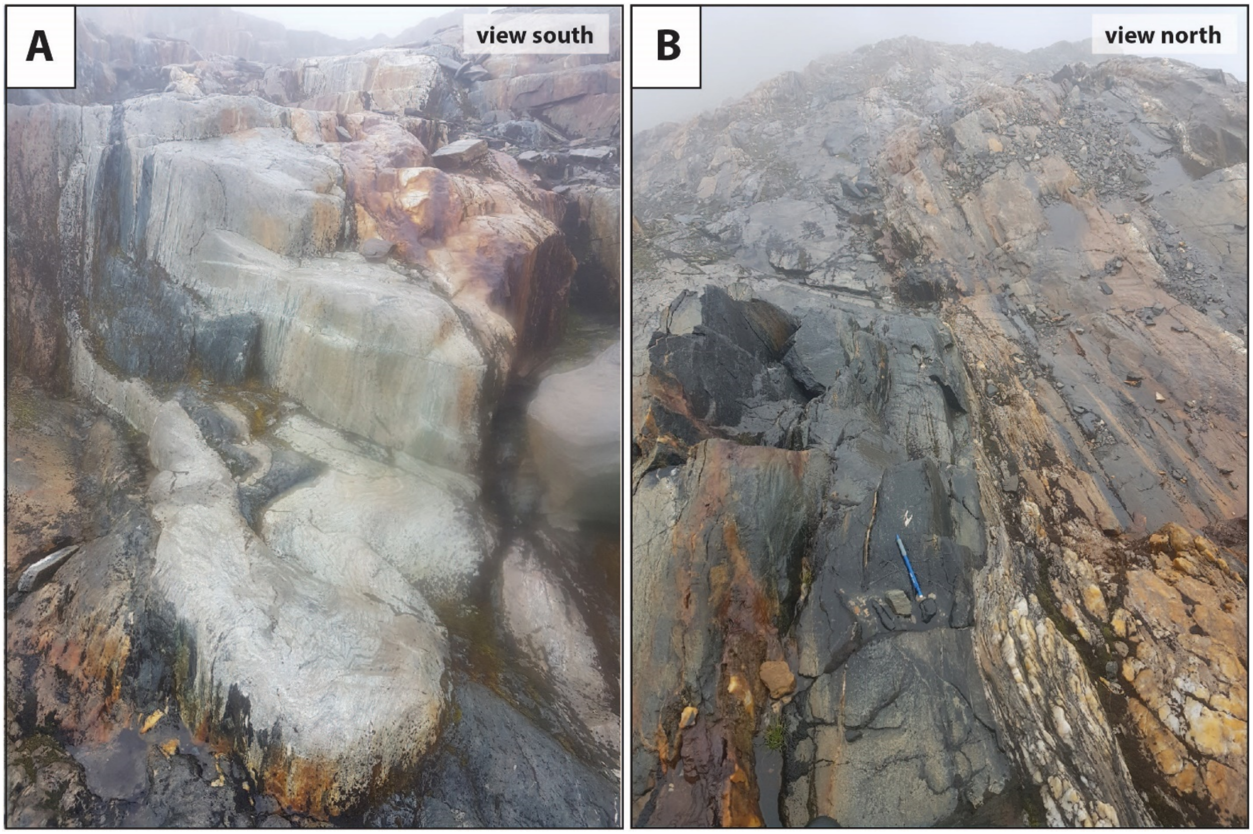

Figure 8: Field photographs of: A) flowbanded, coherent rhyolite (white) and intercalated coherent basalt (black) from section 5953000 mN at 469800 mE; B) foliated, plagioclase-phyric basalt porphyry (black) section line 5952900 mN at 469805 mE.

6.2 Prospecting and Rock Sampling

6.2.1 Prospecting and Rock Sampling Methods

A total of 19 rock samples were collected during the 2020 program at the Ecstall Property (Map 4). Rock sampling focused on gossanous outcrops near the Shiner Zone which contain silver, gold, copper and/or zinc mineralization based on 2019 sampling results. At each rock sample site, basic geological information was captured in both a standard three-tag sample book and a custom digital application, including target area, sample type, outcrop type and comments. For each sample, two tags remained in the book as a permanent record, the third tag was placed in the sample bag along with the rock. Rock samples ranged in weight from 0.7 to 3.7 kg and were zip-tied in labelled plastic polybags with a correspond sample tag. Core samples were placed in a labelled rice bag for shipment. Once full, each rice bag was sealed with a tamper-proof security tag. A representative piece of the rock was left at each sample site with pink flagging tape and metal tag both noting the sample number. A Garmin e-Trex GPS was used to record location information for each rock sample, in UTM NAD83 coordinate system.

Rock samples were shipped by truck to Bureau Veritas, in Vancouver, British Columbia, for preparation and analysis.

6.2.2 Sample Analysis

Rock samples were prepared and analysed at Bureau Veritas in Vancouver using the PRP70-250 crush and split method and a 4-acid digestion with ICP-MS analysis (MA200). Gold was analyzed using fire assay and AAS finish (FA430). Samples with >10000 ppm Cu, Pb or Zn were analyzed using the high-grade multi-acid ICP-ES MA370 for Cu, Pb and Zn.

6.2.3 Rock sample results

Rock sampling at the Property identified anomalous Au concentrations in sample S3441814 which returned 0.33 g/t Au in a greenish siltstone cut by rusty quartz veins. Weakly anomalous Cu concentrations were identified in sample S3441807, up to 655.6 ppm hosted in a quartz veined unknown rock with amphibole lathes. Silver concentrations in grab samples were low, with a maximum of 2.1 g/t Ag in sample S3441801, described as a gossanous basalt with pyrite stringers. The highest Zn concentration was found in sample S3441813, which returned 1,003 ppm Zn hosted in a gossanous quartz-sericite altered siltstone.

A table of summary statistics for 2020 Ecstall rock samples is provided below.

Table 1: Ecstall rock sample summary statistics

	Ag g/t	Au g/t	Cu ppm	Zn ppm
Count	19	19	19	19
Min	0.1	0.003	4.6	5.0
Max	2.1	0.326	655.6	1003.0
Average	0.7	0.031	140.3	254.8
Median	0.4	0.009	84.5	128.0

6.3 Backpack Drilling

6.3.1 Backpack Drilling Methods

The primary focus of the 2020 backpack drill program was to follow up on highlight grab samples taken during the 2019 field season (Map 5).

A 41 mm OD (BQ sized) Shaw portable core drill, manufactured and distributed by Shaw Tool of Yamhill, Oregon, USA, was used for the backpack drilling at the Ecstall Property. Drillholes were aligned at each target area using a standard compass and inclinometer and drilled until ground conditions did not allow for advancement. A total of seven (7) drillholes were completed ranging in depth from 1.93 m down to a maximum of 6.89 m, for a total of 27.35 m

All drillhole locations were recorded in UTM NAD83 coordinate system using a standard Garmin e-Trex handheld GPS. Geological logging and sampling was undertaken for each drillhole on site.

Geological logs for backpack drillholes were recorded using a basic Excel spreadsheet. The Excel spreadsheet captured header information including drill collar location, drillhole orientation and target. Rock type, alteration, sample intervals and detailed geological descriptions of the primary, metamorphic and hydrothermal features were also recorded.

Drill core samples for assay were recorded using a standard three-tag sample book, with one tag remaining in the sample book with relevant information (drillhole name, sample from and to depths), one tag stapled on the core box to mark the sample interval and one tag was placed in the sample bag along with the rock. Drill core samples were typically one meter in length but varied between a minimum of 0.52 m to a maximum of 2.15 m depending on the abundance of quartz veining or to avoid crossing significant lithological contacts or alteration changes. Full drill core was sampled, no core splitting was undertaken. Core samples were placed in a labelled plastic polybag along with the appropriate sample tag, sealed with a zip-tie and then inserted into a labelled rice bag for shipment. Once full, each rice bag was sealed with a tamper-proof security tag.

Core samples were shipped by truck to Bureau Veritas, in Vancouver, British Columbia, for preparation and analysis.

Table 2, below, summarizes the backpack drillholes, detailed drill logs and assays are located in Appendix E.

Table 2: Ecstall backpack drillhole information

Hole ID	Easting (UTM NAD83)	Northing (UTM NAD83)	Elevation	Azimuth	Dip	Depth (m)
ECBPD20-01	469826	5953021	1058	246	-47	6.89
ECBPD20-02	469855	5953000	1057	285	-56	2.88
ECBPD20-03	469840	5952945	1089	236	-42	3.00
ECBPD20-04	469847	5952943	1081	266	-45	6.00
ECBPD20-05	469852	5952941	1090	249	-38	2.15
ECBPD20-06	469868	5952922	1081	268	-44	1.93
ECBPD20-07	469847	5952876	1114	245	-45	5.51

6.3.2 Sample Analysis

Backpack drilling samples were prepared and analysed at Bureau Veritas in Vancouver using the PRP70-250 crush and split method and a 4-acid digestion with ICP-MS analysis (MA200). Gold was analyzed using fire assay and AAS finish (FA430). Samples with >10000 ppm Cu, Pb or Zn were analyzed using the high-grade multi-acid ICP-ES MA370 for Cu, Pb and Zn. Soil and stream sediment samples were prepped using the SS80 method and analyzed at Bureau Veritas with a 1:1:1 Aqua Regia digestion and ultratrace ICP-MS method (AQ252EXT).

6.3.3 Backpack Drilling Results

Results of the 2020 Ecstall backpack drill program are summarized below, in Table 3 and in Maps 7a-7d.

ECBPD20-01 targeted a gossanous outcrop near the Shiner Zone which was sampled during the 2019 field program and returned assay values of 0.164 g/t Au, 5.1 g/t Ag and 8,881.9 ppm Cu. ECBPD20-01 was oriented 247/-47 (azimuth/dip) and was drilled to a final depth of 6.89 m. Dark grey metasedimentary rocks were cored over the entire drillhole length and an interval from 1.10 – 2.20 m returned anomalous Ag, Au and Cu values of 1.9 g/t, 0.101 g/t and 3,095 ppm, respectively.

ECBPD20-02 was drilled directly adjacent to channel ECC20-001 and targeted a 30 cm wide massive sulfide zone which was sampled during the 2019 field program and returned assay values of 47,500 ppm Zn. ECBPD20-02 was oriented 285/-56 (azimuth/dip) and was drilled to a final depth of 2.90 m. Grey-green metavolcanic rocks were cored over the entire drillhole and an interval from 0.00 – 2.00 m returned anomalous Zn concentrations averaging 2,122 ppm.

ECBPD20-03 was drilled directly adjacent to channel ECC20-003 and targeted the down dip projection of a zone which was sampled during the 2019 field program and returned assay values of 0.613 g/t Au, 20,840 ppm Cu, 8,612 ppm Zn and 20.3 g/t Ag. ECBPD20-03 was oriented 236/-42 (azimuth/dip) and was drilled to a final depth of 3.00 m. Black, fine-grained metavolcanic rocks were cored over the entire drillhole and an interval from 1.00 – 2.00 m returned anomalous Ag, Cu and Zn concentrations of 1.9 g/t, 2,340.6 ppm and 1,786 ppm, respectively.

ECBPD20-04 was drilled approximately 10 m east-southeast of ECBPD20-03, with the same target. ECBPD20-04 was oriented 266/-45 (azimuth/dip) and was drilled to a final depth of 6.00 m. Altered metasedimentary rocks were encountered over the entire drillhole length and an interval from 0.00 – 1.90 m returned anomalous Au, Ag, Cu and Zn concentrations with a weighted average of 0.098 g/t, 3.86 g/t, 4,827.9 ppm and 1,348 ppm, respectively.

ECBPD20-05 was drilled approximately 5 m southeast of BP-EC-20-04, with the same target as ECBPD20-03. ECBPD20-05 was oriented 249/-38 (azimuth/dip) and was drilled to a final depth of 2.15 m. Altered metavolcanic rocks were cored over the entire drillhole length but no anomalous precious or base metal values were encountered.

ECBPD20-06 targeted prospective alteration identified during geological mapping. ECBPD20-06 was oriented 268/-44 (azimuth/dip) and was drilled to a final depth of 1.93 m. Altered metavolcanic rocks were cored over the entire drillhole length but no anomalous precious or base metal values were encountered.

ECBPD20-07 was drilled 10 m north of channel ECC20-004 and targeted the down dip projection of a zone which was sampled during the 2019 field program and returned assay values of 1.579 g/t Au, 10,050 ppm Cu, 1,138 ppm Zn and 14.2 g/t Ag. ECBPD20-07 was oriented 245/-45 (azimuth/dip) and was drilled to a final depth of 5.51 m. Dark grey metasedimentary rocks were cored over the entire drillhole and an interval from 2.20 – 4.50 m returned anomalous Au, Ag and Cu concentrations with a weighted average of 0.161 g/t, 3.6 g/t and 3,383.2 ppm, respectively.

Table 3: Ecstall backpack drillhole sample summary statistics

	Ag g/t	**Au g/t**	**Cu ppm**	**Zn ppm**
Count	24	22	26	26
Min	0.1	0.005	87.9	6.0
Max	7.1	0.201	8606.7	3002.0
Average	1.1	0.040	1112.8	526.8
Median	0.5	0.012	331.3	213.5

6.4 Channel Sampling

6.4.1 Channel Sampling Methods

Channel sampling during the 2020 exploration program was also focussed near highlight rock samples discovered during the 2019 field season at the Shiner Zone (Map 5).

Highlight 2019 samples were relocated in the field and were considered the origin or parent sample point. Where ground conditions permitted, channel samples were marked out originating from the parent sample using a standard compass and measuring tape. A portable rock saw was used to cut the channel to a maximum width of 10 cm and a hammer and chisel was used to remove the rock samples. Six (6) channels were cut, with a total of 32 individual samples taken.

All channel sample locations were recorded in the UTM NAD83 coordinate system using a standard Garmin e-Trex handheld GPS. A basic geological description was made for each channel sample.

Geological descriptions and sample information for channel samples were recorded using a basic Excel spreadsheet. The Excel spreadsheet captured pertinent header information including parent sample location, channel orientation, segment length, sample number and a basic geological description.

Channel samples for assay were recorded using a standard three-tag sample book. Two tags remained in the sample book with relevant information (channel name, sample segment) and one tag placed in the sample bag along with the rock. Channel samples varied in length between a minimum of 0.45 m to a maximum of 1.00 m depending on the abundance of quartz veins or to avoid crossing significant lithological contacts or alteration changes. Channel samples were placed in a labelled plastic polybag along with the appropriate sample tag, sealed with a zip-tie and then inserted into a labelled rice bag for shipment. Once full, each rice bag was sealed with a tamper-proof security tag.

Channel samples were shipped by truck to Bureau Veritas, in Vancouver, British Columbia, for preparation and analysis.

6.4.2 Sample Analysis

Channel samples were prepared and analysed at Bureau Veritas in Vancouver using the PRP70-250 crush and split method and a 4-acid digestion with ICP-MS analysis (MA200). Gold was analyzed using fire assay and AAS finish (FA430). Samples with >10000 ppm Cu, Pb or Zn were analyzed using the high-grade multi-acid ICP-ES MA370 for Cu, Pb and Zn. Soil and stream sediment samples were prepped using the SS80 method and analyzed at Bureau Veritas with a 1:1:1 Aqua Regia digestion and ultratrace ICP-MS method (AQ252EXT).

6.4.3 Channel Sample Results

Results of the 2020 Ecstall channel sampling program are summarized below, in Table 4 and in Maps 7a-7d.

Channel ECC20-001 originated from rock grab sample 3441901 and was cut for six meters towards an azimuth of 272 degrees. Oxidized metavolcanics and metasediments were identified along the channel's length. Weakly anomalous Zn values were returned from the channel sampling, with a weighted average over the entire channel of 618 ppm.

Channel ECC20-002 originated from rock grab sample 3441908 and was cut for two meters towards an azimuth of 256 degrees. Oxidized metavolcanics were identified along the channel's length. Weakly anomalous Cu and Zn values were returned from the channel, with a weighted average over the entire length of 394 and 197 ppm, respectively.

Channel ECC20-003 originated from rock grab sample 3441907 and was cut for 5.9 meters towards an azimuth of 272 degrees. Oxidized metavolcanic rock were identified along the channel's length. Weakly anomalous Cu values were returned from the channel, with a weighted average over the entire length of 989 ppm. A moderately oxidized sample at segment 5 returned anomalous Au concentration of 0.111 g/t.

Channel ECC20-004 originated from rock grab sample 3441913 and was cut for 6.0 meters towards an azimuth of 260 degrees. Oxidized metavolcanic rock were identified along the channel's length. Weakly anomalous Cu values were returned from the channel, with a weighted average over the entire length of 706 ppm.

Channel ECC20-005 originated from rock grab sample 3441960 and was cut for 2.6 meters towards an azimuth of 282 degrees. Oxidized metavolcanic rock was identified along the channel's length. No anomalous base or precious metals were encountered in the channel samples.

Channel ECC20-006 originated from rock grab sample 3441963 and was cut for 3.0 meters towards an azimuth of 274 degrees. Oxidized metavolcanic rock was identified along the channel's length. Weakly anomalous Cu concentrations were returned over the channel's length, with a weighted average over the entire channel of 252 ppm.

Table 4: Ecstall channel sample summary statistics

	Ag g/t	**Au g/t**	**Cu ppm**	**Zn ppm**
Count	32	32	32	32
Min	0.1	0.003	67.7	106.0
Max	4.6	0.111	5732.9	2107.0
Average	0.5	0.020	591.8	332.1
Median	0.4	0.013	187.5	226.5

6.5 Lithogeochemistry

6.5.1 Lithogeochemistry Methods

All channel, backpack drill and rock samples submitted to Bureau Vertias after the 2020 exploration program at Ecstall were also analyzed using a whole rock geochemistry package to aid in rock classification.

6.5.2 Sampling Analysis

Whole rock samples were prepared and analysed at Bureau Veritas in Vancouver using the PRP70-250 crush and split method and were analysed for lithogeochemistry using a Li2B4O7/LiB4O7 fusion with ICP-ES analysis (LF300) for samples with less than 10% visible sulfides and Li2B4O7/LiBO2 fusion with XRF analysis (LF725) for samples with greater than 10% visible sulfides.

6.5.3 Lithogeochemistry Results

Whole rock geochemistry results were plotted on a Winchester and Floyd volcanic rock classification diagram (Figure 6). Most samples were logged in the field as meta-andesites and plotted on the volcanic rock diagram within the andesite/basalt field. A single backpack drill sample plotted in the rhyodacite/dacite field, and two channel samples plotted within the subalkaline basalt field.

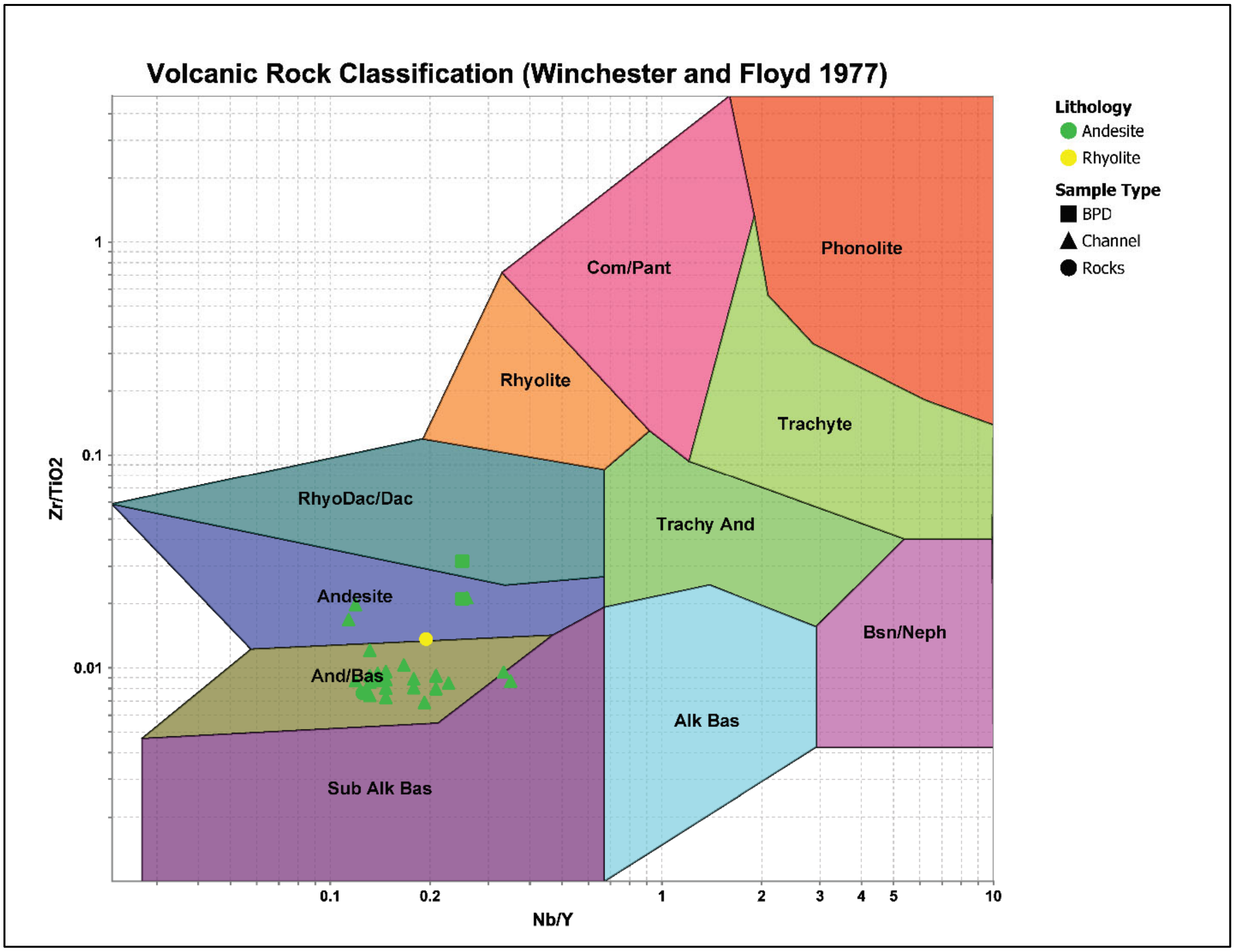

Figure 9: Ecstall lithogeochemical sample results

6.6 VTEM Survey

In 2019 a 1,546 line-km airborne VTEM survey was flown on the Property by Geotech Airborne and Geophysical Surveys and interpreted by Condor North Consulting LLC. In 2020 Maxwell plate modelling of the VTEM survey was undertaken over the Horsefly prospect (Figure 5) with the objective of mapping conductive rock units, interpreted to contain sulphide mineralization.

A summary of the survey specifications and interpretations provided by Condor North Consulting are included in Appendix H.

7.0 CONCLUSIONS

The Ecstall Property covers an extensive portion of the highly prospective Ecstall Greenstone Belt. The underlying rocks belong to the Devonian Yukon-Tanana Terrane which is also host to significant VMS districts such as the Finlayson Lake District in Yukon Territory as well as the Bonnington District in Alaska. Although there has been a significant amount of historical exploration work throughout the belt, much of it remains poorly understood.

Geological mapping of the Shiner Zone identified bimodal volcanic rocks as a significant host to VMS-style mineralization. Bimodal volcanism is preceded by a relatively voluminous andesitic to basaltic volcanism. The thickest and coarsest volcanic units are identified in the central stratigraphic sections, the most probably location for a volcanic vent. Based on bedding facing indications and alteration style, the known mineralization is at a relatively low stratigraphic depth within the hydrothermal alteration body. A prospective location for a larger-scale sulphide body is speculated to be to the west of the mapped stratigraphic sections.

Work undertaken during 2020 at the Ecstall Property by Kingfisher identified anomalous base and precious metal enrichment in backpack drill core, channel samples and grab samples at the Shiner Zone. Detailed geologic mapping and lithogeochemistry aided in the overall understanding of Shiner Zone geology and alteration. A 1,546 line-km airborne VTEM survey successfully identified conductive units at the Horsefly prospect, which are interpreted to reflect sulphide mineralization.

8.0 RECOMMENDATIONS

It is recommended that a follow-up exploration program be conducted at the Ecstall Property consisting of a focused ground gravity survey over the most prospective target areas along with property wide prospecting, soil sampling and additional backpack drilling. 3D modelling of the Horsefly VTEM data and the mapped geology is recommended to aid in drill targeting. If results of the next phase of work are positive, then diamond drilling should be undertaken at the most prospective target areas.

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APPENDIX A: STATEMENT OF QUALIFICATIONS

I, Paul Stewart of of 885 W Georgia St #2040, Vancouver, BC V6C 3E8 do certify that:

1. I graduated from Queen's University with a Bachelor of Science Degree in Geology in 2011 and with a Master of Science Degree in Geology in 2015.

2. I have been working as a geologist in mineral exploration seasonally since 2010 and continuously since 2015.

3. The observations, conclusions and recommendations contained in the report are based on supervision of the 2020 program, field examinations, and the evaluation of results of the exploration program completed by the operator of the property.

4. I am a geologist in training (#213624) registered with the Association of Professional Engineers and Geoscientists of Alberta.

5. I am a Senior Geologist with Kingfisher Resources Ltd, the current owners of the property.

Dated this 28th of July, 2021

Paul Stewart, GIT

I, Kanan Sarioglu of 885 W Georgia St #2040, Vancouver, BC V6C 3E8 do certify that:

1. I am a graduate of the Memorial University of Newfoundland, St. John's Newfoundland, with a B.Sc (Hons) in Earth Sciences, 2007.

2. I have been employed as an exploration geologist since my graduation from Memorial University in 2007.

3. I am a Professional Geoscientist registered with the Engineers and Geoscientists BC (EGBC), Association of Professional Engineers and Geoscientists Alberta (APEGA) and Association of Professional Engineers and Geoscientists Saskatchewan (APEGS).

4. I have not received any interest, nor do I expect to receive any interest directly or indirectly, in the Ecstall Property.

5. I am currently employed as a Senior Geologist with Kingfisher Resources Ltd.

6. I was not present on the property that is the subject of this report.

7. I consent to the filing of this report by Kingfisher Resources Ltd. with any stock exchange and any other regulatory body.

Dated this 28th of July, 2021

Kanan Sarioglu, B.Sc (Hons), P.Geo

APPENDIX B: STATEMENT OF WORK

Exploration Work type	Comment	Days			Totals
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
Gayle Febbo, VP Exploration	August 18 - 29	12	$650.00	$7,800.00	
Paul Stewart, Senior Geologist	August 16 - 31	16	$600.00	$9,600.00	
Andre Gollner, Exploration Geologist	August 17 - 30	14	$450.00	$6,300.00	
Nick Allard, Geotech	August 16 - 31	16	$300.00	$4,800.00	
				$28,500.00	**$28,500.00**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Report preparation	Paul Stewart	5.0	$600.00	$3,000.00	
Report preparation	Gayle Febbo	2.0	$650.00	$1,300.00	
Maxwell Plate Modelling	Condor Consulting	-	-	$6,125.00	
				$10,425.00	**$10,425.00**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Drill (cuttings, core, etc.)	Run for assay and wholerock	28.0	$66.16	$1,852.34	
Rock	Run for assay and wholerock	69.9	$50.15	$3,506.62	
				$5,358.96	**$5,358.96**
Transportation		**No.**	**Rate**	**Subtotal**	
Airfare				$904.24	
Taxi				$62.03	
Truck Rental				$6,178.40	
Trailer Rental				$1,680.00	
Fuel				$794.64	
Helicopter A-Star (hours)		10.10	$1,750.00	$17,675.00	
Jet A Fuel (litres)		2020.00	$1.40	$2,828.00	
				$30,122.31	**$30,122.31**
Accommodation & Food				**Subtotal**	
Hotel				$1,427.18	
Meals	Actual			$817.84	
Groceries	Actual			$2,811.52	
				$5,056.54	**$5,056.54**
Miscellaneous				**Subtotal**	
InReach Communications				$345.96	
Field Supplies				$2,900.22	
				$3,246.18	**$3,246.18**
Equipment Rentals		**No.**	**Rate**	**Subtotal**	
Camp Rental (Orevista)		48.00	$75.00	$3,600.00	
Chainsaw Rental (Orevista)		12.00	$25.00	$300.00	
Radio Rental (Orevista)		18.00	$10.00	$180.00	
				$4,080.00	**$4,080.00**
Freight, rock samples				**Subtotal**	
Sample Shipment (Bandstra)			$0.00	$382.00	
				$382.00	**$382.00**
Debited PAC amount					**$16,022.74**
TOTAL Expenditures					**$103,193.74**

ECSTALL PROPERTY: MINERAL TENURES					**Date:**	**2021-03-09**
OWNER: Kingfisher Resources Ltd.			**BC Client No.: 286218**		**Tenures:**	**31**
ROYALTY: nil					**Area (ha):**	**28406.63**
MINING DIVISION: Skeena			LOCATION: Ecstall River			
LAND DISTRICT: Prince Rupert			GEOGRAPHIC COORDINATES: 53 51' 2.7"N, 129 31' 2.3"W			
NTS: 103H11, 103H13, 103H14, 103H12, 103I04			UTM COORDINATES (NAD83 Z9N):		465969E, 5967024N	
Title Number	**Title Type**	**Owner**	**Map Number**	**Issue Date**	**Good To Date**	**Area (ha)**
1061192	Mineral	286218 (100%)	103H	2018/JUN/15	2023/JUL/30	1907.37
1061193	Mineral	286218 (100%)	103H	2018/JUN/15	2023/JUL/30	1903.50
1061194	Mineral	286218 (100%)	103H	2018/JUN/15	2023/JUL/30	1900.96
1061195	Mineral	286218 (100%)	103H	2018/JUN/15	2023/JUL/30	1852.39
1061196	Mineral	286218 (100%)	103H	2018/JUN/15	2023/JUL/30	1796.86
1063430	Mineral	286218 (100%)	103H	2018/SEP/27	2023/JUL/30	19.07
1063804	Mineral	286218 (100%)	103H	2018/OCT/16	2023/JUL/30	114.64
1065561	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	19.11
1065567	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	1854.58
1065568	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	1911.29
1065569	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	1913.36
1065570	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	1820.18
1065571	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	611.20
1065572	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	459.24
1065573	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	743.45
1065574	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	704.86
1065575	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	897.38
1065576	Mineral	286218 (100%)	103H	2019/JAN/06	2023/JUL/30	95.55
1065583	Mineral	286218 (100%)	103H	2019/JAN/07	2023/JUL/30	229.37
1069361	Mineral	286218 (100%)	103H	2019/JUN/27	2023/JUL/30	1584.27
1069363	Mineral	286218 (100%)	103H	2019/JUN/27	2023/JUL/30	1014.79
1070111	Mineral	286218 (100%)	103H	2019/AUG/04	2023/JUL/30	38.21
1070867	Mineral	286218 (100%)	103H	2019/SEP/05	2023/JUL/30	95.68
1070868	Mineral	286218 (100%)	103H	2019/SEP/05	2023/JUL/30	38.27
1071829	Mineral	286218 (100%)	103H	2019/OCT/16	2023/JUL/30	382.56
1071830	Mineral	286218 (100%)	103H	2019/OCT/16	2023/JUL/30	325.02
1072798	Mineral	286218 (100%)	103H	2019/NOV/18	2023/JUL/30	631.66
1072799	Mineral	286218 (100%)	103H	2019/NOV/18	2023/JUL/30	152.23
1081199	Mineral	286218 (100%)	103H	2021/FEB/15	2022/FEB/15	1826.39
1081200	Mineral	286218 (100%)	103H	2021/FEB/15	2022/FEB/15	989.85
1081201	Mineral	286218 (100%)	103H	2021/FEB/15	2022/FEB/15	573.36

Appendix D: Analytical Methods and Certifications

Sample Preparation, Storage & Disposal

The packages listed here are the most common methods applied in our industry. If you require custom sample preparation techniques please contact your local account manager or lab nearest to your project to discuss in more detail. You will find our team of professionals and technical group second to none in our ability to provide support.

ROCK AND CORE PREPARATION

CODE	DESCRIPTION	CAD
PRP70-250	Crush 1 kg to ≥70% passing 2mm - Pulverize 250 g ≥85% 75µm	$8.15
	Extra crushing over 1 kg, per kg	+ $0.80
PRP70-500	Crush 1 kg to ≥70% passing 2mm - Pulverize 500 g ≥85% 75µm	$9.30
	Extra crushing over 1 kg, per kg	+ $0.80
PRP70-1Kg	Crush 1 kg to ≥70% passing 2mm - Pulverize 1 kg ≥85% 75µm	$10.50
	Extra crushing over 1 kg, per kg	+ $0.80
PRP80-250	Crush 1 kg to ≥80% passing 2mm - Pulverize 250 g ≥85% 75µm	$9.20
	Extra crushing over 1 kg, per kg	+ $1.10
PRP90-250	Crush 1 kg to ≥90% passing 2mm - Pulverize 250 g ≥85% 75µm	$9.55
	Extra crushing over 1 kg, per kg	+ $1.50
CRU70	Crush to ≥70% passing 2mm per kg, includes first 1 kg	$3.95
	Extra crushing over 1 kg, per kg	+ $0.80
CRUPR	Primary Crushing for large samples, (eg. whole core), per kg	$1.10
PUL85	Dry and pulverize to ≥85% passing 75 µm	$4.15
	Extra pulverizing over 250 g, per 250 g	+ $1.05
DY105	Dry pulp at 105°C, per sample	$0.70
HOMG	Homogenizing of pulps by light pulverizing	$2.90
SPTRF	Split by riffle splitter up to 5 kg of –2 mm sample, per sample	$2.45
WGHT	Weigh sample	$0.75
CRUBW	Extra wash with barren material – crushing	$2.85
PULSW	Extra wash – silica – pulverizing	$3.40
SPTRS	Rotary split up to 5 kg	$5.00

Other size fractions / preparation requirements available upon request. For example ceramic bowl pulverizing, different size crushing and bowl sizes, etc.

SOILS

CODE	DESCRIPTION	CAD
SS80	Dry at 60°C, sieve to depletion to -180 µm (80 mesh) up to 1 kg sample (discard plus fraction)	$3.65
	Overweight sieving per 500 g - extra sieving over 1 kg	$1.20
SS230	Dry at 60°C, sieve 100 g to -63 µm (230 mesh), up to 1 kg sample	$4.60
	Overweight sieving per 500 g	$1.70
	Other sieve sizes available upon request	by quote
PULSL	Pulverize soils in mild steel pulverizer, per 100 g	$3.55
SVRJT	Saving all or part of soil reject	$1.10
CLYSP	Clay separation up to 500 g (for other weight requirements please contact us)	$16.85
DISP2	Heat treatment of soils and sediments, per sample (All international soil shipments to Canada)	$0.55

Important note regarding soils: Importation regulations may apply; contact lab prior to shipment for details and shipment requirements. For soil shipments to Canada: No soil, till, sediment pulps or rejects can be returned and must be incinerated prior to disposal. A disposal fee (DISP2) is charged for these samples. Soil rejects are discarded immediately after preparation unless SVRJT is requested.

LITHO**GEOCHEMISTRY**

WHOLE ROCK MAJOR AND MINOR ELEMENTS BY ICP-ES

Lithium borate fusion, a highly aggressive dissolution, is effective for most refractory and resistive mineral phases. When coupled with ICP-ES/MS or XRF analysis, the methods provide excellent determination of the total element content.

CODE	ELEMENT	DETECTION LIMIT	UPPER LIMIT	CAD
LF300	Standard suite of major oxides			$32.50
	SiO_2	0.01 %	100 %	
	Al_2O_3	0.01 %	100 %	
	Cr_2O_3	0.002 %	10 %	
	CaO	0.01 %	100 %	
	Fe_2O_3	0.04 %	100 %	
	K_2O	0.01 %	100 %	
	MgO	0.01 %	100 %	
	MnO	0.01 %	30 %	
	Na_2O	0.01 %	100 %	
	P_2O_5	0.01 %	100 %	
	TiO_2	0.01 %	10 %	
	Ba	5 ppm	5 %	
	Nb	5 ppm	1,000 ppm	
	Ni	20 ppm	10,000 ppm	
	Sc	1 ppm	10,000 ppm	
	Sr	2 ppm	50,000 ppm	
	Y	3 ppm	50,000 ppm	
	Zr	5 ppm	50,000 ppm	
	LOI	0.1 %	100 %	
	Sum	0.01 %	100 %	
LF300-X	Any 1 element			$23.15
LF300-EXT	Extended package			$36.45
	Ce	30 ppm	50,000 ppm	
	Co	20 ppm	10,000 ppm	
	Cu	5 ppm	10,000 ppm	
	Zn	5 ppm	10,000 ppm	

WHOLE ROCK MAJOR AND MINOR ELEMENTS WITH C & S

CODE		CAD
LF302	Major oxides ICP-ES, 20 elements Package including LF300 + TC000 (C & S)	$48.95
LF302-EXT	Major oxides ICP-ES, Package including LF300-EXT + TC000 (C & S)	$52.85

TOTAL WHOLE ROCK CHARACTERIZATION

These packages include several methods that have been specifically selected to optimize the recovery of virtually all elements present in a geological sample.

LF200	Package including (LF100 + LF302)	$74.55
LF202	Package including (LF100-EXT + LF302)	$86.75
LF600*	Package including (LF100-EXT + XF700 + TC000)	$94.25

Requires at least 5 g per sample. * Requires at least 20 g per sample.

TRACE ELEMENTS BY ICP-MS

CODE	ELEMENT	DETECTION LIMIT	UPPER LIMIT	CAD
LF100	Refractory and Rare Earth elements only			$33.90
	Ba	1 ppm	50,000 ppm	
	Be	1 ppm	10,000 ppm	
	Ce	0.1 ppm	50,000 ppm	
	Co	0.2 ppm	10,000 ppm	
	Cs*	0.1 ppm	1,000 ppm	
	Dy	0.05 ppm	10,000 ppm	
	Er	0.03 ppm	10,000 ppm	
	Eu	0.02 ppm	10,000 ppm	
	Ga	0.5 ppm	10,000 ppm	
	Gd	0.05 ppm	10,000 ppm	
	Hf	0.1 ppm	10,000 ppm	
	Ho	0.02 ppm	10,000 ppm	
	La	0.1 ppm	50,000 ppm	
	Lu	0.01 ppm	10,000 ppm	
	Nb*	0.1 ppm	1,000 ppm	
	Nd	0.3 ppm	10,000 ppm	
	Pr	0.02 ppm	10,000 ppm	
	Rb*	0.1 ppm	1,000 ppm	
	Sm	0.05 ppm	10,000 ppm	
	Sn	1 ppm	10,000 ppm	
	Sr	0.5 ppm	50,000 ppm	
	Ta*	0.1 ppm	1,000 ppm	
	Tb	0.01 ppm	10,000 ppm	
	Th	0.2 ppm	10,000 ppm	
	Tm	0.01 ppm	10,000 ppm	
	U	0.1 ppm	10,000 ppm	
	V	8 ppm	10,000 ppm	
	W	0.5 ppm	10,000 ppm	
	Y	0.1 ppm	50,000 ppm	
	Yb	0.05 ppm	10,000 ppm	
	Zr	0.1 ppm	50,000 ppm	
LF100-X	Lithium borate fusion ICP-MS, any 1 element			$23.15
LF100-EXT	Trace elements ICP-MS, 45 elements Package including (LF100 + AQ200)			$47.40
	Ag	0.1 ppm	100 ppm	
	As	1 ppm	10,000 ppm	
	Au	0.5 ppm	100,000 ppm	
	Bi	0.5 ppm	2,000 ppm	
	Cd	0.1 ppm	2,000 ppm	
	Cu	0.1 ppm	10,000 ppm	
	Hg	0.01 ppm	50 ppm	
	Mo	0.1 ppm	2,000 ppm	
	Ni	0.1 ppm	10,000 ppm	
	Pb	0.1 ppm	10,000 ppm	
	Sb	0.1 ppm	2000 ppm	
	Se	0.5 ppm	100 ppm	
	Tl	0.1 ppm	1,000 ppm	
	Zn	5 ppm	10,000 ppm	

* For higher upper limits on Ta, Nb, Cs, Rb - Request REEPKG Results for Co, Cu, Ni, Pb and Zn may not be quantitative by this method.

CARBON & SULPHUR ANALYSIS

CODE	DESCRIPTION	DETECTION LIMIT	UPPER LIMIT	CAD
TC000	Leco – C Leco – S Surcharge samples > 20% (S)	0.02 % 0.02 % 20 %	50 % 20 % 50 %	$21.85 + $8.00
TC000-C	Leco – Total C	0.02 %	100 %	$18.60
TC005-GRA	Graphite C	0.02 %	20 %	$39.45
TC006	Inorganic Carbon, (Direct CO2 evolution Leco analysis)	0.08 %	100 %	$21.85
TC005-ORG	Organic C (TC000-C, TC005-GRA, TC006)	0.02 %	100 %	$39.60
TC000-S	Leco – Total S Surcharge samples > 20% (S)	0.02 % 20 %	20 % 50 %	$18.60 + $8.00
TC008-SO4	Sulphate – Leco after ignition	0.05 %	100 %	$27.30
TC008-S-	Sulphide – (TC000-S, TC008-SO4)	0.05 %	100 %	$28.65
TC508	Sulphate – gravimetric	0.05 %	100 %	$32.75
TC901	Elemental S	0.01 %	14 %	$36.00

Requires at least 5 g per sample.

XRF

X-ray fluorescence analysis on fused discs is an excellent method for the determination of whole rock major elements, as well as some minor elements. It is the preferred method for iron ore, bauxite, Nilaterites, and phosphate ores. Bureau Veritas also offers a specific XRF method for the determination of major elements, plus sub-percent to high-grade Cu, Pb, and Zn ore concentrations.

WHOLE ROCK MAJOR OXIDES

CODE	ELEMENT	DETECTION LIMIT	UPPER LIMIT	CAD
XF700	**Standard Package, 15 elements**			$38.20
	SiO_2	0.01 %	100 %	
	Al_2O_3	0.01 %	100 %	
	Fe_2O_3	0.01 %	100 %	
	CaO	0.01 %	100 %	
	MgO	0.01 %	100 %	
	Na_2O	0.01 %	15 %	
	K_2O	0.01 %	15 %	
	MnO	0.01 %	50 %	
	TiO_2	0.01 %	20 %	
	P_2O_5	0.01 %	40 %	
	Cr_2O_3	0.01 %	10 %	
	Ba	0.01 %	58.8 %	
	LOI	0.1 %	100 %	
	SO_3	0.002 %	10 %	
	Sr	0.002 %	1.5 %	
XF702	Standard Package including TC000 (C & S)			$47.85

Requires at least 12 g per sample

BAUXITE

CODE	ELEMENT	DETECTION LIMIT	UPPER LIMIT	CAD
XF701	**Bauxite Package, 17 elements**			$45.30
	SiO_2	0.01 %	100 %	
	Al_2O_3	0.01 %	100 %	
	Fe_2O_3	0.01 %	100 %	
	CaO	0.01 %	50 %	
	MgO	0.01 %	40 %	
	Na_2O	0.01 %	8.5 %	
	K_2O	0.01 %	15 %	
	MnO	0.01 %	50 %	
	TiO_2	0.01 %	10 %	
	P_2O_5	0.001 %	40 %	
	Cr_2O_3	0.004 %	10 %	
	BaO	0.01 %	10 %	
	ZnO	0.002 %	1 %	
	ZrO_2	0.01 %	1.5 %	
	V_2O_5	0.002 %	10 %	
	SO_3	0.01 %	3.5 %	
	LOI	0.1 %	100 %	

AQUA REGIA GOLD

Recommended for soils, sediments, vegetation or reconnaissance rock samples. Samples are digested in 1:1:1 aqua regia then analyzed by ICP-MS. Refractory, massive sulphide and graphitic samples can limit Au solubility.

CODE	ELEM	DETECTION LIMIT	UPPER LIMIT	DESCRIPTION	CAD
AQ115	Au	0.5 ppb	10 ppm	15 g Aqua regia ICP-MS	$11.55
AQ130				30 g Aqua regia ICP-MS	$16.50
AQ115-IGN				Ignited 15 g Aqua regia ICP-MS Rock samples are ignited at 550°C before aqua regia digestion	$13.00
AQ130-IGN				Ignited 30 g Aqua regia ICP-MS Rock samples are ignited at 550°C before aqua regia digestion	$17.95

Fire Assay

Lead collection fire assay fusion is a classic method for total sample decomposition. Total Au content is determined by digesting an Ag dore bead and then analysing by AAS, ICP-ES, or ICP-MS. The Lab reserves the right to reduce sample weight to 15 g or less for proper fusion.

ICP-MS

CODE	ELEM	DETECTION LIMIT	UPPER LIMIT	DESCRIPTION	CAD
FA130 FA150	Au	1 ppb	1 ppm	30 g / Fire Assay / ICP-MS 50 g / Fire Assay / ICP-MS	$23.40 $26.50
	Pt	0.1 ppb	1 ppm		
	Pd	0.5 ppb	1 ppm		

ICP-ES

CODE	ELEM	DETECTION LIMIT	UPPER LIMIT	DESCRIPTION	CAD
FA330-Au*	Au	2 ppb	10 ppm	30 g / Fire Assay / ICP-ES	$18.40
FA350-Au*				50 g / Fire Assay / ICP-ES	$21.75
FA330* FA350*	Au	2 ppb	10 ppm	30 g / Fire Assay / ICP-ES 50 g / Fire Assay / ICP-ES	$19.70 $22.80
	Pt	3 ppb	10 ppm		
	Pd	2 ppb	10 ppm		

AAS

CODE	ELEM	DETECTION LIMIT	UPPER LIMIT	DESCRIPTION	CAD
FA430*	Au	0.005 ppm	10 ppm	30 g / Fire Assay / AAS	$17.30
FA450*				50 g / Fire Assay / AAS	$20.55

GRAVIMETRIC

CODE	ELEM	DETECTION LIMIT	UPPER LIMIT	DESCRIPTION	CAD
FA530-Ag	Ag	20 ppm		30 g / Fire Assay / gravimetric	$21.85
FA550-Ag				50 g / Fire Assay / gravimetric	$25.00
FA530-Au	Au	0.9 ppm		30 g / Fire Assay / gravimetric	$21.85
FA550-Au				50 g / Fire Assay / gravimetric	$25.00
FA530	Au, Ag	as above		30 g / Fire Assay / gravimetric	$21.85
FA550				50 g / Fire Assay / gravimetric	$25.00

Require at least 15 g sample weight.
*Au>10 ppm are automatically analyzed by gravimetric method.

Multi-Acid

Multi-acid digestion packages are capable of dissolving most minerals. We offer a choice of ICP-ES (MA300), ICP-ES/MS (MA200) or Ultra-trace ICP-ES/MS (MA250) analysis to give near total values for most elements. A 0.25 g split is heated in HNO_3, $HClO_4$ and HF to fuming and taken to dryness. The residue is dissolved in HCl.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
MA300	Multi-Acid ICP-ES, 35 elements, 0.25 g					$15.05
	Ag	0.5	ppm	200	ppm	
	Al	0.01	%	20	%	
	As	5	ppm	10000	ppm	
	Ba	1	ppm	10000	ppm	
	Be	1	ppm	1000	ppm	
	Bi	5	ppm	4000	ppm	
	Ca	0.01	%	40	%	
	Cd	0.4	ppm	4000	ppm	
	Co	2	ppm	4000	ppm	
	Cr	2	ppm	10000	ppm	
	Cu	2	ppm	10000	ppm	
	Fe	0.01	%	60	%	
	K	0.01	%	10	%	
	La	2	ppm	2000	ppm	
	Mg	0.01	%	30	%	
	Mn	5	ppm	10000	ppm	
	Mo	2	ppm	4000	ppm	
	Na	0.01	%	10	%	
	Nb	2	ppm	2000	ppm	
	Ni	2	ppm	10000	ppm	
	P	0.002	%	5	%	
	Pb	5	ppm	10000	ppm	
	S	0.1	%	10	%	
	Sb	5	ppm	4000	ppm	
	Sc	1	ppm	200	ppm	
	Sn	2	ppm	2000	ppm	
	Sr	2	ppm	10000	ppm	
	Th	2	ppm	4000	ppm	
	Ti	0.01	%	10	%	
	U	20	ppm	4000	ppm	
	V	2	ppm	10000	ppm	
	W	4	ppm	200	ppm	
	Y	2	ppm	2000	ppm	
	Zn	2	ppm	10000	ppm	
	Zr	2	ppm	2000	ppm	
AQ200-Hg	Aqua Regia ICP-ES/MS, add-on					$13.15
	Hg	0.01	ppm	50	ppm	

Digestion is partial for some Cr and Ba minerals and oxides of Al, Fe, Hf, Mn, Sn, Ta, Zr and REEs. Volatilization during fuming may result in loss of As, S, Se and Sb.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
MA200	Multi-Acid ICP-ES/MS, 45 elements, 0.25 g					$21.25
	Ag	0.1	ppm	200	ppm	
	Al	0.01	%	20	%	
	As	1	ppm	10000	ppm	
	Ba	1	ppm	10000	ppm	
	Be	1	ppm	1000	ppm	
	Bi	0.1	ppm	4000	ppm	
	Ca	0.01	%	40	%	
	Cd	0.1	ppm	4000	ppm	
	Ce	1	ppm	2000	ppm	
	Co	0.2	ppm	4000	ppm	
	Cr	1	ppm	10000	ppm	
	Cu	0.1	ppm	10000	ppm	
	Fe	0.01	%	60	%	
	Hf	0.1	ppm	1000	ppm	
	In	0.05	ppm	1000	ppm	
	K	0.01	%	10	%	
	La	0.1	ppm	2000	ppm	
	Li	0.1	ppm	2000	ppm	
	Mg	0.01	%	30	%	
	Mn	1	ppm	10000	ppm	
	Mo	0.1	ppm	4000	ppm	
	Na	0.001	%	10	%	
	Nb	0.1	ppm	2000	ppm	
	Ni	0.1	ppm	10000	ppm	
	P	0.001	%	5	%	
	Pb	0.1	ppm	10000	ppm	
	Rb	0.1	ppm	2000	ppm	
	Re	0.005	ppm	100	ppm	
	S	0.1	%	10	%	
	Sb	0.1	ppm	4000	ppm	
	Sc	1	ppm	200	ppm	
	Se	1	ppm	1000	ppm	
	Sn	0.1	ppm	2000	ppm	
	Sr	1	ppm	10000	ppm	
	Ta	0.1	ppm	2000	ppm	
	Te	0.5	ppm	1000	ppm	
	Th	0.1	ppm	4000	ppm	
	Ti	0.001	%	10	%	
	Tl	0.5	ppm	10000	ppm	
	U	0.1	ppm	4000	ppm	
	V	4	ppm	10000	ppm	
	W	0.1	ppm	200	ppm	
	Y	0.1	ppm	2000	ppm	
	Zn	1	ppm	10000	ppm	
	Zr	0.1	ppm	2000	ppm	
AQ200-Hg	Aqua Regia ICP-ES/MS, add-on					$13.15
	Hg	0.01	ppm	50	ppm	

Digestion is partial for some Cr and Ba minerals and oxides of Al, Fe, Hf, Mn, Sn, Ta, Zr and REEs. Volatilization during fuming may result in loss of As, S, Se and Sb.

ICP Analysis

The following multi-element assays provide optimum precision and accuracy for high grade rock and drill core samples with a selection of digestion methods to best suit the ore type. AQ370, MA370 and PF370 report percent level concentrations as determined by ICP-ES.

AQUA REGIA ICP-ES

Modified Aqua regia digestion for base-metal sulphide and precious metal ores. Aqua regia digestion is considered a partial digestion. Solubility of some elements will be limited by the mineral species present.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
AQ370	Aqua Regia ICP-ES, 24 elements					$17.20
	Ag	2	ppm	1000	ppm	
	Al	0.01	%	40	%	
	As	0.01	%	10	%	
	Bi	0.01	%	1	%	
	Ca	0.01	%	40	%	
	Cd	0.001	%	1	%	
	Co	0.001	%	1	%	
	Cr	0.001	%	5	%	
	Cu	0.001	%	10	%	
	Fe	0.01	%	40	%	
	Hg	0.001	%	1	%	
	K	0.01	%	40	%	
	Mg	0.01	%	40	%	
	Mn	0.01	%	20	%	
	Mo	0.001	%	5	%	
	Na	0.01	%	25	%	
	Ni	0.001	%	10	%	
	P	0.001	%	25	%	
	Pb	0.01	%	4	%	
	S	0.05	%	30	%	
	Sb	0.001	%	5	%	
	Sr	0.001	%	1	%	
	W	0.001	%	1	%	
	Zn	0.01	%	20	%	
AQ370-X	Aqua Regia ICP-ES, any 1 element					$12.45

Requires at least 2 g per sample.

PHOSPHORIC ACID ICP-ES

Phosphoric acid digestion for select elements.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
KP300	Phosphoric Acid, ICP-ES, 5 elements					$19.70
	Mo	0.001	%	40	%	
	Nb	0.001	%	40	%	
	Ta	0.001	%	60	%	
	U	0.001	%	60	%	
	W	0.005	%	40	%	
KP300-X	Phosphoric Acid, ICP-ES, any 1 element					$15.50

Requires at least 2 g per sample.

MULTI-ACID ICP-ES

Multi-acid digestion for sulphide and silicate ores.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
MA370	Multi -acid ICP-ES, 23 elements					$19.70
	Ag	2	ppm	1500	ppm	
	Al	0.01	%	40	%	
	As	0.02	%	10	%	
	Bi	0.01	%	2	%	
	Ca	0.01	%	50	%	
	Cd	0.001	%	2	%	
	Co	0.001	%	2	%	
	Cr	0.001	%	5	%	
	Cu	0.001	%	10	%	
	Fe	0.01	%	60	%	
	K	0.01	%	40	%	
	Mg	0.01	%	40	%	
	Mn	0.01	%	20	%	
	Mo	0.001	%	5	%	
	Na	0.01	%	25	%	
	Ni	0.001	%	10	%	
	P	0.01	%	25	%	
	Pb	0.02	%	10	%	
	S	0.05	%	30	%	
	Sb	0.01	%	1	%	
	Sr	0.01	%	1	%	
	W	0.01	%	1	%	
	Zn	0.01	%	40	%	
MA370-X	Multi -acid ICP-ES, any 1 element					$14.75

Requires at least 1 g per sample.

Digestion is partial for some Cr and Ba minerals and oxides of Al, Fe, Hf, Mn, Sn, Ta, Zr and REEs. Volatilization during fuming may result in loss of As, S, Se and Sb.

PEROXIDE FUSION ICP-ES

Sodium peroxide fusion for refractory mineral ores.

CODE	ELEM	DETECTION LIMIT		UPPER LIMIT		CAD
PF370	Peroxide Fusion ICP-ES, 17 elements					$38.00
	Al	0.01	%	50	%	
	As	0.01	%	10	%	
	Ca	0.05	%	50	%	
	Co	0.002	%	30	%	
	Cr	0.01	%	30	%	
	Cu	0.005	%	30	%	
	Fe	0.05	%	70	%	
	K	0.01	%	30	%	
	Li	0.001	%	50	%	
	Mg	0.01	%	30	%	
	Mn	0.01	%	70	%	
	Ni	0.005	%	30	%	
	Pb	0.03	%	30	%	
	S	0.01	%	60	%	
	Sn	0.005	%	50	%	
	Ti	0.01	%	30	%	
	Zn	0.01	%	30	%	
PF370-X	Peroxide Fusion ICP-ES, any 1 element					$20.20

Requires at least 2 g per sample.

MINERAL LABORATORIES
Canada

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Submitted By:	Ecstall - Email Distribution List
Receiving Lab:	Canada-Vancouver
Received:	September 11, 2020
Analysis Start:	November 05, 2020
Report Date:	November 18, 2020
Page:	1 of 3

CERTIFICATE OF ANALYSIS VAN20001962.1

CLIENT JOB INFORMATION

Project:	Ecstall
Shipment ID:	Ecstall 2020-1
P.O. Number	
Number of Samples:	51

SAMPLE DISPOSAL

PICKUP-PLP	Client to Pickup Pulps
PICKUP-RJT	Client to Pickup Rejects

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

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	51	Crush, split and pulverize 250 g rock to 200 mesh			VAN
FA430	51	Lead Collection Fire Assay Fusion - AAS Finish	30	Completed	VAN
MA200	51	4 Acid digestion ICP-MS analysis	0.25	Completed	VAN
LF300	51	LiBO2/Li2B4O7 fusion ICP-ES analysis	0.2	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Kingfisher Resources Ltd.
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6
Canada

CC:

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

Method		WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
3441801	Rock	1.37	0.027	1.2	364.4	2.7	204	2.1	187.4	10.7	399	17.22	<1	3.5	1.2	171	1.1	0.2	0.7	705	9.84
3441802	Rock	2.08	0.006	4.1	65.0	0.7	457	0.4	726.8	84.4	1311	7.43	2	1.0	1.8	25	1.5	0.1	<0.1	221	7.40
3441803	Rock	1.33	0.032	0.3	46.0	2.4	5	0.2	4.0	29.4	80	2.08	2	<0.1	<0.1	7	0.1	<0.1	0.3	7	0.19
3441804	Rock	0.73	<0.005	20.4	4.6	13.0	72	<0.1	14.7	1.1	132	6.39	1	0.8	8.3	27	0.1	<0.1	0.2	10	0.02
3441805	Rock	1.17	0.019	1.4	98.9	3.3	211	1.0	59.9	5.6	266	10.37	<1	1.3	3.1	313	0.9	0.4	0.3	36	11.24
3441806	Rock	1.26	0.006	2.9	84.5	7.3	118	0.5	54.1	29.3	1200	4.97	<1	1.3	2.0	336	0.7	0.2	0.1	301	5.55
3441807	Rock	1.79	0.019	0.2	655.6	4.7	119	0.3	8.1	42.5	2334	8.06	1	0.3	1.0	68	1.2	0.3	0.7	276	4.92
3441808	Rock	1.93	0.054	13.2	141.9	7.4	326	1.1	58.2	2.3	196	20.01	25	5.9	1.8	118	3.6	0.3	<0.1	2012	3.95
3441809	Rock	0.99	0.006	0.6	120.8	6.3	96	0.5	50.2	21.5	548	6.77	<1	<0.1	0.2	105	0.9	0.4	<0.1	241	4.98
3441810	Rock	1.71	0.017	16.7	227.4	5.7	628	1.5	112.6	12.6	451	10.13	<1	8.3	3.0	223	7.0	0.2	0.2	786	8.08
3441811	Rock	1.64	0.007	0.9	52.8	2.4	118	0.3	56.9	18.8	760	5.67	<1	0.9	2.0	172	0.4	<0.1	<0.1	412	7.50
3441812	Rock	1.49	0.006	1.6	80.0	2.5	102	0.4	27.0	6.9	681	5.35	29	1.8	4.3	134	0.5	0.3	<0.1	147	8.98
3441813	Rock	1.55	0.009	64.9	49.6	6.5	1003	0.4	119.9	3.7	259	1.91	<1	14.9	3.8	54	13.7	0.3	<0.1	1593	1.64
3441814	Rock	1.22	0.326	0.9	200.7	4.4	25	1.8	7.5	1.7	123	5.42	<1	0.4	0.2	33	0.1	0.2	0.7	163	1.10
3441815	Rock	1.79	0.025	2.0	256.1	3.1	292	0.8	58.7	4.3	465	18.65	2	3.5	1.8	158	1.3	0.3	0.3	895	9.53
3441816	Rock	1.38	0.006	12.9	114.3	8.2	751	0.9	126.6	21.3	1036	5.47	<1	6.0	2.2	235	13.3	0.1	0.2	694	6.19
3441817	Rock	2.65	0.018	<0.1	73.7	6.4	153	0.1	8.5	23.1	1450	7.28	<1	0.3	1.0	83	0.3	<0.1	<0.1	285	2.58
3441818	Rock	2.32	<0.005	0.4	20.9	3.0	128	<0.1	57.2	42.1	2195	10.68	2	0.2	0.9	230	0.4	<0.1	<0.1	464	7.24
3441819	Rock	3.74	0.005	1.8	8.3	3.2	34	<0.1	24.6	8.2	470	2.78	<1	1.8	6.5	259	0.2	<0.1	<0.1	90	2.87
3441901	Rock	4.21	0.010	0.7	99.4	29.3	166	0.4	4.5	18.1	1305	5.27	2	0.3	1.5	132	0.9	0.1	0.1	194	1.57
3441902	Rock	11.20	0.011	0.4	129.8	29.0	221	0.4	4.2	15.2	914	5.46	2	0.4	0.7	63	0.8	0.1	<0.1	233	0.51
3441903	Rock	7.24	0.018	3.2	151.0	25.2	2107	0.6	10.1	11.5	783	5.14	<1	0.7	1.3	54	7.3	0.1	0.1	163	0.55
3441904	Rock	6.20	0.008	0.7	101.6	43.0	918	0.3	16.4	10.1	952	4.66	1	1.1	2.0	66	1.7	0.1	<0.1	130	0.82
3441905	Rock	6.80	0.010	0.6	120.0	32.4	665	0.4	15.3	23.4	2317	7.34	3	0.6	1.0	78	3.3	0.2	0.2	297	2.21
3441906	Rock	8.04	0.014	0.1	115.0	25.3	106	0.3	5.2	18.8	1259	5.61	2	0.4	0.9	98	0.6	0.1	<0.1	264	3.29
3441907	Rock	8.54	0.015	0.2	791.1	28.3	356	0.5	3.4	20.8	1475	5.62	1	0.1	1.0	65	1.0	<0.1	0.3	195	1.98
3441908	Rock	11.17	0.011	0.1	90.4	20.5	127	0.1	7.2	18.1	1091	5.08	3	0.3	0.8	69	0.3	0.2	<0.1	207	2.39
3441909	Rock	5.71	0.017	0.4	311.3	67.8	218	0.6	4.2	18.1	1476	5.45	1	0.1	0.8	80	0.5	<0.1	0.3	179	2.70
3441910	Rock	16.31	0.018	0.1	642.3	38.0	233	0.4	3.5	15.2	1390	4.66	<1	<0.1	0.8	69	0.8	<0.1	0.2	157	2.15
3441911	Rock	8.56	0.011	<0.1	574.4	28.5	448	0.4	1.7	17.9	1356	6.05	<1	0.2	1.0	65	0.8	<0.1	0.2	226	2.14

BUREAU VERITAS MINERAL LABORATORIES Canada

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
	Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
3441801	Rock	2.611	19.1	165	2.31	15	0.075	1.52	0.160	0.05	0.8	7.7	10	0.2	62.9	2.4	0.1	<1	4	0.8	5.2
3441802	Rock	0.074	10.3	1333	9.95	114	0.236	5.52	0.464	0.26	0.2	10.4	18	0.7	17.0	1.6	0.1	<1	22	5.5	1.0
3441803	Rock	0.010	2.7	5	0.05	8	0.010	0.32	0.050	0.05	<0.1	0.3	6	<0.1	2.4	<0.1	<0.1	<1	<1	0.1	1.2
3441804	Rock	0.006	20.6	4	0.89	26	0.091	5.95	0.486	2.45	0.7	6.6	61	5.3	6.4	14.1	0.8	6	4	7.9	2.9
3441805	Rock	0.072	17.3	36	6.44	56	0.184	2.83	0.213	0.13	0.5	12.9	32	0.8	12.1	9.2	0.6	4	4	2.4	3.4
3441806	Rock	0.074	11.2	177	4.33	146	0.161	8.07	1.531	0.46	0.1	4.4	17	0.6	24.0	3.2	0.2	<1	33	5.6	1.1
3441807	Rock	0.015	4.8	6	2.51	57	0.372	7.69	1.513	0.23	0.6	3.0	12	1.7	30.8	1.6	0.1	<1	28	4.6	1.4
3441808	Rock	1.348	160.0	372	2.04	64	0.112	1.81	0.017	0.03	0.3	15.7	55	0.9	264.8	6.3	0.3	1	5	1.8	2.8
3441809	Rock	0.067	2.7	204	2.87	59	0.749	8.84	0.508	2.53	0.8	3.3	9	0.8	23.8	2.4	0.2	1	31	11.8	2.8
3441810	Rock	0.637	27.4	170	2.39	22	0.167	3.14	0.122	0.35	0.7	18.5	24	0.9	56.0	6.4	0.3	2	7	1.8	4.9
3441811	Rock	0.089	11.5	252	6.85	889	0.276	6.84	0.442	0.91	0.5	9.0	18	0.7	18.3	3.4	0.2	<1	26	8.2	0.8
3441812	Rock	0.078	21.5	87	7.19	96	0.290	3.27	0.188	0.24	0.5	9.4	41	0.6	18.5	14.0	0.9	<1	5	1.4	1.8
3441813	Rock	0.057	19.7	108	1.34	151	0.210	2.97	0.134	1.24	1.4	22.3	28	1.0	28.6	12.0	0.7	1	7	2.7	0.4
3441814	Rock	0.278	7.7	38	0.49	3	0.024	0.43	0.016	<0.01	0.4	1.5	4	<0.1	13.8	0.6	<0.1	<1	2	0.3	<0.1
3441815	Rock	1.740	44.6	232	3.27	44	0.096	1.46	0.175	0.09	1.3	9.6	22	0.3	83.6	4.5	0.2	1	3	0.3	2.6
3441816	Rock	0.400	16.2	292	2.98	64	0.313	6.98	0.441	0.96	0.4	11.4	19	0.6	37.2	3.5	0.2	2	21	3.8	2.0
3441817	Rock	0.035	4.9	16	4.26	94	0.373	8.62	2.596	0.32	0.2	1.0	13	0.8	16.6	1.5	0.1	<1	31	11.0	<0.1
3441818	Rock	0.084	10.0	54	3.63	46	1.428	7.83	1.453	0.19	0.6	5.4	27	1.3	31.3	12.0	0.7	<1	42	2.5	<0.1
3441819	Rock	0.040	15.6	45	1.91	123	0.161	5.41	1.738	0.20	<0.1	6.5	29	0.3	17.6	4.5	0.4	<1	7	2.6	<0.1
3441901	Rock	0.050	4.3	8	1.83	321	0.158	8.00	1.611	1.53	0.3	0.8	12	0.7	13.7	0.6	<0.1	1	18	5.6	0.7
3441902	Rock	0.036	1.8	10	2.18	1213	0.123	7.34	1.147	2.33	0.5	2.2	5	0.7	4.7	0.2	<0.1	<1	20	7.1	0.4
3441903	Rock	0.069	3.2	25	2.29	409	0.086	6.10	1.019	1.60	0.2	4.8	9	1.0	6.9	0.2	<0.1	<1	17	6.8	0.7
3441904	Rock	0.113	5.4	28	2.31	1241	0.135	6.27	1.290	1.29	<0.1	4.8	15	0.9	13.5	0.7	<0.1	<1	16	6.3	0.2
3441905	Rock	0.066	3.7	18	3.25	1323	0.479	7.48	0.954	1.42	0.1	2.5	11	1.1	16.8	1.8	0.1	<1	26	8.5	0.3
3441906	Rock	0.048	3.6	5	1.75	480	0.475	9.07	1.246	1.93	0.4	1.5	10	0.6	13.6	1.8	0.1	<1	22	6.5	0.3
3441907	Rock	0.042	3.0	6	2.01	459	0.323	8.31	1.793	2.50	0.7	0.5	9	0.5	10.0	0.6	<0.1	<1	20	6.7	1.3
3441908	Rock	0.054	3.4	28	1.91	422	0.374	8.80	1.209	2.76	2.0	1.0	10	0.8	12.2	0.9	<0.1	<1	21	6.9	0.6
3441909	Rock	0.046	2.1	9	1.84	496	0.297	8.38	1.840	1.90	0.6	0.8	7	0.4	9.0	0.5	<0.1	<1	19	5.4	1.0
3441910	Rock	0.041	2.4	7	1.91	492	0.244	7.93	1.811	1.98	0.6	0.6	7	0.4	7.7	0.3	<0.1	<1	17	6.3	0.9
3441911	Rock	0.045	3.0	3	2.10	632	0.402	8.30	1.862	2.46	0.6	0.5	9	0.6	12.6	1.3	<0.1	<1	23	8.0	0.8

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400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
	MDL	0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
3441801	Rock	0.8	0.2	<0.05	<0.005	38	2.0	<0.5	32.16	2.64	26.73	4.25	13.77	0.21	0.06	0.11	5.96	0.05	0.023	12	180
3441802	Rock	3.5	0.4	<0.05	<0.005	6	5.1	<0.5	44.71	9.67	11.21	17.33	10.16	0.64	0.31	0.61	0.17	0.16	0.227	103	703
3441803	Rock	1.2	<0.1	<0.05	<0.005	1	0.5	<0.5	94.68	0.55	2.85	0.10	0.27	0.06	0.06	0.01	0.03	0.01	<0.002	6	<20
3441804	Rock	41.4	0.2	0.13	0.012	2	<0.5	<0.5	67.77	11.90	9.35	1.53	0.03	0.64	3.01	0.17	0.02	0.02	<0.002	2695	<20
3441805	Rock	1.7	0.6	<0.05	0.005	7	4.3	<0.5	42.87	5.10	16.78	11.71	16.45	0.30	0.16	0.32	0.16	0.04	0.007	49	63
3441806	Rock	12.0	0.3	0.08	0.005	5	2.2	<0.5	54.50	14.92	7.50	7.59	8.12	2.06	0.57	0.65	0.16	0.15	0.035	141	53
3441807	Rock	2.8	0.3	0.09	<0.005	2	1.4	<0.5	54.55	14.63	12.59	4.50	7.31	2.05	0.29	0.65	0.03	0.30	<0.002	52	<20
3441808	Rock	1.2	0.2	<0.05	0.041	17	0.7	<0.5	48.13	3.17	30.09	3.57	5.80	0.02	0.04	0.18	3.01	0.03	0.051	56	57
3441809	Rock	24.7	0.2	<0.05	<0.005	2	0.7	<0.5	45.37	17.98	10.62	5.37	7.59	0.72	3.26	1.33	0.16	0.07	0.037	1525	58
3441810	Rock	9.5	0.5	0.08	0.025	21	1.6	<0.5	52.48	5.59	15.86	4.21	11.62	0.16	0.42	0.28	1.41	0.06	0.025	184	112
3441811	Rock	21.6	0.3	0.05	<0.005	2	4.0	<0.5	48.70	12.36	8.57	12.09	10.66	0.63	1.13	0.64	0.20	0.09	0.059	832	60
3441812	Rock	5.1	0.4	<0.05	<0.005	5	5.9	<0.5	54.84	5.73	8.05	12.81	12.69	0.26	0.29	0.50	0.17	0.08	0.016	88	28
3441813	Rock	21.4	0.5	0.07	0.031	18	0.7	0.5	79.80	5.30	2.62	2.24	2.25	0.17	1.45	0.34	0.13	0.03	0.015	1333	113
3441814	Rock	0.6	<0.1	<0.05	<0.005	6	3.4	<0.5	86.59	0.77	7.65	0.80	1.49	0.02	<0.01	0.04	0.57	0.02	0.006	<5	<20
3441815	Rock	1.4	0.3	<0.05	<0.005	18	2.4	<0.5	38.60	2.47	28.85	5.93	13.81	0.25	0.11	0.15	4.10	0.06	0.034	39	60
3441816	Rock	19.6	0.3	0.10	0.030	17	1.2	<0.5	55.10	12.43	8.28	5.17	8.97	0.60	1.16	0.52	0.88	0.13	0.046	2179	129
3441817	Rock	2.6	<0.1	<0.05	<0.005	<1	1.1	<0.5	52.58	16.62	11.17	7.52	3.75	3.39	0.43	0.71	0.08	0.18	0.002	89	<20
3441818	Rock	1.4	0.4	0.11	<0.005	<1	1.7	<0.5	47.38	13.70	16.29	6.31	10.19	1.96	0.24	2.36	0.19	0.27	0.010	41	56
3441819	Rock	1.5	0.3	<0.05	<0.005	<1	0.8	<0.5	74.39	10.16	3.87	3.23	4.09	2.22	0.25	0.30	0.09	0.06	0.007	114	26
3441901	Rock	28.1	<0.1	<0.05	<0.005	<1	<0.5	<0.5	60.36	17.19	7.77	3.10	2.50	2.26	1.94	0.62	0.11	0.17	<0.002	312	<20
3441902	Rock	25.5	<0.1	0.13	<0.005	<1	<0.5	0.6	58.22	18.39	8.32	4.01	0.95	1.60	2.98	0.78	0.08	0.13	0.002	1316	<20
3441903	Rock	19.6	0.2	0.23	0.006	1	<0.5	0.5	63.89	14.46	7.85	4.12	0.94	1.38	2.05	0.57	0.15	0.11	0.005	1275	<20
3441904	Rock	14.4	0.1	0.12	<0.005	<1	<0.5	<0.5	64.63	14.41	7.21	4.21	1.43	1.78	1.66	0.58	0.25	0.12	0.005	1269	<20
3441905	Rock	9.7	<0.1	0.13	<0.005	<1	0.7	0.6	52.00	17.04	11.66	6.19	3.45	1.29	2.01	1.03	0.14	0.31	0.003	1425	<20
3441906	Rock	28.8	<0.1	<0.05	<0.005	<1	<0.5	0.8	55.45	18.82	8.78	3.24	5.01	1.73	2.57	0.82	0.10	0.16	<0.002	513	<20
3441907	Rock	41.8	<0.1	<0.05	<0.005	<1	<0.5	<0.5	57.18	17.87	8.80	3.68	3.10	2.52	3.15	0.70	0.09	0.20	<0.002	594	<20
3441908	Rock	39.2	<0.1	<0.05	<0.005	<1	<0.5	<0.5	56.35	18.84	7.82	3.58	3.74	1.70	3.50	0.75	0.12	0.14	0.005	433	<20
3441909	Rock	26.3	<0.1	<0.05	<0.005	<1	0.5	<0.5	56.86	18.17	8.44	3.47	4.23	2.61	2.53	0.67	0.10	0.19	<0.002	534	<20
3441910	Rock	28.2	<0.1	<0.05	<0.005	<1	0.5	<0.5	60.07	17.11	7.28	3.52	3.32	2.59	2.62	0.62	0.08	0.18	<0.002	527	<20
3441911	Rock	41.9	<0.1	<0.05	<0.005	<1	<0.5	<0.5	56.38	17.72	9.40	3.82	3.26	2.70	3.11	0.78	0.09	0.17	<0.002	640	<20

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

	Method	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Sr	Zr	Y	Nb	Sc	LOI	Sum
	Unit	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	2	5	3	5	1	-5.1	0.01
3441801	Rock	158	57	61	6	4	13.7	99.74
3441802	Rock	24	59	16	6	22	4.3	99.61
3441803	Rock	7	<5	<3	<5	<1	1.4	100.01
3441804	Rock	35	339	89	16	5	5.2	99.96
3441805	Rock	307	95	13	7	4	5.8	99.76
3441806	Rock	332	65	24	10	33	3.5	99.80
3441807	Rock	68	61	36	<5	31	2.9	99.79
3441808	Rock	114	160	287	7	6	5.3	99.53
3441809	Rock	121	100	28	<5	38	7.1	99.83
3441810	Rock	218	95	55	<5	8	7.5	99.70
3441811	Rock	163	88	18	<5	26	4.4	99.71
3441812	Rock	127	232	18	15	6	4.2	99.74
3441813	Rock	51	111	27	12	7	5.1	99.59
3441814	Rock	30	16	12	<5	2	2.0	99.96
3441815	Rock	151	102	81	<5	4	5.3	99.68
3441816	Rock	244	71	36	7	20	6.1	99.70
3441817	Rock	81	54	20	<5	35	3.4	99.80
3441818	Rock	220	139	31	12	44	0.8	99.80
3441819	Rock	245	117	22	8	8	1.2	99.93
3441901	Rock	128	75	19	<5	22	3.8	99.89
3441902	Rock	76	75	17	<5	29	4.2	99.85
3441903	Rock	63	96	22	<5	22	3.9	99.62
3441904	Rock	74	124	31	8	20	3.3	99.78
3441905	Rock	85	71	26	5	35	4.4	99.74
3441906	Rock	105	71	20	7	27	3.1	99.88
3441907	Rock	71	66	18	<5	24	2.4	99.76
3441908	Rock	75	69	19	<5	26	3.3	99.88
3441909	Rock	89	64	15	5	24	2.5	99.83
3441910	Rock	76	64	15	<5	22	2.3	99.81
3441911	Rock	68	68	21	<5	27	2.3	99.78

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

	Method	WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
3441912	Rock	6.82	0.046	0.1	1511.9	25.7	519	1.2	2.5	17.2	1289	5.48	1	0.2	0.9	61	2.0	<0.1	0.4	189	2.20
3441913	Rock	9.84	0.010	0.5	80.3	23.2	130	0.1	2.2	11.1	1191	4.09	1	0.8	2.8	71	0.2	<0.1	0.1	99	1.86
3441914	Rock	9.71	0.042	3.1	968.0	31.7	133	0.8	4.4	19.6	594	5.66	7	0.2	0.8	49	0.8	<0.1	0.9	204	1.17
3441915	Rock	6.57	0.075	5.3	1421.4	36.3	200	1.3	3.4	14.8	950	6.47	2	0.3	1.0	66	1.9	<0.1	1.1	168	1.92
3441916	Rock	7.84	0.014	3.4	779.5	44.0	232	0.5	5.7	19.6	857	5.03	<1	0.2	0.8	66	0.9	<0.1	0.5	178	2.07
3441917	Rock	12.12	0.016	1.6	1077.5	74.0	304	0.6	5.1	16.5	1041	5.31	<1	0.2	0.9	59	0.5	<0.1	0.5	244	1.65
3441951	Rock	10.95	0.006	0.1	248.1	19.7	273	0.1	3.6	21.9	1554	6.34	1	0.3	0.8	62	0.3	0.1	0.1	220	3.26
3441952	Rock	10.83	0.111	1.3	5732.9	22.2	809	4.6	5.1	20.0	908	6.07	<1	0.1	0.7	65	5.8	<0.1	1.1	176	2.26
3441953	Rock	10.91	0.016	0.2	280.3	18.8	304	0.2	4.8	22.2	1577	6.29	2	0.3	0.8	64	0.3	<0.1	0.2	250	3.01
3441954	Rock	9.18	0.005	<0.1	148.4	18.6	148	0.1	5.1	22.5	1464	6.34	1	0.2	0.6	61	0.5	<0.1	0.1	271	4.36
3441955	Rock	6.36	<0.005	<0.1	67.9	20.4	157	<0.1	5.9	24.1	1489	6.50	<1	0.3	0.7	70	0.6	<0.1	0.1	282	5.15
3441956	Rock	8.92	0.014	0.2	874.2	22.0	179	0.4	3.8	21.6	1270	6.03	1	0.3	0.7	61	0.4	<0.1	0.2	193	3.17
3441957	Rock	8.59	0.035	1.9	223.9	97.6	121	0.6	2.5	2.2	758	6.59	4	0.1	0.9	52	<0.1	<0.1	0.7	237	1.24
3441958	Rock	17.07	0.015	2.1	1129.5	74.0	247	0.6	5.8	24.9	929	6.03	<1	0.2	0.8	61	0.6	<0.1	0.5	193	1.95
3441959	Rock	9.25	0.011	0.6	116.4	48.6	232	0.2	4.0	20.5	1461	5.56	<1	0.2	0.7	71	0.4	<0.1	0.2	212	3.10
3441960	Rock	13.26	0.007	0.5	92.1	8.0	116	<0.1	5.2	22.0	1337	6.52	2	0.2	1.1	75	0.3	<0.1	<0.1	263	2.35
3441961	Rock	10.97	0.008	1.3	88.4	7.9	254	<0.1	4.9	20.4	1273	6.14	2	0.2	1.1	75	0.4	<0.1	<0.1	236	2.03
3441962	Rock	6.30	0.010	0.4	87.2	7.1	131	0.1	7.3	21.9	1196	5.89	1	0.2	1.2	84	0.2	<0.1	0.2	224	3.18
3441963	Rock	11.72	0.008	0.9	125.2	11.1	190	0.1	6.8	21.7	1290	5.69	<1	0.4	1.5	75	0.6	<0.1	0.2	215	3.04
3441964	Rock	8.42	0.036	1.3	689.8	12.2	237	0.7	6.3	19.5	1332	4.98	1	0.3	1.3	88	2.4	<0.1	0.3	188	2.82
3441965	Rock	10.77	0.006	0.2	67.7	9.5	147	<0.1	6.7	24.7	1452	7.21	1	0.3	1.0	86	0.4	<0.1	0.1	307	3.08

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS   VAN20001962.1

Method		MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
Analyte		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
Unit		%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
3441912	Rock	0.042	2.5	4	1.84	400	0.336	7.64	1.766	1.92	0.7	0.4	8	0.6	9.8	0.9	<0.1	<1	20	6.3	1.1
3441913	Rock	0.036	6.0	6	1.56	669	0.249	7.31	1.462	2.28	1.3	3.5	15	1.4	13.1	2.1	0.1	<1	14	5.5	0.6
3441914	Rock	0.041	1.8	8	1.05	31	0.229	7.61	1.420	2.72	2.1	0.6	6	0.7	6.9	0.2	<0.1	<1	20	4.2	3.6
3441915	Rock	0.037	4.1	9	1.27	213	0.243	7.39	1.561	1.78	1.5	0.7	10	1.0	10.8	0.4	<0.1	<1	21	4.3	1.8
3441916	Rock	0.042	2.5	10	1.20	152	0.276	6.99	1.554	1.99	1.9	0.6	7	0.6	7.9	0.4	<0.1	<1	20	4.9	2.0
3441917	Rock	0.038	3.1	10	1.76	223	0.338	7.98	1.512	3.21	2.2	0.6	8	0.8	9.2	0.4	<0.1	<1	26	5.6	1.7
3441951	Rock	0.042	2.8	4	2.08	436	0.450	7.82	1.244	2.61	0.2	0.6	8	0.6	12.6	1.7	0.1	<1	22	8.1	0.5
3441952	Rock	0.036	1.9	9	1.18	89	0.259	7.00	1.986	1.49	1.7	0.5	5	0.5	6.9	0.4	<0.1	<1	21	3.8	2.9
3441953	Rock	0.042	2.5	9	2.20	523	0.459	8.41	1.478	2.88	0.6	0.6	7	0.6	10.9	1.4	<0.1	<1	24	7.6	0.6
3441954	Rock	0.040	2.7	12	1.76	357	0.444	7.93	1.178	1.50	0.1	1.1	7	0.6	12.8	1.4	<0.1	<1	24	6.0	0.3
3441955	Rock	0.040	2.8	14	1.88	465	0.456	8.53	0.855	1.74	0.2	1.0	8	0.6	12.9	1.4	<0.1	<1	27	7.7	0.1
3441956	Rock	0.037	2.5	8	1.72	387	0.430	7.54	1.349	1.87	0.2	0.5	7	0.5	11.5	1.5	<0.1	<1	24	5.6	1.1
3441957	Rock	0.040	2.2	11	0.93	1097	0.255	7.21	1.167	2.57	2.1	0.6	5	1.1	7.5	0.2	<0.1	<1	26	3.6	0.3
3441958	Rock	0.038	2.6	8	1.27	90	0.342	7.37	1.247	2.76	2.9	0.6	7	0.7	9.4	0.9	<0.1	<1	21	4.6	2.9
3441959	Rock	0.042	2.4	7	1.74	399	0.415	7.96	1.356	2.59	1.2	0.4	6	0.7	11.4	1.3	<0.1	<1	22	6.1	1.1
3441960	Rock	0.040	3.4	8	2.87	293	0.463	9.27	3.348	1.13	0.3	0.5	9	0.6	7.8	1.7	0.1	<1	26	10.0	0.2
3441961	Rock	0.040	3.3	8	2.65	405	0.432	8.69	2.986	1.32	0.4	0.9	8	0.7	11.0	1.7	0.1	<1	25	9.3	0.3
3441962	Rock	0.038	3.8	10	2.46	204	0.416	8.30	3.614	0.64	0.4	1.9	10	0.7	10.4	1.8	0.1	<1	23	5.8	0.2
3441963	Rock	0.050	5.5	10	2.93	365	0.388	7.74	1.542	1.57	0.3	1.3	13	0.8	13.6	1.9	0.1	<1	23	8.6	0.3
3441964	Rock	0.035	4.1	8	2.58	490	0.337	7.80	1.900	1.69	0.3	1.4	11	0.8	11.3	1.4	<0.1	<1	21	9.0	0.6
3441965	Rock	0.033	3.1	7	3.74	351	0.489	9.45	3.013	1.45	0.3	1.4	8	0.7	12.7	1.7	0.1	<1	24	11.3	<0.1

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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
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CERTIFICATE OF ANALYSIS   VAN20001962.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
	MDL	0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
3441912	Rock	30.2	<0.1	0.08	0.006	1	0.6	<0.5	59.85	16.18	8.52	3.36	3.39	2.56	2.51	0.69	0.09	0.17	<0.002	468	<20
3441913	Rock	34.4	<0.1	<0.05	0.013	<1	<0.5	<0.5	63.03	16.32	6.49	2.92	3.01	2.07	2.84	0.52	0.09	0.16	<0.002	717	<20
3441914	Rock	38.4	<0.1	<0.05	0.013	3	<0.5	<0.5	59.88	16.59	8.58	1.88	1.98	2.01	3.41	0.64	0.08	0.08	<0.002	940	<20
3441915	Rock	28.4	<0.1	0.09	0.007	4	0.8	<0.5	59.67	15.26	9.81	2.19	2.95	1.99	2.19	0.62	0.08	0.13	<0.002	636	<20
3441916	Rock	27.1	<0.1	0.05	0.008	1	0.5	<0.5	61.98	15.85	7.76	2.19	3.32	2.11	2.60	0.60	0.10	0.11	0.002	757	<20
3441917	Rock	43.6	<0.1	0.06	<0.005	1	0.6	<0.5	56.25	18.54	8.43	3.24	2.83	2.07	3.77	0.73	0.08	0.14	0.002	998	<20
3441951	Rock	21.6	<0.1	0.05	<0.005	<1	<0.5	<0.5	54.84	17.98	9.99	4.00	5.05	1.65	3.14	0.76	0.09	0.21	<0.002	504	<20
3441952	Rock	20.5	<0.1	0.06	<0.005	3	0.6	<0.5	59.68	15.22	9.42	2.10	3.51	2.63	1.89	0.60	0.08	0.12	<0.002	525	<20
3441953	Rock	25.3	<0.1	0.05	<0.005	<1	<0.5	<0.5	53.28	18.95	10.10	4.20	4.70	1.97	3.43	0.78	0.09	0.22	<0.002	602	<20
3441954	Rock	10.5	<0.1	0.06	<0.005	<1	<0.5	<0.5	53.98	18.58	10.27	3.52	7.05	1.59	2.19	0.78	0.09	0.21	0.002	445	<20
3441955	Rock	13.9	<0.1	0.05	<0.005	<1	<0.5	<0.5	54.14	18.64	10.20	3.61	7.53	1.18	2.36	0.77	0.08	0.20	0.003	513	<20
3441956	Rock	20.5	<0.1	0.05	<0.005	<1	0.5	<0.5	57.67	16.77	9.60	3.29	4.97	1.82	2.57	0.71	0.08	0.18	<0.002	443	<20
3441957	Rock	32.5	<0.1	<0.05	<0.005	2	<0.5	<0.5	59.54	15.70	10.36	1.68	2.11	1.56	2.95	0.73	0.08	0.10	0.002	1180	<20
3441958	Rock	34.4	<0.1	0.06	0.005	2	0.8	<0.5	59.17	16.33	9.32	2.25	3.07	1.64	3.16	0.63	0.08	0.12	<0.002	813	<20
3441959	Rock	28.1	<0.1	0.06	<0.005	<1	<0.5	<0.5	56.79	18.22	8.66	3.31	4.82	1.81	3.08	0.70	0.09	0.20	<0.002	456	<20
3441960	Rock	11.5	<0.1	0.05	<0.005	<1	<0.5	<0.5	53.30	19.15	9.79	4.96	3.45	4.14	1.45	0.73	0.09	0.18	<0.002	338	<20
3441961	Rock	16.7	<0.1	0.05	<0.005	<1	<0.5	<0.5	56.33	17.78	9.16	4.57	2.94	3.68	1.60	0.68	0.08	0.17	<0.002	417	<20
3441962	Rock	5.3	0.1	<0.05	<0.005	<1	<0.5	<0.5	56.56	17.29	8.78	4.35	4.61	4.49	0.86	0.66	0.08	0.15	0.002	232	<20
3441963	Rock	17.5	<0.1	<0.05	<0.005	<1	<0.5	<0.5	59.05	15.54	8.52	5.12	4.46	2.00	2.03	0.63	0.11	0.17	0.002	371	<20
3441964	Rock	18.5	<0.1	<0.05	<0.005	<1	<0.5	<0.5	59.22	16.47	7.51	4.66	4.23	2.47	2.14	0.59	0.07	0.18	<0.002	514	<20
3441965	Rock	10.0	<0.1	0.06	<0.005	<1	<0.5	<0.5	50.04	19.15	10.46	6.47	4.39	3.55	1.88	0.76	0.06	0.18	<0.002	363	<20

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

CERTIFICATE OF ANALYSIS VAN20001962.1

	Method	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Sr	Zr	Y	Nb	Sc	LOI	Sum
	Unit	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	2	5	3	5	1	-5.1	0.01
3441912	Rock	65	61	17	<5	24	2.3	99.69
3441913	Rock	79	103	21	<5	17	2.4	99.91
3441914	Rock	65	59	12	<5	24	4.5	99.80
3441915	Rock	70	55	17	<5	22	4.8	99.74
3441916	Rock	73	55	12	<5	22	3.1	99.82
3441917	Rock	70	59	14	<5	31	3.5	99.74
3441951	Rock	70	65	19	<5	26	2.0	99.82
3441952	Rock	74	48	12	<5	24	3.9	99.26
3441953	Rock	73	63	17	<5	28	2.0	99.81
3441954	Rock	74	58	19	<5	31	1.5	99.86
3441955	Rock	76	56	17	<5	31	1.1	99.86
3441956	Rock	71	57	17	<5	27	2.1	99.79
3441957	Rock	56	62	11	<5	29	4.9	99.88
3441958	Rock	68	56	14	<5	24	3.9	99.78
3441959	Rock	80	61	18	<5	25	2.1	99.87
3441960	Rock	81	61	18	<5	28	2.6	99.85
3441961	Rock	76	62	17	<5	26	2.8	99.85
3441962	Rock	87	75	18	<5	25	2.0	99.88
3441963	Rock	75	60	17	<5	24	2.1	99.83
3441964	Rock	89	77	20	<5	23	2.2	99.78
3441965	Rock	84	52	17	<5	27	2.8	99.75

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: Kingfisher Resources Ltd.
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

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QUALITY CONTROL REPORT VAN20001962.1

	Method	WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
3441911	Rock	8.56	0.011	<0.1	574.4	28.5	448	0.4	1.7	17.9	1356	6.05	<1	0.2	1.0	65	0.8	<0.1	0.2	226	2.14
3441963	Rock	11.72	0.008	0.9	125.2	11.1	190	0.1	6.8	21.7	1290	5.69	<1	0.4	1.5	75	0.6	<0.1	0.2	215	3.04
Pulp Duplicates																					
3441805	Rock	1.17	0.019	1.4	98.9	3.3	211	1.0	59.9	5.6	266	10.37	<1	1.3	3.1	313	0.9	0.4	0.3	36	11.24
REP 3441805	QC		0.024																		
REP 3441813	QC			64.2	50.0	6.3	989	0.4	120.1	3.7	259	1.92	<1	15.3	3.8	53	12.5	0.3	<0.1	1591	1.62
3441816	Rock	1.38	0.006	12.9	114.3	8.2	751	0.9	126.6	21.3	1036	5.47	<1	6.0	2.2	235	13.3	0.1	0.2	694	6.19
REP 3441816	QC																				
3441901	Rock	4.21	0.010	0.7	99.4	29.3	166	0.4	4.5	18.1	1305	5.27	2	0.3	1.5	132	0.9	0.1	0.1	194	1.57
REP 3441901	QC		0.010																		
3441957	Rock	8.59	0.035	1.9	223.9	97.6	121	0.6	2.5	2.2	758	6.59	4	0.1	0.9	52	<0.1	<0.1	0.7	237	1.24
REP 3441957	QC																				
3441959	Rock	9.25	0.011	0.6	116.4	48.6	232	0.2	4.0	20.5	1461	5.56	<1	0.2	0.7	71	0.4	<0.1	0.2	212	3.10
REP 3441959	QC			0.7	118.1	50.0	232	0.2	4.0	20.1	1467	5.65	<1	0.3	0.8	74	0.4	<0.1	0.2	216	3.15
Core Reject Duplicates																					
3441813	Rock	1.55	0.009	64.9	49.6	6.5	1003	0.4	119.9	3.7	259	1.91	<1	14.9	3.8	54	13.7	0.3	<0.1	1593	1.64
DUP 3441813	QC		0.009	62.7	48.0	6.2	982	0.4	117.5	3.5	253	1.88	<1	14.8	3.8	52	12.2	0.2	0.1	1565	1.62
3441961	Rock	10.97	0.008	1.3	88.4	7.9	254	<0.1	4.9	20.4	1273	6.14	2	0.2	1.1	75	0.4	<0.1	<0.1	236	2.03
DUP 3441961	QC		0.009	1.2	89.3	7.8	257	<0.1	4.9	20.8	1248	6.12	1	0.2	1.1	74	0.4	<0.1	<0.1	232	2.03
Reference Materials																					
STD OREAS25A-4A	Standard			2.4	29.3	20.7	44	<0.1	48.2	7.6	501	6.61	10	2.4	12.5	43	<0.1	0.6	0.3	161	0.30
STD OREAS25A-4A	Standard			2.2	32.2	24.2	45	<0.1	45.1	7.5	506	6.65	10	2.7	14.6	43	<0.1	0.5	0.3	163	0.28
STD OREAS45H	Standard			1.6	808.1	11.7	38	0.2	458.7	91.2	417	20.39	17	1.6	7.0	27	<0.1	0.6	0.2	280	0.14
STD OREAS45E	Standard			2.2	768.1	18.0	48	0.3	485.9	57.4	588	24.40	17	2.3	12.8	16	<0.1	1.0	0.3	325	0.06
STD OXB130	Standard		0.122																		
STD OXB130	Standard		0.124																		
STD OXG141	Standard		0.907																		
STD OXG141	Standard		0.920																		
STD OXN155	Standard		7.517																		

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
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QUALITY CONTROL REPORT VAN20001962.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
	Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
3441911	Rock	0.045	3.0	3	2.10	632	0.402	8.30	1.862	2.46	0.6	0.5	9	0.6	12.6	1.3	<0.1	<1	23	8.0	0.8
3441963	Rock	0.050	5.5	10	2.93	365	0.388	7.74	1.542	1.57	0.3	1.3	13	0.8	13.6	1.9	0.1	<1	23	8.6	0.3
Pulp Duplicates																					
3441805	Rock	0.072	17.3	36	6.44	56	0.184	2.83	0.213	0.13	0.5	12.9	32	0.8	12.1	9.2	0.6	4	4	2.4	3.4
REP 3441805	QC																				
REP 3441813	QC	0.057	19.7	107	1.34	132	0.206	2.94	0.130	1.22	1.3	22.2	27	0.9	27.8	11.8	0.6	1	7	2.7	0.4
3441816	Rock	0.400	16.2	292	2.98	64	0.313	6.98	0.441	0.96	0.4	11.4	19	0.6	37.2	3.5	0.2	2	21	3.8	2.0
REP 3441816	QC																				
3441901	Rock	0.050	4.3	8	1.83	321	0.158	8.00	1.611	1.53	0.3	0.8	12	0.7	13.7	0.6	<0.1	1	18	5.6	0.7
REP 3441901	QC																				
3441957	Rock	0.040	2.2	11	0.93	1097	0.255	7.21	1.167	2.57	2.1	0.6	5	1.1	7.5	0.2	<0.1	<1	26	3.6	0.3
REP 3441957	QC																				
3441959	Rock	0.042	2.4	7	1.74	399	0.415	7.96	1.356	2.59	1.2	0.4	6	0.7	11.4	1.3	<0.1	<1	22	6.1	1.1
REP 3441959	QC	0.042	3.0	7	1.79	424	0.415	8.60	1.399	2.68	1.3	0.4	8	0.7	12.5	1.3	<0.1	<1	23	6.3	1.0
Core Reject Duplicates																					
3441813	Rock	0.057	19.7	108	1.34	151	0.210	2.97	0.134	1.24	1.4	22.3	28	1.0	28.6	12.0	0.7	1	7	2.7	0.4
DUP 3441813	QC	0.055	19.2	105	1.34	140	0.202	2.93	0.130	1.18	1.4	21.7	27	0.9	27.6	11.7	0.6	2	7	2.6	0.4
3441961	Rock	0.040	3.3	8	2.65	405	0.432	8.69	2.986	1.32	0.4	0.9	8	0.7	11.0	1.7	0.1	<1	25	9.3	0.3
DUP 3441961	QC	0.039	3.3	8	2.68	405	0.433	8.75	2.993	1.30	0.4	0.9	8	0.6	10.9	1.7	0.1	<1	25	9.2	0.3
Reference Materials																					
STD OREAS25A-4A	Standard	0.050	18.3	124	0.34	134	0.917	8.94	0.136	0.48	1.8	157.9	45	3.5	9.0	18.2	1.4	<1	13	37.8	<0.1
STD OREAS25A-4A	Standard	0.050	17.9	119	0.35	150	0.880	9.40	0.141	0.47	1.9	149.0	44	3.8	8.7	18.5	1.4	<1	12	41.6	<0.1
STD OREAS45H	Standard	0.023	12.6	720	0.25	332	0.895	8.40	0.097	0.21	0.9	129.9	25	1.8	9.1	13.2	1.0	1	58	13.8	<0.1
STD OREAS45E	Standard	0.032	10.5	1046	0.16	270	0.502	7.17	0.056	0.33	1.0	94.7	24	1.2	7.5	6.0	0.6	<1	90	6.8	<0.1
STD OXB130	Standard																				
STD OXB130	Standard																				
STD OXG141	Standard																				
STD OXG141	Standard																				
STD OXN155	Standard																				

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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
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QUALITY CONTROL REPORT VAN20001962.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
	MDL	0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
3441911	Rock	41.9	<0.1	<0.05	<0.005	<1	<0.5	<0.5	56.38	17.72	9.40	3.82	3.26	2.70	3.11	0.78	0.09	0.17	<0.002	640	<20
3441963	Rock	17.5	<0.1	<0.05	<0.005	<1	<0.5	<0.5	59.05	15.54	8.52	5.12	4.46	2.00	2.03	0.63	0.11	0.17	0.002	371	<20
Pulp Duplicates																					
3441805	Rock	1.7	0.6	<0.05	0.005	7	4.3	<0.5	42.87	5.10	16.78	11.71	16.45	0.30	0.16	0.32	0.16	0.04	0.007	49	63
REP 3441805	QC																				
REP 3441813	QC	20.9	0.5	0.06	0.026	18	1.0	0.5													
3441816	Rock	19.6	0.3	0.10	0.030	17	1.2	<0.5	55.10	12.43	8.28	5.17	8.97	0.60	1.16	0.52	0.88	0.13	0.046	2179	129
REP 3441816	QC								55.13	12.46	8.25	5.22	8.90	0.60	1.14	0.52	0.88	0.13	0.046	2179	121
3441901	Rock	28.1	<0.1	<0.05	<0.005	<1	<0.5	<0.5	60.36	17.19	7.77	3.10	2.50	2.26	1.94	0.62	0.11	0.17	<0.002	312	<20
REP 3441901	QC																				
3441957	Rock	32.5	<0.1	<0.05	<0.005	2	<0.5	<0.5	59.54	15.70	10.36	1.68	2.11	1.56	2.95	0.73	0.08	0.10	0.002	1180	<20
REP 3441957	QC								59.34	15.77	10.38	1.69	2.12	1.58	3.01	0.74	0.09	0.10	0.002	1186	<20
3441959	Rock	28.1	<0.1	0.06	<0.005	<1	<0.5	<0.5	56.79	18.22	8.66	3.31	4.82	1.81	3.08	0.70	0.09	0.20	<0.002	456	<20
REP 3441959	QC	26.8	<0.1	0.06	<0.005	<1	<0.5	<0.5													
Core Reject Duplicates																					
3441813	Rock	21.4	0.5	0.07	0.031	18	0.7	0.5	79.80	5.30	2.62	2.24	2.25	0.17	1.45	0.34	0.13	0.03	0.015	1333	113
DUP 3441813	QC	20.3	0.6	0.06	0.033	17	0.8	0.5	79.60	5.38	2.67	2.26	2.29	0.17	1.45	0.34	0.13	0.03	0.015	1341	114
3441961	Rock	16.7	<0.1	0.05	<0.005	<1	<0.5	<0.5	56.33	17.78	9.16	4.57	2.94	3.68	1.60	0.68	0.08	0.17	<0.002	417	<20
DUP 3441961	QC	16.8	<0.1	0.05	<0.005	<1	<0.5	<0.5	56.38	17.71	9.14	4.59	2.94	3.68	1.60	0.68	0.08	0.17	<0.002	415	<20
Reference Materials																					
STD OREAS25A-4A	Standard	56.5	4.1	0.08	<0.005	3	<0.5	<0.5													
STD OREAS25A-4A	Standard	56.6	4.2	0.10	<0.005	2	<0.5	<0.5													
STD OREAS45H	Standard	22.5	3.7	0.10	<0.005	2	<0.5	<0.5													
STD OREAS45E	Standard	21.6	3.0	0.09	<0.005	3	<0.5	<0.5													
STD OXB130	Standard																				
STD OXB130	Standard																				
STD OXG141	Standard																				
STD OXG141	Standard																				
STD OXN155	Standard																				

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Canada

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: November 18, 2020

QUALITY CONTROL REPORT VAN20001962.1

	Method	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Sr	Zr	Y	Nb	Sc	LOI	Sum
	Unit	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	2	5	3	5	1	-5.1	0.01
3441911	Rock	68	68	21	<5	27	2.3	99.78
3441963	Rock	75	60	17	<5	24	2.1	99.83
Pulp Duplicates								
3441805	Rock	307	95	13	7	4	5.8	99.76
REP 3441805	QC							
REP 3441813	QC							
3441816	Rock	244	71	36	7	20	6.1	99.70
REP 3441816	QC	244	71	36	6	20	6.1	99.69
3441901	Rock	128	75	19	<5	22	3.8	99.89
REP 3441901	QC							
3441957	Rock	56	62	11	<5	29	4.9	99.88
REP 3441957	QC	56	63	11	<5	29	4.9	99.88
3441959	Rock	80	61	18	<5	25	2.1	99.87
REP 3441959	QC							
Core Reject Duplicates								
3441813	Rock	51	111	27	12	7	5.1	99.59
DUP 3441813	QC	52	113	27	10	7	5.1	99.58
3441961	Rock	76	62	17	<5	26	2.8	99.85
DUP 3441961	QC	75	62	18	<5	26	2.8	99.83
Reference Materials								
STD OREAS25A-4A	Standard							
STD OREAS25A-4A	Standard							
STD OREAS45H	Standard							
STD OREAS45E	Standard							
STD OXB130	Standard							
STD OXB130	Standard							
STD OXG141	Standard							
STD OXG141	Standard							
STD OXN155	Standard							

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		WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
STD OXN155	Standard		7.706																		
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19 Expected																					
STD OREAS45H Expected				1.55	767	12.2	39.7	0.147	451	92	405	20.4	16.9	1.68	7.6	28		0.63	0.17	275	0.135
STD OREAS25A-4A Expected				2.41	33.9	25.2	44.4		45.8	7.7	480	6.6	9.94	2.94	15.8	48.5		0.65	0.37	157	0.301
STD OREAS45E Expected				2.4	780	18.2	46.7	0.311	454	57	570	24.12	16.3	2.41	12.9	15.9	0.06	1	0.28	322	0.065
STD OXG141 Expected			0.93																		
STD OXN155 Expected			7.762																		
STD OXB130 Expected			0.125																		
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank																				
BLK	Blank																				
BLK	Blank			<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.2	2	<0.01	<1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank			<0.1	0.4	<0.1	<1	<0.1	0.1	<0.2	<1	<0.01	<1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
Prep Wash																					
ROCK-VAN	Prep Blank		0.006	0.5	3.6	2.1	29	<0.1	0.6	3.5	536	1.98	2	1.0	2.8	215	<0.1	0.1	<0.1	32	1.50
ROCK-VAN	Prep Blank		<0.005	0.5	4.2	2.1	28	<0.1	1.4	3.6	535	1.96	2	1.1	2.7	199	<0.1	<0.1	<0.1	32	1.54

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QUALITY CONTROL REPORT VAN20001962.1

		MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
		%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
STD OXN155	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19 Expected																					
STD OREAS45H Expected		0.023	13.3	660	0.2575	342	0.878	8.2	0.09	0.215	0.9	126	24.3	1.93	10.4	13.8	1	1.09	59	13.9	
STD OREAS25A-4A Expected		0.048	21.8	115	0.327	147	0.93	8.87	0.131	0.482	2	155	47.3	4.06	10.5	20.9	1.4	0.93	13.7	36.7	0.047
STD OREAS45E Expected		0.034	11	979	0.156	252	0.559	6.78	0.059	0.324	1.07	97	23.5	1.32	8.28	6.8	0.54		93	6.58	0.046
STD OXG141 Expected																					
STD OXN155 Expected																					
STD OXB130 Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.001	<0.1	<1	<0.01	<1	<0.001	<0.01	0.002	<0.01	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<1	<1	<0.1	<0.1
BLK	Blank	<0.001	<0.1	2	<0.01	<1	<0.001	<0.01	0.003	<0.01	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<1	<1	<0.1	<0.1
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-VAN	Prep Blank	0.038	11.1	4	0.45	890	0.187	6.93	3.219	1.74	0.3	47.4	23	0.7	14.5	5.4	0.4	<1	6	2.8	<0.1
ROCK-VAN	Prep Blank	0.036	11.5	6	0.46	856	0.175	7.07	3.194	1.70	0.3	44.5	24	0.6	13.7	5.2	0.4	<1	6	2.9	<0.1

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Project: Ecstall
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QUALITY CONTROL REPORT VAN20001962.1

		MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
		Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
		0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
STD OXN155	Standard																				
STD SO-19	Standard								60.80	13.87	7.36	2.87	5.88	4.07	1.29	0.69	0.31	0.13	0.496	463	462
STD SO-19	Standard								60.72	13.89	7.37	2.88	5.90	4.09	1.28	0.69	0.32	0.13	0.496	465	454
STD SO-19	Standard								60.52	13.94	7.44	2.90	5.97	4.03	1.31	0.70	0.32	0.13	0.493	472	477
STD SO-19	Standard								60.30	14.08	7.41	2.92	5.98	4.11	1.31	0.70	0.32	0.13	0.498	467	469
STD SO-19 Expected									61.13	13.95	7.47	2.88	6	4.11	1.29	0.69	0.32	0.13	0.5	486	470
STD OREAS45H Expected		22.5	3.42	0.1		2.02															
STD OREAS25A-4A Expected		61	4.14	0.09		2.4		0.35													
STD OREAS45E Expected		21.2	3.11	0.099		2.97	0.1	0.15													
STD OXG141 Expected																					
STD OXN155 Expected																					
STD OXB130 Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank								0.02	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20
BLK	Blank								0.02	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20
BLK	Blank	<0.1	<0.1	<0.05	<0.005	<1	<0.5	<0.5													
BLK	Blank	<0.1	<0.1	<0.05	<0.005	<1	<0.5	<0.5													
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-VAN	Prep Blank	36.7	1.6	<0.05	<0.005	<1	<0.5	<0.5	71.75	13.94	2.82	0.80	2.26	4.39	2.03	0.35	0.09	0.07	<0.002	832	<20
ROCK-VAN	Prep Blank	33.5	1.7	<0.05	<0.005	<1	<0.5	<0.5	71.80	13.74	2.78	0.80	2.25	4.43	2.01	0.34	0.09	0.07	<0.002	813	<20

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Project: Ecstall
Report Date: November 18, 2020

QUALITY CONTROL REPORT VAN20001962.1

		LF300	LF300	LF300	LF300	LF300	LF300	LF300
		Sr	Zr	Y	Nb	Sc	LOI	Sum
		ppm	ppm	ppm	ppm	ppm	%	%
		2	5	3	5	1	-5.1	0.01
STD OXN155	Standard							
STD SO-19	Standard	314	113	34	70	26	1.9	99.88
STD SO-19	Standard	313	113	35	71	26	1.9	99.89
STD SO-19	Standard	314	115	34	71	27	1.9	99.88
STD SO-19	Standard	320	116	34	71	27	1.9	99.88
STD SO-19 Expected		317.1	112	35.5	68.5	27		
STD OREAS45H Expected								
STD OREAS25A-4A Expected								
STD OREAS45E Expected								
STD OXG141 Expected								
STD OXN155 Expected								
STD OXB130 Expected								
BLK	Blank							
BLK	Blank							
BLK	Blank	<2	<5	<3	<5	<1	0.0	0.02
BLK	Blank	<2	<5	<3	<5	<1	0.0	0.04
BLK	Blank							
BLK	Blank							
BLK	Blank							
BLK	Blank							
Prep Wash								
ROCK-VAN	Prep Blank	201	139	16	8	7	1.4	99.99
ROCK-VAN	Prep Blank	199	135	16	8	7	1.6	100.00

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Vancouver British Columbia V6C 3A6 Canada

Submitted By:	Ecstall - Email Distribution List
Receiving Lab:	Canada-Vancouver
Received:	October 13, 2020
Analysis Start:	December 17, 2020
Report Date:	January 15, 2021
Page:	1 of 2

CERTIFICATE OF ANALYSIS VAN20002355.1

CLIENT JOB INFORMATION

Project:	Ecstall
Shipment ID:	Ecstall 2020-2
P.O. Number	
Number of Samples:	28

SAMPLE DISPOSAL

PICKUP-PLP	Client to Pickup Pulps
PICKUP-RJT	Client to Pickup Rejects

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

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	26	Crush, split and pulverize 250 g rock to 200 mesh			VAN
SLBHP	2	Sort, label and box pulps			VAN
FA430	28	Lead Collection Fire Assay Fusion - AAS Finish	30	Completed	VAN
MA200	28	4 Acid digestion ICP-MS analysis	0.25	Completed	VAN
LF300	28	LiBO2/Li2B4O7 fusion ICP-ES analysis	0.2	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Kingfisher Resources Ltd.
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
MARCUS LAU
Production Manager

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

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Report Date: January 15, 2021

CERTIFICATE OF ANALYSIS VAN20002355.1

	Method	WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
3440151	Drill Core	2.47	0.041	0.3	2079.6	43.0	588	1.5	2.8	27.2	1429	6.27	<1	0.2	1.2	77	4.2	<0.1	0.7	197	2.26
3440152	Drill Core	2.15	0.176	0.6	8606.7	32.2	2393	7.1	3.3	28.5	1254	6.61	1	0.2	1.1	73	18.6	<0.1	1.5	171	2.40
3440153	Drill Core	1.88	0.008	0.2	463.2	20.2	331	0.2	4.6	27.5	1938	6.56	3	0.4	1.1	72	0.4	0.3	0.2	226	3.50
3440154	Drill Core	4.15	0.008	0.3	589.8	6852.2	395	0.7	5.5	27.2	2027	6.71	2	0.3	1.0	80	0.4	0.9	0.3	263	3.15
3440155	Drill Core	2.49	<0.005	0.1	108.9	24.7	194	<0.1	6.0	30.2	1867	6.84	2	0.3	0.8	80	0.7	<0.1	0.1	275	4.90
3440156	Drill Core	2.45	0.008	0.3	181.7	27.6	197	0.2	4.6	28.4	1650	6.53	<1	0.3	1.0	78	0.4	<0.1	0.2	257	3.87
3440157	Drill Core	2.16	0.027	1.4	579.9	8.8	118	0.5	7.5	18.5	796	4.94	7	0.3	1.6	80	0.9	<0.1	0.9	123	1.47
3440158	Drill Core	3.07	0.101	6.5	3095.0	7.6	137	1.9	2.6	15.8	528	5.27	4	0.3	1.7	51	2.2	<0.1	2.9	62	0.53
3440159	Drill Core	2.61	0.008	0.3	441.6	6.2	49	0.2	2.2	15.1	603	4.59	6	0.3	1.9	61	0.1	<0.1	0.9	65	0.76
3440160	Drill Core	2.73	0.005	0.2	233.8	6.6	66	0.2	2.9	11.2	686	4.42	3	0.3	1.9	77	0.1	<0.1	0.5	86	1.18
3440160S	Rock Pulp	0.11	1.220	15.9	939.3	4647.7	1140	92.1	13.5	23.2	1137	4.40	32	1.4	2.9	524	10.7	78.7	0.5	178	4.90
3440161	Drill Core	1.33	<0.005	0.2	99.7	1.9	6	<0.1	0.6	2.0	89	0.90	<1	<0.1	0.3	17	<0.1	0.1	<0.1	11	0.22
3440162	Drill Core	2.73	<0.005	2.1	211.2	6.5	29	0.1	2.0	16.3	427	4.75	1	0.4	1.9	64	0.1	<0.1	0.6	63	0.72
3440163	Drill Core	2.86	0.011	0.7	372.3	6.7	37	0.2	2.3	15.1	496	4.38	3	0.4	1.9	71	0.1	<0.1	0.9	91	0.75
3440164	Drill Core	2.45	<0.005	0.6	87.9	7.4	113	0.1	18.7	17.9	1340	4.77	1	0.6	4.3	121	0.2	0.1	0.2	185	2.71
3440165	Drill Core	2.39	0.006	0.1	170.5	6.4	187	0.1	20.9	24.1	1729	6.04	1	0.2	0.8	97	0.2	<0.1	0.1	193	2.06
3440166	Drill Core	1.37	0.007	0.8	107.5	27.4	120	0.1	4.4	9.2	1007	3.26	1	1.3	6.5	84	0.3	<0.1	<0.1	65	2.06
3440167	Drill Core	2.01	0.009	3.3	308.8	44.7	274	0.4	14.5	26.3	1359	6.17	1	0.5	1.7	79	0.6	0.1	0.4	212	2.76
3440168	Drill Core	1.54	0.201	8.1	4706.5	104.6	622	4.8	6.4	26.6	1079	7.32	3	0.3	0.9	62	12.7	<0.1	1.8	134	1.92
3440169	Drill Core	2.44	0.125	5.8	2170.2	77.1	530	2.5	5.3	20.6	964	6.74	7	0.2	0.7	43	6.8	<0.1	1.0	126	1.69
3440170	Drill Core	2.14	0.016	2.1	353.8	33.8	3002	1.0	6.9	22.6	1089	7.01	3	0.5	1.0	63	46.7	0.2	0.2	217	0.95
3440170S	Rock Pulp	0.11	1.095	14.3	946.7	4632.1	1123	89.9	13.5	21.0	1147	4.39	31	1.5	2.8	509	9.8	76.0	0.5	179	5.07
3440171	Drill Core	1.70	0.013	1.1	150.1	31.9	1242	0.5	20.7	18.7	1262	5.83	1	1.0	2.5	62	2.3	0.4	<0.1	224	1.00
3440172	Drill Core	1.77	0.012	0.3	160.7	29.2	230	0.6	5.2	24.4	1148	5.29	3	0.4	1.1	109	1.0	0.3	<0.1	208	2.16
3440173	Drill Core	2.43	0.007	0.1	289.4	25.9	276	0.2	5.4	23.3	1560	7.02	2	0.4	1.0	85	0.2	0.3	0.1	287	4.04
3440174	Drill Core	2.13	0.064	0.2	2340.6	25.4	1786	1.9	2.7	22.5	1589	6.59	<1	0.4	1.1	84	10.0	<0.1	0.8	230	2.87
3440175	Drill Core	2.10	0.015	5.6	914.7	41.9	686	0.6	5.4	26.4	1176	6.07	1	0.4	1.0	100	6.3	0.1	0.2	211	3.00
3440176	Drill Core	5.71	0.006	<0.1	109.0	13.3	90	0.1	40.5	35.8	1414	6.41	<1	0.3	0.6	114	0.1	0.2	<0.1	234	5.34

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: January 15, 2021

CERTIFICATE OF ANALYSIS VAN20002355.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
	Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
3440151	Drill Core	0.044	4.0	4	1.78	102	0.367	7.87	2.170	2.31	1.2	0.7	11	0.7	12.8	0.6	<0.1	1	21	7.1	2.1
3440152	Drill Core	0.045	3.9	4	1.67	88	0.333	7.49	2.007	1.97	0.9	0.5	9	0.7	11.6	0.7	<0.1	<1	22	5.2	2.5
3440153	Drill Core	0.043	3.9	9	2.16	540	0.475	8.56	0.840	2.60	0.2	0.8	10	0.7	15.2	1.7	0.1	<1	25	6.8	1.0
3440154	Drill Core	0.045	4.2	11	2.17	401	0.460	8.60	1.583	2.52	0.4	0.6	10	0.8	16.9	1.3	<0.1	<1	28	7.4	1.3
3440155	Drill Core	0.035	3.4	13	1.93	458	0.460	8.90	0.998	1.70	0.1	1.2	9	0.8	16.1	1.6	<0.1	<1	25	7.4	0.3
3440156	Drill Core	0.041	3.4	9	2.02	492	0.477	8.54	1.457	2.20	0.2	1.0	9	0.7	15.9	1.8	<0.1	<1	26	6.2	0.7
3440157	Drill Core	0.039	6.0	17	1.83	132	0.274	6.71	1.976	1.54	0.6	1.1	13	0.7	12.9	1.4	<0.1	<1	18	5.0	1.2
3440158	Drill Core	0.024	4.5	7	1.33	31	0.144	5.52	1.212	1.87	0.9	1.0	12	0.8	6.2	0.4	<0.1	<1	13	5.0	3.1
3440159	Drill Core	0.024	6.8	7	1.69	120	0.187	6.16	1.806	1.83	0.4	0.8	16	0.9	5.2	0.5	<0.1	<1	16	4.8	1.9
3440160	Drill Core	0.029	7.5	7	2.07	146	0.250	6.71	2.365	1.57	0.1	0.7	16	1.0	5.9	1.0	<0.1	<1	17	4.4	1.0
3440160S	Rock Pulp	0.100	11.0	24	1.92	416	0.340	8.34	2.365	1.58	5.9	43.2	21	1.4	14.6	2.5	0.2	<1	17	22.3	1.0
3440161	Drill Core	0.002	1.2	3	0.24	64	0.027	1.20	0.400	0.20	0.1	2.4	3	<0.1	2.2	<0.1	<0.1	<1	3	0.7	0.2
3440162	Drill Core	0.033	7.2	7	1.73	41	0.173	5.61	1.983	1.30	0.2	1.0	16	0.6	4.3	0.8	<0.1	<1	12	3.9	2.3
3440163	Drill Core	0.033	6.4	6	1.81	48	0.198	6.05	1.878	1.53	0.4	1.0	15	0.7	3.3	0.5	<0.1	<1	13	4.2	1.9
3440164	Drill Core	0.032	11.7	66	2.62	555	0.300	7.98	2.501	0.60	0.4	5.3	23	1.3	16.0	2.4	0.2	<1	25	5.8	<0.1
3440165	Drill Core	0.041	3.4	70	3.48	477	0.335	7.79	2.264	0.71	0.2	0.7	8	0.9	11.0	1.6	<0.1	<1	28	7.9	0.2
3440166	Drill Core	0.033	13.0	8	1.43	490	0.218	6.82	1.735	1.62	0.7	9.8	26	1.2	14.3	2.9	0.2	<1	11	5.0	0.6
3440167	Drill Core	0.061	7.1	24	2.15	136	0.352	8.07	1.505	2.52	1.0	1.0	16	0.7	11.6	0.6	<0.1	<1	22	8.2	2.1
3440168	Drill Core	0.034	3.5	8	1.09	58	0.214	6.02	1.351	1.46	1.0	0.8	8	0.5	10.7	0.4	<0.1	<1	18	3.7	5.0
3440169	Drill Core	0.024	3.7	7	1.02	27	0.165	4.88	0.669	1.44	1.2	1.0	9	0.5	11.3	0.3	<0.1	<1	14	3.1	5.1
3440170	Drill Core	0.054	3.0	12	2.96	75	0.142	7.45	1.192	2.23	0.7	3.6	8	1.3	5.3	0.2	<0.1	<1	25	8.8	2.0
3440170S	Rock Pulp	0.106	9.4	25	1.92	666	0.338	8.47	2.426	1.52	5.6	43.7	21	1.2	14.3	2.5	0.2	<1	15	22.6	1.0
3440171	Drill Core	0.087	8.2	21	3.03	274	0.158	8.01	1.312	2.53	0.9	7.0	18	1.1	14.4	0.4	<0.1	1	23	9.3	0.8
3440172	Drill Core	0.048	4.2	7	1.49	256	0.404	7.58	1.461	1.53	1.1	1.6	10	0.6	11.6	1.3	<0.1	<1	21	9.7	0.9
3440173	Drill Core	0.035	3.7	7	2.01	526	0.451	9.17	1.158	2.35	1.1	0.7	9	0.7	15.4	1.5	<0.1	<1	28	5.5	0.5
3440174	Drill Core	0.047	3.2	3	2.18	331	0.472	8.45	1.895	2.43	0.7	0.5	8	0.6	13.4	1.3	0.1	<1	24	6.7	1.6
3440175	Drill Core	0.041	3.6	11	1.62	176	0.424	8.01	1.955	1.73	1.0	0.5	9	0.6	12.8	1.3	<0.1	<1	23	4.8	1.6
3440176	Drill Core	0.035	3.2	104	2.62	228	0.409	8.31	1.219	1.24	0.2	2.1	8	0.5	15.7	1.2	<0.1	<1	34	4.8	0.3

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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
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Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: January 15, 2021

CERTIFICATE OF ANALYSIS VAN20002355.1

Method		MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
Analyte		Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
MDL		0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
3440151	Drill Core	37.8	<0.1	0.11	<0.005	1	0.7	<0.5	57.28	17.27	9.29	3.20	3.49	2.80	2.77	0.73	0.08	0.19	<0.002	549	<20
3440152	Drill Core	32.7	<0.1	0.12	<0.005	2	0.7	<0.5	57.91	15.84	9.93	3.00	3.61	2.60	2.30	0.68	0.08	0.17	<0.002	419	<20
3440153	Drill Core	33.3	<0.1	<0.05	<0.005	<1	0.6	<0.5	55.02	17.79	9.74	3.90	5.54	1.14	3.20	0.73	0.08	0.26	0.002	578	<20
3440154	Drill Core	37.2	<0.1	0.07	<0.005	1	0.6	<0.5	54.61	17.95	10.28	3.95	4.93	2.09	3.06	0.76	0.09	0.27	0.003	554	<20
3440155	Drill Core	16.9	0.1	0.09	<0.005	<1	0.6	<0.5	52.77	19.20	10.43	3.70	7.81	1.41	2.37	0.74	0.08	0.25	0.003	481	<20
3440156	Drill Core	22.5	<0.1	0.09	<0.005	<1	<0.5	<0.5	54.50	18.45	9.94	3.75	6.05	1.91	2.83	0.75	0.08	0.22	0.002	512	<20
3440157	Drill Core	28.3	<0.1	0.07	<0.005	1	0.6	<0.5	63.84	14.81	7.56	3.25	2.44	2.62	1.82	0.49	0.08	0.11	0.003	542	<20
3440158	Drill Core	34.0	<0.1	0.15	<0.005	4	1.0	<0.5	68.99	12.12	7.71	2.29	0.83	1.60	2.14	0.34	0.05	0.07	<0.002	752	<20
3440159	Drill Core	35.0	<0.1	<0.05	<0.005	2	0.7	<0.5	66.85	14.23	6.96	2.91	1.28	2.35	2.00	0.38	0.05	0.10	<0.002	671	<20
3440160	Drill Core	36.8	<0.1	0.12	<0.005	<1	0.7	<0.5	64.86	15.15	6.83	3.54	1.90	3.10	1.99	0.43	0.07	0.11	<0.002	497	<20
3440160S	Rock Pulp	53.4	1.5	0.11	0.050	3	1.0	0.6	53.98	16.01	6.61	3.36	7.57	3.10	1.92	0.57	0.24	0.15	0.005	993	<20
3440161	Drill Core	5.0	<0.1	<0.05	<0.005	<1	<0.5	<0.5	94.78	2.21	1.21	0.41	0.29	0.55	0.24	0.06	0.01	0.01	<0.002	64	<20
3440162	Drill Core	29.2	<0.1	<0.05	<0.005	4	0.6	<0.5	68.30	13.07	7.17	3.00	1.16	2.61	1.57	0.35	0.07	0.07	<0.002	480	<20
3440163	Drill Core	31.5	<0.1	<0.05	<0.005	3	0.5	<0.5	65.89	14.83	6.77	3.20	1.30	2.53	1.85	0.41	0.07	0.09	<0.002	623	<20
3440164	Drill Core	6.9	0.2	0.06	<0.005	<1	0.8	<0.5	61.26	16.12	6.90	4.57	3.93	3.22	0.84	0.58	0.07	0.18	0.012	550	25
3440165	Drill Core	6.1	<0.1	<0.05	<0.005	<1	0.6	<0.5	56.39	16.70	9.18	6.40	3.10	2.95	0.91	0.62	0.08	0.23	0.012	478	24
3440166	Drill Core	35.2	0.3	<0.05	0.009	<1	<0.5	<0.5	68.52	14.44	4.81	2.52	3.05	2.27	2.18	0.37	0.07	0.13	0.002	473	<20
3440167	Drill Core	31.9	<0.1	<0.05	0.013	1	0.6	<0.5	56.26	17.28	9.20	3.90	4.41	1.93	3.09	0.73	0.13	0.18	0.004	703	20
3440168	Drill Core	33.0	<0.1	0.16	0.013	4	1.4	<0.5	64.55	11.88	10.33	1.85	2.77	1.74	1.76	0.46	0.06	0.14	<0.002	506	<20
3440169	Drill Core	29.3	<0.1	<0.05	0.006	3	0.8	<0.5	69.53	9.45	9.55	1.73	2.42	0.88	1.67	0.35	0.05	0.13	<0.002	385	<20
3440170	Drill Core	27.8	0.1	0.56	<0.005	1	<0.5	0.7	52.94	18.12	10.53	5.24	1.62	1.55	2.74	0.71	0.11	0.16	0.003	1380	<20
3440170S	Rock Pulp	47.5	1.4	0.12	0.047	1	0.7	0.6	53.90	16.03	6.53	3.40	7.55	3.11	1.91	0.57	0.23	0.15	0.004	987	<20
3440171	Drill Core	38.6	0.2	0.15	<0.005	1	<0.5	0.8	53.34	19.16	8.77	5.30	1.69	1.73	3.18	0.74	0.20	0.18	0.003	1978	<20
3440172	Drill Core	26.5	<0.1	0.06	<0.005	1	<0.5	<0.5	59.56	17.74	8.14	2.70	3.53	1.95	1.97	0.75	0.10	0.16	<0.002	841	<20
3440173	Drill Core	30.8	<0.1	<0.05	<0.005	<1	<0.5	<0.5	53.09	19.06	10.45	3.64	6.25	1.49	2.97	0.75	0.07	0.21	<0.002	513	<20
3440174	Drill Core	30.6	<0.1	<0.05	<0.005	1	0.6	<0.5	55.39	17.40	9.85	3.87	4.51	2.40	2.92	0.75	0.10	0.21	<0.002	510	<20
3440175	Drill Core	23.7	<0.1	0.07	0.006	2	0.8	<0.5	57.75	17.16	9.18	2.96	4.78	2.56	2.28	0.72	0.10	0.16	0.002	465	<20
3440176	Drill Core	13.8	0.2	0.11	<0.005	<1	<0.5	<0.5	54.78	17.37	9.71	4.81	7.93	1.59	1.65	0.69	0.08	0.19	0.022	220	38

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CERTIFICATE OF ANALYSIS VAN20002355.1

	Method	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Sr	Zr	Y	Nb	Sc	LOI	Sum
	Unit	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	2	5	3	5	1	-5.1	0.01
3440151	Drill Core	77	65	20	<5	25	2.4	99.58
3440152	Drill Core	71	59	18	<5	23	2.3	98.53
3440153	Drill Core	72	60	18	<5	27	2.3	99.80
3440154	Drill Core	77	59	20	<5	30	1.7	99.75
3440155	Drill Core	79	53	19	<5	31	1.0	99.84
3440156	Drill Core	79	60	20	<5	29	1.3	99.83
3440157	Drill Core	74	78	18	<5	18	2.7	99.84
3440158	Drill Core	51	85	17	<5	14	3.4	99.60
3440159	Drill Core	64	96	23	<5	17	2.7	99.87
3440160	Drill Core	77	98	21	<5	17	1.8	99.87
3440160S	Rock Pulp	517	87	15	<5	16	5.6	99.28
3440161	Drill Core	16	14	7	<5	2	0.2	100.00
3440162	Drill Core	64	91	16	<5	12	2.4	99.90
3440163	Drill Core	73	92	17	<5	15	2.9	99.88
3440164	Drill Core	121	122	28	7	26	2.1	99.87
3440165	Drill Core	101	70	20	<5	31	3.2	99.82
3440166	Drill Core	84	117	20	5	12	1.5	99.92
3440167	Drill Core	79	66	17	<5	26	2.6	99.81
3440168	Drill Core	59	44	12	<5	18	3.7	99.35
3440169	Drill Core	42	31	13	<5	15	3.8	99.63
3440170	Drill Core	72	67	20	<5	32	5.5	99.45
3440170S	Rock Pulp	519	79	15	6	16	5.7	99.24
3440171	Drill Core	76	120	38	<5	28	5.1	99.68
3440172	Drill Core	114	68	18	<5	24	3.1	99.84
3440173	Drill Core	85	57	18	<5	31	1.8	99.83
3440174	Drill Core	83	66	17	<5	26	1.9	99.39
3440175	Drill Core	103	62	19	<5	27	2.0	99.71
3440176	Drill Core	111	49	18	<5	38	1.0	99.86

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Client: Kingfisher Resources Ltd.
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Project: Ecstall
Report Date: January 15, 2021

QUALITY CONTROL REPORT VAN20002355.1

Method		WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
3440157	Drill Core	2.16	0.027	1.4	579.9	8.8	118	0.5	7.5	18.5	796	4.94	7	0.3	1.6	80	0.9	<0.1	0.9	123	1.47
Pulp Duplicates																					
3440154	Drill Core	4.15	0.008	0.3	589.8	6852.2	395	0.7	5.5	27.2	2027	6.71	2	0.3	1.0	80	0.4	0.9	0.3	263	3.15
REP 3440154	QC		0.009																		
3440159	Drill Core	2.61	0.008	0.3	441.6	6.2	49	0.2	2.2	15.1	603	4.59	6	0.3	1.9	61	0.1	<0.1	0.9	65	0.76
REP 3440159	QC																				
3440167	Drill Core	2.01	0.009	3.3	308.8	44.7	274	0.4	14.5	26.3	1359	6.17	1	0.5	1.7	79	0.6	0.1	0.4	212	2.76
REP 3440167	QC			3.1	305.1	44.4	286	0.4	13.5	24.2	1365	6.17	1	0.5	1.8	78	0.5	<0.1	0.4	210	2.89
Core Reject Duplicates																					
3440165	Drill Core	2.39	0.006	0.1	170.5	6.4	187	0.1	20.9	24.1	1729	6.04	1	0.2	0.8	97	0.2	<0.1	0.1	193	2.06
DUP 3440165	QC		0.008	0.2	189.7	6.5	183	0.1	21.0	25.5	1754	6.20	<1	0.2	0.9	101	0.2	<0.1	0.1	201	2.11
Reference Materials																					
STD OREAS25A-4A	Standard			2.4	35.0	26.6	43	<0.1	49.2	8.5	477	6.61	12	2.9	17.3	50	<0.1	0.6	0.4	159	0.27
STD OREAS45H	Standard			1.6	782.2	13.8	43	0.1	446.7	98.1	408	20.41	17	1.8	7.7	30	<0.1	0.7	0.2	281	0.14
STD OXB130	Standard		0.120																		
STD OXG141	Standard		0.956																		
STD OXN155	Standard		7.463																		
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19 Expected																					
STD OXG141 Expected			0.93																		
STD OXN155 Expected			7.762																		
STD OXB130 Expected			0.125																		
STD OREAS25A-4A Expected				2.41	33.9	25.2	44.4		45.8	7.7	480	6.6	9.94	2.94	15.8	48.5		0.65	0.37	157	0.301
STD OREAS45H Expected				1.55	767	12.2	39.7	0.147	451	92	405	20.4	16.9	1.68	7.6	28		0.63	0.17	275	0.135
BLK	Blank																				
BLK	Blank		<0.005																		
BLK	Blank		<0.005																		
BLK	Blank			<0.1	0.2	<0.1	<1	<0.1	<0.1	<0.2	<1	<0.01	<1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Kingfisher Resources Ltd.**
400 Burrard Street, Suite 1050
Vancouver British Columbia V6C 3A6 Canada

Project: Ecstall
Report Date: January 15, 2021

QUALITY CONTROL REPORT VAN20002355.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
	Analyte	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
	Unit	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
3440157	Drill Core	0.039	6.0	17	1.83	132	0.274	6.71	1.976	1.54	0.6	1.1	13	0.7	12.9	1.4	<0.1	<1	18	5.0	1.2
Pulp Duplicates																					
3440154	Drill Core	0.045	4.2	11	2.17	401	0.460	8.60	1.583	2.52	0.4	0.6	10	0.8	16.9	1.3	<0.1	<1	28	7.4	1.3
REP 3440154	QC																				
3440159	Drill Core	0.024	6.8	7	1.69	120	0.187	6.16	1.806	1.83	0.4	0.8	16	0.9	5.2	0.5	<0.1	<1	16	4.8	1.9
REP 3440159	QC																				
3440167	Drill Core	0.061	7.1	24	2.15	136	0.352	8.07	1.505	2.52	1.0	1.0	16	0.7	11.6	0.6	<0.1	<1	22	8.2	2.1
REP 3440167	QC	0.059	7.7	24	2.16	116	0.352	8.21	1.487	2.47	1.1	0.9	17	0.8	11.9	0.5	<0.1	<1	23	8.1	2.1
Core Reject Duplicates																					
3440165	Drill Core	0.041	3.4	70	3.48	477	0.335	7.79	2.264	0.71	0.2	0.7	8	0.9	11.0	1.6	<0.1	<1	28	7.9	0.2
DUP 3440165	QC	0.041	3.7	71	3.54	506	0.343	7.97	2.301	0.74	0.2	0.7	10	1.0	11.0	1.4	0.1	<1	29	7.3	0.2
Reference Materials																					
STD OREAS25A-4A	Standard	0.054	24.4	116	0.37	159	0.906	8.97	0.137	0.50	2.0	149.6	52	4.4	10.0	20.5	1.3	1	14	39.2	<0.1
STD OREAS45H	Standard	0.024	13.5	681	0.26	368	0.888	8.29	0.083	0.20	0.9	121.4	25	2.1	9.4	13.6	0.9	1	62	13.3	<0.1
STD OXB130	Standard																				
STD OXG141	Standard																				
STD OXN155	Standard																				
STD SO-19	Standard																				
STD SO-19	Standard																				
STD SO-19 Expected																					
STD OXG141 Expected																					
STD OXN155 Expected																					
STD OXB130 Expected																					
STD OREAS25A-4A Expected		0.048	21.8	115	0.327	147	0.93	8.87	0.131	0.482	2	155	47.3	4.06	10.5	20.9	1.4	0.93	13.7	36.7	0.047
STD OREAS45H Expected		0.023	13.3	660	0.2575	342	0.878	8.2	0.09	0.215	0.9	126	24.3	1.93	10.4	13.8	1	1.09	59	13.9	
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.001	<0.1	<1	<0.01	<1	<0.001	<0.01	0.001	<0.01	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<1	<1	<0.1	<0.1

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Project: Ecstall
Report Date: January 15, 2021

QUALITY CONTROL REPORT VAN20002355.1

	Method	MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
	MDL	0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
3440157	Drill Core	28.3	<0.1	0.07	<0.005	1	0.6	<0.5	63.84	14.81	7.56	3.25	2.44	2.62	1.82	0.49	0.08	0.11	0.003	542	<20
Pulp Duplicates																					
3440154	Drill Core	37.2	<0.1	0.07	<0.005	1	0.6	<0.5	54.61	17.95	10.28	3.95	4.93	2.09	3.06	0.76	0.09	0.27	0.003	554	<20
REP 3440154	QC																				
3440159	Drill Core	35.0	<0.1	<0.05	<0.005	2	0.7	<0.5	66.85	14.23	6.96	2.91	1.28	2.35	2.00	0.38	0.05	0.10	<0.002	671	<20
REP 3440159	QC								66.64	14.40	6.92	2.93	1.28	2.37	2.02	0.38	0.05	0.10	<0.002	664	<20
3440167	Drill Core	31.9	<0.1	<0.05	0.013	1	0.6	<0.5	56.26	17.28	9.20	3.90	4.41	1.93	3.09	0.73	0.13	0.18	0.004	703	20
REP 3440167	QC	36.9	<0.1	0.07	0.016	1	<0.5	<0.5													
Core Reject Duplicates																					
3440165	Drill Core	6.1	<0.1	<0.05	<0.005	<1	0.6	<0.5	56.39	16.70	9.18	6.40	3.10	2.95	0.91	0.62	0.08	0.23	0.012	478	24
DUP 3440165	QC	6.5	<0.1	0.06	<0.005	<1	0.8	<0.5	56.48	16.68	9.15	6.37	3.08	2.95	0.91	0.62	0.09	0.23	0.013	477	22
Reference Materials																					
STD OREAS25A-4A	Standard	60.0	4.1	0.07	<0.005	2	<0.5	<0.5													
STD OREAS45H	Standard	22.7	3.6	0.10	<0.005	2	<0.5	<0.5													
STD OXB130	Standard																				
STD OXG141	Standard																				
STD OXN155	Standard																				
STD SO-19	Standard								60.35	14.04	7.44	2.92	5.99	4.05	1.31	0.70	0.32	0.13	0.503	474	482
STD SO-19	Standard								60.20	14.11	7.48	2.94	6.00	4.06	1.30	0.70	0.31	0.13	0.504	474	481
STD SO-19 Expected									61.13	13.95	7.47	2.88	6	4.11	1.29	0.69	0.32	0.13	0.5	486	470
STD OXG141 Expected																					
STD OXN155 Expected																					
STD OXB130 Expected																					
STD OREAS25A-4A Expected		61	4.14	0.09		2.4		0.35													
STD OREAS45H Expected		22.5	3.42	0.1		2.02															
BLK	Blank								0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.1	<0.1	<0.05	<0.005	<1	<0.5	<0.5													

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QUALITY CONTROL REPORT VAN20002355.1

	Method	LF300	LF300	LF300	LF300	LF300	LF300	LF300
	Analyte	Sr	Zr	Y	Nb	Sc	LOI	Sum
	Unit	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	2	5	3	5	1	-5.1	0.01
3440157	Drill Core	74	78	18	<5	18	2.7	99.84
Pulp Duplicates								
3440154	Drill Core	77	59	20	<5	30	1.7	99.75
REP 3440154	QC							
3440159	Drill Core	64	96	23	<5	17	2.7	99.87
REP 3440159	QC	65	97	22	<5	16	2.7	99.87
3440167	Drill Core	79	66	17	<5	26	2.6	99.81
REP 3440167	QC							
Core Reject Duplicates								
3440165	Drill Core	101	70	20	<5	31	3.2	99.82
DUP 3440165	QC	101	69	19	<5	31	3.2	99.81
Reference Materials								
STD OREAS25A-4A	Standard							
STD OREAS45H	Standard							
STD OXB130	Standard							
STD OXG141	Standard							
STD OXN155	Standard							
STD SO-19	Standard	322	115	35	71	27	1.9	99.87
STD SO-19	Standard	323	119	35	69	27	1.9	99.87
STD SO-19 Expected		317.1	112	35.5	68.5	27		
STD OXG141 Expected								
STD OXN155 Expected								
STD OXB130 Expected								
STD OREAS25A-4A Expected								
STD OREAS45H Expected								
BLK	Blank	<2	<5	<3	<5	<1	0.0	0.04
BLK	Blank							
BLK	Blank							
BLK	Blank							

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		WGHT	FA430	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.005	0.1	0.1	0.1	1	0.1	0.1	0.2	1	0.01	1	0.1	0.1	1	0.1	0.1	0.1	1	0.01
Prep Wash																					
ROCK-VAN	Prep Blank		<0.005	0.7	2.1	2.7	29	<0.1	0.7	4.0	543	1.89	1	1.3	3.2	212	<0.1	0.1	<0.1	32	1.60
ROCK-VAN	Prep Blank		0.006	0.8	3.1	2.5	28	<0.1	0.7	3.9	534	1.93	2	1.3	3.3	225	<0.1	0.1	<0.1	32	1.52

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		MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200	MA200
		P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Ce	Sn	Y	Nb	Ta	Be	Sc	Li	S
		%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.001	0.1	1	0.01	1	0.001	0.01	0.001	0.01	0.1	0.1	1	0.1	0.1	0.1	0.1	1	1	0.1	0.1
Prep Wash																					
ROCK-VAN	Prep Blank	0.042	12.5	3	0.41	846	0.211	6.94	3.499	1.76	0.3	45.7	25	0.7	15.2	5.8	0.4	<1	7	2.6	<0.1
ROCK-VAN	Prep Blank	0.042	15.1	3	0.43	862	0.216	6.89	3.525	1.81	0.2	52.0	29	0.8	16.6	6.0	0.4	1	6	2.1	<0.1

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		MA200	MA200	MA200	MA200	MA200	MA200	MA200	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300	LF300
		Rb	Hf	In	Re	Se	Te	Tl	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm
		0.1	0.1	0.05	0.005	1	0.5	0.5	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20
Prep Wash																					
ROCK-VAN	Prep Blank	36.6	1.8	<0.05	<0.005	<1	<0.5	<0.5	71.81	13.93	2.78	0.73	2.41	4.49	2.13	0.33	0.09	0.07	<0.002	837	<20
ROCK-VAN	Prep Blank	39.5	2.0	<0.05	<0.005	<1	<0.5	<0.5	71.89	14.00	2.78	0.76	2.31	4.54	2.11	0.33	0.08	0.07	<0.002	827	<20

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		LF300	LF300	LF300	LF300	LF300	LF300	LF300
		Sr	Zr	Y	Nb	Sc	LOI	Sum
		ppm	ppm	ppm	ppm	ppm	%	%
		2	5	3	5	1	-5.1	0.01
Prep Wash								
ROCK-VAN	Prep Blank	206	141	17	<5	7	1.1	99.99
ROCK-VAN	Prep Blank	208	151	17	5	6	1.0	99.99

Appendix E: Drill Logs – Backpack Drill Holes

Hole Number	ECBPD20-01	UTM Datum	NAD83	Target	Shiner
		UTM Zone	9U	Logged by	G. Febbo
Azimuth	246	Easting (m)	469826	Comment	Backpack ddh targeting gossan sampled by 3441605. EOH 6.9, Azi 246, dip -47
Dip	-47	Northing (m)	5953021		
Length (m)	6.89	Elevation (m)	1058		
From (m)	**To (m)**	**Rock Type**	**Alteration**	**SampleNo**	**Description**
0.00	1.10	Volcaniclastic sandstone (andesite to basalt)	Quartz-sericite-chlorite	3440157	Lithology: unit is dark grey coloured, due to mafic-rich componentry. Most of interval has relict fragmental texture ranging from 1-3 mm, equant to angular/lenticular fragments. Componentry ~50% mafic minerals (~30% biotite black to brown; 30% black to deep green amphibole, ~40% feld (plg?) amorphous or banded; 5-15% brown-pink garnet 2-50 cm). Original unit inferred to be mafic/intermediate volcaniclastic sandstone. Metamorphic Fabric: Biotite defines schistose foliation, can have micro compositional banding with feldspar. Garnet has no strong preferred orientation, interpreted as porphyroblasts. Pyrite defines pressure shadow to garnet. Sulphide lenses all distended, lenticular, chalcopyrite mechanical deformation. Pyrite recrystallized (?) no obvious porphyroblasts of amphibole here. Foliation 68 deg CA, S0 and S1 transposed. Hydrothermal Features: High pyrite: chalcopyrite ratios in this hole. Sulphide-rich intervals have very strong spatial correlation with increase in quartz, deformed into fabric, some appears to be vein-like, others more diffuse. Quartz 5-15% over the entire interval (excluding large vein), local lenses of white mica associated with quartz. Pale green chlorite has minor spatial correlation with sulphides in some areas. Quartz vein subinterval (4.35-4.82 m): Vein cuts foliation and sulphide, sharp contacts, quartz is brittle deformed, grain size reduced, very coarse bt at vein margin, some wall rock material incorporated in vein, minor pyrite. Minor Fe-ox in vein, but no other primary minerals are obvious.
1.10	2.20			3440158	
2.20	3.30			3440159	
3.30	4.30			3440160	
4.30	4.82			3440161	
4.82	5.85			3440162	
5.85	6.89			3440163	

Hole Number	ECBPD20-02	**UTM Datum**	NAD83	**Target**	Shiner
		UTM Zone	9U	**Logged by**	G. Febbo
Azimuth	285	**Easting (m)**	469855	**Comment**	BP ddh targeting 30 cm massive sulfide zone sampled by 3440251 and channel sample 3441902. EOH 2.9 m, azi 285, dip -56
Dip	-56	**Northing (m)**	5953000		
Length (m)	2.88	**Elevation (m)**	1057		
From (m)	**To (m)**	**Rock Type**	**Alteration**	**SampleNo**	**Description**
0.00	1.00	Feldspar tuff, andesitic	Quartz-chlorite-pyrite	3440170	Lithology: Grey-green coloured, 10-30% subrounded to angular feldspar crystal fragments, evenly distributed, 1-2 mm (most), one band of lithic fragments up to 7 mm across, 15% lenticular, chl-rich fragments, interpreted as scoria (flattened/devitrified), matrix is mostly < 0.5 mm material, grey-green, even colour/texture, foliated, interpreted as tuffaceous. Fabric: Clasts aligned to S1, transposed, especially chl-rich, penetrative fabric defined by chl, note primary volc unit results in much less gt and bt; interpreted to be a proxy for maturity, veins folded, <1% pink-brown gt porphyroblasts, < 1 mm. Hydrothermal Features: 5-10% quartz veins and alteration bands throughout, chl<py, strong spatial relationship to quartz.
1.00	2.00			3440171	
2.00	2.88			3440172	

Hole Number	ECBPD20-03	UTM Datum	NAD83	Target	Shiner
		UTM Zone	9U	Logged by	G. Febbo
Azimuth	236	Easting (m)	469840	Comment	Backpack drill hole targeting down dip of 3441611. EOH 3 m, azi 236, dip -42, Petro sample: 1.37-1.4 m, alteration bands of feldspar, biotite, quartz, pyrite and trace cpy-sph (?). Is this sodic or potassic alteration (photo 6695)
Dip	-42	Northing (m)	5952945		
Length (m)	3	Elevation (m)	1089		

From (m)	To (m)	Rock Type	Alteration	SampleNo	Description
0.00	1.00	Volcaniclastic basalt	Quartz-feldspar-sulphide	3440173	Lithology: unit is black coloured, all distinct grains are < 1 mm, visible fragments are mostly feld, mafic-rich domains are more foliated. Feldspar components ~30%, mafic ~70%, mostly amphibole, some biotite near veins. Fabric: defined by amphibole, deformed quartz, approx 1% porphyroblasts garnet. Hydrothermal Features: The unit has narrow focused intervals of qz-feld alteration, associated with chalcopyrite-red sphalerite and pyrite. Feldspar alteration possible host rock formation. quartz-feldspar-sphalerite-pyrite-cpy+/-biotite alteration.
1.00	2.00			3440174	
2.00	3.00			3440175	

Hole Number	ECBPD20-04	UTM Datum	NAD83	Target	Shiner
		UTM Zone	9U	Logged by	G. Febbo
Azimuth	266	Easting (m)	469847	Comment	Targeting down dip of 3441612 and 3441611. azi 266, dip -45, EOH 6.0 m
Dip	45	Northing (m)	5952943		
Length (m)	6	Elevation (m)	1081		

From (m)	To (m)	Rock Type	Alteration	SampleNo	Description
0.00	1.10	Metasandstone: volcaniclastic breccia (intermediate)		3440151	Primary Features: 50-60% mafic minerals, most black to brown biotite/phlogopite 0-2 mm, 30-40% plagioclase aggregates, clasts and bands, 1-2 mm. Some compositional banding, < 2 mm wide. 10-20% green actinolite/hornblende, randomly oriented up to 2-3 mm long, spatial association with epidote. Relict fragmental domains 2-5 mm diameter, angular, higher feldspar abundance in clasts. No magnetism, no primary quartz, no carbonate (effervescence). Coarsest intervals = higher amphibolite ratios, interpreted to indicate primary volcanic deposits from mature (bt-rich) seds. Metamorphic Features: Tectonic fabric at 70 degrees CA, randomly oriented (metamorphic) amphibole indicates amphibolite facies. 3-5% pink-brown aggregates of garnet, measures 1-3 mm, locally can see 6-sided crystals, spatial association with epidote/feldspar/pyrite domains. Fabric mostly defined by biotite/phlogopite grains, interpreted to be metamorphic. Primary bedding (S0) transposed into metamorphic fabric. Hydrothermal Features: Entire interval overprinted by alteration and sulphides. Highest interval of chalcopyrite associated with transposed, recrystallized quartz (1-5% qz throughout; 15% qz 1.1-1.26 m). Quartz alteration is spatially associated with white mica. Chalcopyrite and pyrite are somewhat decoupled, cpy and pyrite lenses are separated. Red-brown coloured sphalerite (?) rims chalcopyrite aggregates. Inclusions and rims of black sulphide, black scratches on chalcopyrite. Lenticular sulphide lenses, blebs measure 3-5 mm. Local epidote, chlorite after amphibole, spatial association with pyrite, possible epidote correlation with hydrothermal system.
1.10	1.90			3440152	
1.90	2.54			3440153	
2.54	4.10			3440154	
4.10	5.00			3440155	
5.00	6.00			3440156	

Hole Number	ECBPD20-05	UTM Datum	NAD83	Target	Shiner
		UTM Zone	9U	Logged by	G. Febbo
Azimuth	249	Easting (m)	469852	Comment	Targeting cross cutting qtz veining. feeder structures? EOH 2.15 m, azi 249, dip -38
Dip	-38	Northing (m)	5952941		
Length (m)	2.15	Elevation (m)	1090		

From (m)	To (m)	Rock Type	Alteration	SampleNo	Description
0.00	2.15	Andesite breccia	Quartz-feldspar-chlorite-sulphide	3440176	Lithology: much of the interval is intensely altered. Less altered is a deep green coloured, fragmental andesite to basalt. Fragments are up to 1 cm, black, matrix is < 1 mm, green mafic and feldspar, tuffaceous? Potentially primary volcanic clasts, highly angular. Fabric: foliation defined by amphibole and chlorite, no biotite visible. Coarse amphibole in alteration bands - porphyroblasts. Hydrothermal Features: Interval contains ~10% feldspar and quartz veins. Feldspar vein domains are banded with amphibole-chlorite-quartz-epidote-pyrite (tr), quartz bands have higher chl and slightly higher sulphide. Quartz-albite-chlorite-amphibole-pyrite

Hole Number	ECBPD20-06	**UTM Datum**	NAD83	**Target**	Shiner
		UTM Zone	9U	**Logged by**	G. Febbo
Azimuth	268	**Easting (m)**	469868	**Comment**	Targeting various alterations. EOH 1.95 m, azi 268, dip -44
Dip	-44	**Northing (m)**	5952922		
Length (m)	1.93	**Elevation (m)**	1081		
From (m)	**To (m)**	**Rock Type**	**Alteration**	**SampleNo**	**Description**
0.00	1.00	Andesite breccia	Quartz-chlorite-pyrite	3440164	Lithology: Dark green coloured, intermediate to mafic fragmental rock/breccia. Clasts measure up to 5 mm, angular-irregular and feld-rich. Rock is ~60% mafic component, most forest green, foliated amphibole (?), 5% is black foliated biotite, ~40% is feld, most abundant in fragments. Fabric: defined by deformed, transposed veins, amphibole and biotite. Only tr garnet porphyroblasts. Alteration: Background alteration is chlorite (or possibly primary chl?), pyrite and quartz. One ~10 cm band near 40 cm with 20% quartz, chl in and halo to vein, and slightly elevated pyrite. Cpy not phaneritic in this hole, inferred based on qz+py abundance
1.00	1.93			3440165	

Hole Number	ECBPD20-07	UTM Datum	NAD83	Target	Shiner
		UTM Zone	9U	Logged by	G. Febbo
Azimuth	245	Easting (m)	469847	Comment	DDH targeting cu au min down dip of 3441622. EOH 4.5, Azi 245, dip -45
Dip	-45	Northing (m)	5952876		
Length (m)	5.51	Elevation (m)	1114		

From (m)	To (m)	Rock Type	Alteration	SampleNo	Description
0.00	1.10	Volcaniclastic sandstone	Quartz-chlorite-pyrite	3440166	Lithology: unit is dark grey coloured, unit has relict fragments/grains measure at most 2 mm diameter, most lenticular in shape. Mafic components ~60% (amph>>bt), feld 40% in compositional bands and preferentially as fragments. Porphyroblasts of pink-brown garnet 1-3%. Alteration: Interval is predominantly quartz-chlorite-pyrite alteration, ~15% quartz bands and diffuse domains, some may have represented veins. Dark green chl has strong spatial relationship to qz-rich domains. Only trace white mica in this hole.
1.10	2.20			3440167	
2.20	3.30			3440168	
3.30	4.50			3440169	

Appendix F: Geochemical Sample Notes – Rock Samples

Sample No.	Easting	Northing	Target	Sample Type	Outcrop Type	Comments
S3441801	469730	5953284	Shiner	Grab	Outcrop	
S3441802	469661	5953226	Shiner	Grab	Subcrop	local sluff
S3441803	469875	5952747	Shiner	Grab	Outcrop	qtz/alteration lens/blowout approx 2m thick following foliation. Slighly rusty in areas and minor massive pyrite found. Py 0.1%
S3441804	469746	5952684	Shiner	Grab		altn band through saddle, centered on this point, approx 15 m wide gossan , host is well foliated meta silt-sandstone, sampled layer 10cm wide
S3441805	469660	5952600	Shiner	Grab	Outcrop	10 cm layer sampled in siltstone, very rusty surface, very fine pyrite 5%, possible traces of cpy, sulphide dkmain is on conductor picks, uncertain whether cause is siltstkne or this type of lense
S3441806	469602	5952465	Shiner	Grab	Outcrop	gossan band on ridge sampled, located on conductor pick, very fine pyrite, difficult to est % due to size, 5%? silica altn 30%, ser 10%
S3441807	469825	5952815	Shiner	Grab	Outcrop	
S3441808	469645	5953620	Shiner	Grab	Subcrop	local float
S3441809	469667	5953488	Shiner	Grab	Outcrop	Gayle collected Petro sample too
S3441810	469647	5953487	Shiner	Grab	Outcrop	
S3441811	469699	5953350	Shiner	Grab	Outcrop	
S3441812	469713	5953287	Shiner	Grab	Outcrop	
S3441813	469720	5953212	Shiner	Grab	Outcrop	
S3441814	469643	5953761	Shiner	Grab	Outcrop	
S3441815	469651	5953763	Shiner	Grab	Outcrop	
S3441816	469738	5953101	Shiner	Grab		wrong id entry listed as 807 here, correct to 816
S3441817	469892	5953106	Shiner	Grab	Outcrop	basalt breccia marker unit whole rock id, altered to py, qz and green mica
S3441818	469820	5953151	Shiner	Grab	Outcrop	marker unit plg phyric coherent basalt, minor py-qz stringers
S3441819	469748	5953100	Shiner	Grab	Outcrop	distinct white coloured, laminated qz-rich layer, interpreted to be rhy tuff, between interm. vcl siltstone, dark lamjnations in sample poss silt, no obv. alt

Sample	Easting	Northing	Elevation	TrenchId	PrntSmp	Sgmnt	Length	Azi	Dip	RockLith	GeoDescr
S3441901	469855.3	5953002	1061.597	ECC20-001	3441901	1	0.6	272	0	andesite	moderately foliated garnetiferous interval with vf to f py +/- red rusty sp rims (?)
S3441902	469854.7	5953002	1056.813	ECC20-001	3441901	2	0.7	272	30	conglomerate	Sandstone with sub-rounded qtz-fields grains up to 5 mm with interstitial sacs tied with ight-dark grey phylosilicate and fine disseminations of py and red rusty sp veinlets
S3441903	469854.1	5953002	1056.507	ECC20-001	3441901	3	0.6	272	0	conglomerate	qtz veined conglomerate with 5 mm felsic grains_ interstitial ser (?) and veinlets and disseminations of py and sp
S3441904	469853.5	5953002	1056.544	ECC20-001	3441901	4	0.45	272	0	conglomerate	qtz veined conglomerate with sporadic py disseminations
S3441905	469853	5953002	1056.357	ECC20-001	3441901	5	0.75	272	0	andesite	garnetiferous sheared andesite with sporadic <cm with qtz veins +/- ser
S3441906	469852.3	5953002	1051.461	ECC20-001	3441901	6	1	272	0	andesite	garnetiferous sheared andesite_ trace fd py
S3441907	469844.3	5952941	1091.479	ECC20-003	3441907	1	0.5	272	0	andesite	same geology as ECC20-002_ 10 cm band in middle of pervasive qtz-ser alteration associated with up to 1% cpy_ subordinat po. blebs of py throughout
S3441908	469846.3	5952940	1092.689	ECC20-002	3441908	1	0.6	256	0	andesite	andesite schist with feld-bt-grnt with intervals of enhanced mica and py content. py as vf to f disseminations and foliation parallel blebs
S3441909	469845.7	5952939	1087.307	ECC20-002	3441908	2	0.5	256	0	andesite	same geol as segment before with a band of enhanced oxidation and ser and chl
S3441910	469845.2	5952939	1100.795	ECC20-002	3441908	3	0.9	256	0	andesite	same as before bt rich rock with disseminated medium blelba and banal of py

S3441911	469843.8	5952941	1091.669	ECC20-003	3441907	2	0.6	272	0	andesite	same geology and alteration style as 3441907_ weaker
S3441912	469843.2	5952941	1092.055	ECC20-003	3441907	3	0.6	272	0	andesite	same geology as prior samples
S3441913	469846	5952873	1116.518	ECC20-004	3441913	1	0.7	260	0	andesite	foliated qtz bt schist with1-5 cm width qtz coins and disseminations of py
S3441914	469845.3	5952873	1111.813	ECC20-004	3441913	2	0.5	260	0	andesite	same rock as before with qtz-ser alteration with blebs and stringers of py +/- cpy
S3441915	469844.8	5952873	1119.15	ECC20-004	3441913	3	0.7	260	0	andesite	strongly clay altered and sanded out interval.
S3441916	469844.1	5952873	1124.115	ECC20-004	3441913	4	0.7	260	-50	andesite	qtz veined andesite with coarse blebs and disseminations of py +/- CPU in qtz and host rock
S3441917	469843.7	5952873	1119.414	ECC20-004	3441913	5	0.7	260	10	andesite	same as 3441916_ more qtz_ more min
S3441951	469842.6	5952941	1092.369	ECC20-003	3441907	4	0.7	272	0	andesite	same geology as samples before_ weaker min_ alteration
S3441952	469841.9	5952941	1087.229	ECC20-003	3441907	5	0.5	272	0	andesite	same geology as prior samples_ moderate qtz-ser alteration with disseminated blebs cm width veinlets of py and cpy
S3441953	469841.4	5952941	1089.508	ECC20-003	3441907	6	0.8	272	0	andesite	same geology as prior samples_ very little qtz-ser overprinring
S3441954	469840.6	5952941	1084.692	ECC20-003	3441907	7	0.6	272	0	andesite	same as before_ weak min_ no significant alteration
S3441955	469840	5952942	1091.098	ECC20-003	3441907	8	0.7	272	0	andesite	minor xmas scale qtz vein with weaknpy min_ same geology as before
S3441956	469839.3	5952942	1085.167	ECC20-003	3441907	9	0.9	272	0	andesite	zone of enhanced py mineralization_ weak qtz overprinring_ same as prior samples geology
S3441957	469843	5952873	1111.249	ECC20-004	3441913	6	0.7	260	0	andesite	clayed and oxidized out interval
S3441958	469842.3	5952872	1123.927	ECC20-004	3441913	7	1	260	45	andesite	qtz veined and py mineralized andesite
S3441959	469841.6	5952872	1118.813	ECC20-004	3441913	8	1	260	0	andesite	
S3441960	469901.8	5953103	1005.5	ECC20-005	3441960	1	0.9	282	0	andesite	

S3441961	469900.9	5953103	1009.899	ECC20-005	3441960	2	1	282	0	andesite	chlorite altered intermediate volcanic with fine disseminated py
S3441962	469899.9	5953103	1004.246	Ecc20-005	3441960	3	0.7	282	0	andesite	same as other rocks in xhannel
S3441963	469904.8	5953099	1012.506	ECC20-006	3441963	1	1	274	0	andesite	andesite cut by 30 cm wide qt vein with mini heat rock and vein margins
S3441964	469903.8	5953099	1015.083	ECC20-006	3441963	2	0.5	274	0	andesite	25 cm band of silic with bands of py cpy
S3441965	469903.3	5953099	1007.726	ECC20-006	3441963	3	0.5	274	0	andesite	same as last sample_ less silic and min

Appendix G: Geological Station Notes – Geology Stations

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
5290_913	469914	5952911	Shiner	Geology station		above chl altn is 50 cm wide zone, 300% qz, 10% chl, 200% ser, up to 5% cp, 5% py
5290_915	469915	5952906	Shiner	Geology station		1.5m wide feldspathic altn in metasedds, pink kf, 10%, ep 5%, alb 20%, irreg defd qz domains
5290_923	469924	5952907	Shiner	Geology station		rep monotonous package, amph 50%, feld 50%, most sub 2 mm, vcl sandstone, metamorphic amph to 2 cm, very fissile, no gt here
5290_935	469936	5952904	Shiner	Geology station		20% qz clasts to 5 mm, mafic lenticular cclasts, rest feld, folisted , 3 m thick, undivided dark metaseds to east
5300_19	469818	5953005	Shiner	Geology station		end of gossan, approx 5 m total, high mafic content, fragmental basalt host%, up to 40 cm recrystallized qz bodies
5300_751	469751	5953002	Shiner	Geology station		from sz/felsic rocks to here is good homogeneous package, brown to white, layrred rock with qzx rch chert or rhy bands , intermed feld rick bands , vcl sandstone and silltstoone, trt py
5300_780	469781	5953000	Shiner	Geology station		mm fltn in white coloured felsic unit, felsic tuff?, very abrupt appearance, interlayerd w basalt
5300_790	469791	5952999	Shiner	Geology station		end basalt, start mixed unit of comp variation, pseudofragments less thsn 1 cm, 20% maf, resst plg, intermrdiate vcl sssnddtonne , 5 % pinnkish gt
5300_797	469798	5953001	Shiner	Geology station		starting here is aphanitic, nlack unit >95% maf minerals, 10 m thivk, minor ppy asssd with folldrd qz veins, unit to esst mixdd maf and fel units, 34% py, minor alb, kf andd qz
5300_800	469806	5953014	Shiner	Geology station		onset of felsic volcanism at 800 mE, cream to pink colour, flowbanded, lots of vcl comp, cobble/lapilli size,, isoclinal folds at bounsry, rheology contrast , photo view south
5300_804	469804	5953001	Shiner	Geology station		approx 3 m of feldsparthic altn to east, this point marks onset of ser sltn, qz altn, cjl altn, gradational wiyh marked coherent mafic unit to west
5300_805	469805	5953004	Shiner	Geology station		recrystallized qz, pink kf buff white albite, cream/green ep/cz, greeen brown clays, bleaches mafic rich, gt bearing vcl sandstone to esst
5300_813	469813	5953004	Shiner	Geology station		10-15 cm wide 95% mafic layer, fine to coarse amph, onset of basalttic volc , boudined aling striike
5300_815	469814	5953007	Shiner	Geology station		unit betwen g9ssan and rhy to west. layered, foliated, heterogeneous to clastic, amph 70% feld 20%, gt poorhyroblasts to 1 cm 5%, qz in irreg lenses, post s1 ep stringers

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
5300_821	469822	5953006	Shiner	Geology station		start of sulphide altn body, up to 10 cm wide recrystallized qz grey to clear, in irreg to lrnsoidd domains, start of ser, 5% py, tr cpy, green asbestos liike altn
5300_853	469853	5952996	Shiner	Geology station		3 m wide gossan , up to 20% even ppyrite, ser 20%, qz 20%, sodic altn continuous in fw (east)
5300_858	469858	5953019	Shiner	Geology station		altn bands hereof qz, albite, chl, irreg distribution
5300_873	469874	5952993	Shiner	Geology station		1 m wide pale green coloured rhy, flow bandeed, chl in uniit likely altn, 5% kf,qz>feld, apph, no mafics, unitt clearly wanes to north, broader to south
5300_930	469929	5952992	Shiner	Geology station		1 m wide altn band to ep alb, most stratabound, some s1 perp veins, unit hÃ s comp layering, 30% amph, 10% kf, 60% feld white, vcl and?, sections up to cobble bx,
5920_735	469735	5952880	Shiner	Geology station		rocks to this point are most siltstone, isoclinal folds, slamm lense of fels and one basalt, narrow py lenses tr, most of sevtion dark grey and lavks metamorphic gt
5920_767	469767	5952892	Shiner	Geology station		sharp cnt between gossanous mixed fels and vcl maf seds, and well layered and bedded metaseds to esst, 2 m of feldspathic altn focused un cnt area, stringers and stratiform rept, alb 2o%, ep/cz 5%, kf 5%, qz 8%, barren here
5920_768	469766	5952882	Shiner	Geology station		background unit isocljnal folded siltstone snd mrta sandstone grey to black, patchy py throufhout, here isc2 m wide gossan plus stringers, 2% puy, ser 20%, qz 15%, local early? feld, photo view south
5920_784	469784	5952880	Shiner	Geology station		increasing felsic component, photo view north, kyanite here, to west coherent basslt layer
5920_792	469793	5952901	Shiner	Geology station		hw dolmain thinly layered nlack, 5% gt, vcl mafic sandstone siltstone, 30% irreg to lenticulsr qz rich altn, in lense 40% qz, poss rhy tuffs, butelevsted py 1% suggest altn,
5920_793	469783	5952901	Shiner	Geology station		2 m wide intense barrren feldspathic altn, 8% kf, 20% alb, 10% qz, appears very continuous alkng strinkke
5920_796	469797	5952900	Shiner	Geology station		start of complex, mixed strata, isoclinal folds between white, felsic, lamjnated tuffs and black to dark grey vcl mafic and coherent basalt, 50% fels component, py tr, qz 5%, ser 5%, heterogeneous throughout
5920_799	469799	5952899	Shiner	Geology station		starting here, dark grey to black , very mafic rich, foliated, 5% gt, one layer aphanitic black, approx 5m thick, complicated upprr cnt, folded with fels unit, local qz-py lenses

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
5920_802.0	469802	5952904	Shiner	Geology station		updated stn: coherent basalt ends here, mixed siltstonee and qz rich laminations, felsic tuff?, approx 2 m wide, traces of sulphide locally, 5% gt, 5% qz in bands,
5920_803	469803	5952900	Shiner	Geology station		end of 3-4 m wide cohereng bassslt, start layered, mafic rich, silt sized, metaseds, sllterd in narow patches too 15% qzx, 5%ser, 8% gt,
5920_804	469805	5952897	Shiner	Geology station		lith mafic vcl, lenses visible through altn, most of 2 m wide section is laminated recrystallized qz, milky, qz 60%, py 2% , prev described as rhy. focused in fw of bas.
5920_805	469806	5952902	Shiner	Geology station		very abrupt, poss discordant cntt, 15% plg2 mm, rest mafic aph, foliated, 5% qz stringers, tr py, very black
5920_807	469808	5952891	Shiner	Geology station		stringer veins are mostly qz here, traces of py and chl annd plg, feeder to jasperoid altn?, 1%% py here
5920_815	469826	5952899	Shiner	Geology station		homogeneous fine grained bassalt, vcl siltstone?, all grains sub 1 mm, gt to 1 cm 5%, traces of stringrers mostly qz 5%, lesser chl2%, alb 3%, tr py
5920_817	469817	5952900	Shiner	Geology station		mafic rich laminsted unit, thib altered bands of qz locally 30% and ser 5% py 1%, gt 5 %, qz bands 10% total
5920_831	469832	5952901	Shiner	Geology station		1-2 m wide gossan, very well foliated, qz 30%, ser 20%, py 7%, cpy .1, cb 3%, in fine mafic unit
5920_836	469836	5952901	Shiner	Geology station		major qz vein zone , very folded, likely emplavd at high angle to fltn, 5 m wide, qz 30%, 20 m on strik, chl 10%, kf 5, alb 1%, py 1%, possuive feeder
5920_841	469842	5952903	Shiner	Geology station		<1 mm mafic rich grains, 10% verty fine gt,vcl and msyb coheent basslt, striingers at high angle to fltn, qz 2%chl 5% alb 5% kf 2%, all in vein, isoclinal folds of veins, py tr
5920_846	469847	5952905	Shiner	Geology station		start of hoomogeneous intrrval: intermmediate to mafic finecgrrained unit, thick bedded (coherrnt?), abundant folded stringers throughout domain, esp to north, alb 5%, kf 2%, qz 1t%, chl 8%, and narrow lenses of ser-qz-py 2%, less than 50cm
5920_855	469856	5952912	Shiner	Geology station		backtround altn sasmr: local 1 m band of 25% alb, 5% pink carb, 15% qz, 5% kf, ep? 3%, chl 5%, gt coaser here poss ca rich strata
5920_879	469880	5952899	Shiner	Geology station		30 % amphibole green, aliged with fltn plane, 5% garnet red pink coliur, interpreted to be vcl sandstone, higher degree of maturity here, lower abundance of mafic components

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
5920_880	469869	5952910	Shiner	Geology station		40% irregular angular mafic fragments, replaced to black amphibole, green phyllosilicate, pyrite, qz, mt, matrix is very fine <1 mm except for metamorohic amphibole, strong subvertical clast lineation, unit 3 m wide in metaseds
5920_895	469896	5952901	Shiner	Geology station		chlorite, quartz, albite, kfeld, barren feldsathic alteration 2 m wide, appears stratiform, quartz is recrystallized into coarse bodies, subhorizontal, post s1 epidote veins cut all
5920_898	469899	5952906	Shiner	Geology station		less 2 mm sized pseudo fragments, foliated, lenticular, high mafic content esp in fragments, nearby clasts excede 6 cm and are angular , description reflects broader area
5929_862	469862	5952897	Shiner	Geology station		start of domain with several bands of more sulphide rich domains, loccally yp rto 5% py, these domains to 10% qz, 15% ser, inbetween narrow lenses is qz 10%, kf 5%, gt 2% to 5 mm, green phyllosilicste, phlohopie? 5%, early alb 2%, ep tr,qz domains
5929_866	469867	5952900	Shiner	Geology station		albite 20%, chl 10%, kf 5%, py 1%, qz lenses 5%, approx 2 m wide zone
59528_810	469811	5952803	Shiner	Geology station		starting here approx 2 m of 2 mm plg 15%, rest mafic aphanittic foliated, photo view north, 5% qz stringers with tr py, folded,
59528_815	469816	5952803	Shiner	Geology station		photo view south, cm wide felsic bands interp to be rhy tuff, vcl siltstone (intermediate) inbetween, unit more bleachrd toward altn to north, approx 1 m wide
59528_820	469820	5952804	Shiner	Geology station		bedded black to grey silt to sandstone, foliated, here is 15% qz lenticular to 10 cm long, ser 15%, py 2%, isoclinal folds internally, photo view south
59528_846	469846	5952801	Shiner	Geology station		photo view west, start here sandstone, plg 20%, mafic 10%, kfv20%%, siltstone lyers darker, somne domaijns darker, mafic to 30%, vcl sandstone, rae thin maficv cohrrent, <20 cm, 5% stratifoirm lenses if alb-kf-qz-act?, very rare sulphides
59528_870	469870	5952797	Shiner	Geology station		35-40% mafic rich, highly angular clasts, subvertical lineation in plane, clsts of black amph green mica, very coarse py to 2 cm cubes, mtx feld fine grained and 2 mm amph 10%, altd to pods of alb, qz 10%, tr kf
59528_879	469880	5952791	Shiner	Geology station		laminated unit, in least altered domain is black siltstone, fairly large 7-8 m wide gossan starts here, highly fissile, py 1-2%, ser15%, qz10%, slightly patchy

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
59528_899	469899	5952790	Shiner	Geology station		outcropp gap starts here, gossan?
59528_900	469905	5952784	Shiner	Geology station		10 m domain of high qz 30%, ser 15%, py 2%, very fissile,
59528_910	469910	5952793	Shiner	Geology station		1 m wide gossan, lenses of qz, albite? and tr py
59528_918	469918	5952791	Shiner	Geology station		start here, well bedded green sandstone and dark grey siltstone, metamorphic amph and gt,
59528_933	469934	5952793	Shiner	Geology station		view north, 3 m wide, qz 20%, ser 10%, py 1%, possible local feld: backgroud as to east, green vcl sand/silt bedded
59528_938	469938	5952791	Shiner	Geology station		at base of gossan is 1 m wide feld band, no py, alb 20%, kf 5%, ep5%, qz 5%
59528_947	469948	5952826	Shiner	Geology station		view north, mafic rich layered, bedded? vcl sandstkne, patchy altnto qz 5%, alb 3%, and coarse chl clots at core, coaree py 1% locally
59531_737	469738	5953103	Shiner	Geology station		from here to west end of oc, 80% laminated fels tuff, foliated, very tr py causes gossan, 70% recrystallized qz, 20% of int green lam siltstone
59531_740	469739	5953101	Shiner	Geology station		unit is 2 m wide, black, laminsted, coarser layers entirely mafic, interp to be mafic vcl, intense sulphide rept 5-10%
59531_748	469748	5953105	Shiner	Geology station		from here to W, laminated, feld dom tuff, vcl silt and sanddtone, green soft, feld modtjy, 10% mafic, minor thin layers rhy tuff, tr py
59531_751	469751	5953104	Shiner	Geology station		mixed package of fels laminated tuffs and msfic lamunated siltstone and tuff, norml graded indicate younge to west, 1% pybin band locally to 10% jn mafic layers, very fine (py?)
59531_771	469772	5953114	Shiner	Geology station		grey green unit, grainy ssnd sized minerals, foliated, jommogeneous, metamorphic phyllo pearly lusre, munor qz, most feld, meta amph 10%, orange brown neta prisms
59531_775	469776	5953109	Shiner	Geology station		2-3 m wide laminated, white qz rich unit-rhy tuff? or silicified metased, 40% of unit is overprinted by 10% qz, 20% alb, 5% kf, tr ep?, tr gossan lenses py?
59531_777	469777	5953110	Shiner	Geology station		host laminated, qz rich, rhy tuff? or altered metased?, 5% sulphide weathered out, extremely fissile, ser? 15%,
59531_778	469812	5953100	Shiner	Geology station		start plg basalt here, 15-20% plg aph black, 5% qz bands, py rich halos, 3 m wide,

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
59531_786	469787	5953106	Shiner	Geology station		photo view south, 2 m gossan, black cohereng bassalt triggers sulphide body, to east is white very fissile ser, qz rich layer, metasddss?, feld altn to eadr? tr cpy? , 5% sulphide
59531_796	469796	5953105	Shiner	Geology station		gey metasdds, sanddtone mostly, to 40 vm alb kf qz barren bands, tr py only
59531_805	469806	5953100	Shiner	Geology station		mixed unit, black-white layrtred, bedded? package, includes both fels snd maf vcl layers, bimoodsl, gossan throughout broad rsnge, comp changr trigers drposition, 1-3% py,
59531_845	469845	5953095	Shiner	Geology station		metaseds, maf mostly, amph-gt schist, coarser and more abundant gt here
59531_856	469857	5953099	Shiner	Geology station		large package to west: 5-15% pink brown gt to 1.5 cm, 40% amph defines fltn, 5-30% feld, black vcl basalt?, and grey metaseds, scattered lenses, tr py , narrow felddpayhic altn rare
59531_857	469865	5953100	Shiner	Geology station		green, fragmental to 2cm, highy angular clasts, plg 30% total, and to basalt, lateral equiv to basalt bx to south? patchy barren feld alytn, chl? , pearly mica,
59531_870	469871	5953095	Shiner	Geology station		pearly white phyllosilicate, intense fissiluty, coarse py to 3 mm , tr cpy, irreg zone up to 2 m wide, host vcl metased, ser 20%, qz 20%, py5-40% cpy tr
59531_885	469886	5953101	Shiner	Geology station		dark green basalt breccia unit ~3 m wide, centered here, clsts to 15cm, rept to amph and green mica, 2-3cm euhedral , 5% in domain, clasts ljnestd subvertical
59531_895	469896	5953096	Shiner	Geology station		very green coloured packagd, relict fragmdnt domains to 1cm defjned by metamorhoc amph, pearl kustre phyllosilicate, chl?, qz, and heterogeneous pyrite, focused lenses w qz to 1/2%, gt 1-5%
59531_903	469903	5953101	Shiner	Geology station		start gossan from here to bas bx, pyrite lenses 1-3%, local cpy to 1%, pink kf? w cpy, white qz or alb, sooty black halo to cpy, qz 15%, well layered maf vcl metased
59531_915	469915	5953099	Shiner	Geology station		fragmental mafic clasts, sandstone siltstone dark, qz-ep-chl altn, from here to west
GFECST004	469882	5952939	Shiner	Geology station		mafic irregular, angilar clasts altered to amph, many are greater than 10cm, basalt breccia, likely vent proximal type strata
GFECST006	469895	5952815	Shiner	Geology station		bedded/layered int to basalt fragmental, up to 3 cm pyrite clusters, intense alb wash 30% is mafic destructive, gradational with gossan band uphill

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
GFECST007	469879	5952811	Shiner	Geology station		ser 10, qz 10, py 2, patchy albite, 5 m wide domain centered on this point
GFECST008	469817	5952725	Shiner	Geology station		excellent marker marker horizon, 15% plg phenos foliated, rest black and aphanitic, very continuous aling strike at similar thickness
GFECST009	469646	5953460	Shiner	Geology station		note centered on at leat 10 m wide altn corridor, hosed in metased including siltstone, folded, 10%ser, 10% qz, 1-2% py here, very distal expression of conductor?
GFECST010	469851	5952941	Shiner	Geology station		proposed altn drill hole sample, distended, irregular veins, were likely at huigh angle to foliation, possible stringer zone, transposed, altn qz 10%, chl10%, cz? 15%, possible tremolite15% randomly oriented, very proximal to sulphide lense drilled
GFECST011	469866	5952921	Shiner	Geology station		altn sample drill hole, qz 10%, alb 20%, ep8%, chl 10%, green pearl lustre phyllosilucste phlogopute?2% pink kf, yhinly laminateed rock localy, isoclinal fold,
GFSTEeC001	469713	5953279	Shiner	Geology station		1 m wide argillacedous band, ptygmatic folds, poss conductor source,, photo view east
G+3441801	469731	5953283	Shiner	Assay sample	3441801	fine grained basalt with disseminations and stringers of pyramid in a 1-10 m wide gossan band
G+3441802	469661	5953224	Shiner	Assay sample	3441802	well foliated fine grained micsceous basalt
G+3441807	469826	5952813	Shiner	Assay sample	3441807	veinlets and disseminations of py in qtz veined rock with smhibope lathes
G+3441808	469645	5953618	Shiner	Assay sample	3441808	fine grained silestone with foliation parallel mm width veinlets of po + py
G+3441809	469667	5953494	Shiner	Assay sample	3441809	bleached ser altered siltstone(?). foliation parallel black partings +/- sulfide
G+3441810	469648	5953489	Shiner	Assay sample	3441810	fine grained sooty py disseminations along foliation
G+3441811	469696	5953347	Shiner		3441811	py mineralization in ser altered silestone (?(
G+3441812	469714	5953285	Shiner	Assay sample	3441812	ser altered siltat
G+3441813	469721	5953201	Shiner	Assay sample	3441813	40 cm band of dark sitstne in qtz-ser altered gossan band, 14 m wide

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
G+3441814	469643	5953764	Shiner	Assay sample	3441814	greenish chlorite altered (?) siltstone cut by dim width rusty qtz veins with sporadic py disseminations
G+3441815	469649	5953760	Shiner	Assay sample	3441815	greenish chlorite altered (?) siltstone with fine grained disseminations of py and foliation parallel veinlets
G+3441901	469856	5953000	Shiner	Assay sample	3441901	moderately foliated garnetiferous interval with vf to f py +/- red rusty sp rims (?)
G+3441902	469855	5953002	Shiner	Assay sample	3441902	Sandstone with sub-rounded qtz-fields grains up to 5 mm with interstitial sacs tied with ight-dark grey phylosilicate and fine disseminations of py and red rusty sp veinlets
G+3441903	469854	5953001	Shiner	Assay sample	3441903	qtz veined conglomerate with 5 mm felsic grains, interstitial ser (?) and veinlets and disseminations of py and sp
G+3441904	469854	5953001	Shiner	Assay sample	3441904	qtz veined conglomerate with sporadic py disseminations
G+3441905	469854	5953003	Shiner	Assay sample	3441905	garnetiferous sheared andesite with sporadic <cm with qtz veins +/- ser
G+3441906	469853	5953002	Shiner	Assay sample	3441906	garnetiferous sheared andesite, trace fd py
G+3441907	469846	5952945	Shiner	Assay sample	3441907	same geology as ECC20-002, 10 cm band in middle of pervasive qtz-ser alteration associated with up to 1% cpy, subordinat po. blebs of py throughout
G+3441908	469847	5952943	Shiner	Assay sample	3441908	andesite schist with feld-bt-grnt with intervals of enhanced mica and py content. py as vf to f disseminations and foliation parallel blebs
G+3441909	469846	5952939	Shiner	Assay sample	3441909	same geol as segment before with a band of enhanced oxidation and ser and chl
G+3441910	469846	5952942	Shiner	Assay sample	3441910	same as before bt rich rock with disseminated medium blelba and banal of py
G+3441911	469843	5952944	Shiner	Assay sample	3441911	same geology and alteration style as 3441907, weaker
G+3441912	469846	5952943	Shiner	Assay sample	3441912	same geology as prior samples
G+3441913	469845	5952873	Shiner	Assay sample	3441913	foliated qtz bt schist with1-5 cm width qtz coins and disseminations of py

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
G+3441914	469847	5952870	Shiner	Assay sample	3441914	same rock as before with qtz-ser alteration with blebs and stringers of py +/- cpy
G+3441915	469847	5952870	Shiner	Assay sample	3441915	strongly clay altered and sanded out interval.
G+3441916	469843	5952873	Shiner	Assay sample	3441916	qtz veined andesite with coarse blebs and disseminations of py +/- CPU in qtz and host rock
G+3441917	469844	5952874	Shiner	Assay sample	3441917	same as 3441916, more qtz, more min
G+3441951	469844	5952943	Shiner	Assay sample	3441951	same geology as samples before, weaker min, alteration
G+3441952	469842	5952942	Shiner	Assay sample	3441952	same geology as prior samples, moderate qtz-ser alteration with disseminated blebs cm width veinlets of py and cpy
G+3441953	469844	5952943	Shiner	Assay sample	3441953	same geology as prior samples, very little qtz-ser overprinring
G+3441954	469839	5952942	Shiner	Assay sample	3441954	same as before, weak min, no significant alteration
G+3441955	469841	5952942	Shiner	Assay sample	3441955	minor xmas scale qtz vein with weaknpy min, same geology as before
G+3441956	469841	5952944	Shiner	Assay sample	3441956	zone of enhanced py mineralization, weak qtz overprinring, same as prior samples geology
G+3441957	469843	5952869	Shiner	Assay sample	3441957	clayed and oxidized out interval
G+3441958	469843	5952870	Shiner	Assay sample	3441958	qtz veined and py mineralized andesite
G+3441959	469844	5952874	Shiner	Assay sample	3441959	
G+3441960	469899	5953104	Shiner	Assay sample	3441960	
G+3441961	469901	5953102	Shiner	Assay sample	3441961	chlorite altered intermediate volcanic with fine disseminated py
G+3441962	469901	5953102	Shiner	Assay sample	3441962	same as other rocks in xhannel

Station No.	Easting	Northing	Target	Station Type	Assay Samp.	Comments
G+3441963	469906	5953107	Shiner	Assay sample	3441963	andesite cut by 30 cm wide qt vein with mini heat rock and vein margins
G+3441964	469903	5953100	Shiner	Assay sample	3441964	25 cm band of silic with bands of py cpy
G+3441965	469903	5953099	Shiner	Assay sample	3441965	same as last sample, less silic and min
PSECG001	469646	5953629	Shiner	Geology station		well bedded metased, dark coloured, metasiltstne black and meta sand stone, deep red to orange oxidation in 15 m wide corridor, sits directly on conductor, oxidized sulphide sites throughout, very fine pyrite, 1-3% over interval

Appendix G: Geological Station Notes – Structure Stations

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC-0001	469910	5953000	Shiner	Dyke geometry plane	52	75	ppinkk cream coloured, 10%% kf to 2 mm, 15% bt ? <1 mm, rest grey aphanitic qz-feld, photo view south, mafic min foliated parallrl to trend
GFEC0002	469954	5953000	Shiner	Dyke geometry plane	52	83	photo view eaast, pegmatitic dyke,, coarse qz, pink feld domaiins,maf rich domains, resembles pink dyke, 1.5 m wide follows s1 and cuts it
GFEC0003	469813	5953017	Shiner	Gneissic/compositional layering	63	84	heterogeneous domains of qz feld, amph and gt, possible altn?, amph randomly oriented in foliation plane, up to 5 mm long, photo view west
GFEC0004	469874	5953005	Shiner	Gneissic/compositional layering	80	99	comp layers
GFEC0005	469648	5953469	Shiner	Schistosity (phaneritic phyllosilicate layers)	73	85	white qz rich, schistose ser foliation, on maargiin of folded unit
GFEC0006	469648	5953472	Shiner	Secondary syncline fold hinge (Fn+1)	70	263	gossnous black arg foldrd layer f2 between two parallel comp layers, photo view west
GFEC0007	469744	5953126	Shiner	Schistosity (phaneritic phyllosilicate layers)	50	100	50 cm argillaceous layer, schistose
GFEC0008	469803	5953034	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	73	91	15% plg mineral alignment, rest aphanitic mafic, centted on 10 m wide basalt layer
GFEC0009	469781	5953001	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	66	79	mixrd vcl unit, here and bx to 2 cm, tr py, coarse metamorphic amphibole
GFEC00010	469768	5953001	Shiner	Shear zone (ductile, or brittle-ductile)	81	260	1 m wide sz, abundant qz sigmoids, abundsnt sinistral and dextral, sz defines boundary domain of mostly felsic strata, compass points n, trend parallels s1
GFEC00011	469752	5953004	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	81	71	transposed s00 and s1 fsbric drfoned by comp layering

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00012	469913	5952903	Shiner		85	66	1 m wide, white dyke, 10% kf, 80% plg, 10% amph? monz dyke traceable along strike to next line
GFEC00013	469921	5952901	Shiner	Dyke geometry plane	72	66	dyke 80 cm moz fi ne grained cuts dark grey metaseds
GFEC00014	469730	5953265	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	68	84	foliation in black unit, basalt? or argillite?, 5 m wide zone , 2% py in corridor, buts of feld altn in fw east
GFEC00015	469742	5953252	Shiner	Schistosity (phaneritic phyllosilicate layers)	83	98	photo view south, ser rich eastern margin of altered lense, py 2 %,
GFEC00016	469715	5953223	Shiner		82	98	close to western boundary of broad altn lense
GFEC00017	469693	5953222	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	67	90	2 m wide lense of gossan , high ser 20% and qz 15%, low py 1%, considerable strike continuity, sits right on conductor plate
GFEC00018	469711	5953245	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	76	82	western contact, foliated, of altn zone, very continuous alkng strike , ser15%, qz 10%, weathered pids may have been carbonate, possible ht in origin, photo view south large scale altn cnt visible in distance
GFEC00019	469710	5953244	Shiner	Lineation crenulation	80	52	compass points north, crenulation of les competrnt altered rock untk f2 foliations
GFEC00020	469707	5953171	Shiner	Schistosity (phaneritic phyllosilicate layers)	74	74	view south, measurement on margin of the principle altn zone, more narrow lenses in HW side, host is thinly bedded meta seds, siltstone most, no garnet, here ser 15% qz 10%, py 2%
GFEC00021	469724	5953177	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	58	84	contact of ser altn bod in metaseds, shifts to west as you move south,
GFEC00022	469880	5952899	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	81	85	metamorpjic fabric defined hy amphiblle
GFEC00023	469872	5952886	Shiner		80	73	basslt coarse bx foliated

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00024	469873	5952815	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	90	85	basaltic brecccia coarse, 2% py, sits above ser,
GFEC00025	469874	5952754	Shiner	Bedding tops unknown	89	100	basalt bomb bx, overprinted by coarse py 2%, domains of qz and chl, in hw of qz rich altn
GFEC00026	469872	5952756	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	66	94	very qz rich altn over 7 m toeast several bands of qz 30%, ser 15%, py 2%, protolith metased?
GFEC00027	469858	5952738	Shiner	Bedding tops unknown	66	84	relatively hkmogeneous package of metaseds, mix of darker beds, amph rich, and pale sandsrone mayers with fkne kf grains
GFEC00028	469759	5952748	Shiner		71	78	7 m band of pale coloured metaseds, mafic poor 10% mature arenite,
GFEC00029	469767	5952741	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	56	82	extremely coarse gt 20% to 1 cm, amphobole 1 cm 50%, locally gem qualify
GFEC00030	469746	5952683	Shiner	Schistosity (phaneritic phyllosilicate layers)	67	84	saddle altn ser 15%, qz 10%, py locally to 7%, most 1%
GFEC00031	469720	5952665	Shiner	Bedding tops unknown	80	73	1% py, 15% ser 10% qz in thinly bedded seds transposed into s1
GFEC00032	469707	5952656	Shiner	Bedding tops unknown	63	77	black, laminated siktstone, isoclknal folds, primary bedding compositional bands, transposed to s1, unit is at least 5 m wide, possuble conductor source, 1% stratiform py
GFEC00033	469682	5952644	Shiner	Schistosity (phaneritic phyllosilicate layers)	56	95	lamjnated black siltstone has isockinal folds and f2 folds at high angle, ossible conductor source
GFEC00034	469677	5952613	Shiner	Schistosity (phaneritic phyllosilicate layers)	78	80	siltstone, isoclinal folds, possible conductor source

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00035	469623	5952518	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	69	80	blsck siltstone, poss conductor source, many isoclinal folds along ridge
GFEC00036	469814	5952806	Shiner	Gneissic/compositional layering	76	67	eastern margin of plg phyric basalt layer, measurement is fln and cnt
GFEC00037	469828	5952894	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	74	69	host fine grained basslt, 95% msgic or vcl ÃŸiltstone, qz-py veins follded, st high anglr to strata, 5% fine gt
GFEC00038	469796	5952897	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	73	83	recrystallized qz, very fine, milky jn silica altn zone, photo view north
PSEC001	469599	5953637	Shiner	Bedding tops unknown	80	80	thinly felsic in seds, 30 cm wide
GFEC00039	469790	5952944	Shiner	Bedding tops unknown	74	74	very distict marker horizon, white ,2 m wide laminated felsic tuff, local qz bands with stratiform sodic altn, 7% kf pink, albite 15%, nk sulphide, very continuous along strike
GFEC00040	469792	5952928	Shiner	Mineral alignment platy	82	71	sharp cnt between rhy tuff to east and this metased. new metamorphic mineral defines fabric, honey brown, resinous lustre, excellent bipyramidal form in one section, 2:5 aspect ratio and rectangular on other section, H<7
GFEC00041	469784	5952878	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	80	83	kyanite here! honey brown bipyramidal mineral, adj to narrow az-alb-kf altd lense, compasss points north
GFEC00042	469736	5952877	Shiner	Bedding tops unknown	70	77	laminated siltstone, isoclinal folds common
GFEC00043	469740	5952872	Shiner	Small-scale fold hinge (<2 m wavelength)	60	34	parasitic z fold , f1, steep defined by siltstone
GFEC00044	469835	5952801	Shiner	Schistosity (phaneritic phyllosilicate layers)	74	92	schistose metamoric fabric in thiny layered metaseds
GFEC00045	469901	5952787	Shiner	Gneissic/compositional layering	78	93	compass points north, to 2 cm act radiiating in fltn pplane, 5% gt, vcl sandstone green

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00046	469918	5952790	Shiner	Dyke geometry plane	78	94	fine grained, 1 m wide monz dyke, photo view south
GFEC00047	469928	5952845	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	60	72	qz-alb-kf altn band, possible mariposite , pastel green mica
GFEC00048	469651	5953592	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	79	80	braided sulphide lense 5-15 m wide, hosted in black siltstone, highly fissile, sulphide veryy fine 5% here, py-po
GFEC00049	469644	5953588	Shiner	Schistosity (phaneritic phyllosilicate layers)	80	81	continued gossan in black siltstone and metasandstone, 5% sulph here, crenulated, total width 15 m, another 4 m to west
GFEC00050	469645	5953536	Shiner	Schistosity (phaneritic phyllosilicate layers)	72	73	western margin of gossan, locally black siltstone, very foliated, 3% gossan, gossan band continues>15m to east to west is grey metasandstone, mostly feld , 30% maf
GFEC00051	469667	5953507	Shiner	Schistosity (phaneritic phyllosilicate layers)	84	72	along eastern extent of gossan, 2m band of qz-ser altn in metaseds, only focused on fw of the gossan, rest in siltstone
GFEC00052	469669	5953509	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	73	86	petro sample , distal altn, white and green ser, 5% sulphide, sph-py?, characterize altn style here, compass points north
GFEC00053	469645	5953483	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	73	74	petro sample, very fine sulphidess in siltstone, possibly clastic?, oriented petro sample to look at distal altn expression, sample 3441810
GFEC00054	469649	5953490	Shiner	Schistosity (phaneritic phyllosilicate layers)	77	87	3441810B petro sample, black siltstone, schistose, 7% sulohide, py, sph, po?, 5 m west of prev sample
GFEC00055	469692	5953349	Shiner	Schistosity (phaneritic phyllosilicate layers)	70	100	altn petro sample, main conductor along strike, just before its lost over the hill, petro ID structure id, meta siltstone, 8 m wide

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00056	469691	5953351	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	74	83	represents fltn north of structural disruption zone, 2% py here, meta siltstone and sandstone, crenulated
GFEC00057	469721	5953323	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	61	104	major change in fltn across scarp, folded qz veins, disruption of conductor continuity
GFEC00058	469718	5953275	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	56	97	5 m wide gossan, sulphide to 5%, well schistose, white mica
GFEC00059	469713	5953286	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	71	100	3441812 sample, petro sample, oriented, schistose, white mica, metasiltstone, very fine sulphide- py?
GFEC00060	469729	5953215	Shiner		74	87	petro sample, same lense dp sampled, samle A is very fine sulphide in siltstone, B is ser overprinted sample
GFEC00061	469729	5953099	Shiner	Bedding tops unknown	45	58	primary layering and fissility, crenulared, laminated, green vcl siltstone, laminated qz rich rhy tuff? no evidence for alteration ,black laminations between fels layers, anomalous low angle, edge of oc
GFEC00062	469737	5953100	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	43	70	petro sample of sulphide rich lense, laminations in vcl basalt isoclinal folds locally
GFEC00063	469740	5953107	Shiner	Bedding tops unknown	40	78	excellent white unaltered rhy ruff layer, mixed younging rest is vcl silt to sand green
GFEC00064	469753	5953101	Shiner	Small-scale fold hinge (<2 m wavelength)	64	51	isoclinal fold of vcl mafic tuff /siltstkne black, normal graded towsrd core, z fold view east indicates overall younging to west
GFEC00065	469753	5953099	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	50	52	to 10 % very fine sulhide in laminated mafic rocks, petro sample
GFEC00066	469759	5953139	Shiner	Bedding tops unknown	60	97	3-4 m wide gossan mapped on section ljne continues here, mixed fels/maf laminated, isoclinal folds throughout

Structure No.	Easting	Northing	Target	Structure Type	Dip	Dip Dir.	Description
GFEC00067	469783	5953105	Shiner	Schistosity (phaneritic phyllosilicate layers)	81	72	petro sample, 5% sulphie, intense schistosity, high qz, rhy or metased, 5% sulph
GFEC00068	469794	5953112	Shiner	Schistosity (phaneritic phyllosilicate layers)	80	91	sulphide lense in basalt?, altered to ser-qz, 5% py, tr cpy?, possible feld altn, petro sample
GFEC00069	469790	5953111	Shiner	Gneissic/compositional layering	69	94	amph gt gneiss, mafic 60%, gt 15%, rest feld, fairly characteristic of large interval of metaseds (sandstone,?)
GFEC00070	469872	5953096	Shiner	Schistosity (phaneritic phyllosilicate layers)	76	86	petro sample, very fissile sulphide lense, mostly pyrite, tr cpy, inner east side of sample labelled
GFEC00071	469913	5953090	Shiner	Dyke geometry plane	84	82	psle white monz dyke, 1.5 m wide, fine grained
GFEC00072	469914	5953102	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	74	78	vcl green siltstone, fragmental mafic jntervals
GFEC00073	469904	5953097	Shiner	Cleavage pervasive (<2 mm spacing; Sn)	88	89	petro sample deppest lense, apearane cpy, poss kf,

Memorandum

Condor·North·Consulting·ULC

To: Paul Stewart, Senior Geologist
Kingfisher Metals

Cc: Ken Witherly, President
Condor Consulting Ltd.

From: Francis Moul, Senior Geophysicist
Condor North Consulting ULC

Date: March 29, 2021

RE: EM parametric modelling of the 2019 VTEM data over the Horsefly prospect EM anomaly in the Ecstall block, BC

Summary

This memorandum outlines details of EMIT Maxwell parametric conductive plate modelling conducted over the EM anomalies present at the Horsefly prospect on the Ecstall project. The AOI for modelling was defined by Paul Steward in the Ecstall block of a 2019 VTEM survey (Geotech project number GL190051). All data files are included as Appendix B to this memo. Appendix A contains screenshots of the EM plate models with the observed and modelled responses.

EM Conductive Plate Modelling

The AOI for the EM modelling was defined based on a the EM AdTau and discrete EM picks over the area of the Horsefly prospect (Figure 1). The VTEM survey traverse lines are at 200 m separation flown at a measured mean EM bird clearance of 89 m in the area of the Horsefly prospect. The EM modelling was completed on survey lines L2350 – L2460 covering the area of the Horsefly EM anomaly. The VTEM EM data are from the z-coil only limiting discrimination of conductors, accurate modelling of the conductor dip and strike compared with multi-component data. The multi-component data would have been particularily useful here where plates appear to have a non-perpendicular strike relatively to the line direction and where responses from multiple conductors appear to be convolved.

One to three plate models were generated for each selected survey line independently with the westernmost plate suffixed “1” with increasing suffix values with easting. All initial parameters for each plate were estimated based on the profile character and parameters from adjacent models excepting strike length which was fixed in almost all cases at 400 m. All other variables were free during the initial inversion and only fixed when necessary to obtain a reasonable solution. Only the latest 5 channels, where the individual anomalous response was above the noise level, and where the background response is relatively invariable, were used in the modelling.

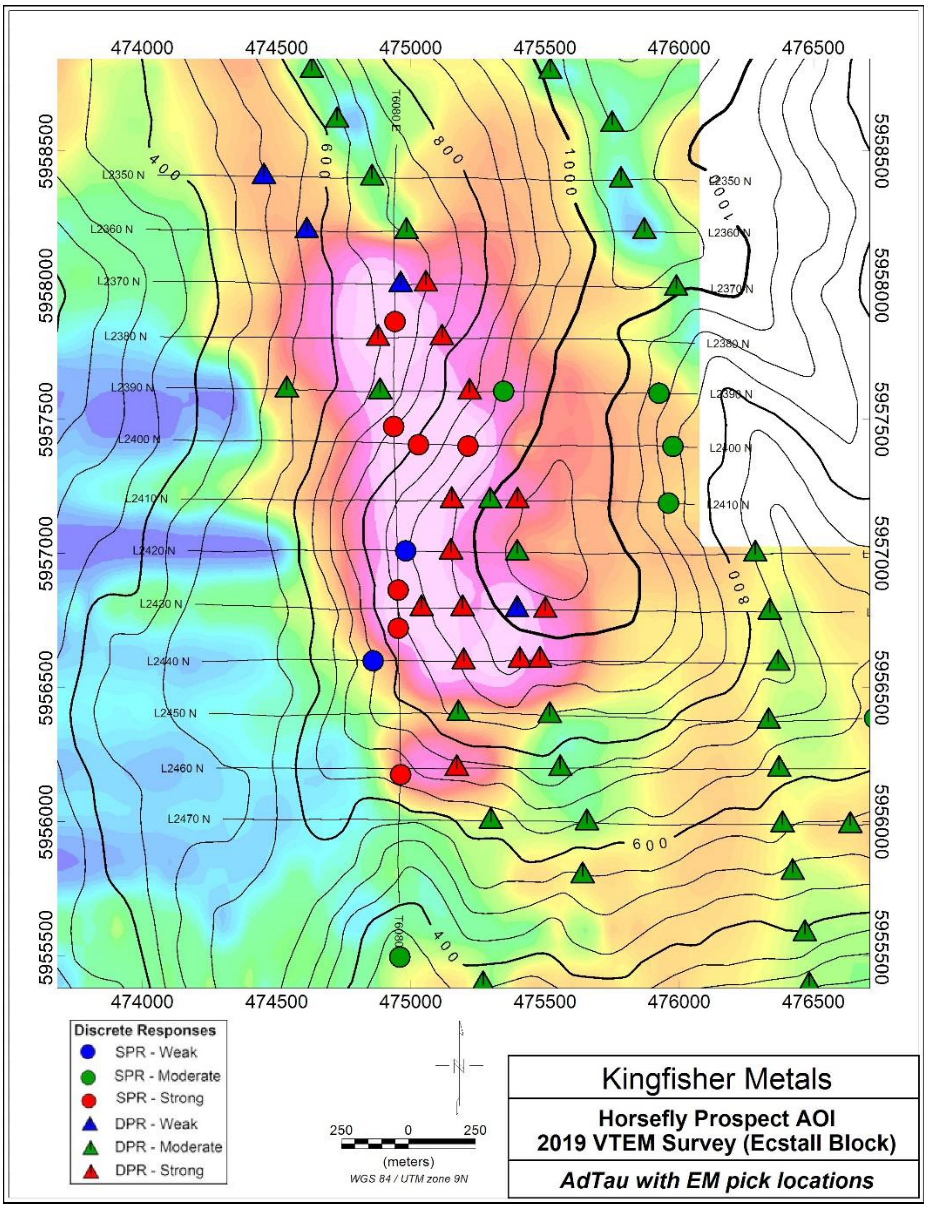


Figure 1: AdTau (EM time-constant) with EM discrete conductor picks, contours from SRTM1 DEM (50 m intervals), and the survey line segments selected for modelling.

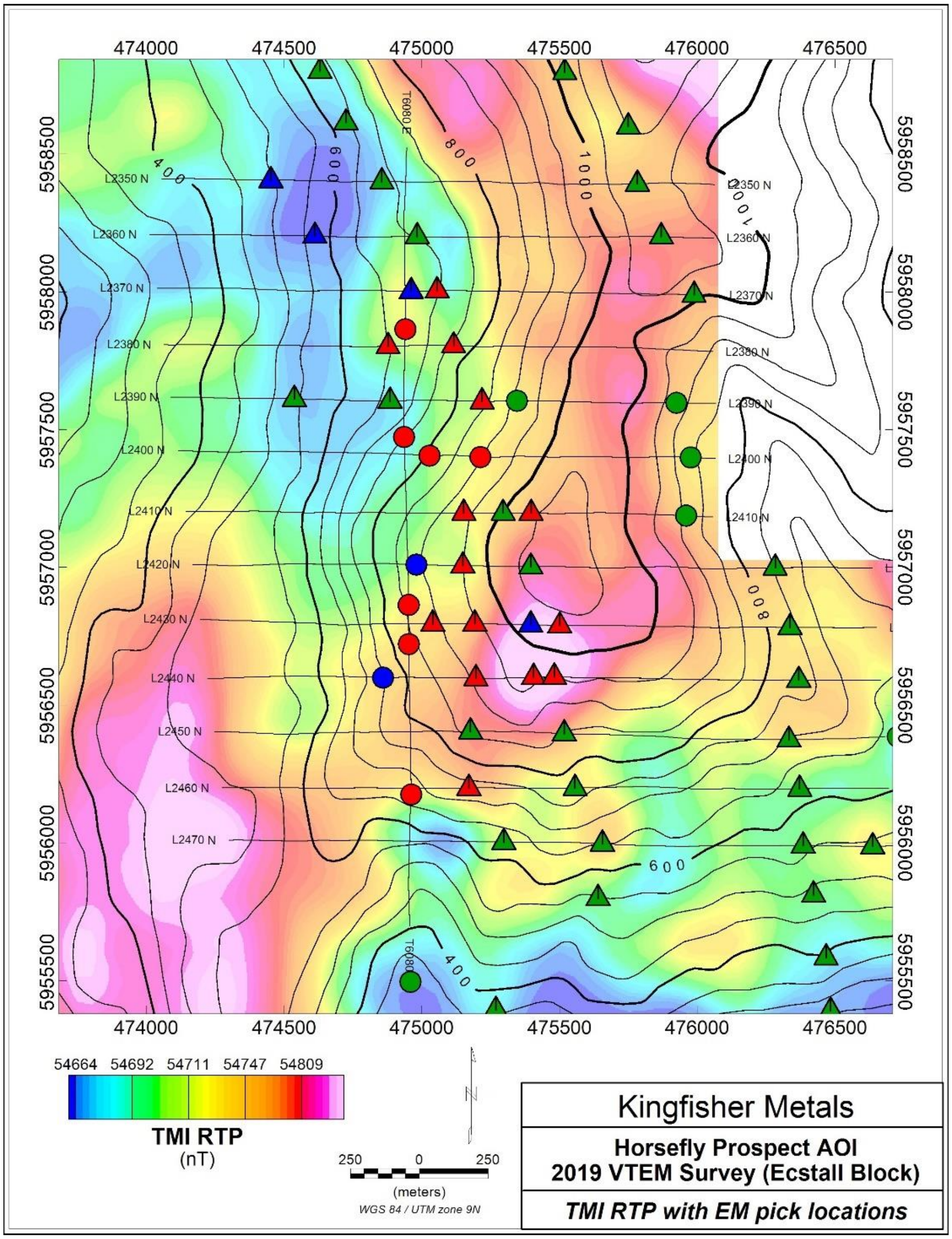


Figure 2: TMI RTP (reduced to pole total magnetic intensity) with EM discrete conductor picks, contours from SRTM1 DEM (50 m intervals), and the survey line segments selected for modelling.

The confidence in the models is largely dependent on the character of the EM response. Double peak responses can typically be modelled with a high degree of confidence using steeply dipping thin (2D) or narrow thick plates (3D plated but with limited width) and provide reliable depth to top estimates. Single peak responses require fit using shallow dipping thin plates or thick plates and may be fit with a wide variety of sources. Only a single thick plate was used (LThick plate models were used only where necessary (L2460-1) otherwise thin plate models were sufficient to obtain a reasonable fit to the observed data. In the absence of constraints, models of single peak responses are relatively unreliable compared with models of double peak responses.

The EM plate models are shown in plan view with the SRTM DEM, the EM Z dB/dt AdTau, and the TMI in Figures 3, 4, and 5, respectively. The plate models with VTEM EM Z dB/dt AdTau response are shown draped on the SRTM1 DEM in 3D views in Figure 6, 7, and 8. In each case the strike length of the plates has been truncated to approximately 200 m to avoid overlapping models for visual clarity.

The plate parameters are summarised in Table 1; a column is included to qualitatively describe the level of confidence in the model based on the ease and quality of the fit. Screenshots of each plate model with the overserved and modelled EM response included as Appendix A.

Products list:

Plate_parameters.xlsx: summary of the plate parameters as presented in Table 1.

\Memo\ - folder containing this document
\Memo\Figures\ - folder containing the figures shown in the memo
\Maxwell\Plates\ - Maxwell format .pte files containing the model plates
\Maxwell\DXF\ - 3D .dxf defining the conductive plate models in WGS84 U9N
\Maxwell\DXF-Truncated\ - 3D .dxf defining the conductive plate models in WGS84 U9N with strike limited to approximately 200 m.
\Maxwell\Spreadsheet\ - excel spreadsheet including the plate parameters
\Maxwell\Project_File\ .prj EMIT Maxwell format project file containing the data and models
\Maxwell\Screenshots\ .jpg screenshots of the observed data and modelled response on each line.

Table 1: Maxwell Conductive Plate Properties

Plate Name	x	y	z	Depth to top	Dip	Dip Azi.	Rot.	Length	Depth Extent	Cond. – Thick.	Cond.	Thick.
	(m)	(m)	(m)	(m)	(°)	(°)	(°)	(m)	(m)	(S-m)	(S)	(m)
L2350-1	474826	5958395	548	-139	75	55	0	400	655	26	-	-
L2350-2	475718	5958395	885	-194	85	270	0	400	891	26	-	-
L2360-2	475759	5958195	887	-170	85	270	0	400	904	21	-	-
L2360-1	474970	5958195	602	-108	75	70	0	400	553	38	-	-
L2370-2	475065	5958005	700	-1	88	70	0	400	36	229	-	-
L2370-1	475013	5958005	657	-29	80	270	0	400	242	81	-	-
L2380-2	475147	5957807	726	-58	75	70	0	400	150	113	-	-
L2380-1	474923	5957796	646	-20	45	90	0	400	240	98	-	-
L2390-1	474910	5957605	674	0	54	90	0	400	59	316	-	-
L2390-2	475245	5957605	836	-21	80	255	0	454	302	62	-	-
L2400-1	475135	5957405	865	2	90	90	0	296	352	102	-	-
L2400-2	475360	5957400	928	-42	72	255	0	400	357	91	-	-
L2410-1	475166	5957195	960	-1	76	90	0	400	463	60	-	-
L2410-2	475390	5957195	1025	-19	85	260	0	400	33	267	-	-
L2420-2	475180	5957000	945	-22	74	90	0	400	400	96	-	-
L2420-3	475395	5957005	1004	-63	72	260	0	400	149	59	-	-
L2430-3	475448	5956790	989	-50	55	260	0	400	79	321	-	-
L2430-1	475065	5956795	884	-14	74	75	0	400	135	211	-	-
L2430-2	475214	5956795	918	-35	87	270	0	400	138	202	-	-
L2440-1	475215	5956595	898	-21	74	95	0	400	89	186	-	-
L2440-3	475470	5956600	955	-5	81	260	0	400	26	455	-	-
L2440-2	475400	5956600	955	-14	81	260	0	400	25	935	-	-
L2450-1	475220	5956405	795	-77	87	270	0	400	63	114	-	-
L2450-2	475505	5956400	800	-45	70	260	0	400	26	351	-	-
L2460-1	475163	5956200	720	-20	85	270	0	519	35	448	24.9	18.0
L2460-2	475515	5956205	750	-41	50	255	0	400	14	153	-	-

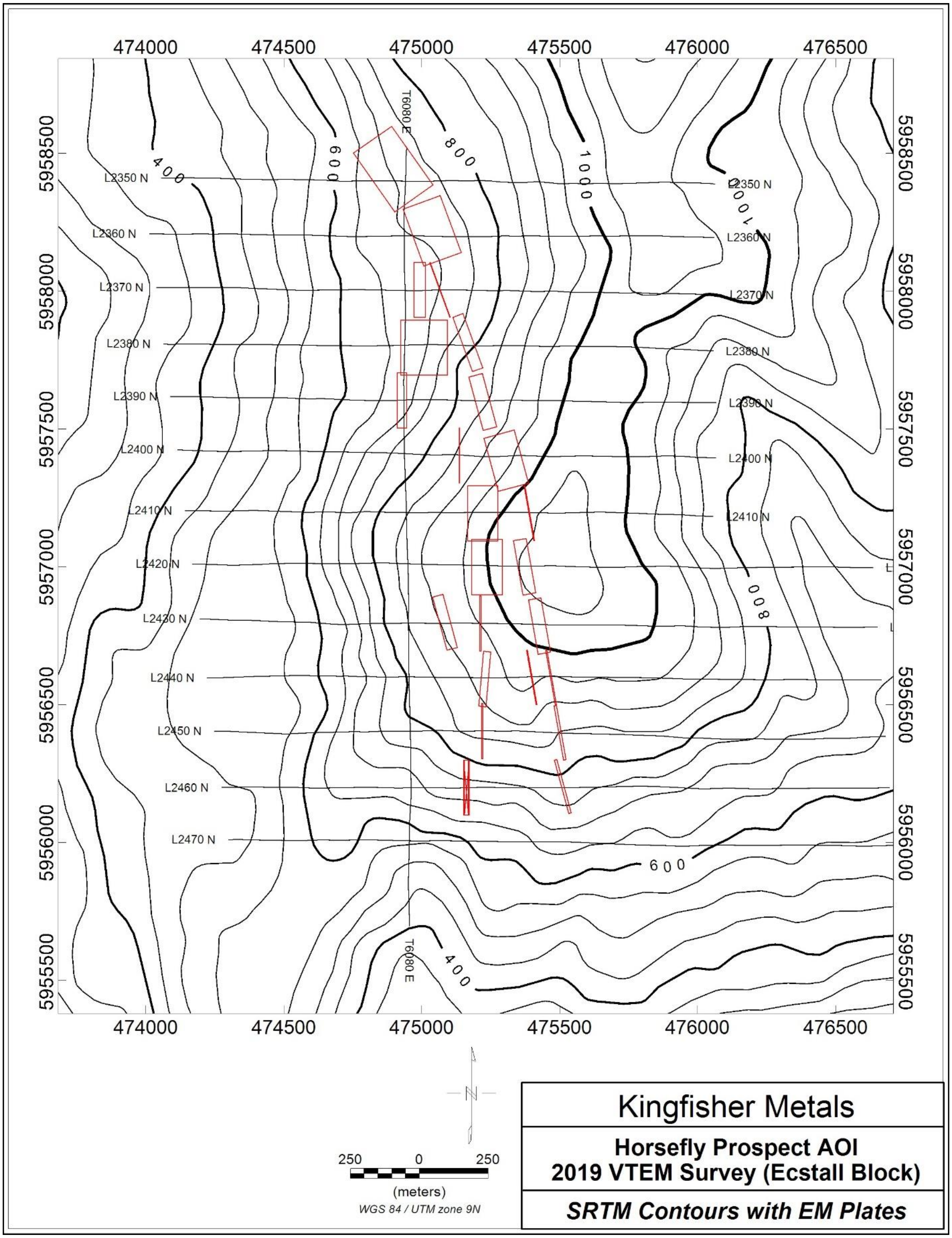


Figure 3: Contours from SRTM1 DEM (50 m interval) with conductive plate model outlines and flight lines.

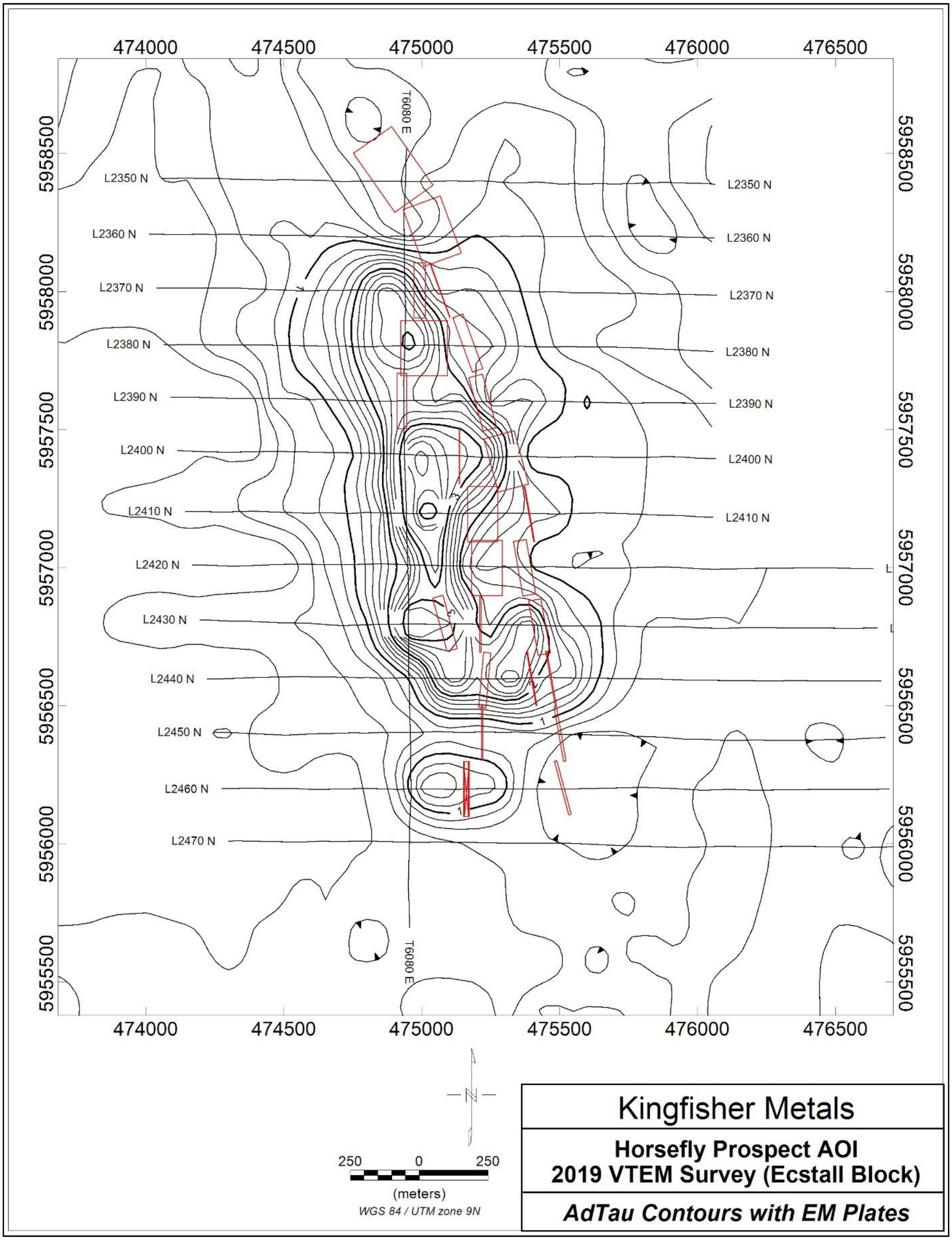


Figure 4: Contours from EM Z dB/dt AdTau (0.2, 1.0, 5.0 pV/A*m^4 intervals) with conductive plate model outlines and flight lines.

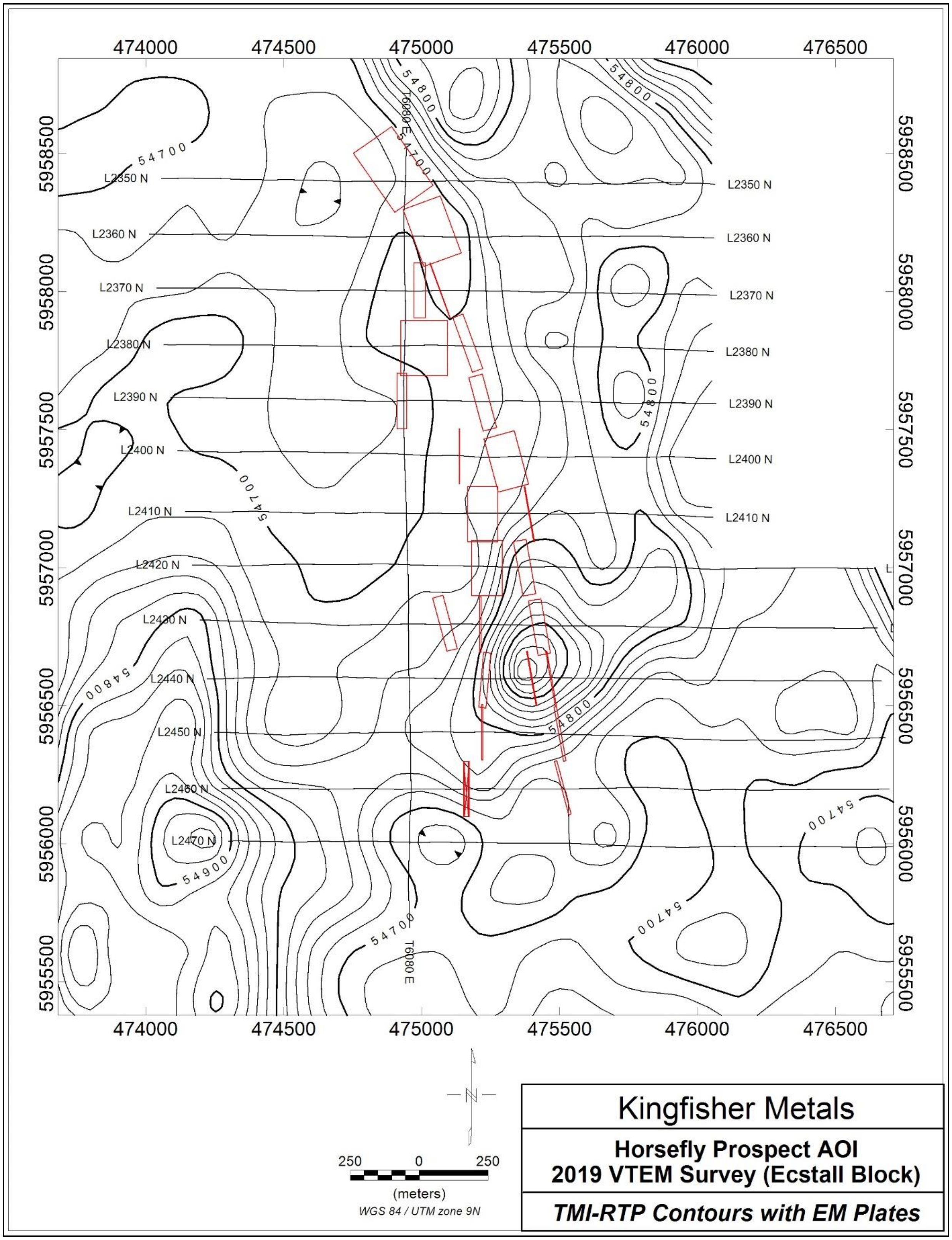


Figure 5: Contours from TMI-RTP (50, 200, 1000 nT intervals) with conductive plate model outlines and flight lines.

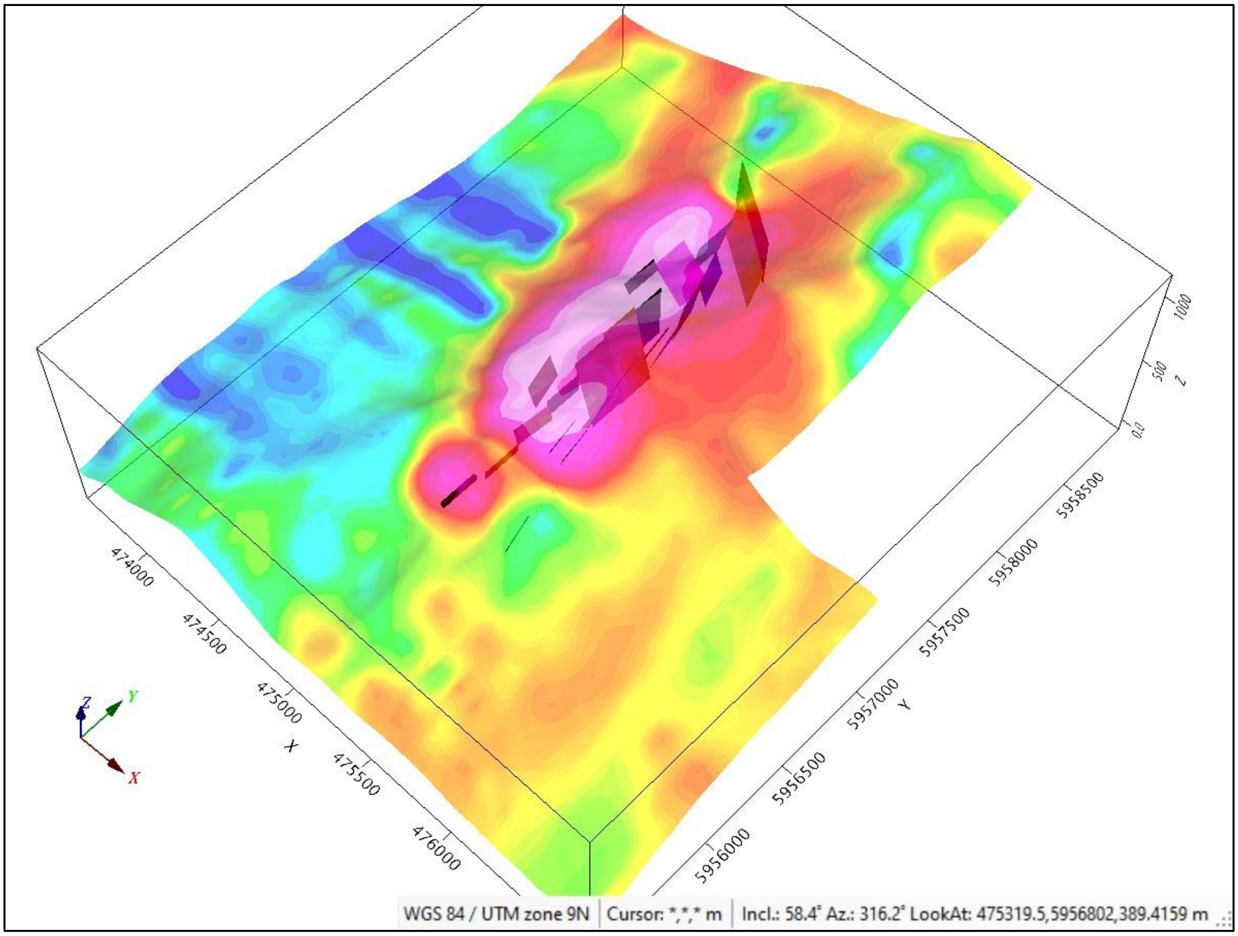


Figure 6: All Maxwell plate models (truncated) in 3D with EM Z dB/dt AdTau draped over the terrain model. View looking down and NW. There is no importance assigned to the plate colour.

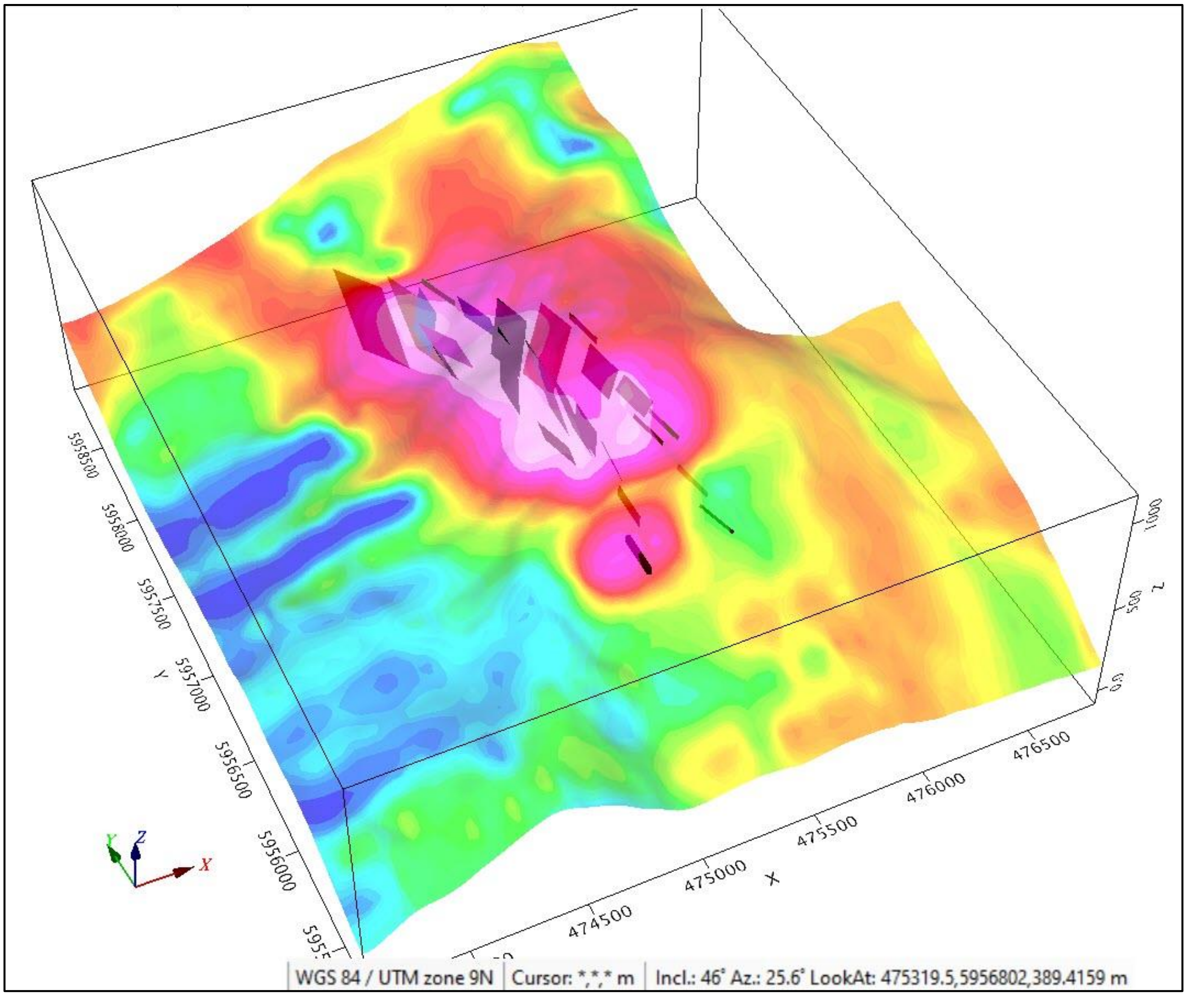


Figure 7: All Maxwell plate models (truncated) in 3D with EM Z dB/dt AdTau draped over the terrain model. View looking down and NE. There is no importance assigned to the plate colour.

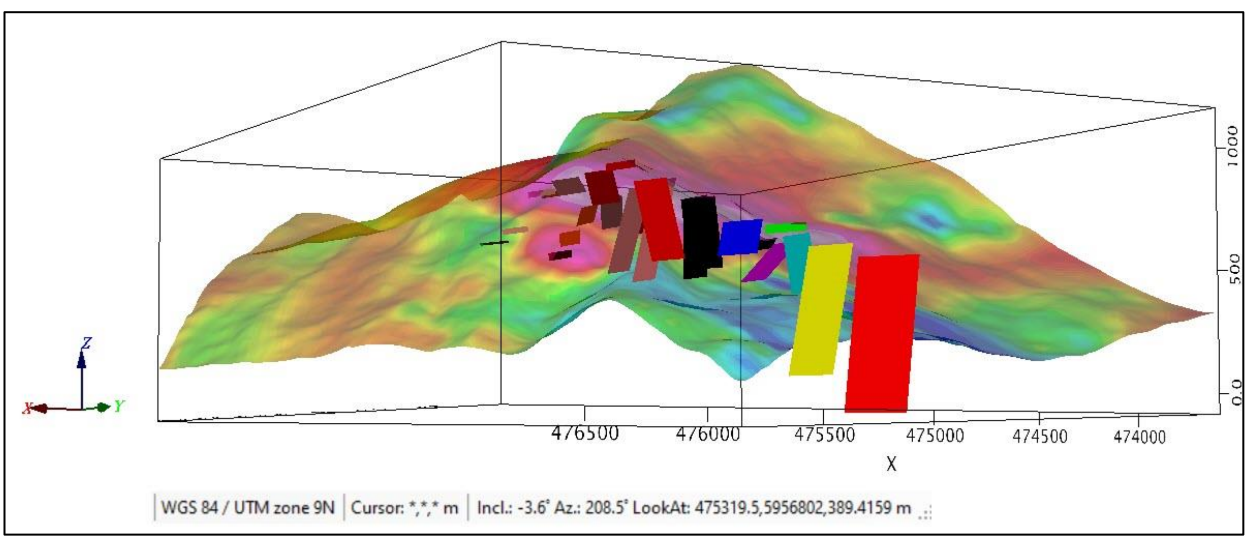
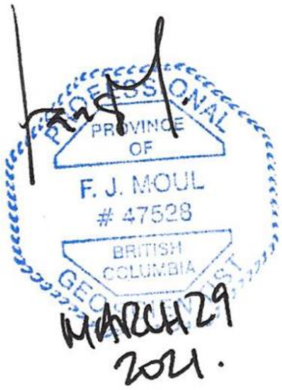


Figure 8: All Maxwell plate models (truncated) in 3D with EM Z dB/dt AdTau draped over the terrain model. View looking up and SE. There is no importance assigned to the plate colour.



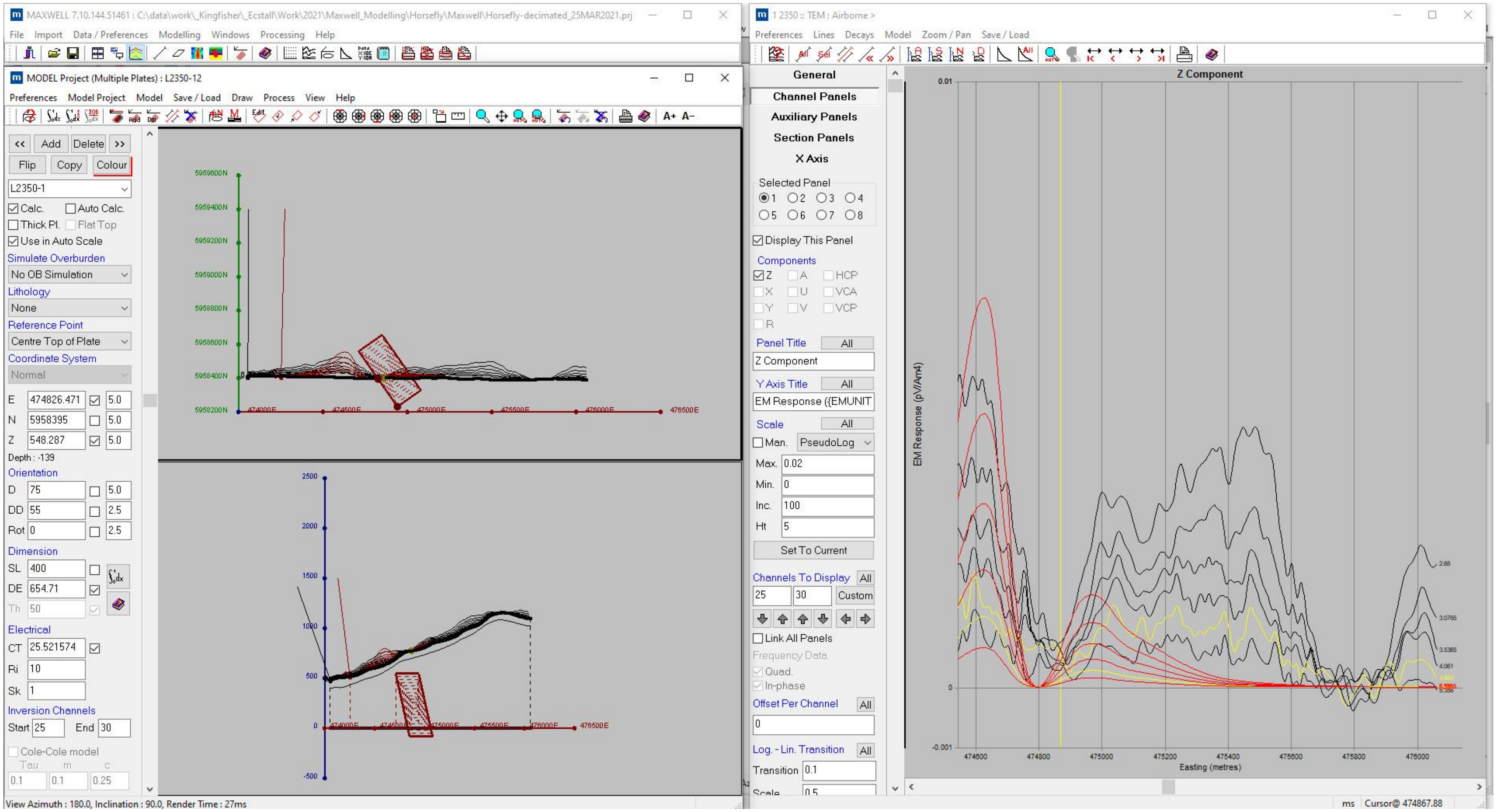
Francis Moul, Senior Geophysicist, P.Geo.
Condor North Consulting, ULC.
Vancouver, BC

Reference

Venter, N., Rummey, J., Legault, J., Soares, J., 2019. Report on a helicopter-borne versatile time domain electromagnetic (VTEM terrain) and aeromagnetic geophysical survey. Ecstall Property, Prince Rupert, British Columbia. Report for Kingfisher Resources Ltd. by Geotech Ltd. Project number GL190051. November, 2019.

Appendix A:

Maxwell Plate Model Screenshots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Preferences Model Project Model Save / Load Draw Process View Help
<< Add Delete >>
Flip Copy Colour
L2350-1
Calc. Auto Calc.
Thick Pl. Flat Top
Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
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N 5958395 5.0
Z 548.287 5.0
Depth : -139
Orientation
D 75 5.0
DD 55 2.5
Rot 0 2.5
Dimension
SL 400
DE 654.71
Th 50
Electrical
CT 25.521574
Ri 10
Sk 1
Inversion Channels
Start 25 End 30
Cole-Cole model
Tau m c
0.1 0.1 0.25
View Azimuth : 180.0, Inclination : 90.0, Render Time : 27ms
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Preferences Lines Decays Model Zoom / Pan Save / Load
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
Selected Panel
1 2 3 4
5 6 7 8
Display This Panel
Components
Z A HCP
X U VCA
Y V VCP
R
Panel Title All
Z Component
Y Axis Title All
EM Response ({EMUNIT
Scale All
Man. PseudoLog
Max. 0.02
Min. 0
Inc. 100
Ht 5
Set To Current
Channels To Display All
25 30 Custom
Link All Panels
Frequency Data
Quad.
In-phase
Offset Per Channel All
0
Log. - Lin. Transition All
Transition 0.1
Scale 0.5
Z Component
EM Response (pV/Am4)
Easting (metres)
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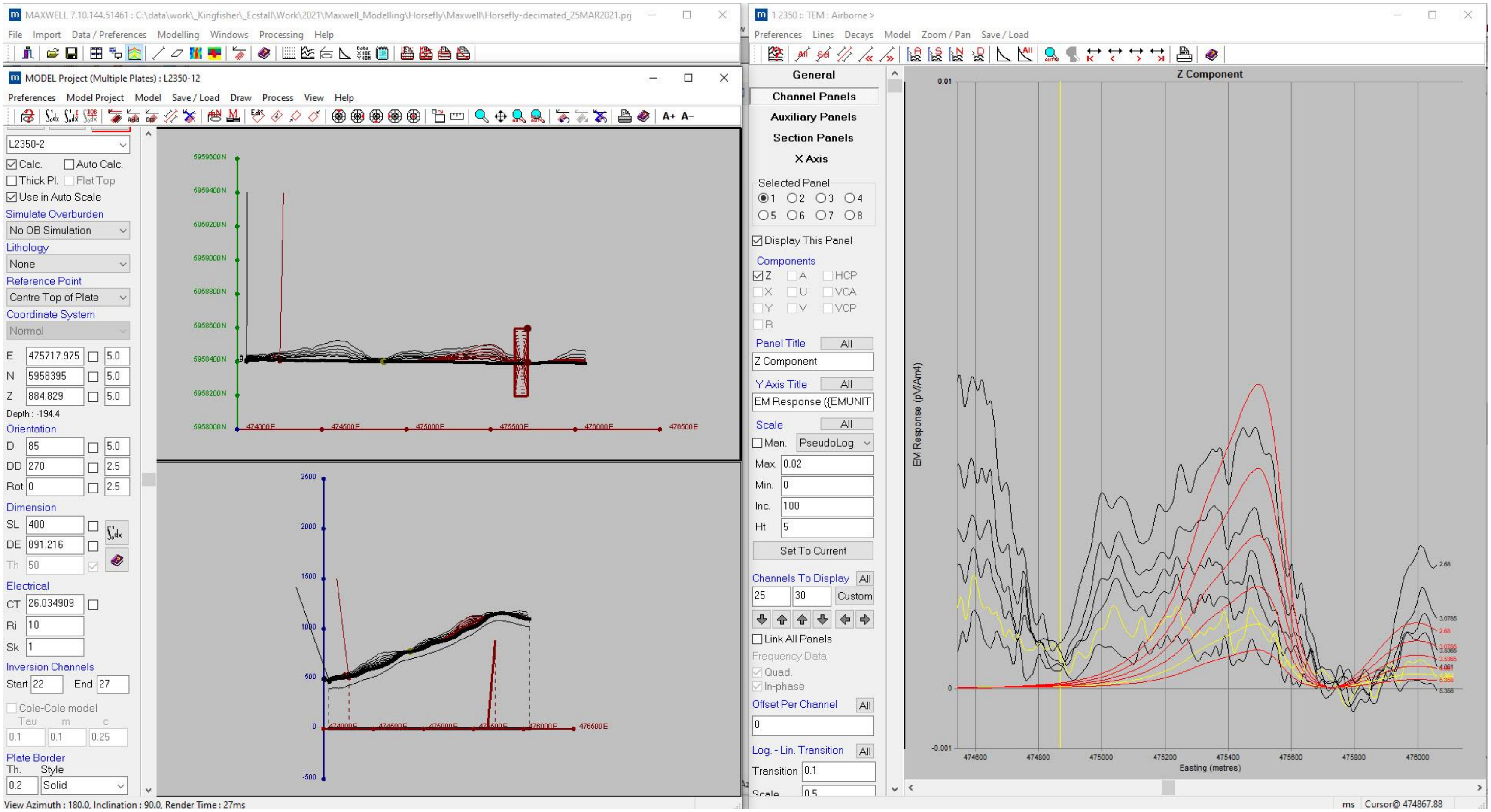
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Thick Pl.
Flat Top
Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
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Depth : -194.4
Orientation
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DD 270 2.5
Rot 0 2.5
Dimension
SL 400
DE 891.216
Th 50
Electrical
CT 26.034909
Ri 10
Sk 1
Inversion Channels
Start 22 End 27
Cole-Cole model
Tau m c
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Plate Border
Th. Style
0.2 Solid
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X U VCA
Y V VCP
R
Panel Title All
Z Component
Y Axis Title All
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Scale All
Man. PseudoLog
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Min. 0
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Set To Current
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Link All Panels
Frequency Data
Quad.
In-phase
Offset Per Channel All
0
Log. - Lin. Transition All
Transition 0.1
Z Component
EM Response (pV/Am4)
Easting (metres)
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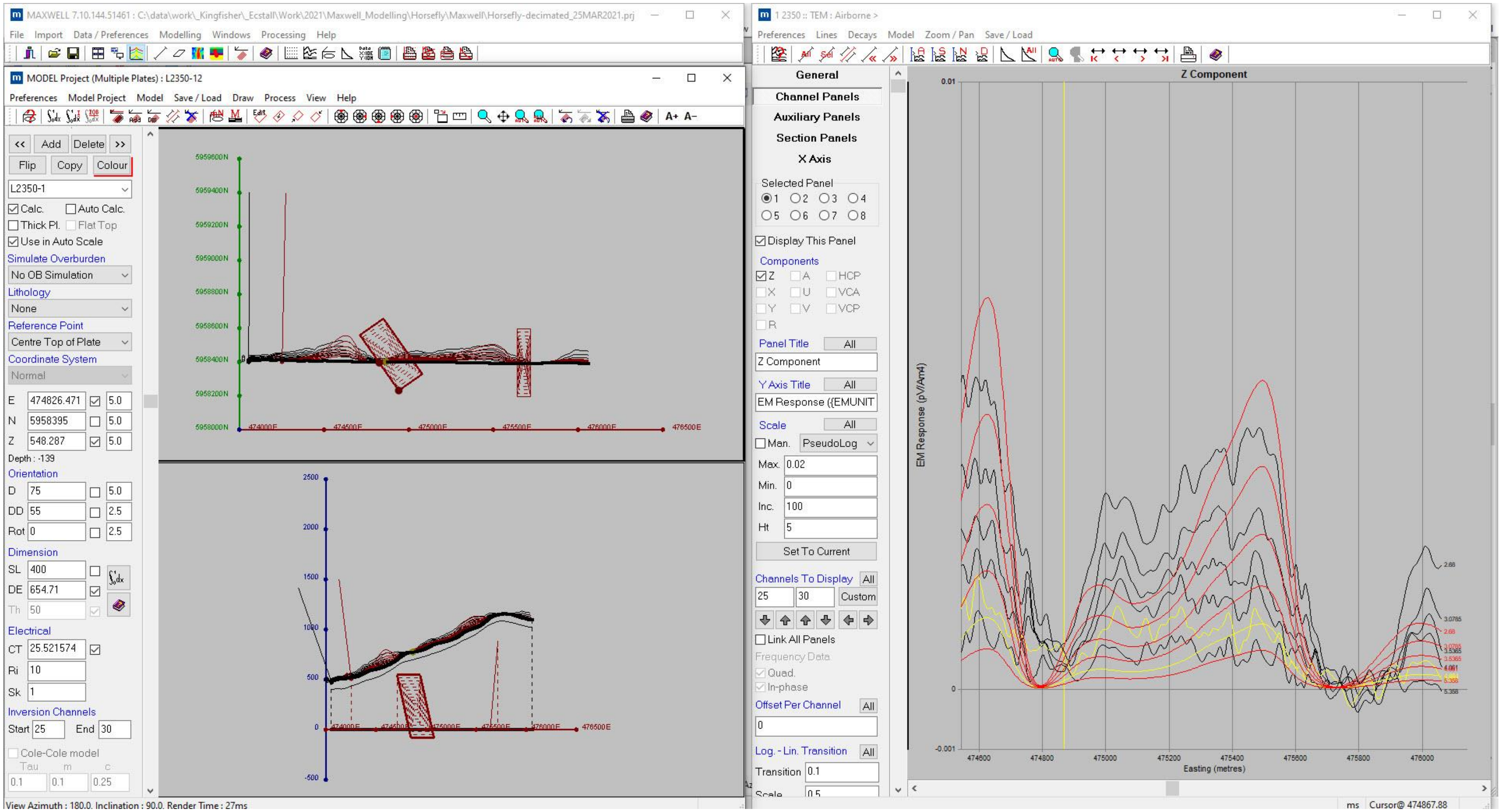
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Thick Pl. Flat Top
Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
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Reference Point
Centre Top of Plate
Coordinate System
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E 474826.471 5.0
N 5958395 5.0
Z 548.287 5.0
Depth : -139
Orientation
D 75 5.0
DD 55 2.5
Rot 0 2.5
Dimension
SL 400
DE 654.71
Th 50
Electrical
CT 25.521574
Ri 10
Sk 1
Inversion Channels
Start 25 End 30
Cole-Cole model
Tau m c
0.1 0.1 0.25
View Azimuth : 180.0, Inclination : 90.0, Render Time : 27ms
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X U VCA
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Offset Per Channel All
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Easting (metres)
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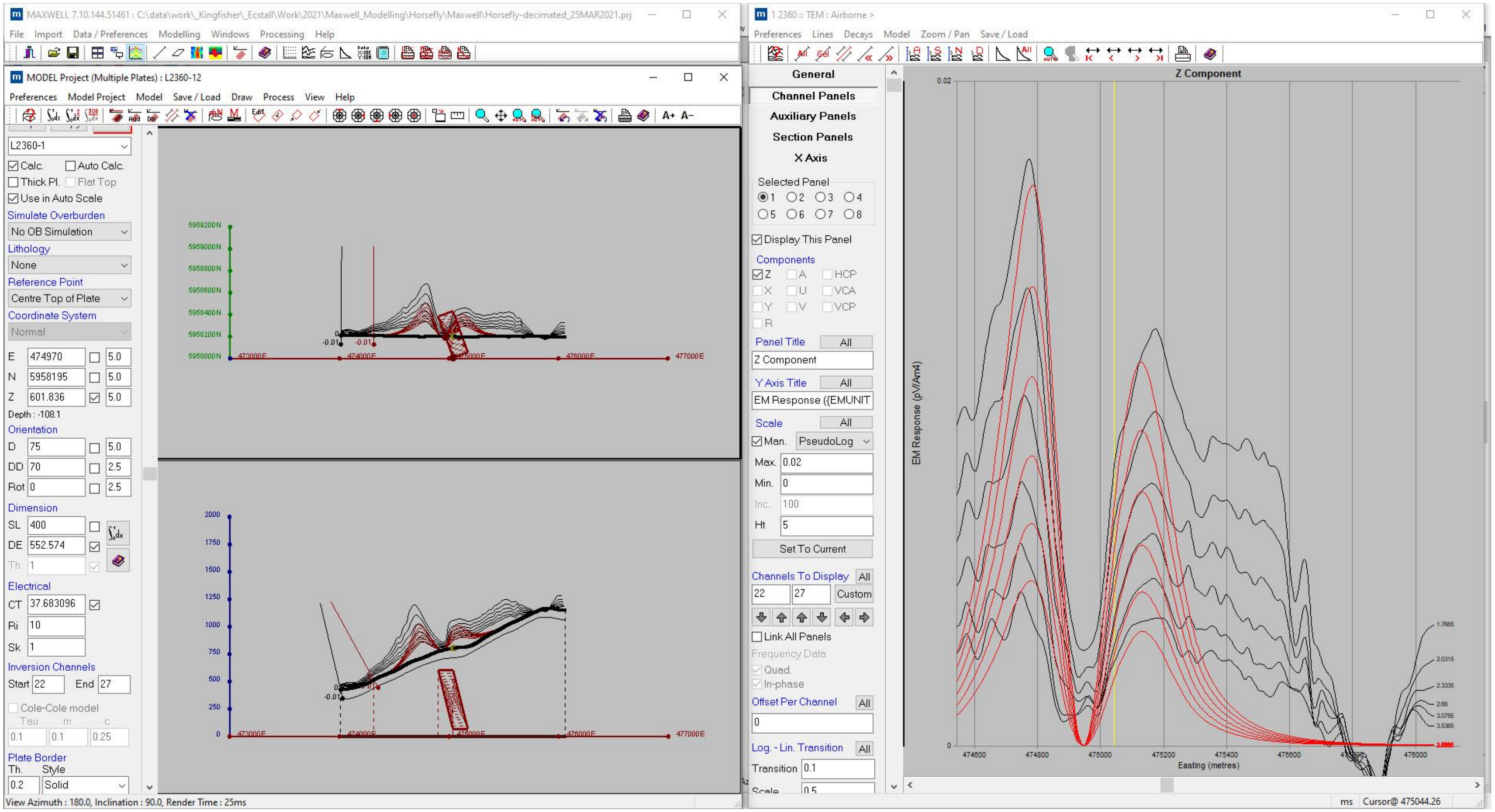

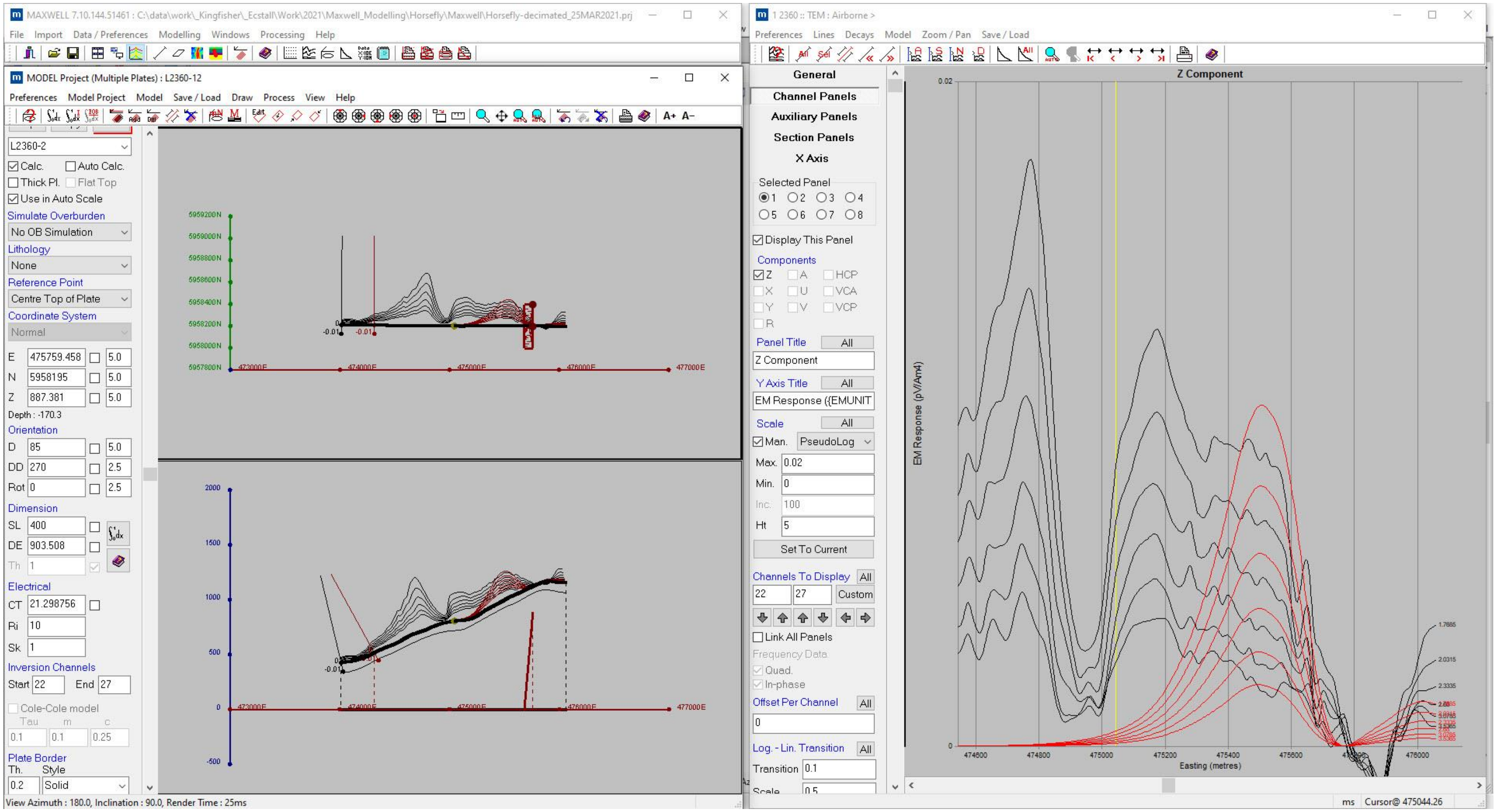

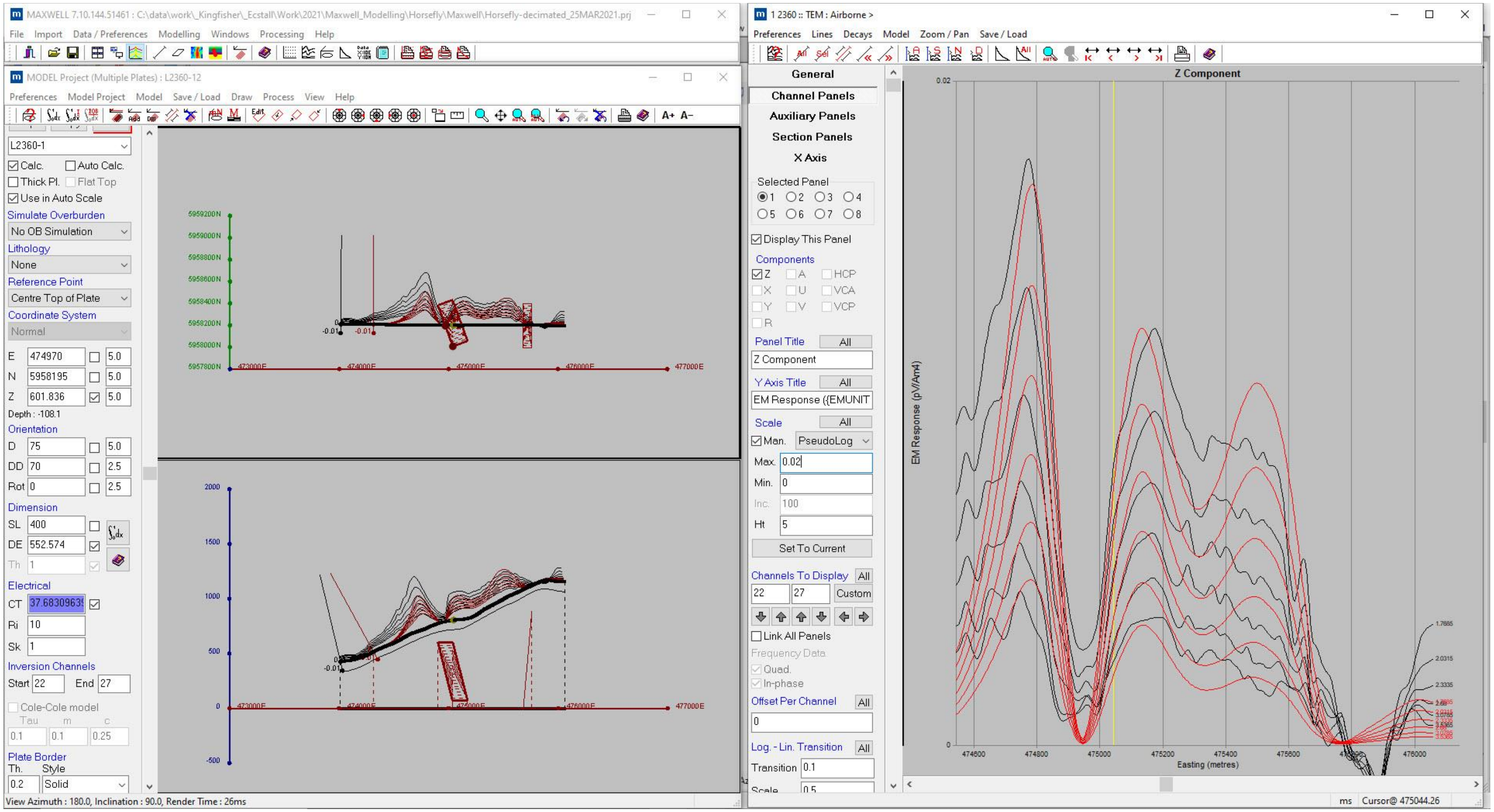
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Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
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Reference Point
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Coordinate System
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N 5958195 5.0
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Orientation
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DD 70 2.5
Rot 0 2.5
Dimension
SL 400
DE 552.574
Th 1
Electrical
CT 37.6830963
Ri 10
Sk 1
Inversion Channels
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Cole-Cole model
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X U VCA
Y V VCP
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Panel Title All
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Y Axis Title All
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Man. PseudoLog
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Min. 0
Inc. 100
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Channels To Display All
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Link All Panels
Frequency Data
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Easting (metres)
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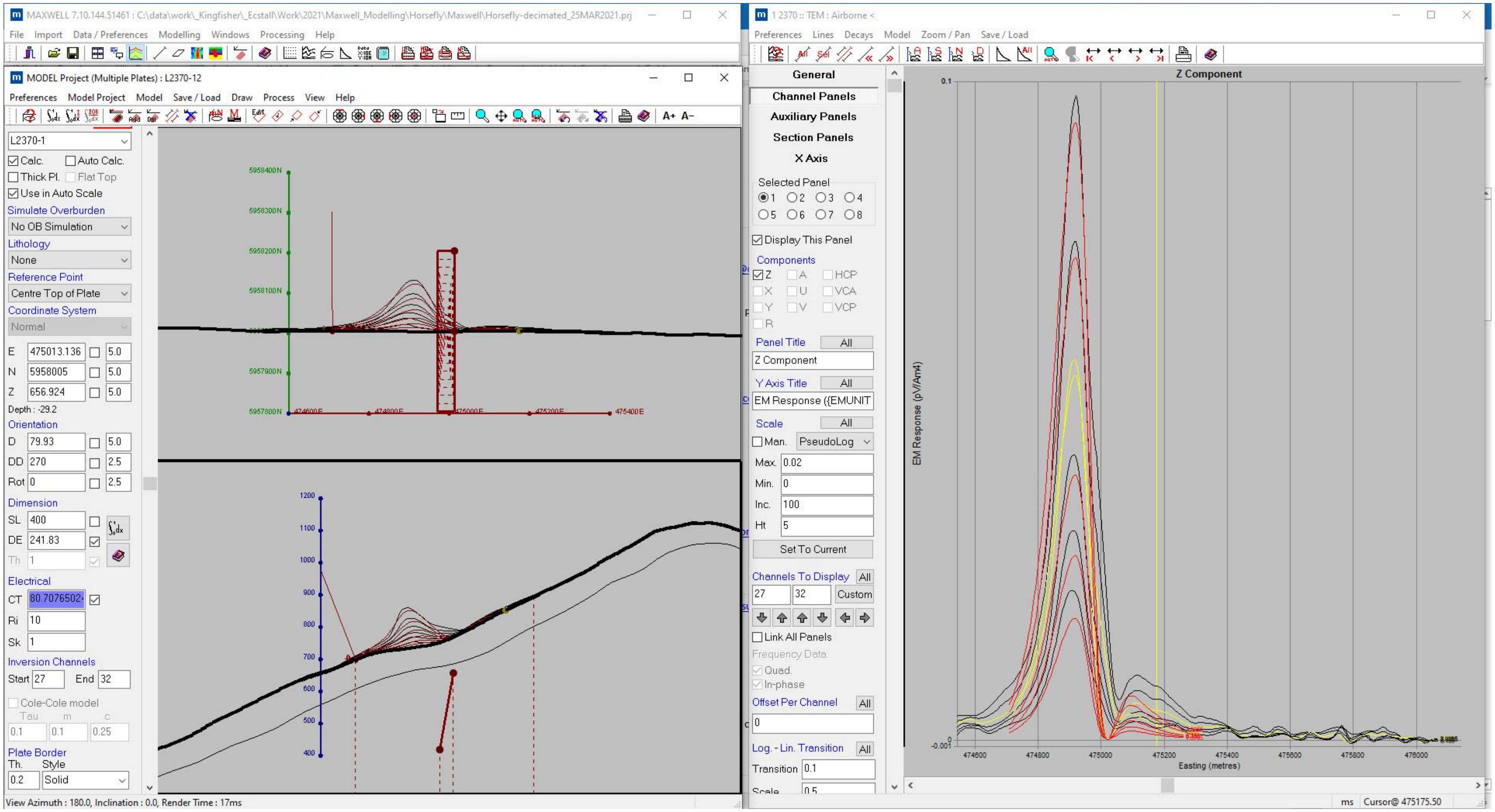
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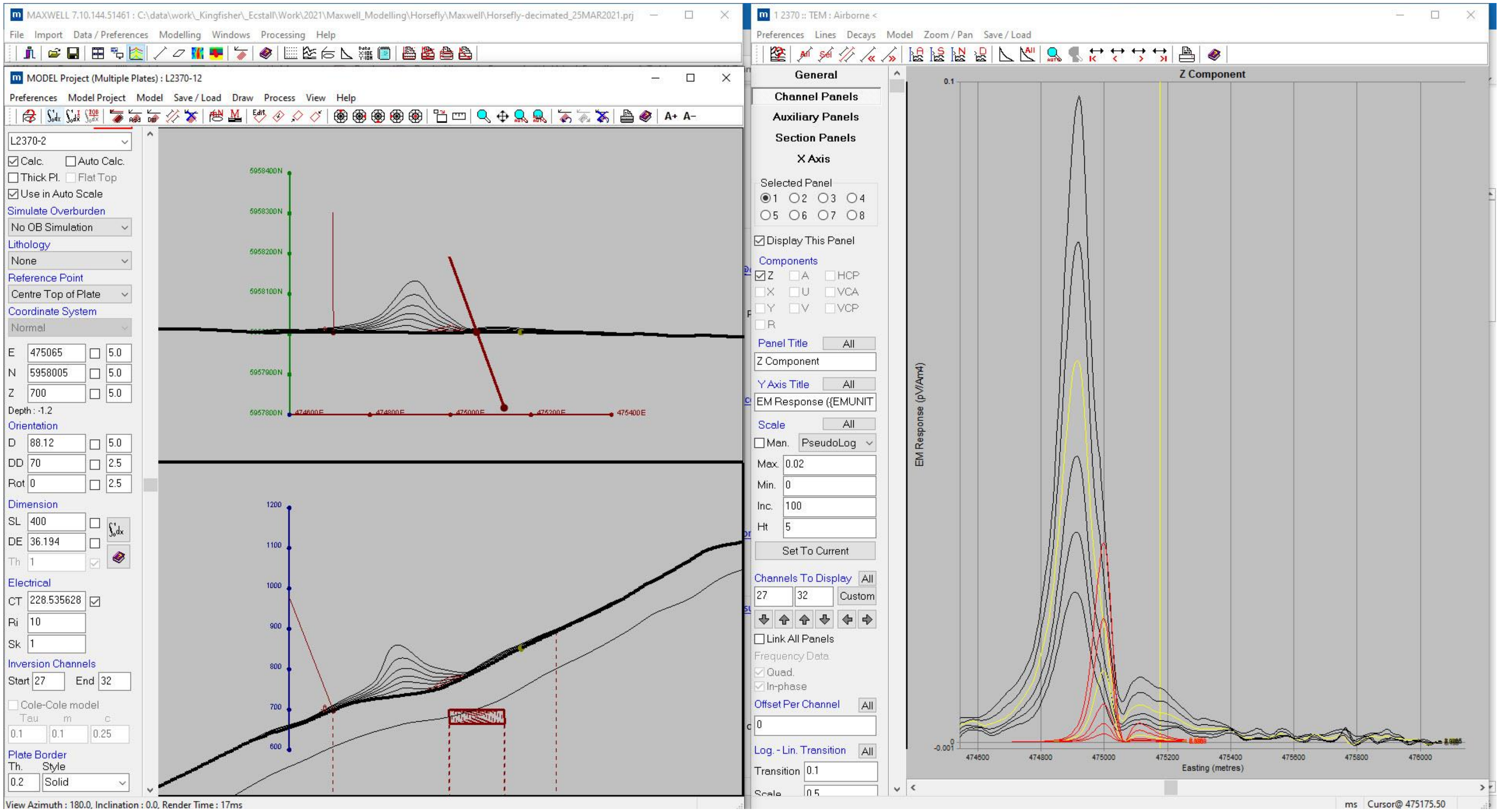

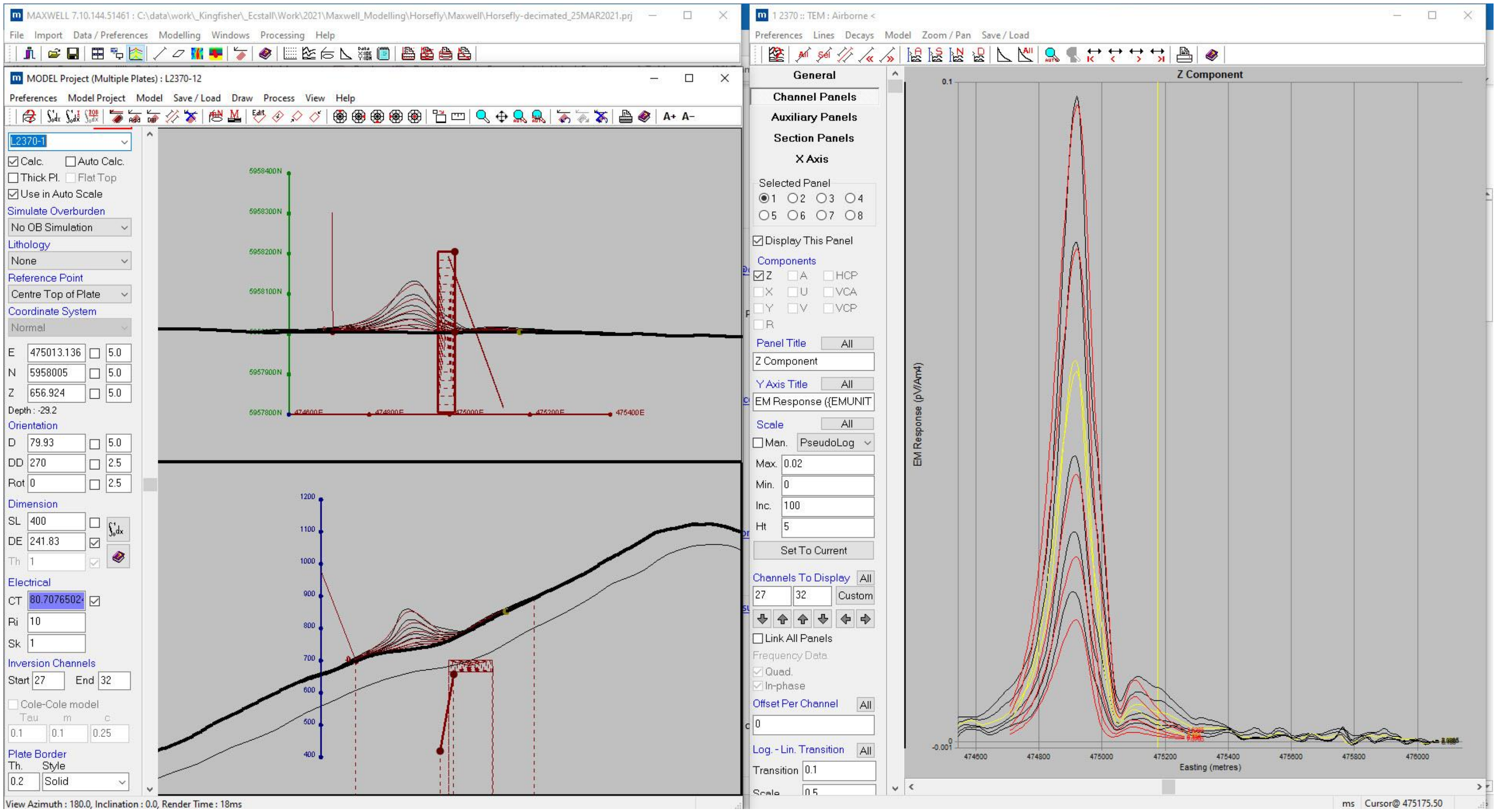

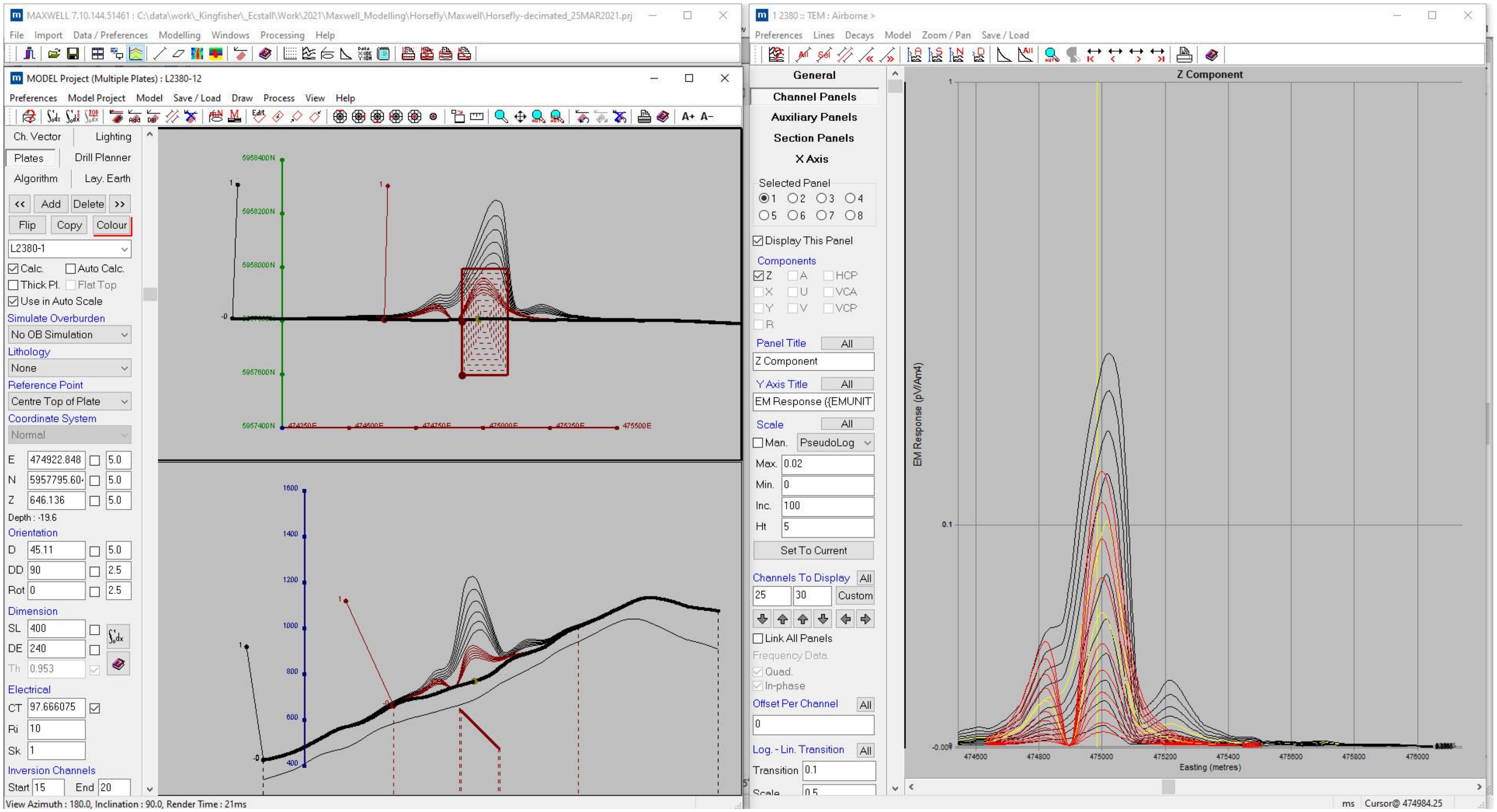

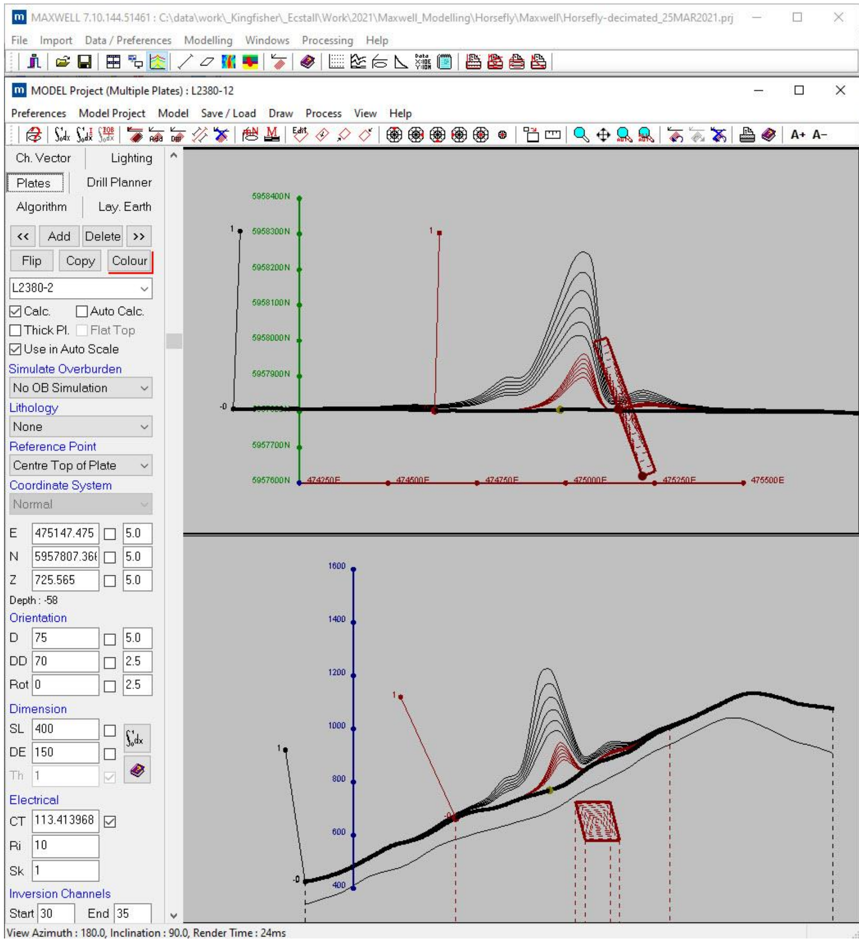

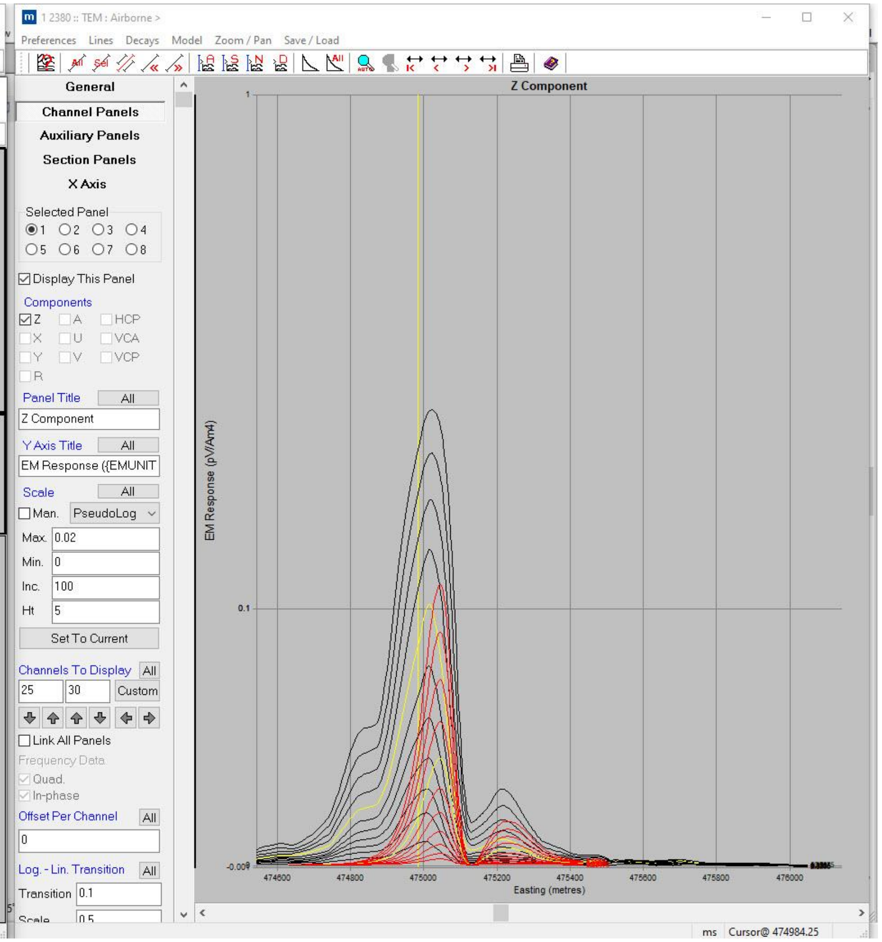

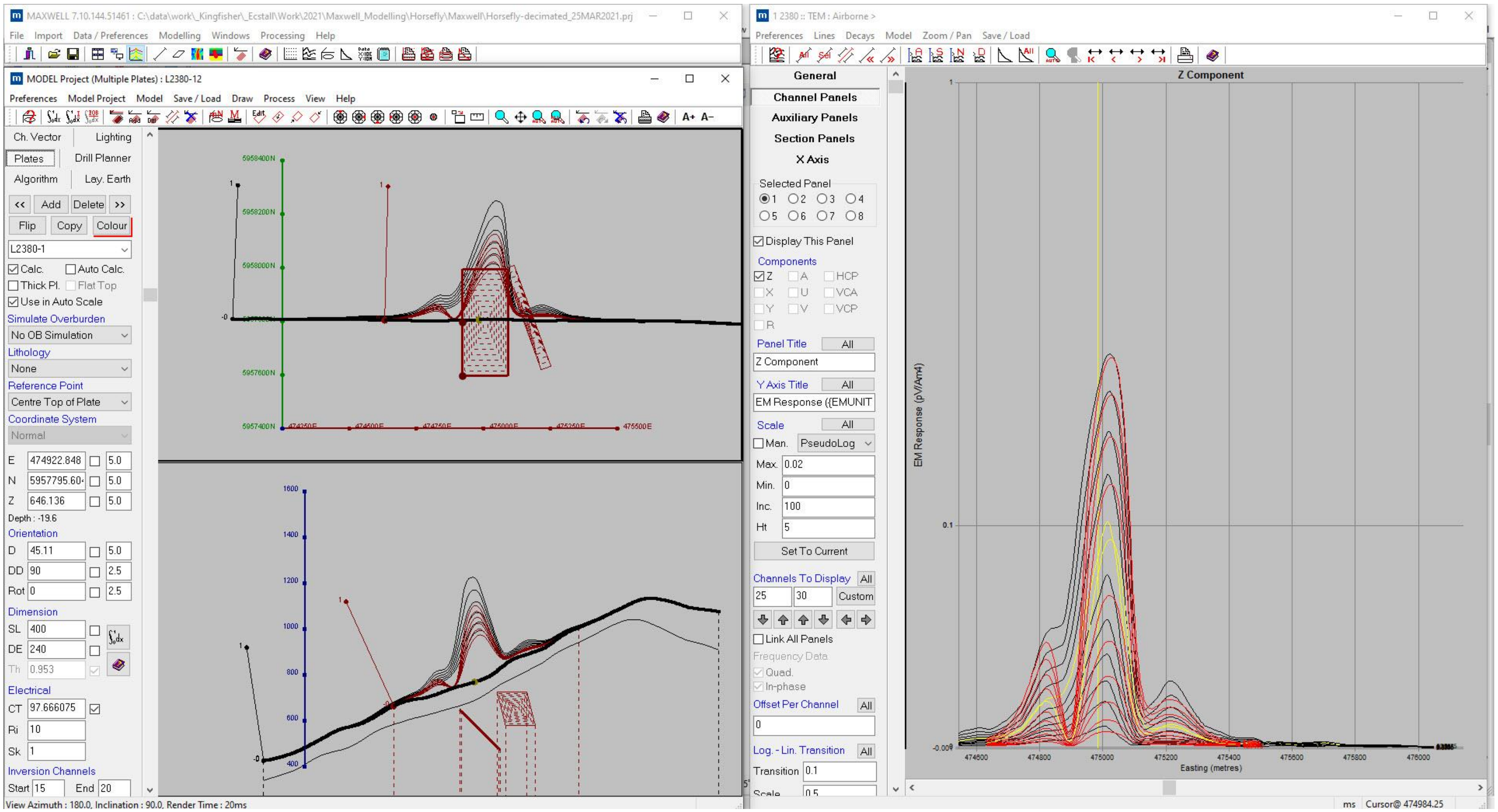

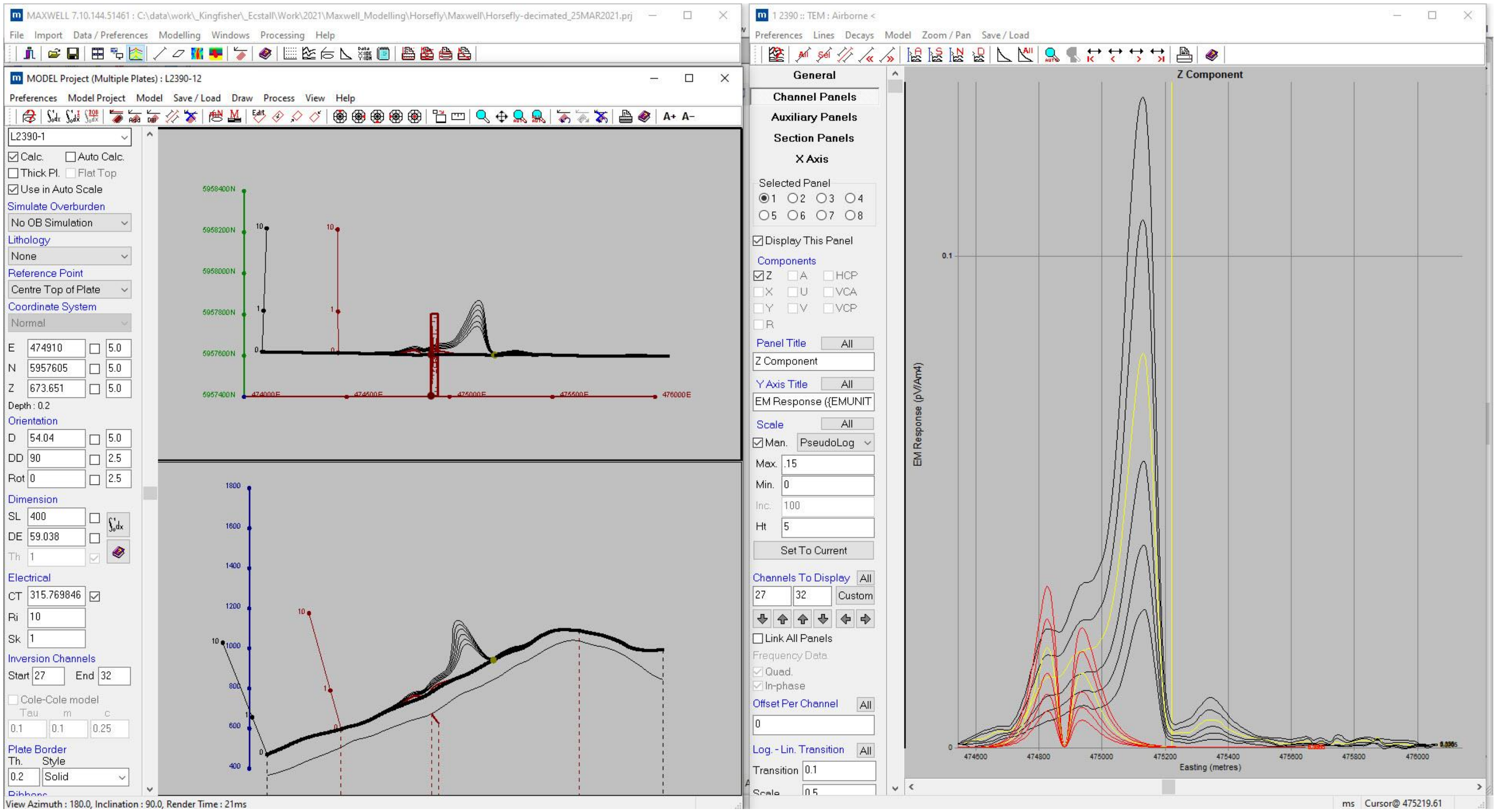

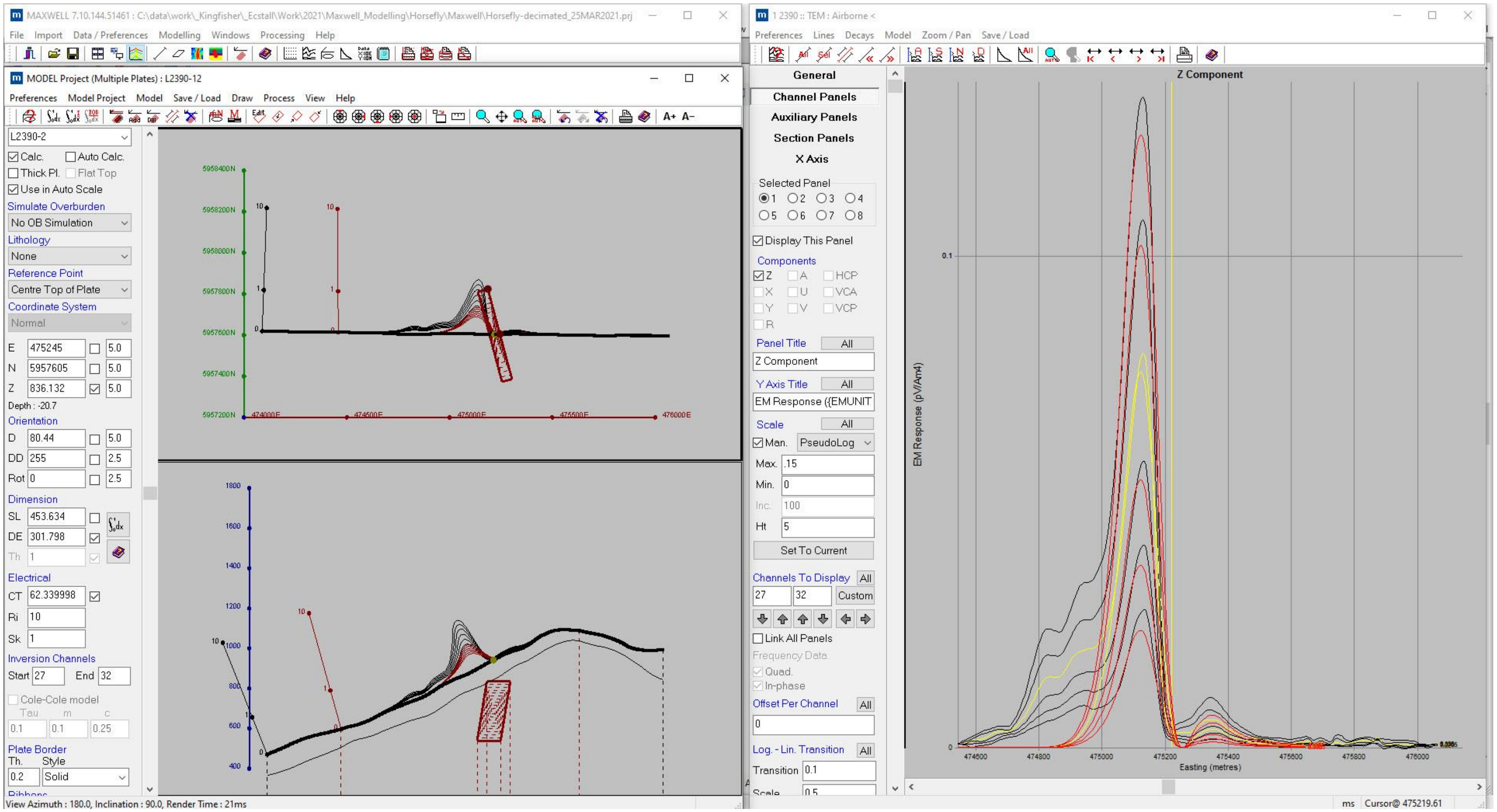
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Electrical
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Ri 10
Sk 1
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Z Component
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Easting (metres)
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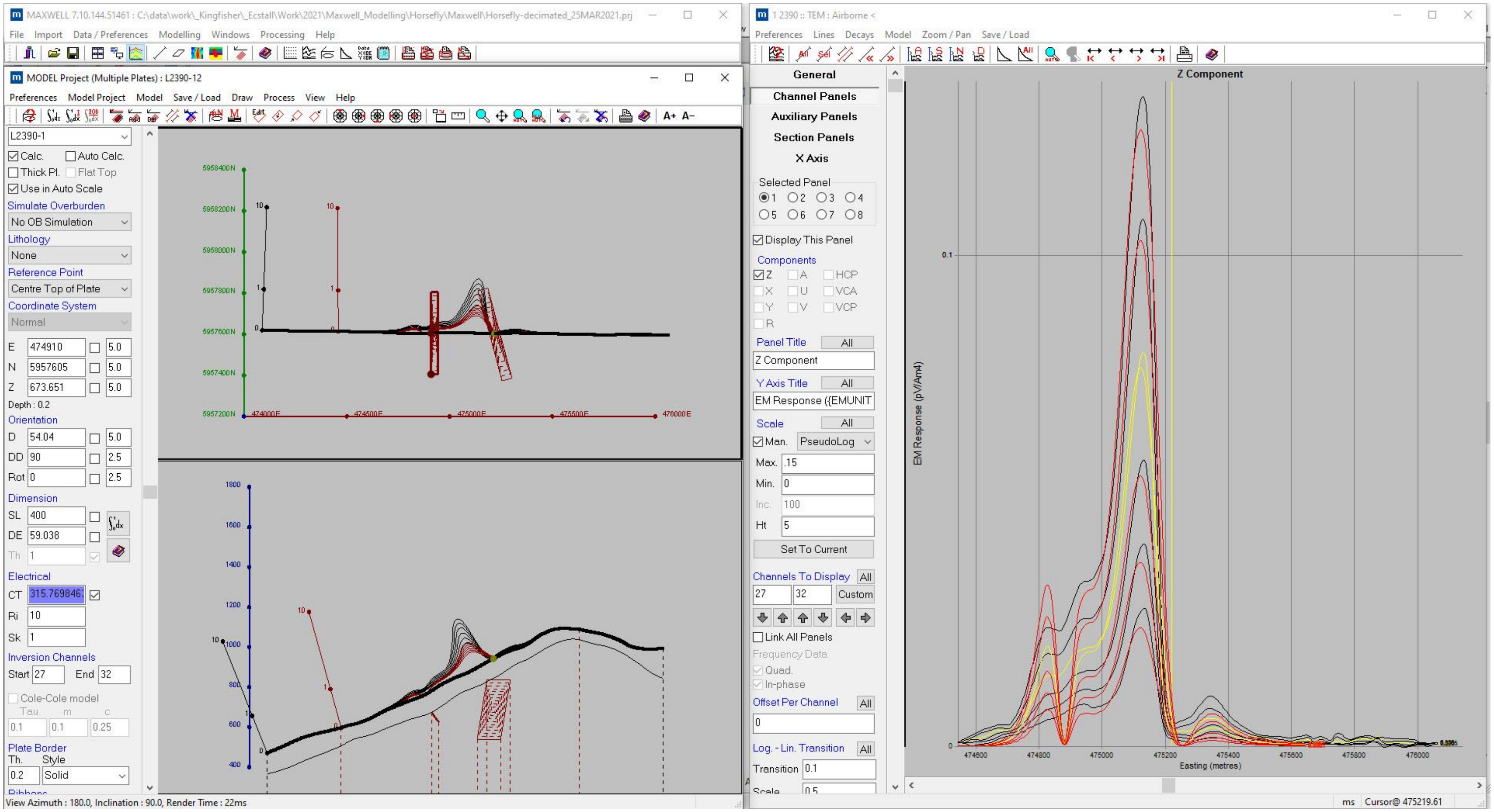
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L2390-1
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Auto Calc.
Thick Pl.
Flat Top
Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
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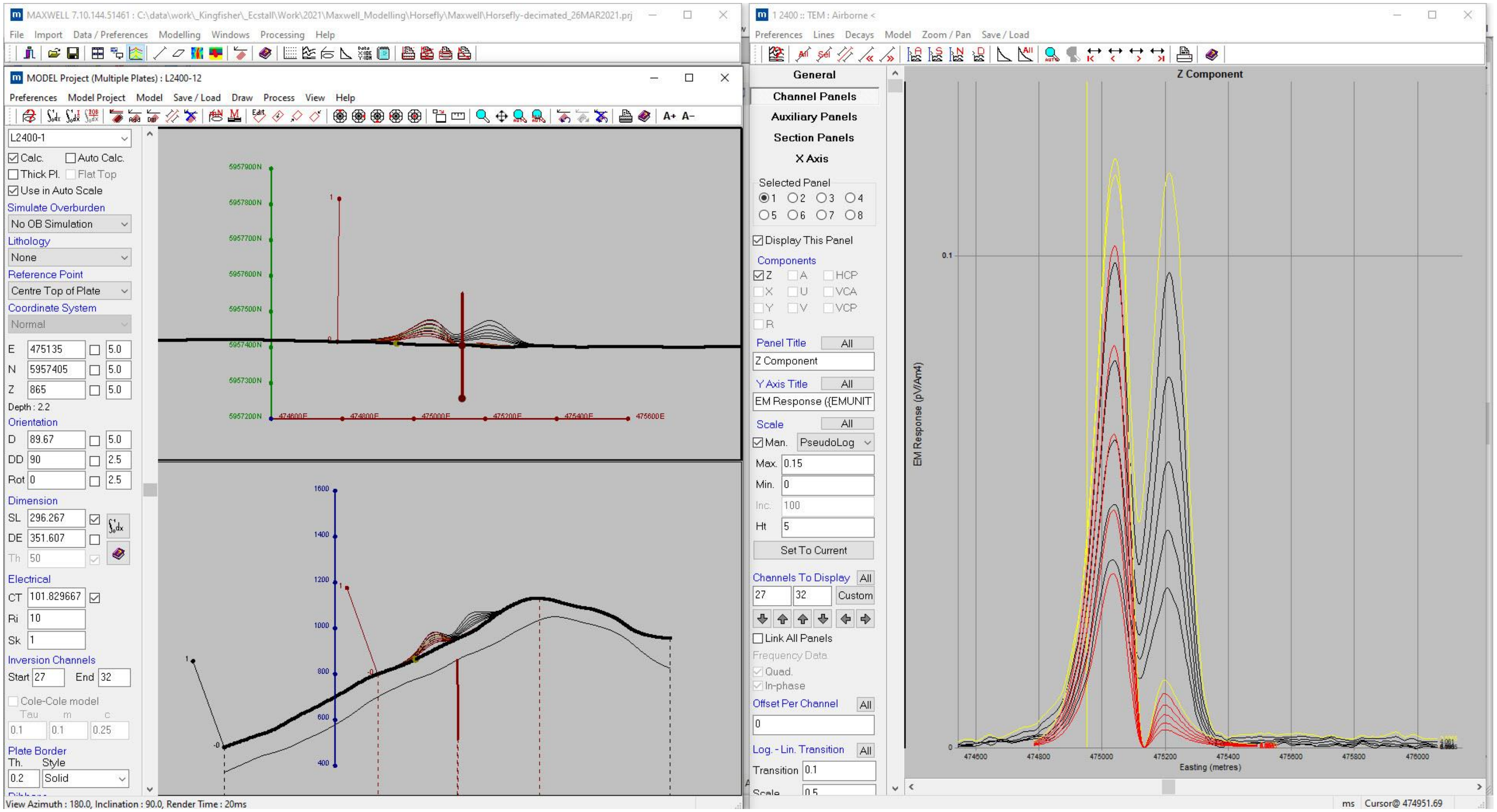
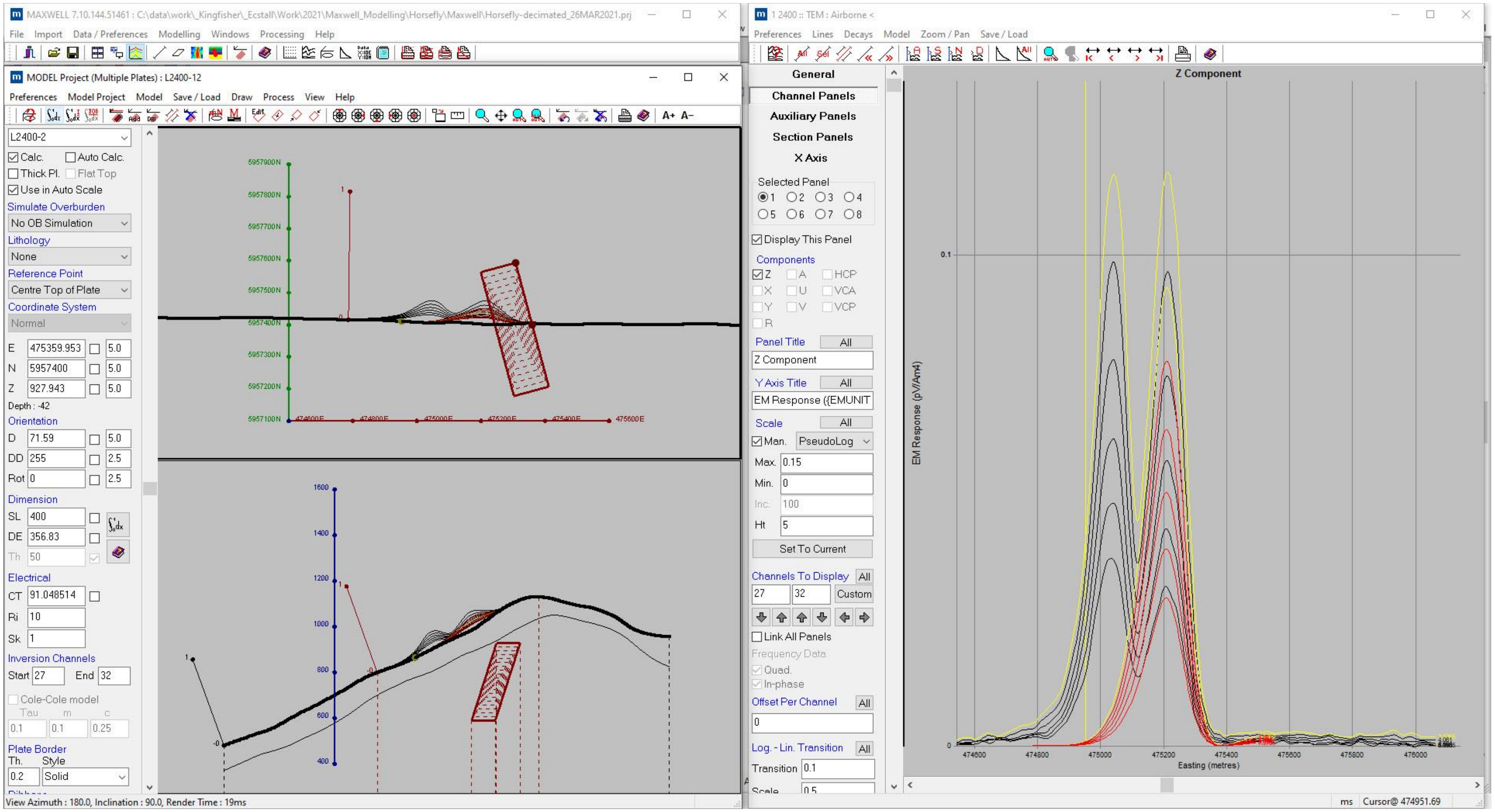
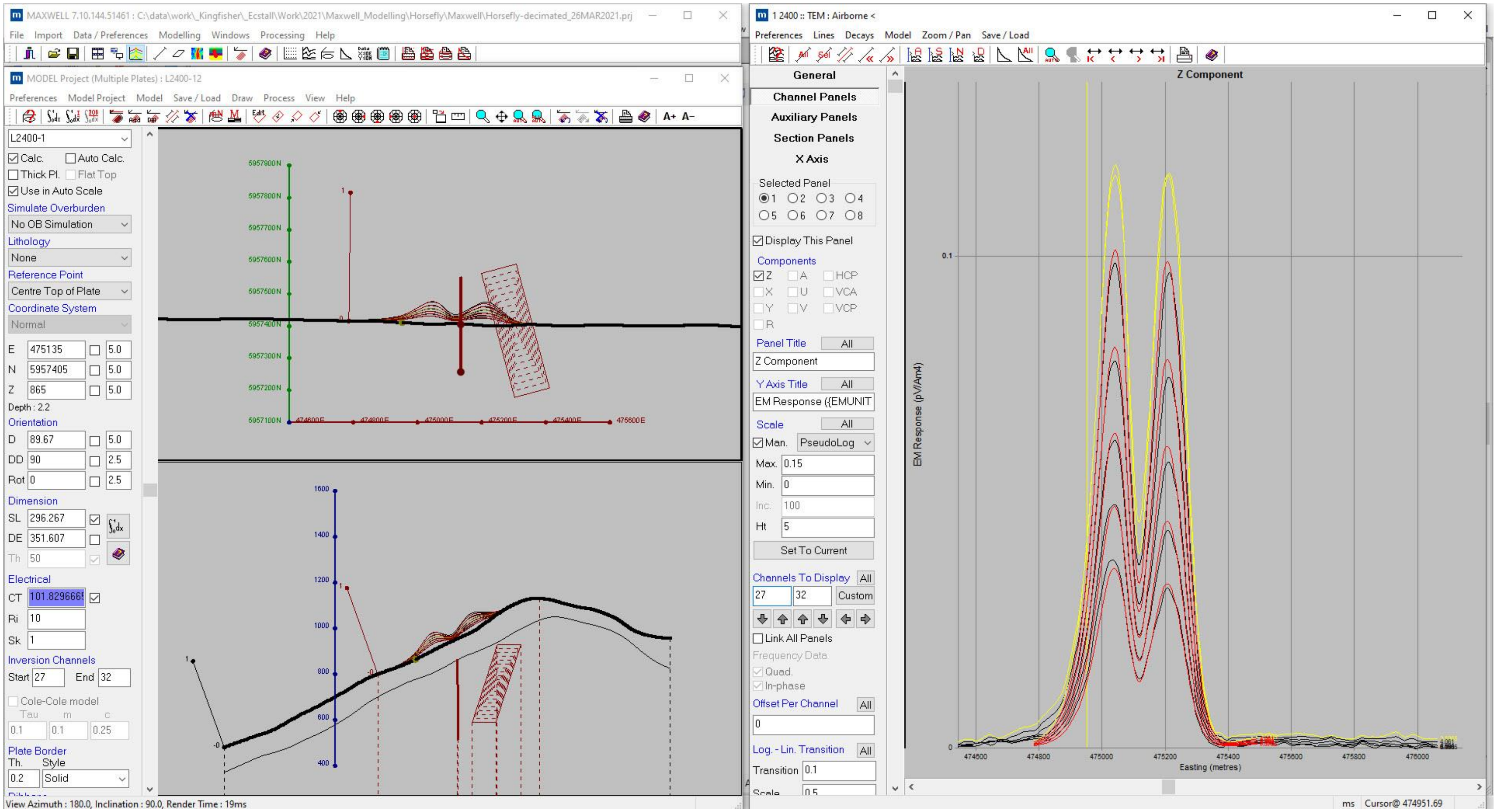
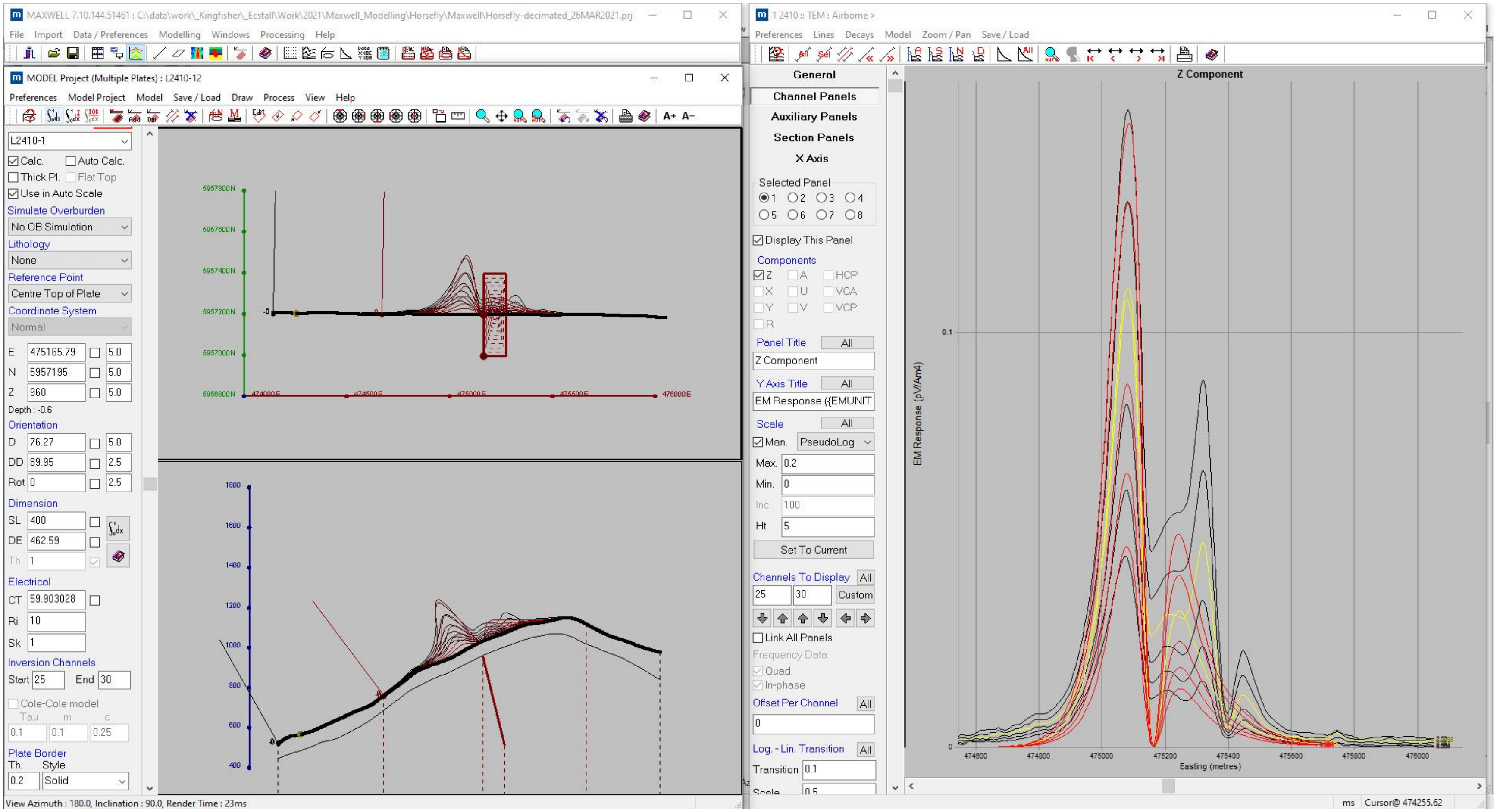
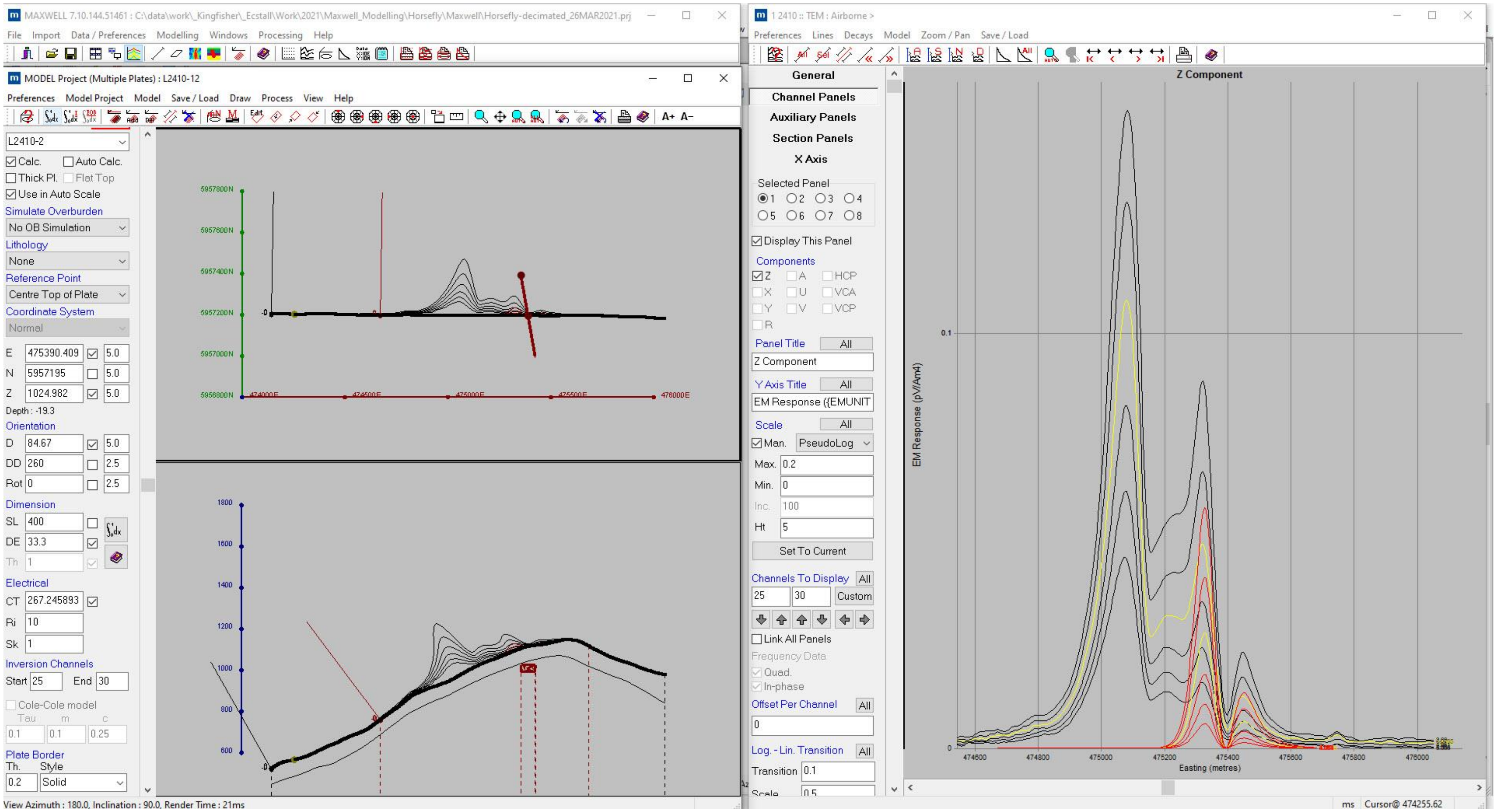
N 5957605 5.0
Z 673.651 5.0
Depth : 0.2
Orientation
D 54.04 5.0
DD 90 2.5
Rot 0 2.5
Dimension
SL 400
DE 59.038
Th 1
Electrical
CT 315.769846
Ri 10
Sk 1
Inversion Channels
Start 27 End 32
Cole-Cole model
Tau m c
0.1 0.1 0.25
Plate Border
Th. Style
0.2 Solid
View Azimuth : 180.0, Inclination : 90.0, Render Time : 22ms
1 2390 :: TEM : Airborne <
Preferences Lines Decays Model Zoom / Pan Save / Load
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
Selected Panel
1 2 3 4
5 6 7 8
Display This Panel
Components
Z A HCP
X U VCA
Y V VCP
R
Panel Title All
Z Component
Y Axis Title All
EM Response ({EMUNIT
Scale All
Man. PseudoLog
Max. .15
Min. 0
Inc. 100
Ht 5
Set To Current
Channels To Display All
27 32 Custom
Link All Panels
Frequency Data
Quad.
In-phase
Offset Per Channel All
0
Log. - Lin. Transition All
Transition 0.1
Z Component
EM Response (pV/Am4)
Easting (metres)
ms Cursor@ 475219.61

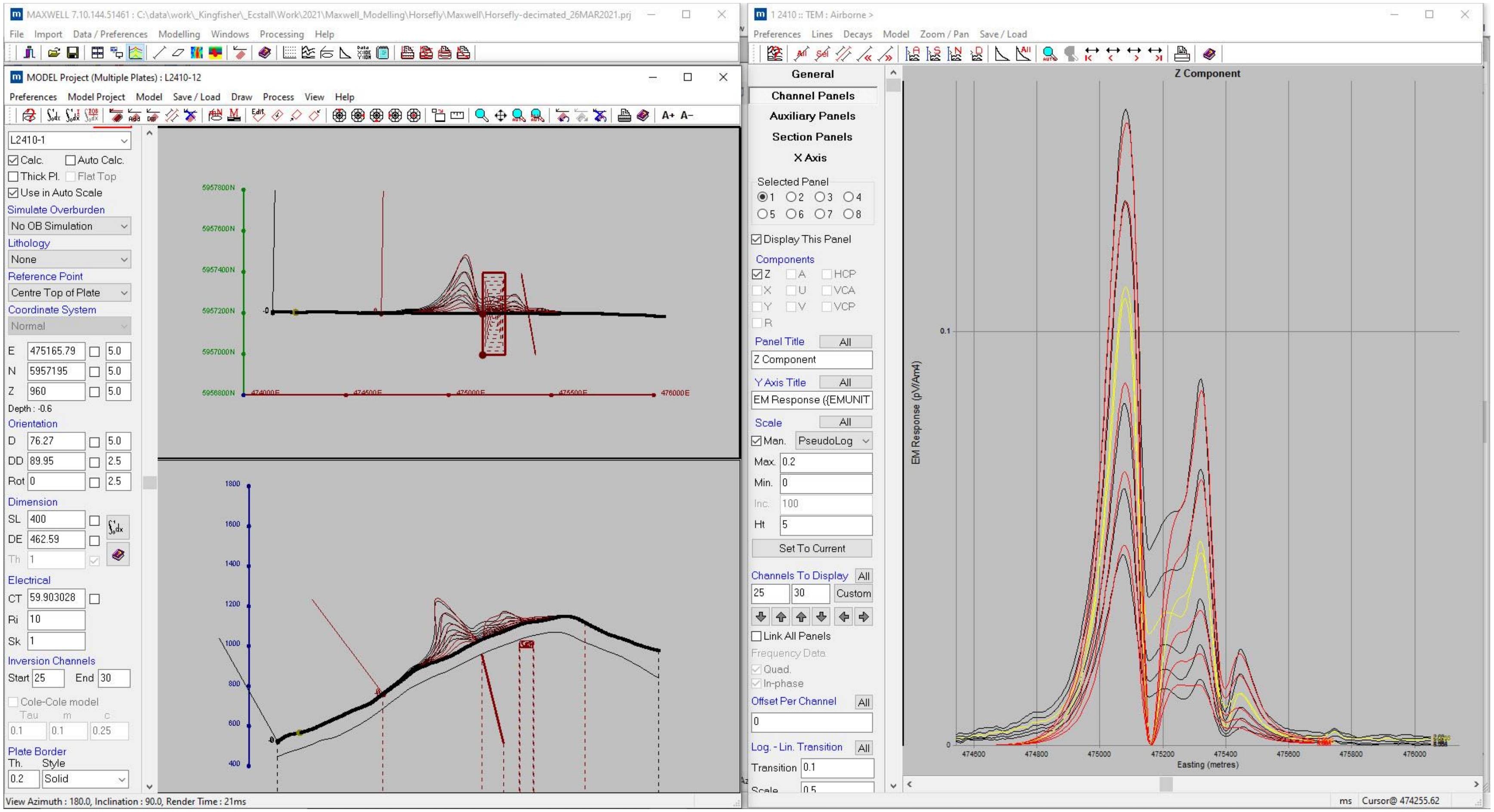

MODEL Project (Multiple Plates) : L2400-12
1 2400 :: TEM : Airborne
Z Component
EM Response (pV/Am4)
Easting (metres)
View Azimuth : 180.0, Inclination : 90.0, Render Time : 20ms
Cursor@ 474951.69

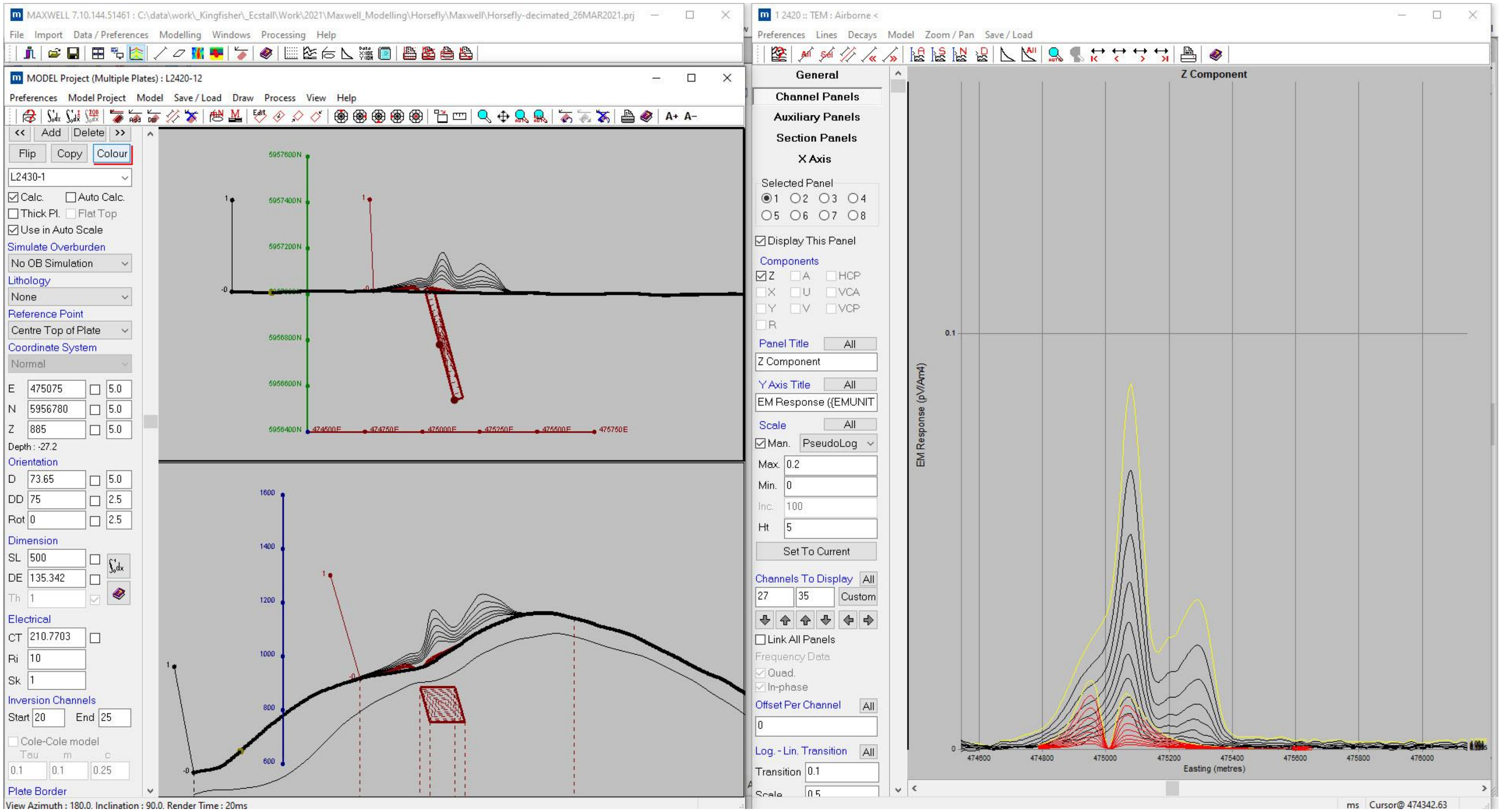


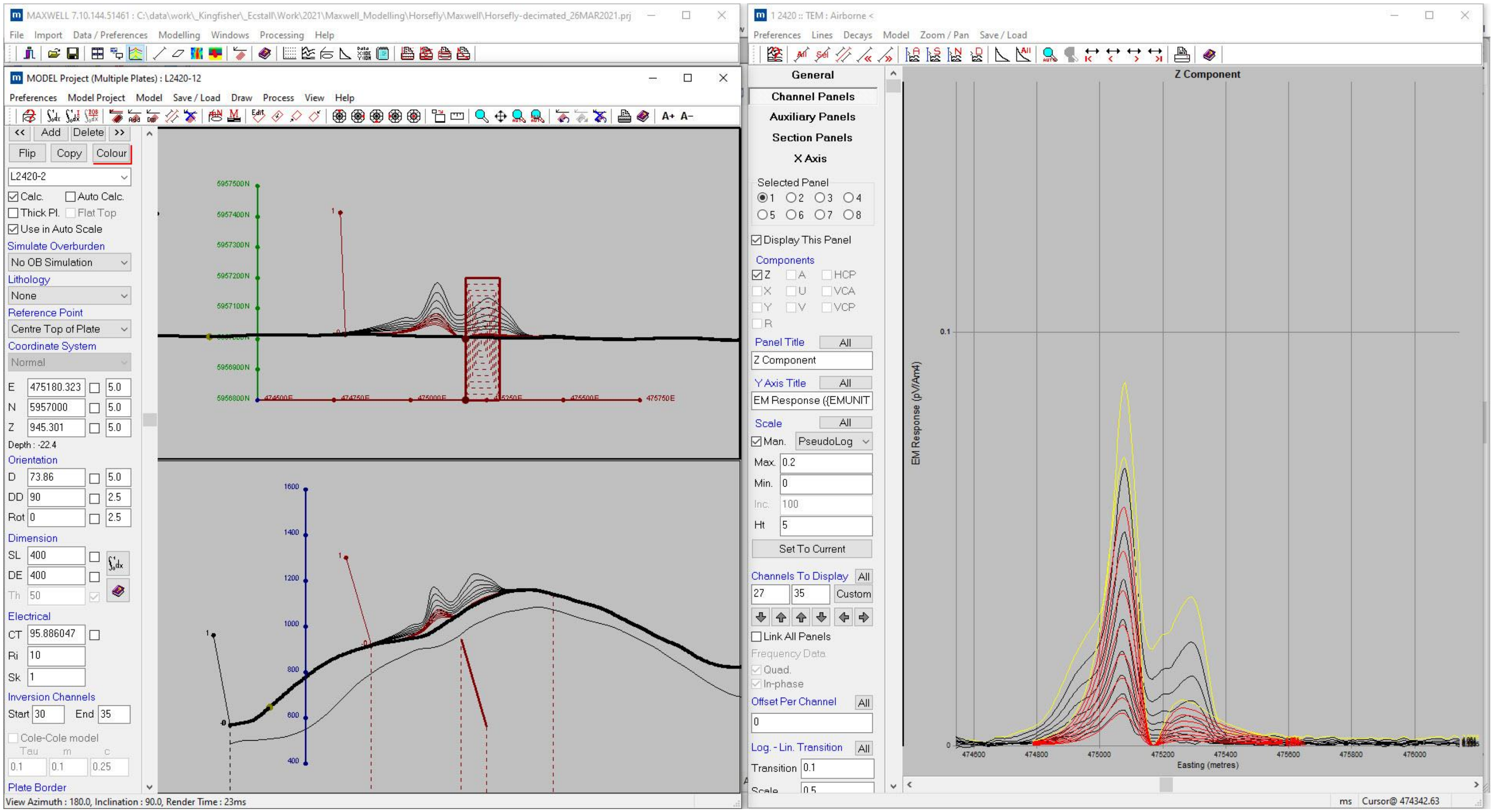


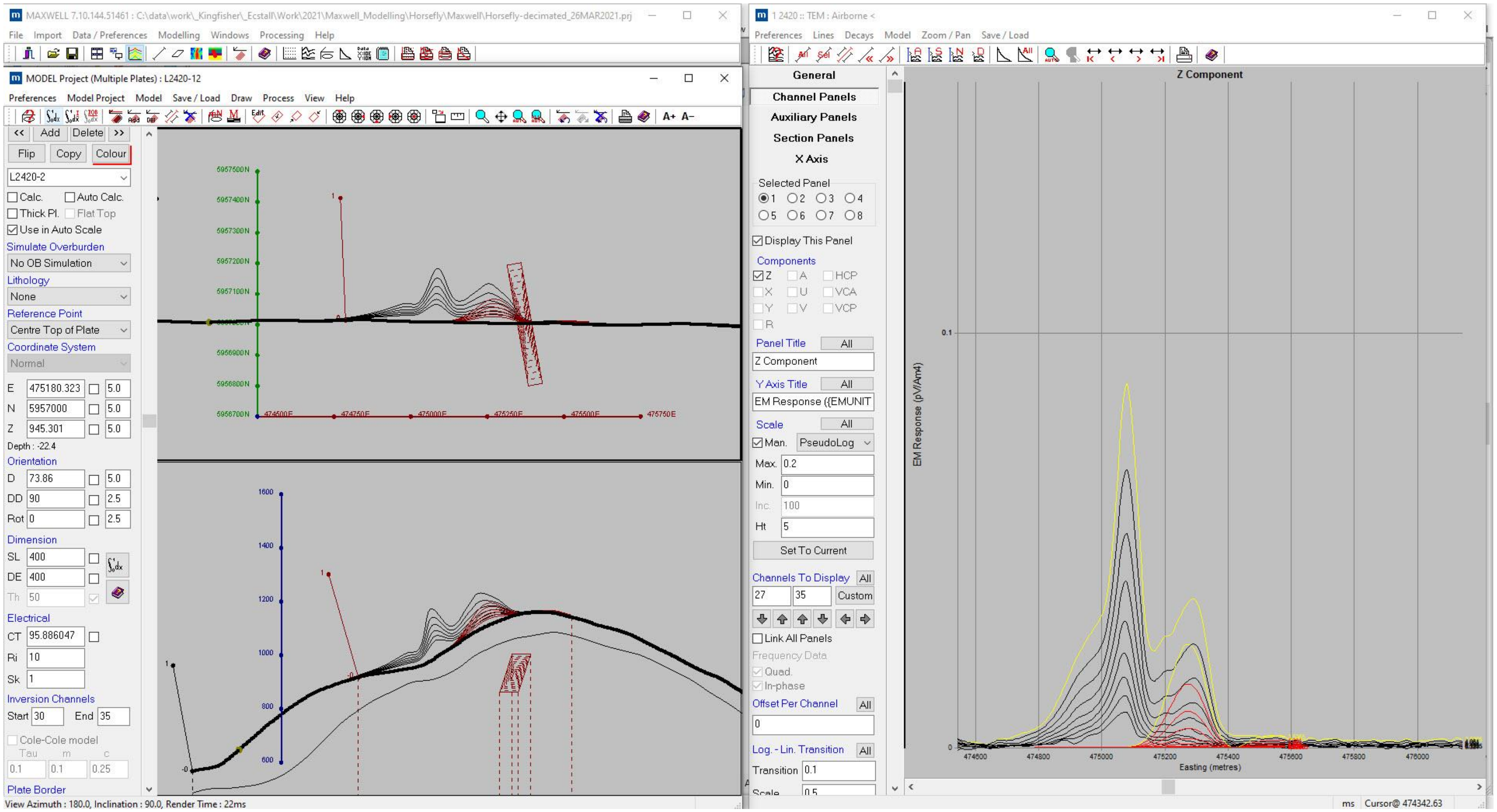

MODEL Project (Multiple Plates) : L2410-12
L2410-1
Calc.
Auto Calc.
Thick Pl.
Flat Top
Use in Auto Scale
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
E 475165.79 5.0
N 5957195 5.0
Z 960 5.0
Depth : -0.6
Orientation
D 76.27 5.0
DD 89.95 2.5
Rot 0 2.5
Dimension
SL 400
DE 462.59
Th 1
Electrical
CT 59.903028
Ri 10
Sk 1
Inversion Channels
Start 25 End 30
Cole-Cole model
Tau m c
0.1 0.1 0.25
Plate Border
Th. Style
0.2 Solid
View Azimuth : 180.0, Inclination : 90.0, Render Time : 23ms
1 2410 :: TEM : Airborne >
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
Selected Panel
Display This Panel
Components
Panel Title
Z Component
Y Axis Title
EM Response ({EMUNIT
Scale
Man. PseudoLog
Max. 0.2
Min. 0
Ht 5
Set To Current
Channels To Display
25 30 Custom
Link All Panels
Offset Per Channel
Log. - Lin. Transition
Transition 0.1
Z Component
EM Response (pV/Am4)
Easting (metres)
Cursor@ 474255.62

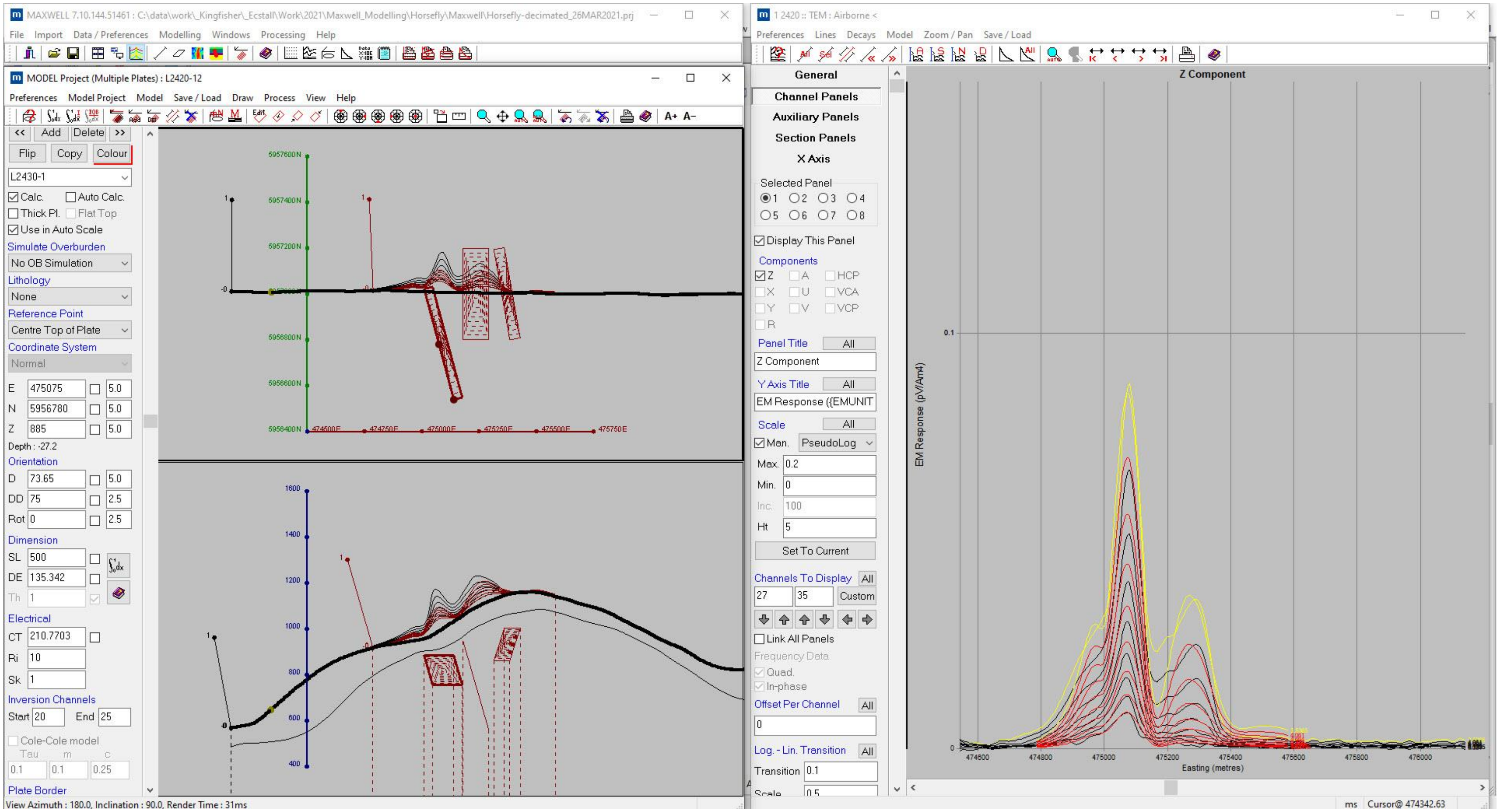


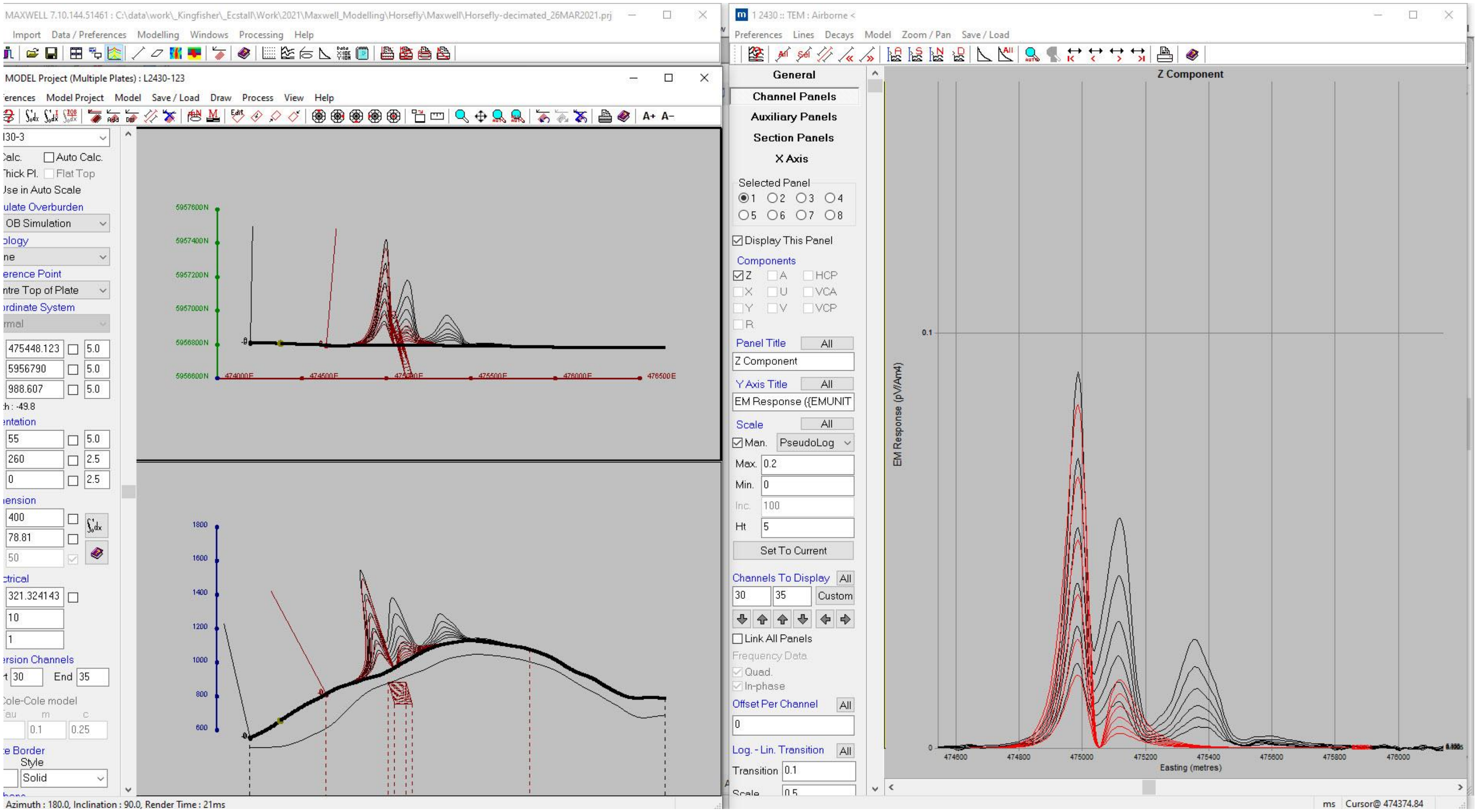


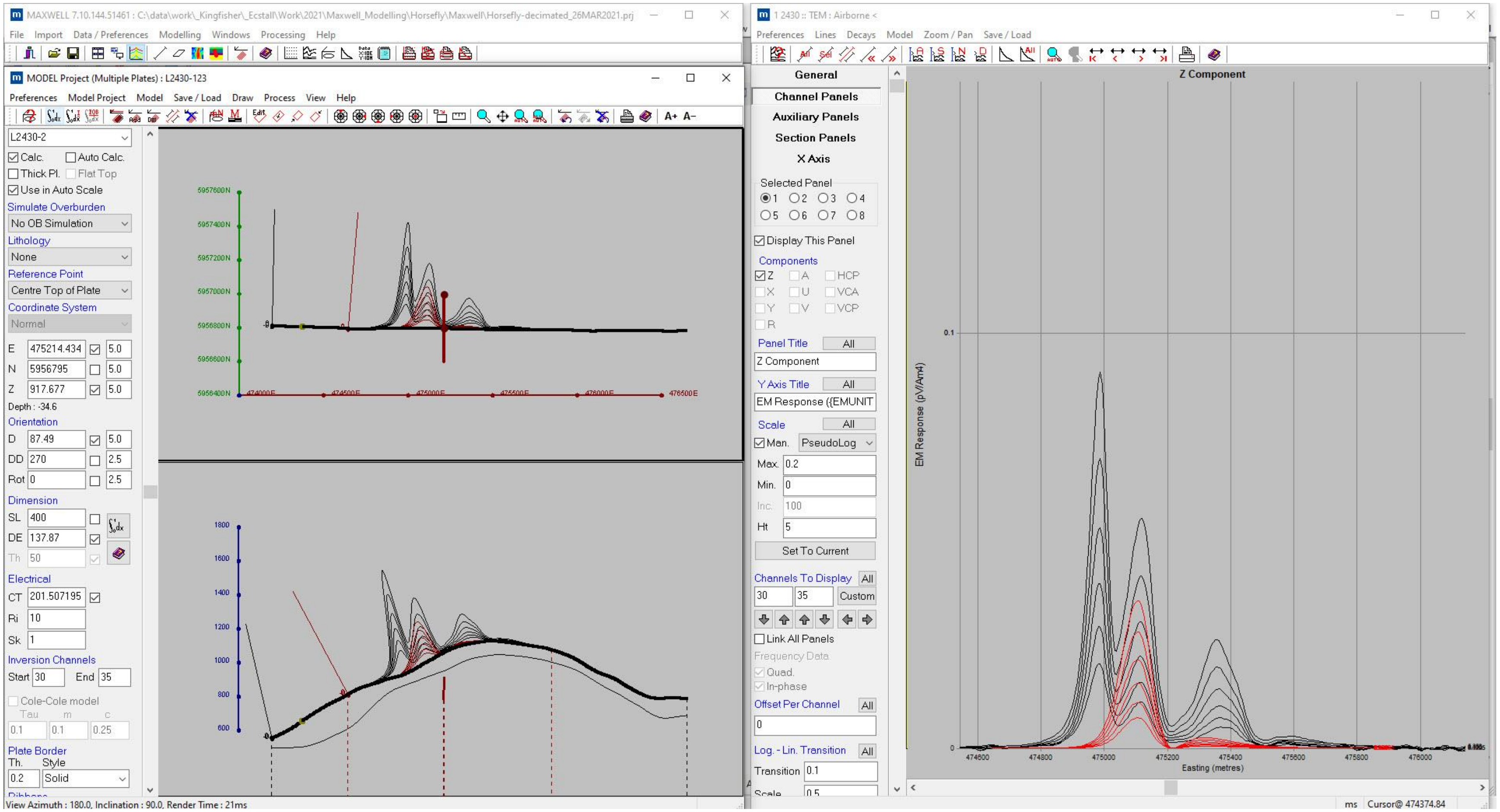


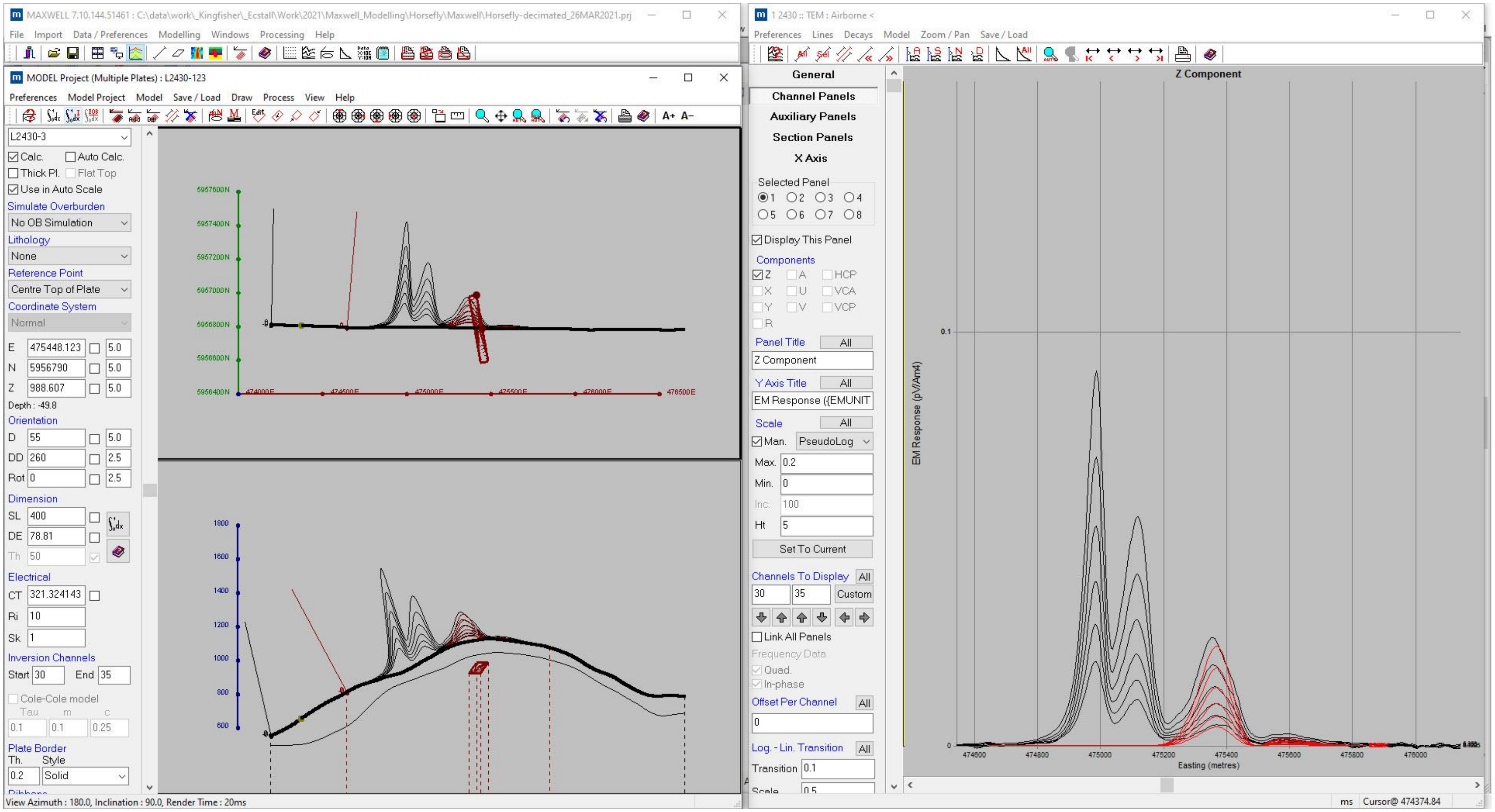


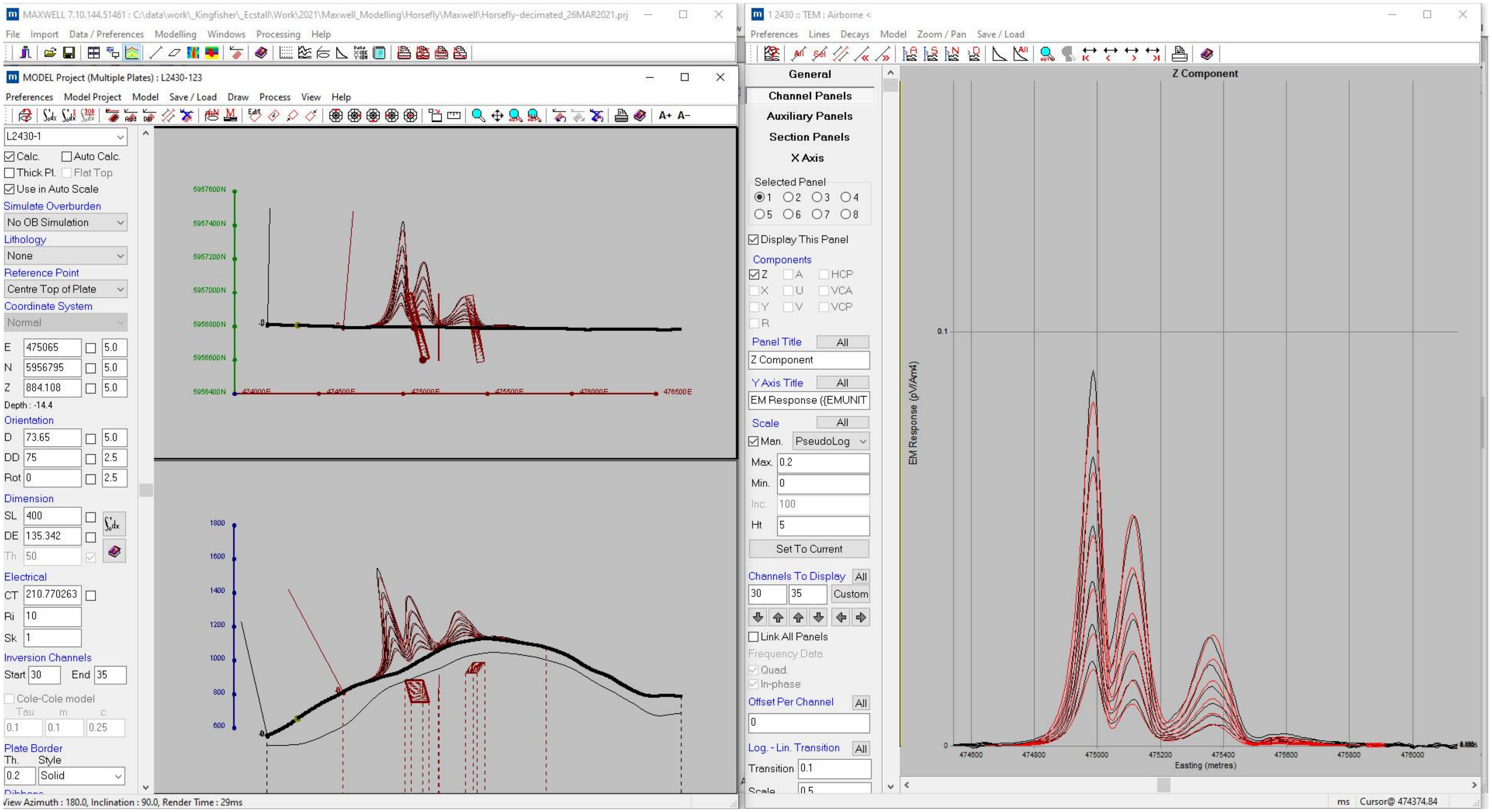

MAXWELL 7.10.144.51461 : C:\data\work_Kingfisher_Ecstall\Work\2021\Maxwell_Modelling\Horsefly\Maxwell\Horsefly-decimated_26MAR2021.prj
MODEL Project (Multiple Plates) : L2420-12
L2420-2
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
E 475180.323
N 5957000
Z 945.301
Depth : -22.4
Orientation
D 73.86
DD 90
Rot 0
Dimension
SL 400
DE 400
Th 50
Electrical
CT 95.886047
Ri 10
Sk 1
Inversion Channels
Start 30 End 35
Cole-Cole model
Plate Border
View Azimuth : 180.0, Inclination : 90.0, Render Time : 22ms
1 2420 :: TEM : Airborne
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
Selected Panel
Display This Panel
Components
Panel Title
Z Component
Y Axis Title
EM Response ({EMUNIT
Scale
PseudoLog
Max. 0.2
Min. 0
Ht 5
Set To Current
Channels To Display
27 35 Custom
Link All Panels
Offset Per Channel
Log. - Lin. Transition
Transition 0.1
Z Component
EM Response (pV/Am4)
Easting (metres)
Cursor@ 474342.63

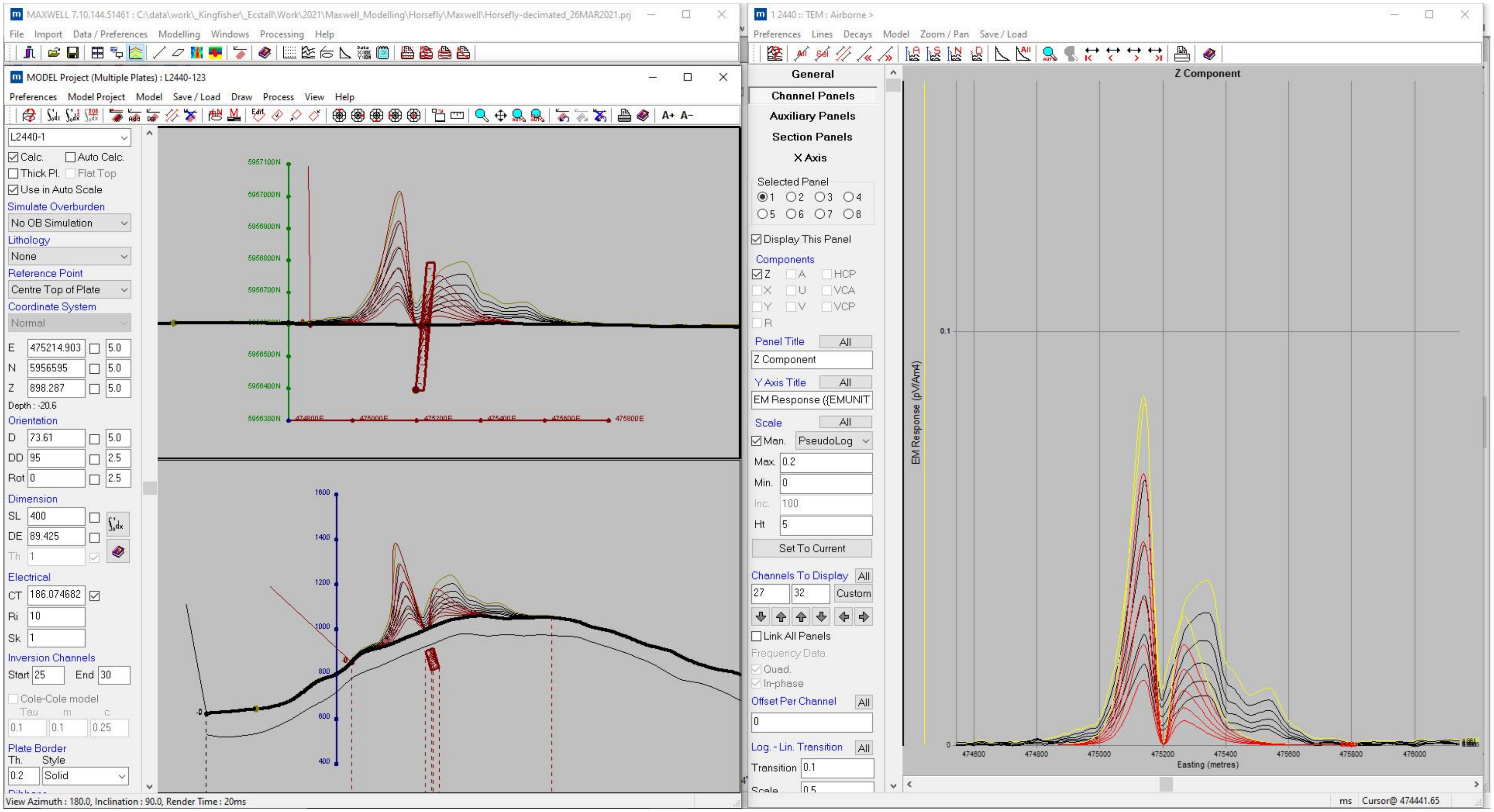


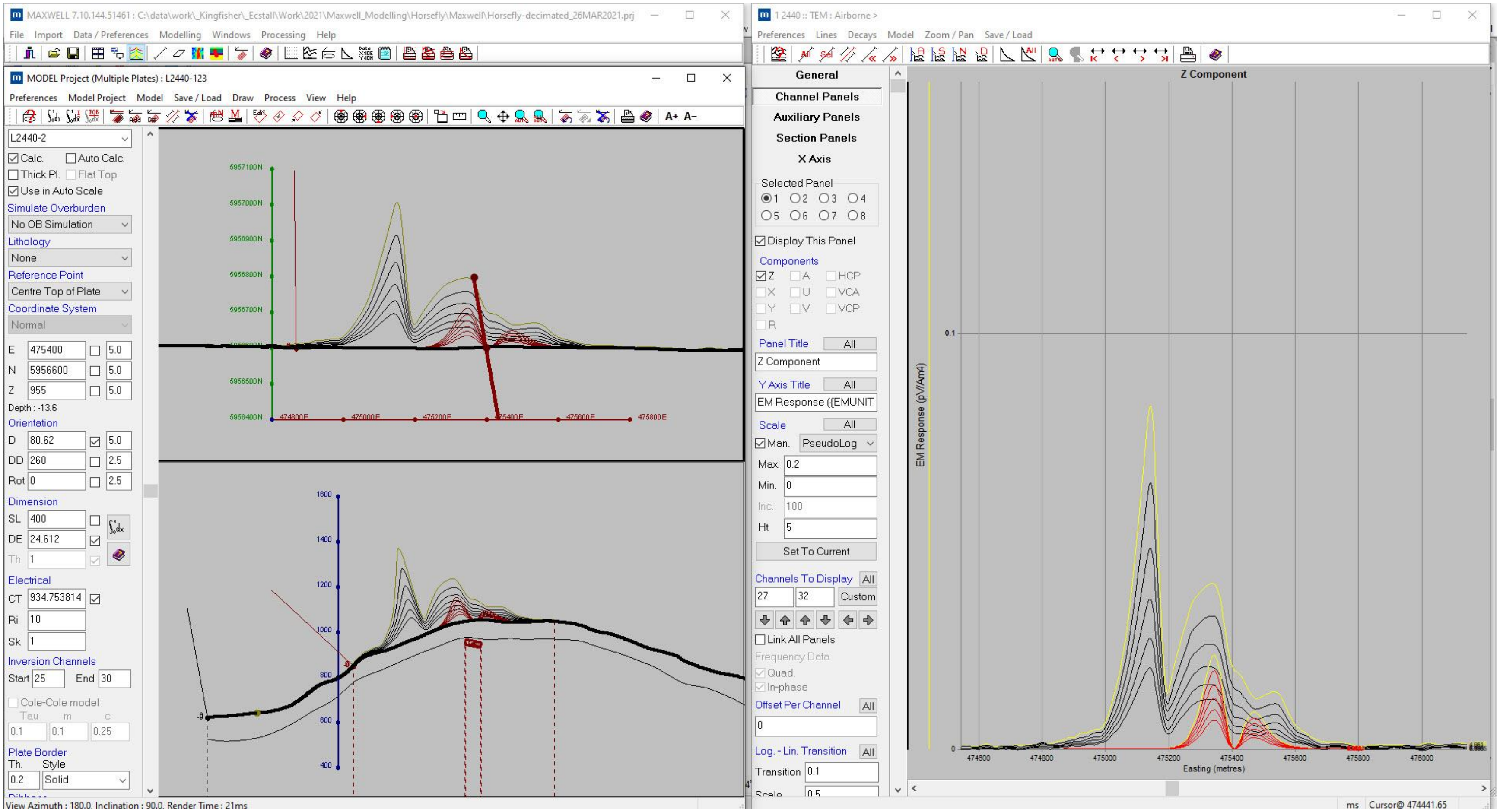


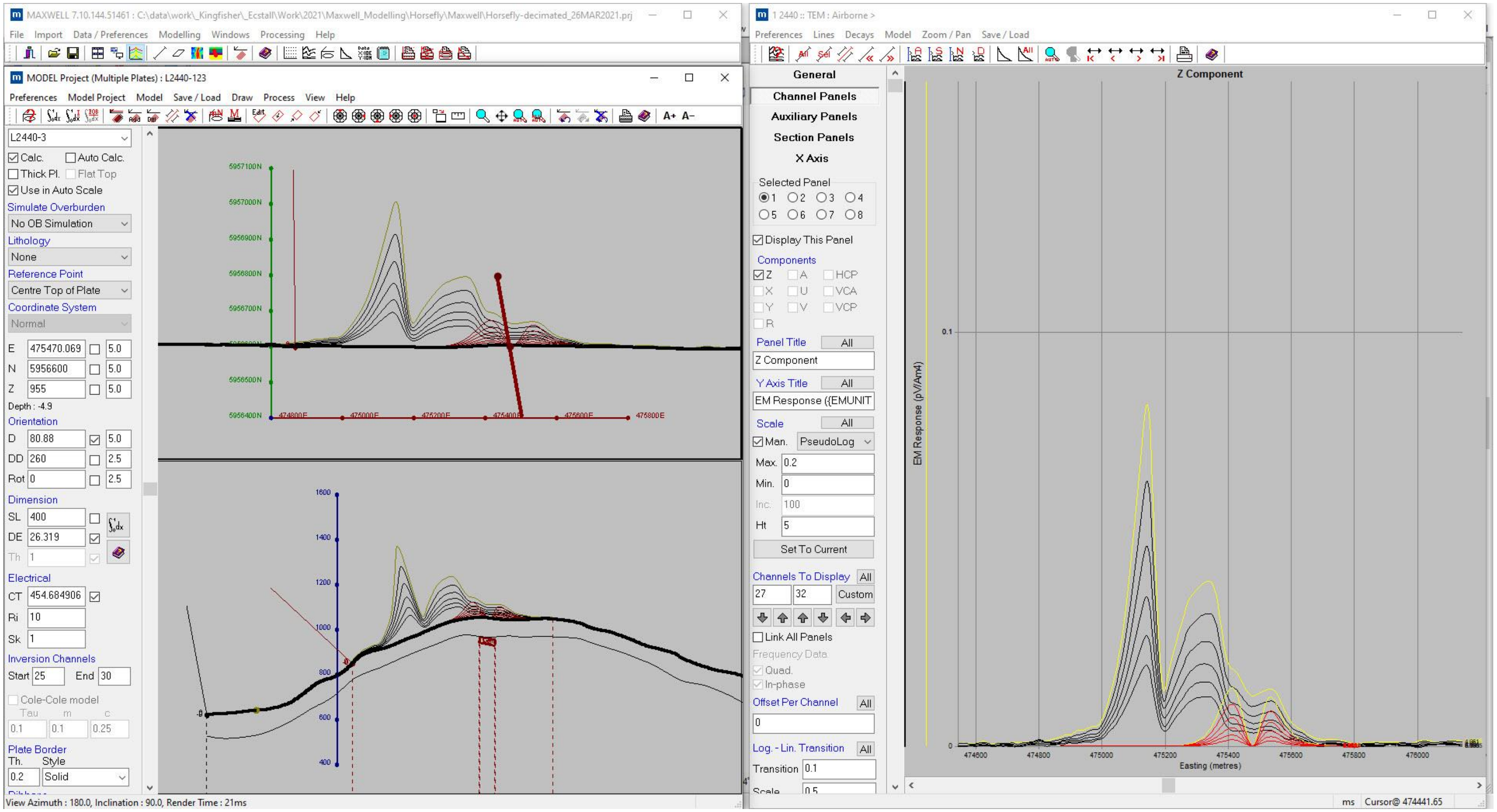


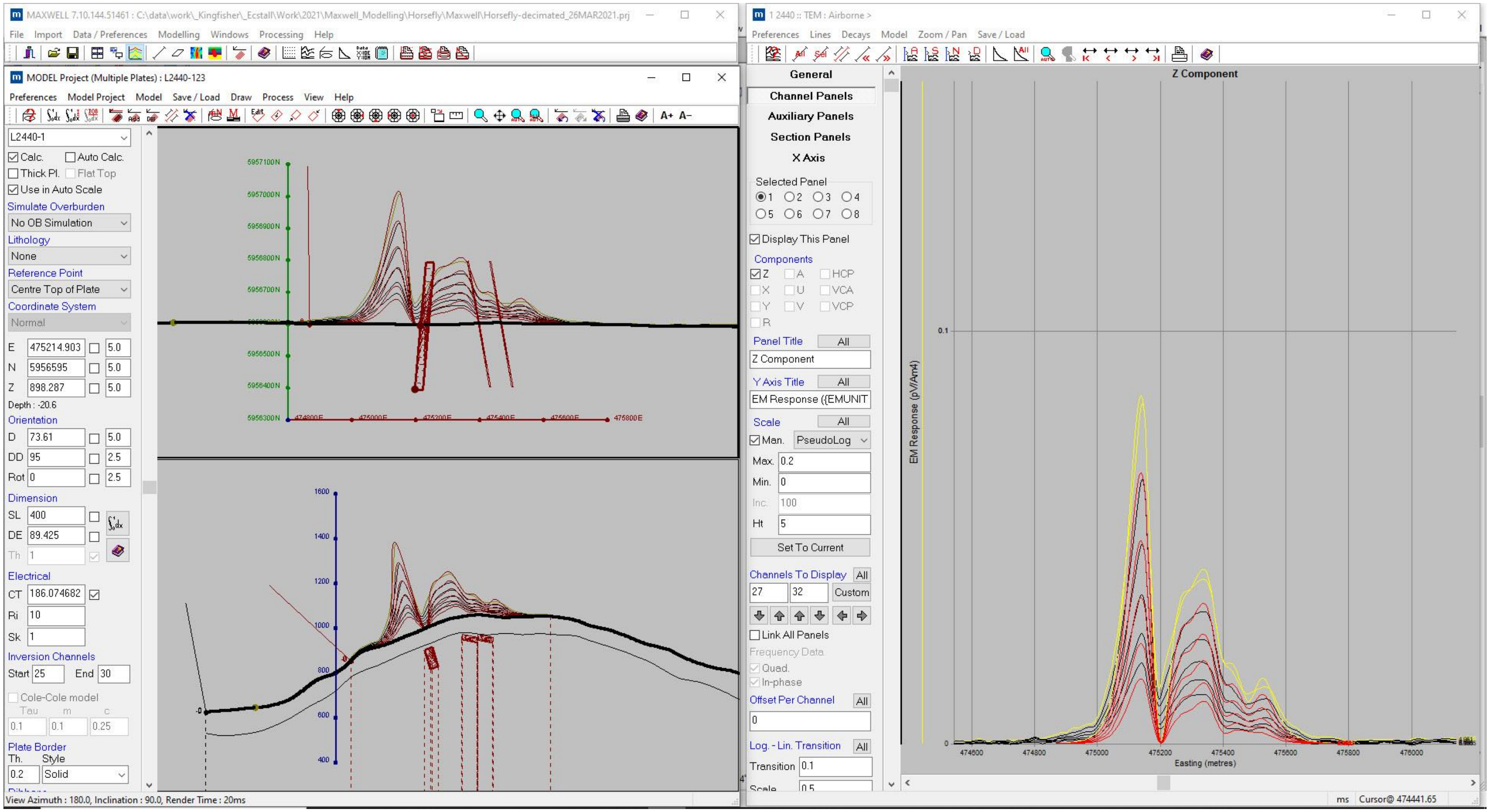

MODEL Project (Multiple Plates) : L2430-123
L2430-3
Simulate Overburden
No OB Simulation
Lithology
Reference Point
Centre Top of Plate
Coordinate System
E 475448.123
N 5956790
Z 988.607
Depth : -49.8
Orientation
D 55
DD 260
Rot 0
Dimension
SL 400
DE 78.81
Electrical
CT 321.324143
Ri 10
Sk 1
Inversion Channels
Start 30 End 35
Z Component
EM Response (pV/Am4)
Easting (metres)
View Azimuth : 180.0, Inclination : 90.0, Render Time : 20ms
Cursor@ 474374.84

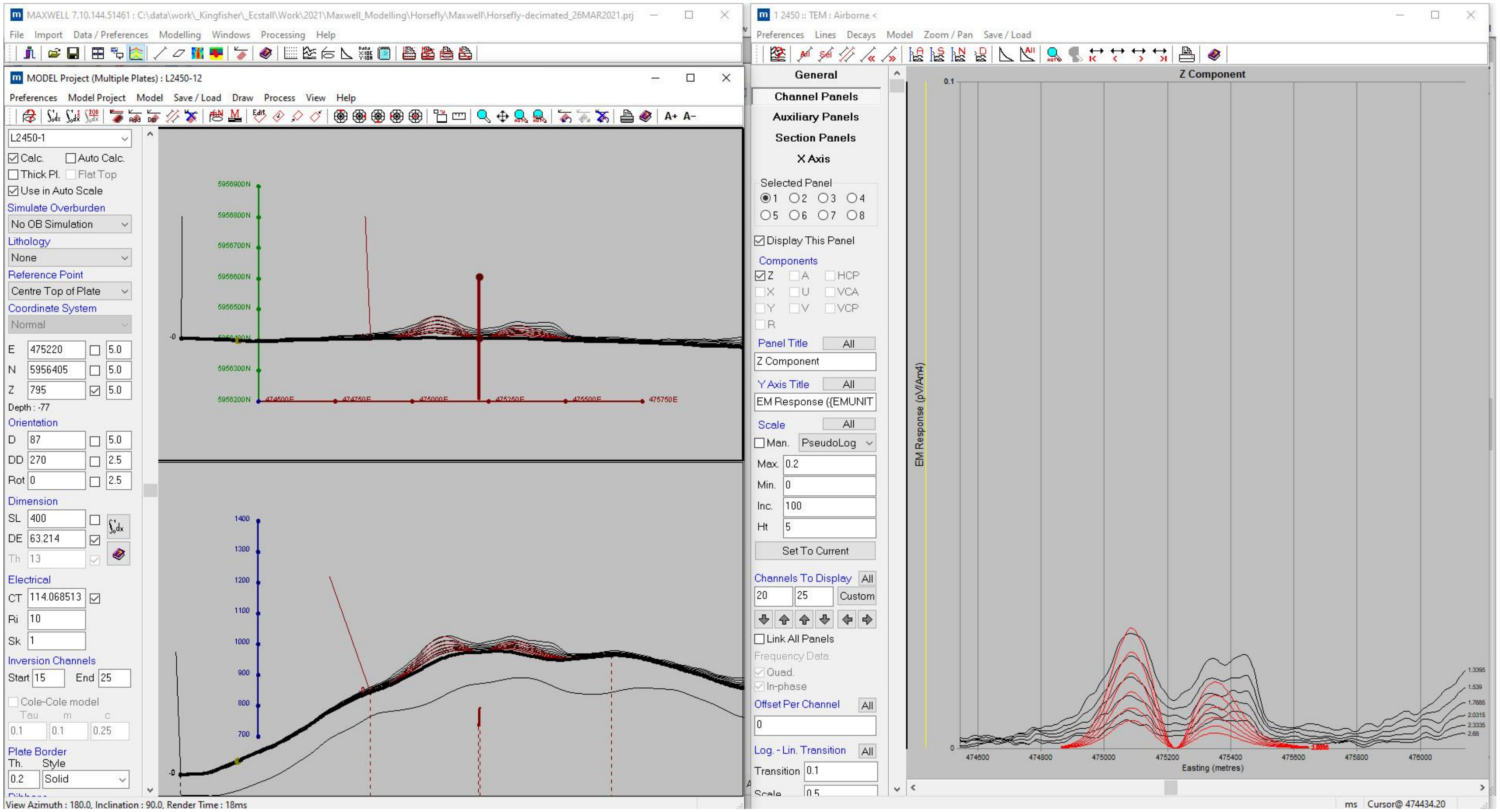


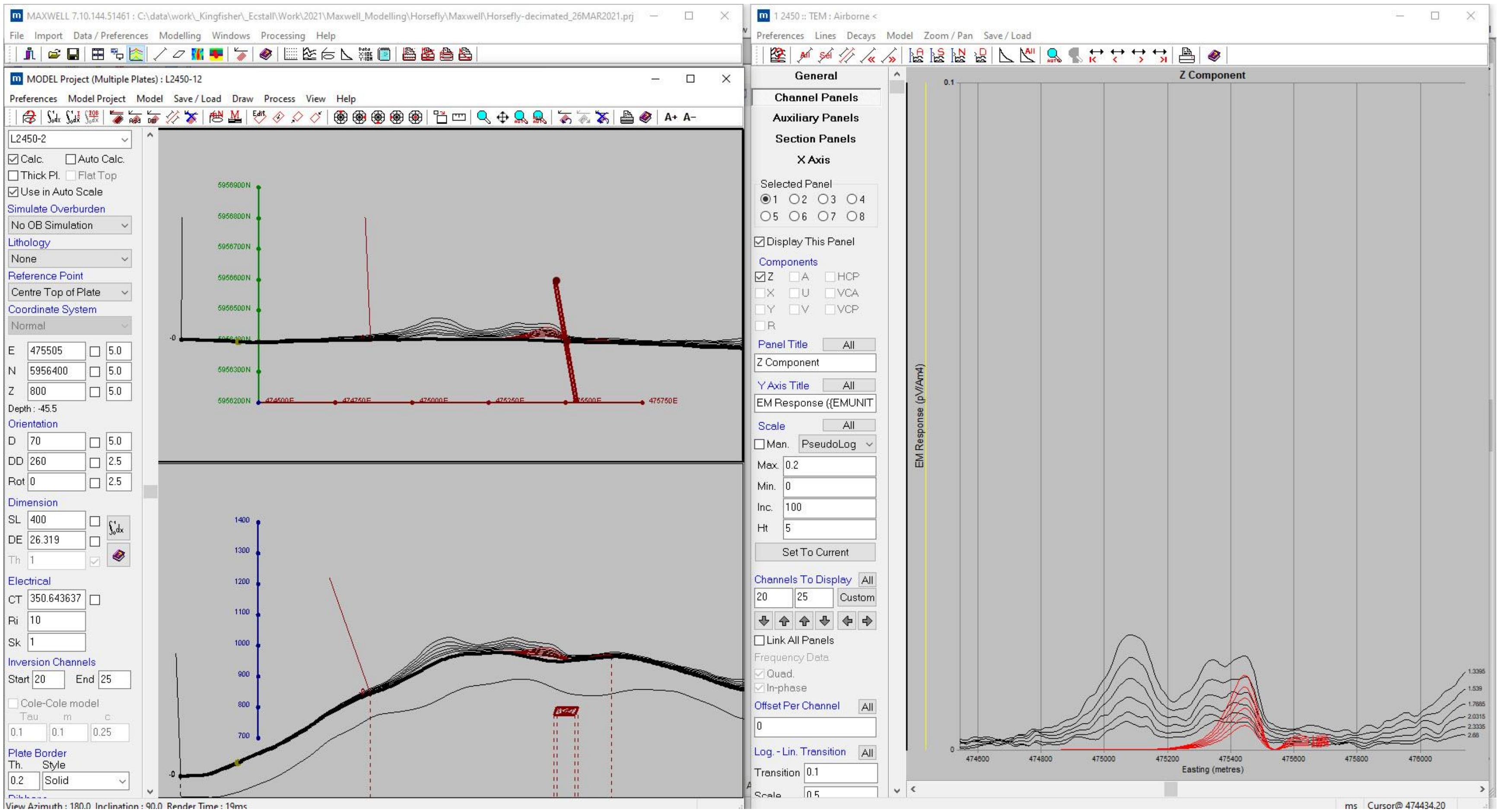


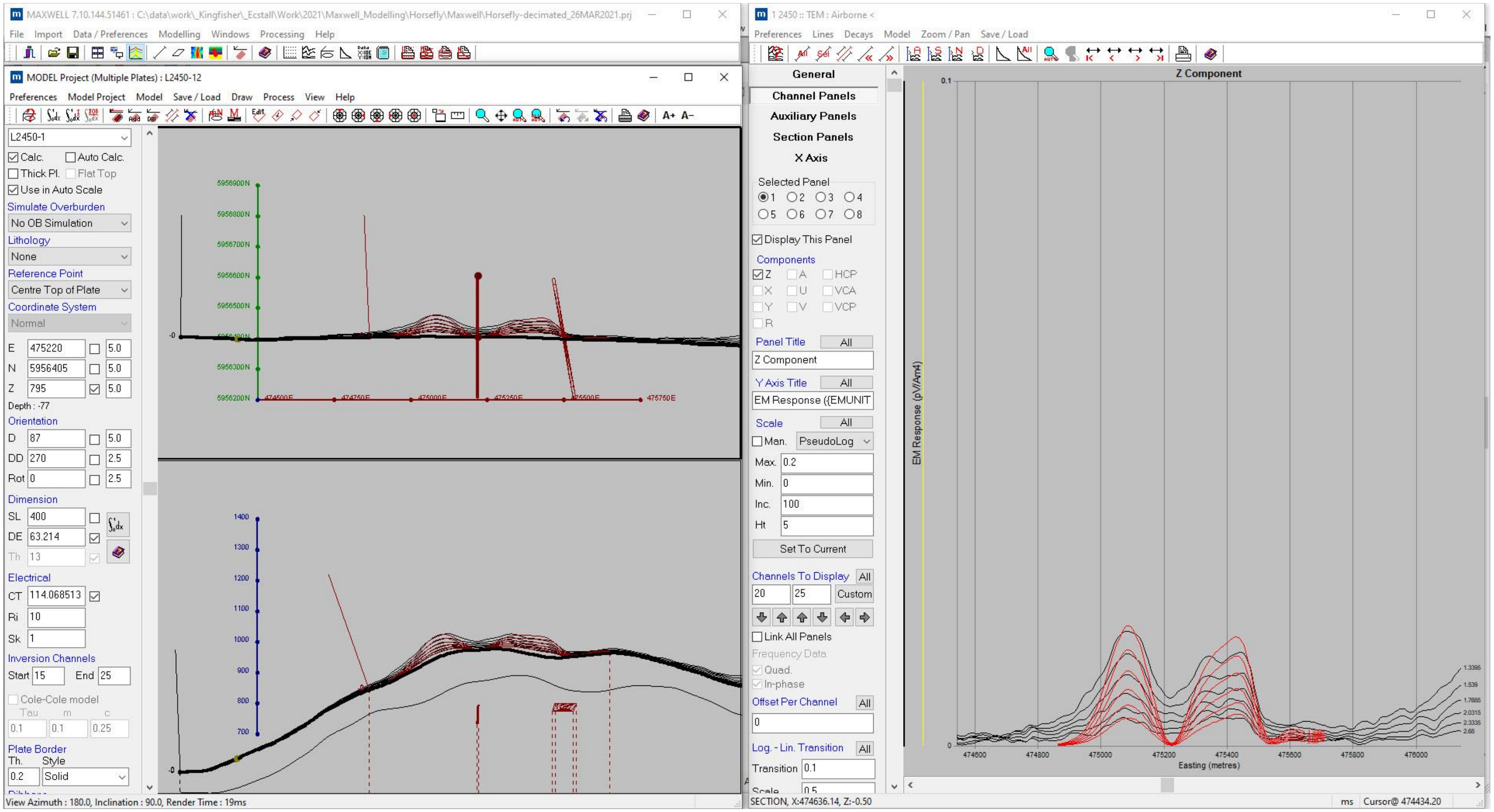

MODEL Project (Multiple Plates) : L2440-123
1 2440 :: TEM : Airborne >
L2440-2
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
Normal
E 475400
N 5956600
Z 955
Depth : -13.6
Orientation
D 80.62
DD 260
Rot 0
Dimension
SL 400
DE 24.612
Electrical
CT 934.753814
Ri 10
Sk 1
Inversion Channels
Start 25 End 30
Z Component
EM Response (pV/Am4)
Easting (metres)
View Azimuth : 180.0, Inclination : 90.0, Render Time : 21ms
Cursor@ 474441.65

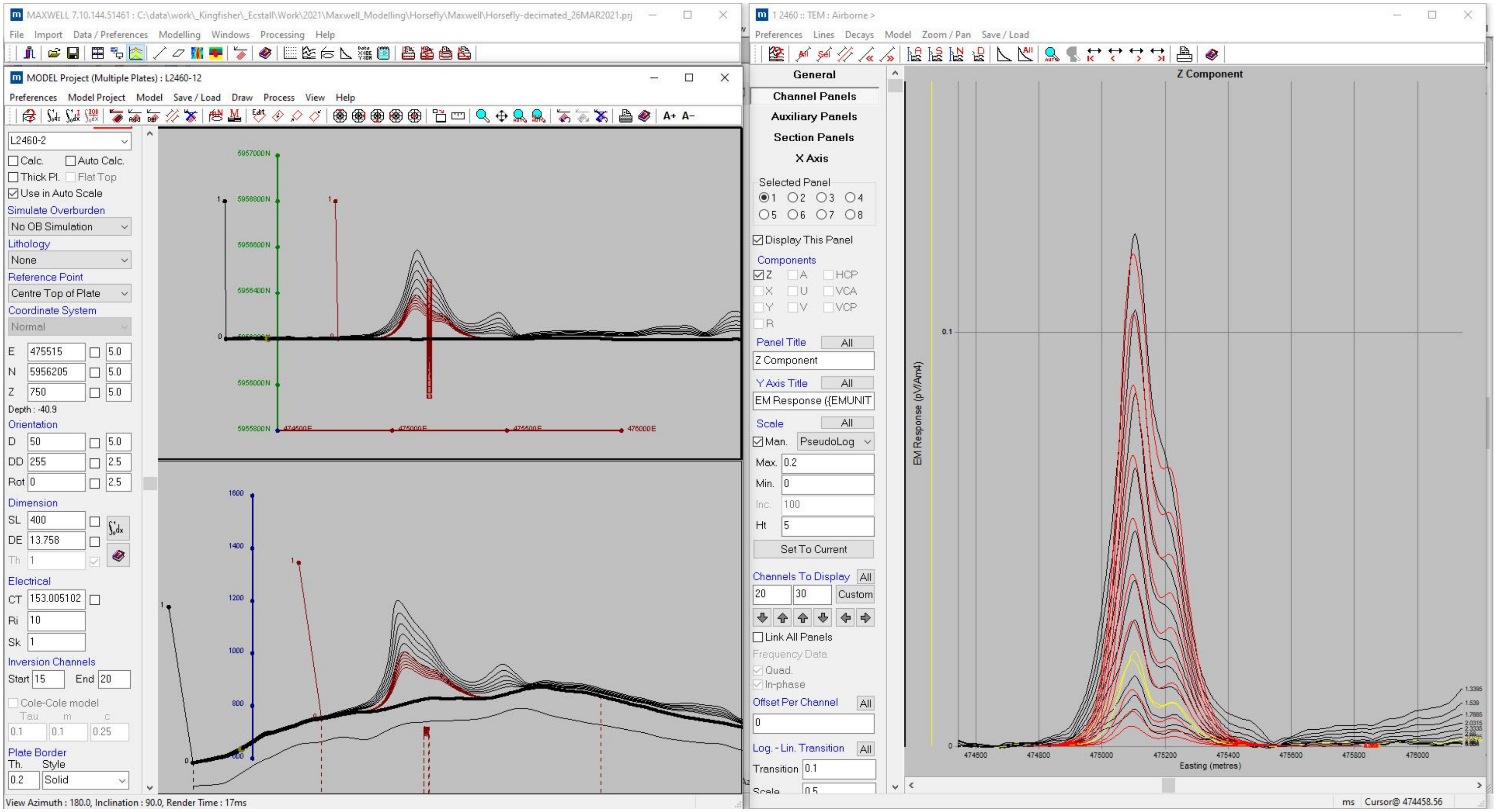

MODEL Project (Multiple Plates) : L2440-123
L2440-3
Simulate Overburden
No OB Simulation
Lithology
Reference Point
Centre Top of Plate
Coordinate System
E 475470.069
N 5956600
Z 955
Depth : -4.9
Orientation
D 80.88
DD 260
Rot 0
Dimension
SL 400
DE 26.319
Electrical
CT 454.684906
Ri 10
Sk 1
Inversion Channels
Start 25 End 30
View Azimuth : 180.0, Inclination : 90.0, Render Time : 21ms
1 2440 :: TEM : Airborne >
Z Component
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
EM Response (pV/Am4)
Easting (metres)
Cursor@ 474441.65

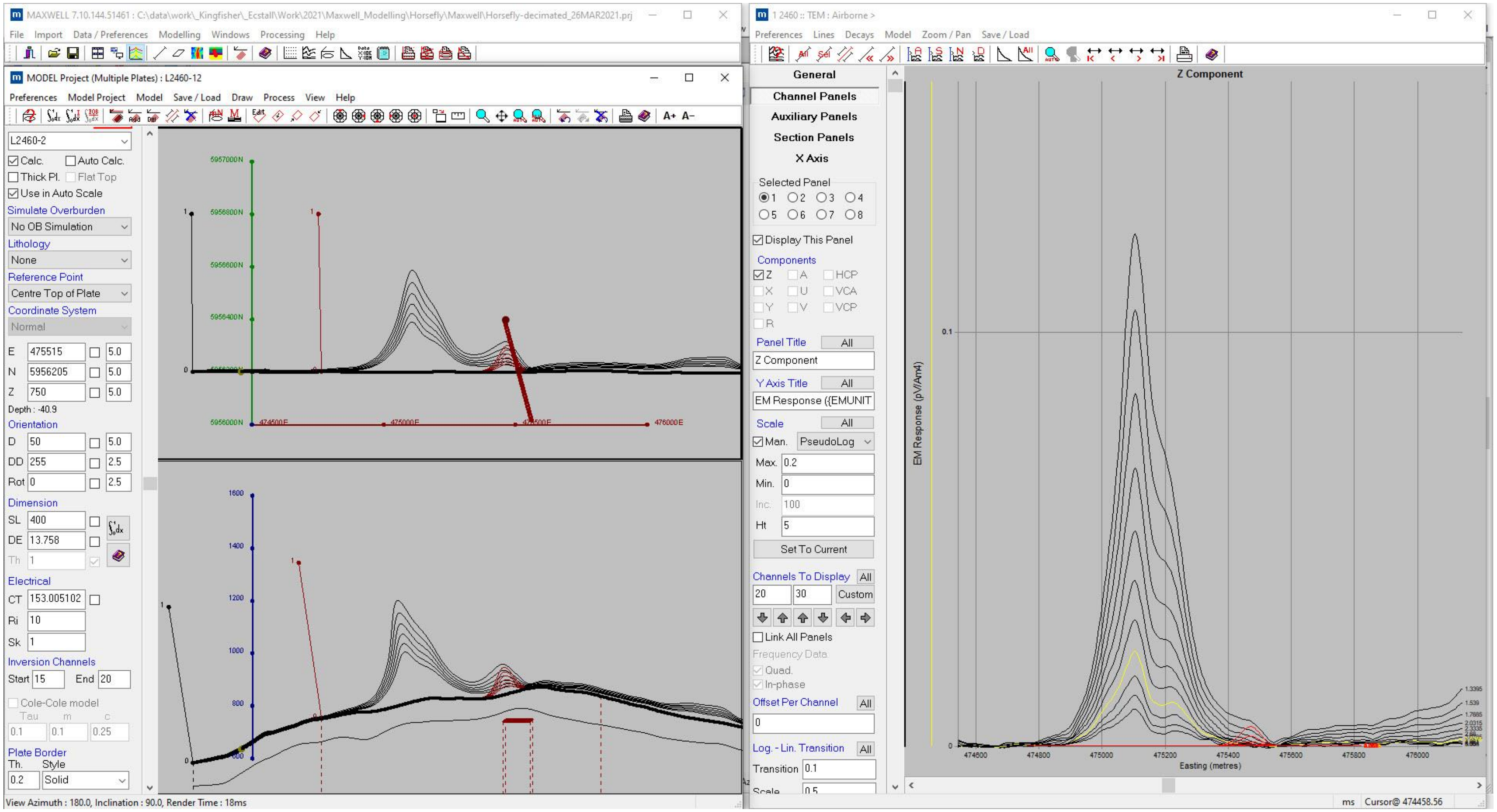


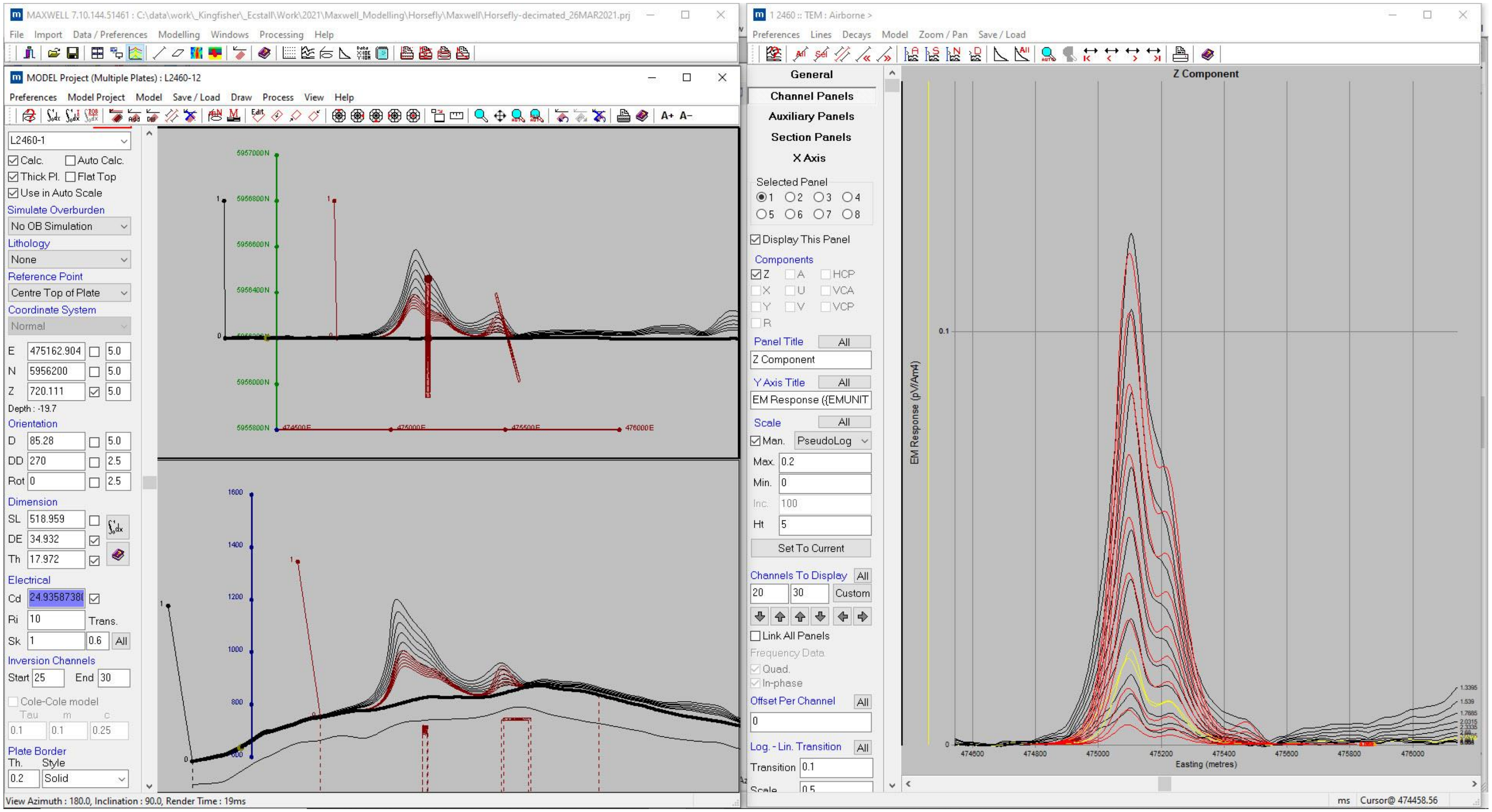






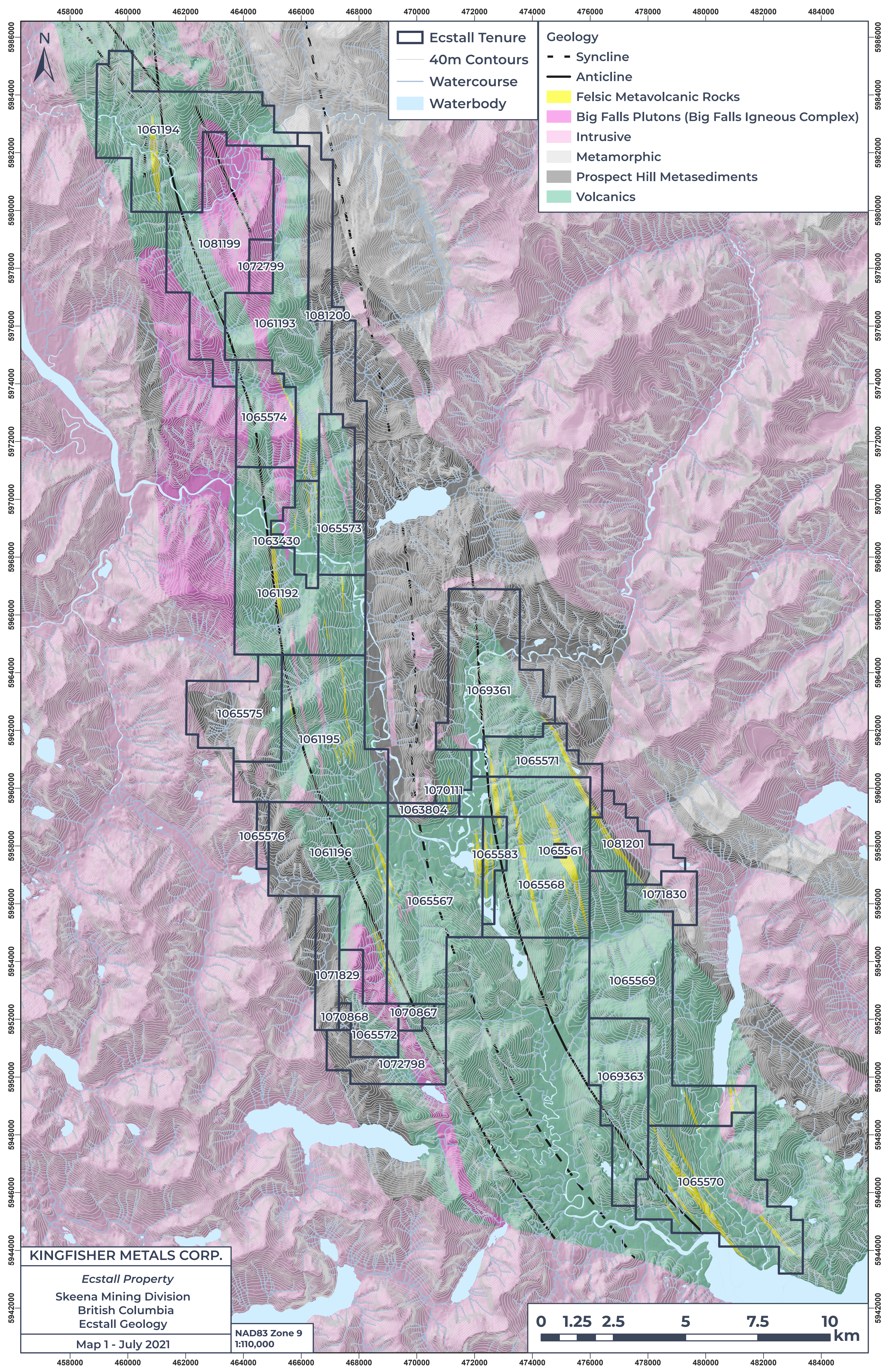

MODEL Project (Multiple Plates) : L2460-12
L2460-2
Simulate Overburden
No OB Simulation
Lithology
None
Reference Point
Centre Top of Plate
Coordinate System
E 475515
N 5956205
Z 750
Orientation
D 50
DD 255
Rot 0
Dimension
SL 400
DE 13.758
Electrical
CT 153.005102
Ri 10
Sk 1
Inversion Channels
Start 15 End 20
View Azimuth : 180.0, Inclination : 90.0, Render Time : 17ms
General
Channel Panels
Auxiliary Panels
Section Panels
X Axis
Selected Panel
Display This Panel
Components
Panel Title
Z Component
Y Axis Title
Scale
PseudoLog
Max. 0.2
Min. 0
Set To Current
Channels To Display
20 30 Custom
Link All Panels
Offset Per Channel
Log. - Lin. Transition
Transition 0.1
Z Component
EM Response (pV/Am4)
Easting (metres)
Cursor@ 474458.56





Appendix B: Digital Archive

The listed products and working files were provided as an archive by Hightail.


Ecstall Tenure
40m Contours
Watercourse
Waterbody
Geology
Syncline
Anticline
Felsic Metavolcanic Rocks
Big Falls Plutons (Big Falls Igneous Complex)
Intrusive
Metamorphic
Prospect Hill Metasediments
Volcanics
N
1061194
1081199
1072799
1061193
1081200
1065574
1065573
1063430
1061192
1069361
1065575
1061195
1065571
1070111
1063804
1065576
1061196
1065583
1065561
1081201
1065568
1071830
1065567
1065569
1071829
1070868
1070867
1065572
1072798
1069363
1065570
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
Ecstall Geology
Map 1 - July 2021
NAD83 Zone 9
1:110,000
0 1.25 2.5 5 7.5 10
km


2020 Geology Stations
Ecstall Tenure
40m Contours
Watercourse
Waterbody
1065567
G+3441810
GFECST009
G+3441811
G+3441812
GFSTEeC001
G+3441802
G+3441813
G+3441965
G+3441963
G+3441964
G+3441960
G+3441961
G+3441905
G+3441903
G+3441902
G+3441901
G+3441956
G+3441953
G+3441952
G+3441911
G+3441955
G+3441909
G+3441912
GFECST010
GFECST004
GFECST011
G+3441917
G+3441958
G+3441957
G+3441915
G+3441913
G+3441807
GFECST008
G+3441962
G+3441916
G+3441959
G+3441914
NAD83 Zone 9U
1:1,300
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Geology Stations
Map 2 - July 2021


2020 Structures
Ecstall Tenure
40m Contours
Watercourse
Waterbody
PSEC001
GFEC00049
GFEC00050
GFEC00051
GFEC00054
GFEC0005
GFEC0006
GFEC00053
GFEC00052
GFEC00056
GFEC00057
GFEC00059
GFEC00014
GFEC00058
GFEC00015
GFEC00018
GFEC00016
GFEC00019
GFEC00017
GFEC00060
GFEC00020
GFEC00021
GFEC00066
GFEC0007
GFEC00067
GFEC00063
GFEC00061
GFEC00069
GFEC00062
GFEC00065
GFEC00068
GFEC00064
GFEC00072
GFEC00071
GFEC00073
1065567
GFEC0008
GFEC00010
GFEC00011
GFEC0009
GFEC-0001
GFEC0002
GFEC00039
GFEC00038
GFEC00041
GFEC00042
GFEC00043
GFEC00022
GFEC00012
GFEC00023
GFEC00013
GFEC00047
GFEC00036
GFEC00044
GFEC00028
GFEC00029
GFEC00030
GFEC00031
GFEC00032
GFEC00033
GFEC00034
GFEC00035
1070867
0 40 80 120 160 m
NAD83 Zone 9U
1:1,500
0 10 20 m
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Structure Stations
Map 3 - July 2021

2020 Rock Samples
Ecstall Tenure
40m Contours
Watercourse
Waterbody
S3441810
S3441809
S3441811
S3441812
S3441801
S3441802
S3441813
1065567
S3441818
S3441819
S3441816
S3441817
S3441807
S3441804
S3441805
S3441806
1065572
1070867
0
50
100
150
200
m
NAD83 Zone 9U
1:1,800
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Rock Samples
Map 4 - July 2021

Backpad Drill Collars
Drillholes Traces
2020 Channel Samples
Ecstall Tenure
40m Contours
Watercourse
Waterbody
S3441962
S3441961
S3441960
S3441965
S3441964
S3441963
1065567
ECBPD20-01
ECBPD20-02
ECBPD20-03
ECBPD20-04
ECBPD20-05
ECBPD20-06
ECBPD20-07
S3441959
S3441958
S3441957
S3441917
S3441916
S3441915
S3441914
S3441913
1080
NAD83 Zone 9U
1:1,300
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Channels, Backpack Collars
Map 5 - July 2021


Ecstall Tenure
40m Contours
Watercourse
Waterbody
2020 Geology
Contact (approximate)
2020 Structures
Bedding tops unknown
Cleavage pervasive (<2 mm spacing; Sn)
Dyke geometry plane
Mineral alignment platy
Alteration
2020 Geology Stations
Basalt
Graphite
Sandstone
Siltstone/Mudstone
Geology Section
Sandstone
Rhyolite
Basalt
Andesite Breccia
Basalt Breccia
Basalt Porphyry
Conglomerate
Hydrothermal
Rhyolite tuff
Sandstone-siltstone
Siltstone
Basalt tuff
Sedimentary
1065567
1070867
0 30 60 90 120 m
NAD83 Zone 9U
1:1,500
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Geology
Map 6 - July 2021


Drillholes Collars
40m Contours
Watercourse
Waterbody
Ecstall Tenure
2020 Rocks - Cu ppm
4.6 - 250
250 - 500
500 - 1000
2020 Channels - Cu ppm
0 - 250
250 - 500
500 - 1000
1000 - 2500
5000 - 5732.9
2020 BPD - Cu ppm
0 - 250
250 - 500
500 - 1000
1000 - 2500
2500 - 5000
5000 - 8606.7
1065567
1070867
ECBPD20-01
ECBPD20-02
ECBPD20-03
ECBPD20-04
ECBPD20-05
ECBPD20-06
ECBPD20-07
NAD83 Zone 9U
1:1,500
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Cu Geochem
Map 7a - July 2021


Drillholes Collars
40m Contours
Watercourse
Waterbody
Ecstall Tenure
2020 Rocks - Zn ppm
0 - 250
250 - 500
500 - 1000
1000 - 2500
2020 Channels - Zn ppm
0 - 250
≤500
500 - 1000
1000 - 2107
2020 BPD - Zn ppm
0 - 250
250 - 500
500 - 1000
1000 - 2500
2500 - 3002
N
1065567
1070867
ECBPD20-01
ECBPD20-02
ECBPD20-03
ECBPD20-04
ECBPD20-05
ECBPD20-06
ECBPD20-07
NAD83 Zone 9U
1:1,500
0 30 60 90 120 m
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Zn Geochem
Map 7b - July 2021


Drillholes Collars
40m Contours
Watercourse
Waterbody
Ecstall Tenure
2020 Rocks - Au g/t
0 - 0.05
0.05 - 0.1
2020 Channels - Au g/t
0 - 0.05
0.05 - 0.1
0.1 - 0.111
2020 BPD - Au g/t
0 - 0.05
0.05 - 0.1
0.1 - 0.201
N
1065567
1070867
ECBPD20-01
ECBPD20-02
ECBPD20-03
ECBPD20-04
ECBPD20-05
ECBPD20-06
ECBPD20-07
0 30 60 90 120 m
NAD83 Zone 9U
1:1,500
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Au Geochem
Map 7c - July 2021


Drillholes Collars
40m Contours
Watercourse
Waterbody
Ecstall Tenure
2020 Rocks - Ag g/t
0 - 0.5
0.5 - 1
1 - 5
2020 Channels - Ag g/t
0 - 0.5
0.5 - 1
1 - 4.6
2020 BPD - Ag g/t
0 - 0.5
0.5 - 1
1 - 5
5 - 7.1
1065567
1070867
ECBPD20-01
ECBPD20-02
ECBPD20-03
ECBPD20-04
ECBPD20-05
ECBPD20-06
ECBPD20-07
NAD83 Zone 9U
1:1,500
0 30 60 90 120 m
KINGFISHER METALS CORP.
Ecstall Property
Skeena Mining Division
British Columbia
2020 Shiner Ag Geochem
Map 7d - July 2021