



## **ASX RELEASE**

14 October 2019

# **ALOTTA and LORRAINE DHEM and DRILLING UPDATE**

---

## **Summary**

- The consultant's report on the DHEM survey of the eight diamond drill holes recently completed at the Alotta and Lorraine Projects has been received;
- Drilling to test a priority shallow DHEM anomaly at Alotta and two DHEM anomalies from hole CM-19-05 at Target 4 in the Lorraine project area is set to commence this week;
- Additional drilling will also be undertaken at Alotta aimed at extending the known mineralisation based on recent geological and structural interpretation of historic drilling data; and,
- The drilling programme of approximately 1,000m will commence with the +300m deep hole to assess the two DHEM anomalies at Target 4 in the Lorraine block before moving to Alotta.

---

Chase Mining Corporation Limited ("CML" or "The Company") provides the following update on its Alotta and Lorraine Projects' recently completed downhole EM (DHEM) surveys.

The Southern Geoscience Consultants (SGC) report incorporates the VTEM survey data modelling and interpretation with that of the DHEM response for each hole surveyed.



**CHASE MINING CORPORATION LIMITED**

ABN 12 118 788 846



Level 8, 46 Edward Street, Brisbane QLD 4000  
PO Box 15505, City East QLD 4002  
0439 310 818 | 0419 702 616  
<https://www.chasemining.com.au>

## DHEM Programme Summary

Downhole time-domain EM (DHEM) surveys were successfully conducted by Geophysiques TMC on all eight recently completed diamond drill holes. Seven of these holes were located on the Lorraine project and one on the Alotta project. The drilling programme and the DHEM survey details are summarised in **Table 1 and 2**.

A Crone Pulse EM system was used to acquire the data. The acquisition parameters and equipment specifications are summarised in **Appendix 3**. Comprehensive data acquisition and processing reporting, along with raw and processed data files and all required supporting information, including loop coordinates, drill hole coordinates and drill hole survey files, have been supplied by TMC.

SGC has modelled the DHEM data for each hole in conjunction with the previously completed VTEM modelling.

A summary table of the final DHEM models is given in **Appendix 1 -Table 3**.

**Table 1: Lorraine and Alotta Drill Programme**

Target	Hole ID	Easting (mE)	Northing (mN)	Azi	Dip	Planned Depth	Final Depth
1	CM-19-01	660856	5244090	350	-60	120	117
2	CM-19-02	659294	5243751	19	-51	275	252
3	CM-19-03	658682	5244138	348	-52	110	108
3	CM-19-04	658806	5244238	154	-45	120	120
4	CM-19-05	655500	5242900	355	-63	350	309
5-VTEM	CM-19-06	655773	5247066	329	-56	120	213
5-DHEM	CM-19-07	655796	5246914	332	-61	350	354
ALOTTA	ZA-19-01.Ext*	660856	5244090	350	-60	198	198
<b>Total</b>						<b>1,445m</b>	<b>1,671m</b>

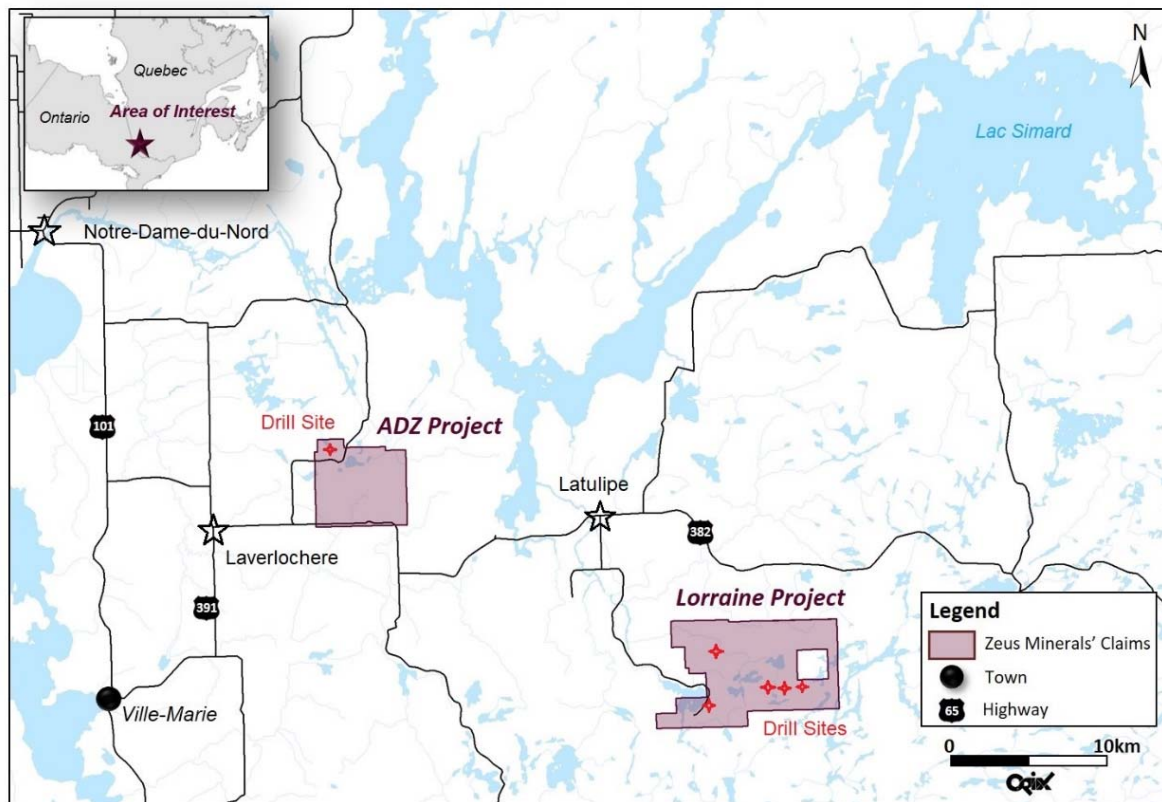
Coordinates NAD83 UTM Zone 17N. Azimuth (Azi) True North

\*The 2018 Hole ZA-18-01 was deepened from 102m to 300m and renamed ZA-19-01. These holes are interchangeable in this report and the DHEM refers to it as the former.

**Table 2. Summary of the DHEM surveys and targets**

DHEM Survey & Hole ID	Prospect – Target	TX Loop	Reading interval	Stations	Length
<b>CM-19-01</b>	Lorraine – T1	LR-05	10m to 105m	20	95m
<b>CM-19-02</b>	Lorraine – T2	LR-04	35m to 250m	44	215m
<b>CM-19-03</b>	Lorraine – T3 east	LR-03	10m to 105m	18	95m
<b>CM-19-04</b>	Lorraine – T3 west	LR-03	10m to 120m	19	110m
<b>CM-19-05</b>	Lorraine – T4	LR-02	30m to 305m	51	275m
<b>CM-19-06</b>	Lorraine – T5	LR-01	35m to 210m	24	185m
<b>CM-19-07</b>	Lorraine – T5	LR-01	10m to 350m	41	340m
<b>ZA-18-01*</b>	Alotta T1	AL-01	10m to 300m	36	290m

\*The 2018 Hole ZA-18-01 was deepened from 102m to 300m and renamed ZA-19-01. These holes are interchangeable in this report and the DHEM refers to it as the former.



**Figure 1: Drill Hole Locality Plan ADZ and Lorraine Project Areas**

## **DHEM Modelling Results**

SGC have provided a report which incorporates the VTEM survey and DHEM response for each hole surveyed with recommendations for follow-up work as warranted. The results of the modelling of the DHEM plates are presented in **Appendix 1 - Table 3**. The DHEM Anomaly Profiles are presented in **Appendix 2**.

### **CM-19-01 – VTEM Target 1**

The DHEM data for CM-19-01 shows two responses;

- A minor in-hole response at 85m DH from a small conductor intersected by the hole.
- A larger and stronger off-hole response from a bigger, albeit still quite narrow and shallow conductor, positioned above the hole and dipping to the south.

Field reports showed a 10cm intersection of sulfides in CM-19-01 at the target depth which likely represents the minor in-hole anomaly observed at 85m downhole, **Appendix 1 and 2**.

There is some discrepancy between the location of the VTEM target 1 and the larger off-hole DHEM anomaly for CM-19-01; the main difference being the DHEM conductor is located further to the north and is much smaller and shallower than the modelled conductor.

### **CM-19-02 – VTEM Target 2**

The DHEM data for CM-19-02 shows a strong in-hole anomaly at 195m downhole. This corresponds with the position of Target 2 as modelled from the VTEM data.

In this instance the drill hole has intersected the VTEM conductor at 195m downhole and is confirmed by the DHEM results. The DHEM data has been modelled; the results are included in the modelling summary **Appendix 1 and 2**.

### CM-19-03 – VTEM Target 3 West

The DHEM data for CM-19-03 shows a strong off-hole anomaly between 25 and 30m DH. Modelling indicates that the drill hole has passed directly underneath conductor. The modelled conductor is dipping to the south, is very shallow and has a limited depth extent.

There is a significant offset in the position of the modelled DHEM conductor compared to the modelled VTEM conductor. The DHEM conductor is much smaller and shallower and higher conductance than the VTEM model. The DHEM modelling results are included in **Appendix 1 and 2**.

The modelling results for Target 3 have shown that the very small and shallow targets tend to be modelled much deeper in the VTEM data than they are. This could be a function of the filtering being applied to the AEM data. It is possible that the EM conductor is much smaller and shallower than originally modelled.

### CM-19-04 – VTEM Target 3 East

The DHEM data for CM-19-04 shows a moderate to weak off-hole anomaly at 75m downhole (modelling discussed below) and a very weak and small off-hole response at 110m downhole (anomaly not modelled here). The DHEM modelling indicates that the drill hole has passed underneath the conductor target by a significant distance. The position and orientation of the target is not well constrained due to the anomaly response being very weak. This is partly due to poor primary field coupling and partly due to the distance of this small conductor from the drill hole.

There is a significant offset in the position of the modelled DHEM conductor compared to the modelled VTEM conductor. The DHEM conductor is much smaller and shallower and higher conductance than the VTEM model. The DHEM modelling results are included in **Appendix 1 and 2**.

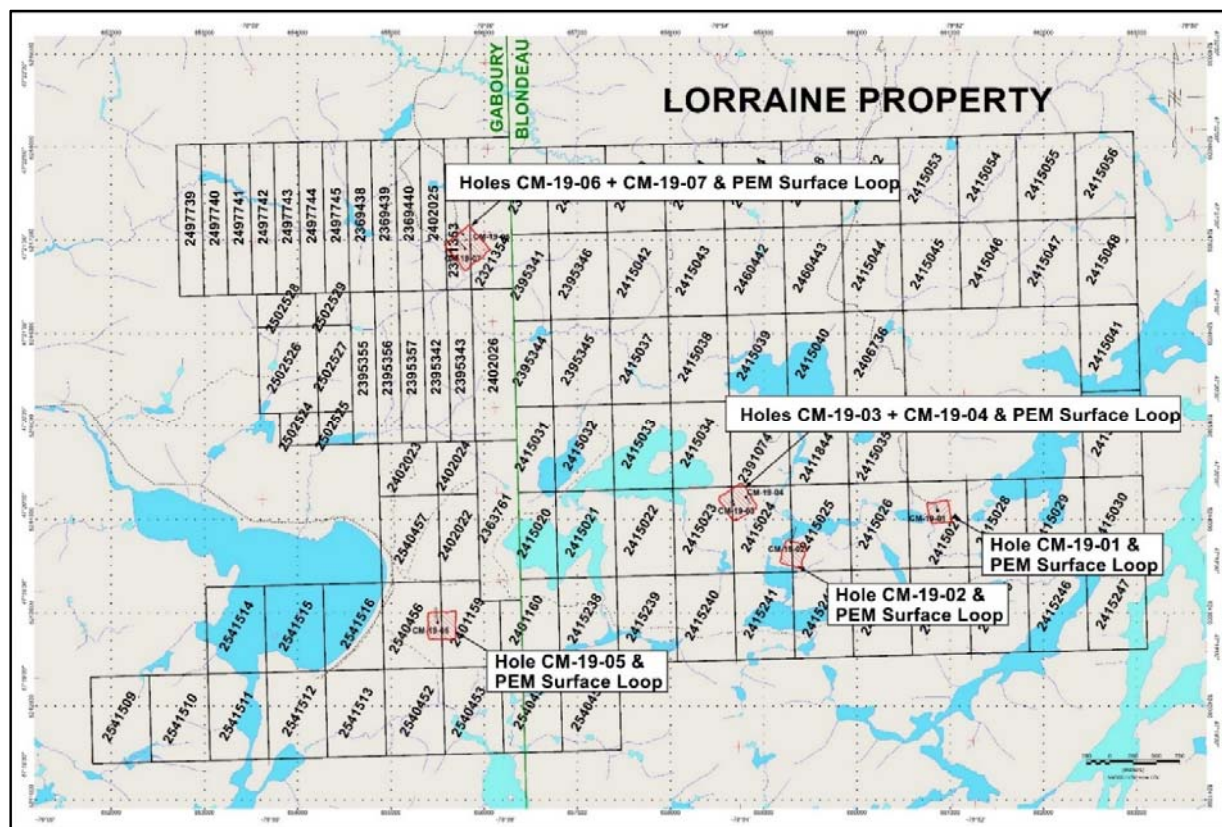


Figure 2: Lorraine Project Drill Hole Location Plan and DHEM Loop Layout

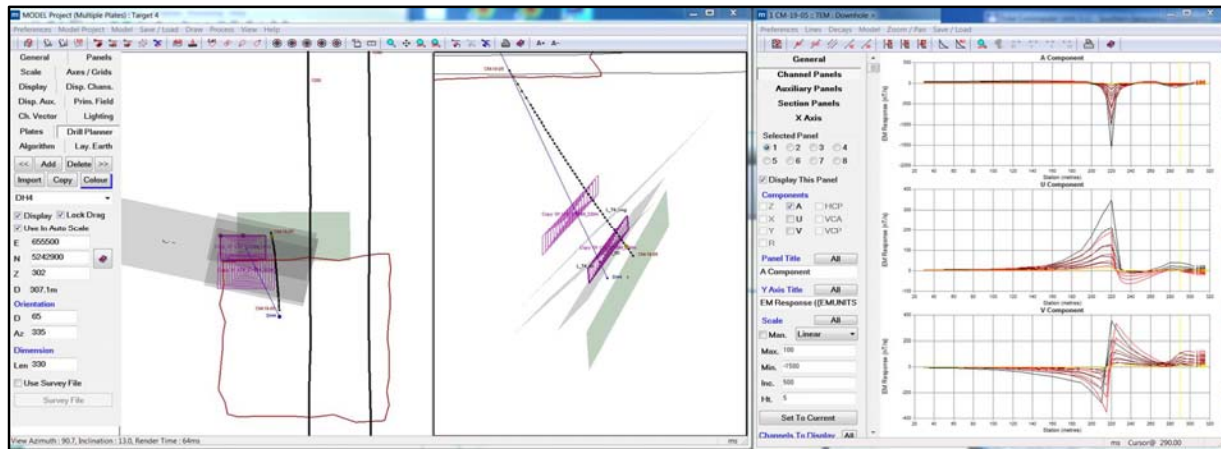


### M-19-05 – VTEM Target 4

The DHEM data for DM-19-05 includes a weak / minor off-hole response at 130m downhole (not modelled) and stronger off-hole responses at 220m and 290m downhole (as discussed below).

CM-19-05 was originally targeting VTEM Target 4 between 250 and 300m DH. The DHEM data has resolved this into two separate conductors, one located below and west of the hole at 220m DH, and another located to the west of the hole at 270m DH.

The 220m and 270m conductors have been modelled and the results are included in **Appendix 1 and 2**. The Company will drill a diamond hole from the CM-19-05 drill site in the October programme which will intersect both of the off-hole plates as shown in **Figure 3**.



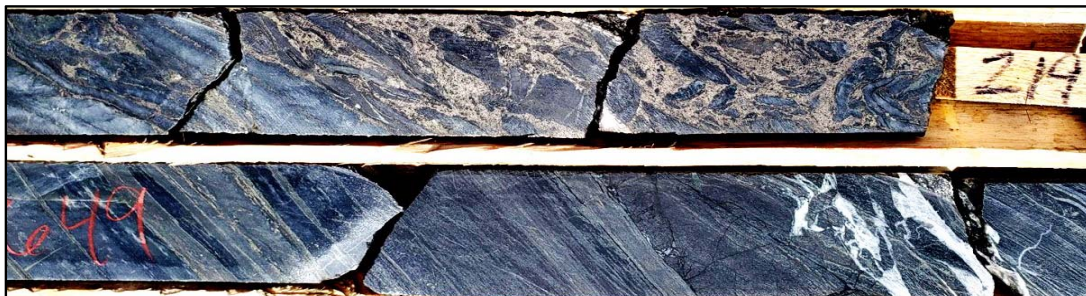
**Figure 3: Plate Models and Planned October Drilling**

### Summary:

The drilling of the VTEM anomalies comprising Targets 1 to 3 (**Figure 2**) returned Banded Iron Formation/ Banded Chert horizons (BIF / BC) containing both interbedded (laminated to semi-massive) and replacement pyrrhotite-pyrite-trace chalcopyrite sulphides and associated quartz-carbonate alteration zones in part coincident with the modelled VTEM plates. Some of the sulphide zones were anomalous in Zn-Cu-Ag (**ASX 24 September 2019**).

The DHEM results for Target 4 (CM-19-05) remains the most prospective in terms of sulphide mineralisation (**Figure 4**) with the VTEM response resolved as two sub-parallel conductors at depth, although neither were properly intersected or tested by the drill hole. The two conductors were located in close proximity to where the original VTEM models were located; however, the DHEM reveals that the structure is more complex than can be resolved from the VTEM survey at this depth.

A +300m deep hole (DH1 in Figure 3) will be drilled from the CM-19-05 site so as to intersect both the 220m and 290m plates and to provide additional information on the extent and style of the Zn-Cu-Ag anomalous brecciated sulphide mineralisation intersected in the primary hole (**Figure 4**).



**Figure 4: Hole CM-19-05 ~219m – Banded Chert / Breccia with late-stage pyrrhotite matrix and banded chert with laminated pyrrhotite replacing magnetite**

## Lorraine Mine Area

### CM-19-06 – VTEM Target 5

The DHEM data for CM-19-06 does not show any significant anomalism. The most conductive response is in the near surface, above the location where the first DHEM reading is taken at 35m DH. CM-19-06 was designed to intersect VTEM target 5 between 80 and 90m DH. The lack of any DHEM anomaly is of concern. It is possible that the source of the EM response is very close to surface and might be cultural in nature (i.e. buried scrap metal or mine infrastructure).

A review of the magnetic data shows that there is no significant high-frequency and amplitude response that we might expect to see from ferrous scrap material area directly above the location of the anomaly.

### CM-19-07 – DHEM Target Depth 270m

The target was an off-hole conductor sitting above hole L01 (defined by an earlier DHEM plate). A review of the 2004/2005 diamond drill programme (holes L01-L06) indicated that there was consistent north-east uplift of the holes. This historic deviation was factored into the collar azimuth/inclination for **CM-19-07**. However, the hole remained 'true' and missed the target plate as shown in **Figure 5**.

This hole was reported in ASX announcement of 24 September 2019 and the Company assumed it had dropped beneath the target, scraping the bottom edge of the conductor intersecting a mineralised shear zone at ~272m downhole approximating the edge of the historic DHEM plate which returned **30cm @ 0.47% Ni + 0.22% Cu (Figure 5)**.

The present DHEM data for CM-19-07 confirms that the drill hole has intersected the bottom edge of the conductor target at the expected depth and the position of the conductor target has been updated to match the newly acquired DHEM data. Hole CM-19-07 will be redrilled (Figure 5) in the future with a hole targeting the centre of the plate. The drilling will be incorporated into planned evaluation of the gold potential of the Lorraine Mine for which the Company is seeking a JV partner.

The updated conductor model information is included in **Appendix 1** and the anomaly profile is in **Appendix 2**.



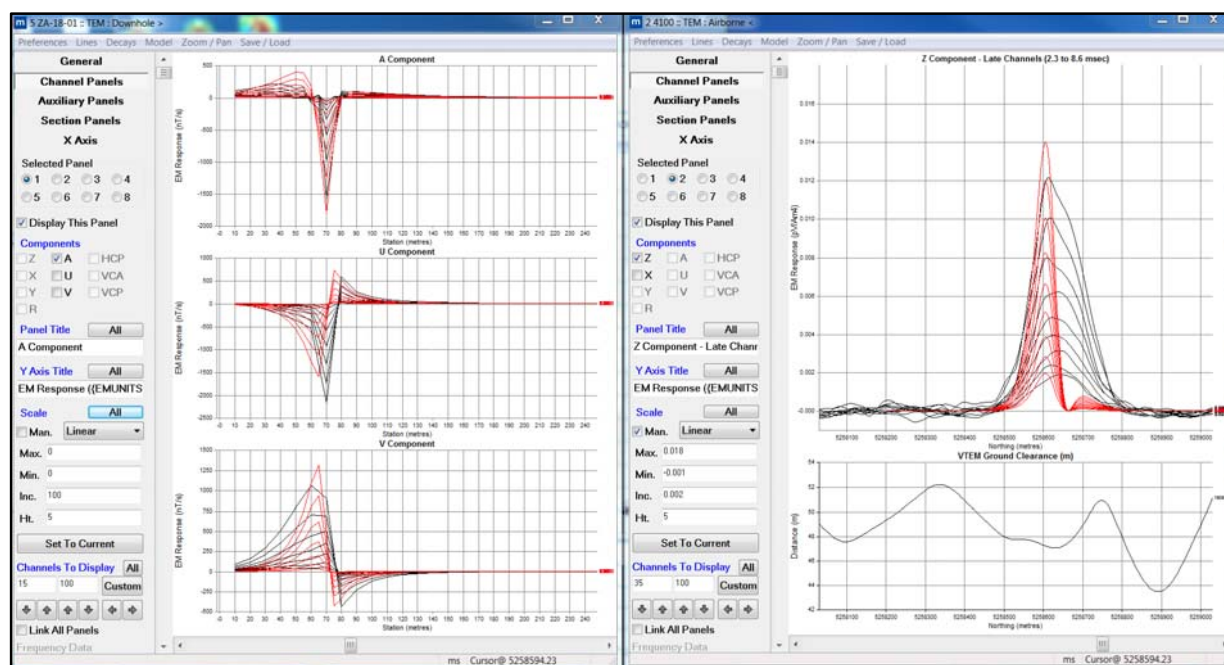
Figure 5: CM-19-07 Planned Redrill and Nickel Potential Lorraine Mine Area



## Alotta Prospect

**ZA-18-01:** The DHEM data for ZA-18-01 shows a strong off-hole response between 60m and 80m downhole. This hole was designed to test for deeper conductors below and outside of the existing Alotta resource that were inferred from modelling of the late-time VTEM data by SGC (ASX 8 August 2019).

The DHEM data for ZA-18-01 has been modelled and reconciled against the VTEM anomaly as shown below in **Figure 6**. The conductor responsible for the DHEM anomaly is positioned along the southern margin of the mineralisation envelope and above the hole with a steep southerly dip. When compared to the VTEM data, the model fit is reasonable for the southern flank of the anomaly, but poor for the northern flank of the anomaly.



**Figure 6: Comparison of the DHEM modelling for ZA-18-01 (LHS) reconciled with the VTEM anomaly for line 4100 (RHS)**

It is possible that there are additional conductors with the resource envelope that might contribute to the VTEM response, but not the DHEM response, that might help resolve this discrepancy.

The Company will drill the shallow off-hole DHEM anomaly with a view linking it with previously drilled mineralisation in holes **ZA-18-01** and **ZA-18-09** (ASX 8 January 2019).

## OCTOBER 2019 DRILLING PROGRAMME

The follow-up diamond drilling programme of approximately 1,000m is set to commence this week.

The programme will commence with a +300m hole to assess the two DHEM anomalies at Target 4 in the Lorraine block.

At Alotta drilling will be aimed at evaluating the shallow DHEM anomaly but is mainly aimed at extending the known mineralisation based on recent geological and structural interpretation of historic drilling.

For, and on behalf of, the Board of Directors of Chase Mining Corporation Limited:

Dr Leon Pretorius  
Executive Chairman  
14 October 2019

Direct any enquiries to: Martin Kavanagh on 0419 429 974 or Leon Pretorius on 0419 702 616

## **Competent Person Statements**

The information in this report that relates to Exploration Activities is based on information evaluated by Dr Leon Pretorius who is a Fellow of The Australasian Institute of Mining and Metallurgy (FAusIMM) and who has sufficient experience relevant to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Dr Pretorius is the Executive Chairman of Chase Mining Corporation Limited and he consents to the inclusion in the report of the information in the form and context in which it appears. Dr Pretorius holds shares in Chase Mining Corporation Limited.

Information in this ASX announcement that relates to Exploration Activities is based on information compiled by Mr Martin Kavanagh. Mr Kavanagh is a Non-Executive Director of Chase Mining Corporation Limited and is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), and a Member of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Mr Kavanagh has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activities, which he is undertaking. This qualifies Mr Kavanagh as a "Competent Person" as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Kavanagh consents to the inclusion of information in this announcement in the form and context in which it appears. Mr Kavanagh holds shares in Chase Mining Corporation Limited.

Information in this ASX announcement that relates to Geophysical Exploration Results is based on information reviewed by Mr. Robert Hearst, Chief Geophysicist – Americas, with Southern Geoscience Consultants (SGC), consultants to the Company. Mr. Hearst is a member of the Professional Geoscientists of Ontario (PGO), and a member of the Canadian Institute of Mining & Metallurgy. He has sufficient experience relevant to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr. Hearst consents to the inclusion in this announcement of the matters based on SGC's information in the form and context in which it appears.

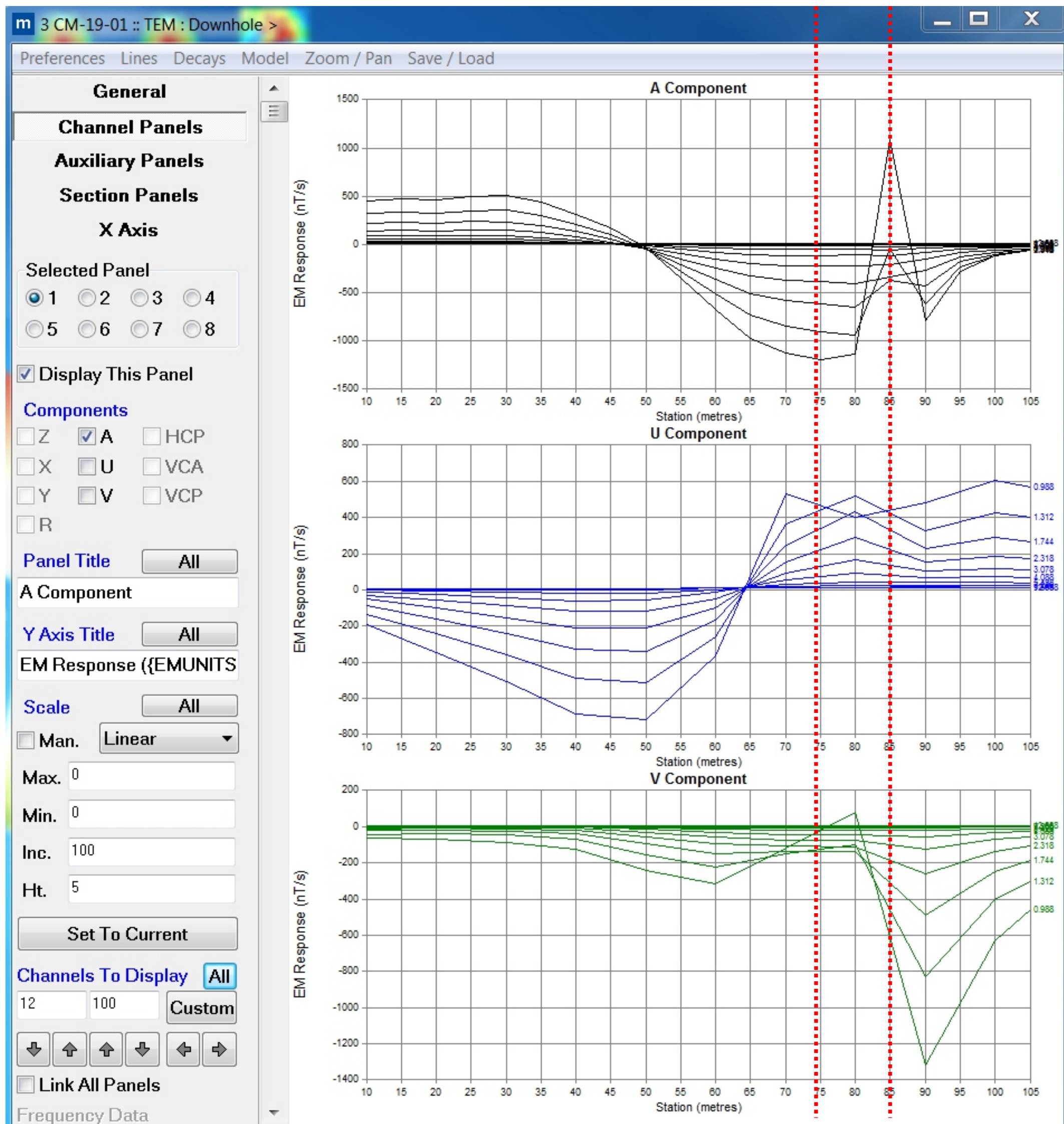
Information in this ASX announcement that relates to Geophysical Exploration Results is based on from downhole TDEM surveys completed on the Lorraine and ADZ Properties is partially based on the field work technical report submitted by Mr Joél Simard, consultant geophysicist for Geophysique TMC. Mr Simard is a member of the Ordre des Geophysiques du Québec (#1350) and of the Professional Association of Geoscientists of Ontario (#2967). He has sufficient experience relevant to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr. Simard consents to the inclusion in this announcement of the matters based on Geophysique TMC information in the form and context in which it appears.



Table 1. DHEM Modelling Results for the 2019 DHEM Programme

Target	Plate_Name	Reference	east NAD83z17N	north NAD83z17N	RL NAD83z17N	Dip (degrees)	Dip_Direction (degrees)	Rotation (degrees)	Length (m)	Depth_Extent (m)	Conductivity- Thickness (S)
Lorraine Target 1	L_T1-DHEM_offhole	Centre top of plate	660797	5244178	297	58	198	0	160	30	420
Lorraine Target 1	L_T1-DHEM_inhole	Centre top of plate	660855	5244140	256	61	197	10	10	10	515
Lorraine Target 2	L_T2_DHEM	Centre top of plate	659360	5243870	175	66	200	-9	80	60	750
Lorraine Target 3	L_T3_east DHEM	Centre top of plate	658836	5244160	303	75	3	0	45	18	400
Lorraine Target 3	L_T3_west_DHEM	Centre top of plate	658684	5244188	311	61	175	0	40	15	500
Lorraine Target 4	LT4_DHEM_220m	Centre top of plate	655443	5243025	119	45	190	0	100	143	330
Lorraine Target 4	LT4_DHEM_290m	Centre top of plate	655440	5243072	83	51	191	0	80	70	850
Lorraine Target 5 (L-01 DHEM)	LT5_DHEM	Centre top of plate	655716	5247038	90	66	155	0	50	28	320
Alotta Target 1	T1_DHEM	Centre top of plate	631637	5258626	253	58	207	-27	15	43	1425

## **Appendix 2: DHEM Anomaly Profiles**



2 1

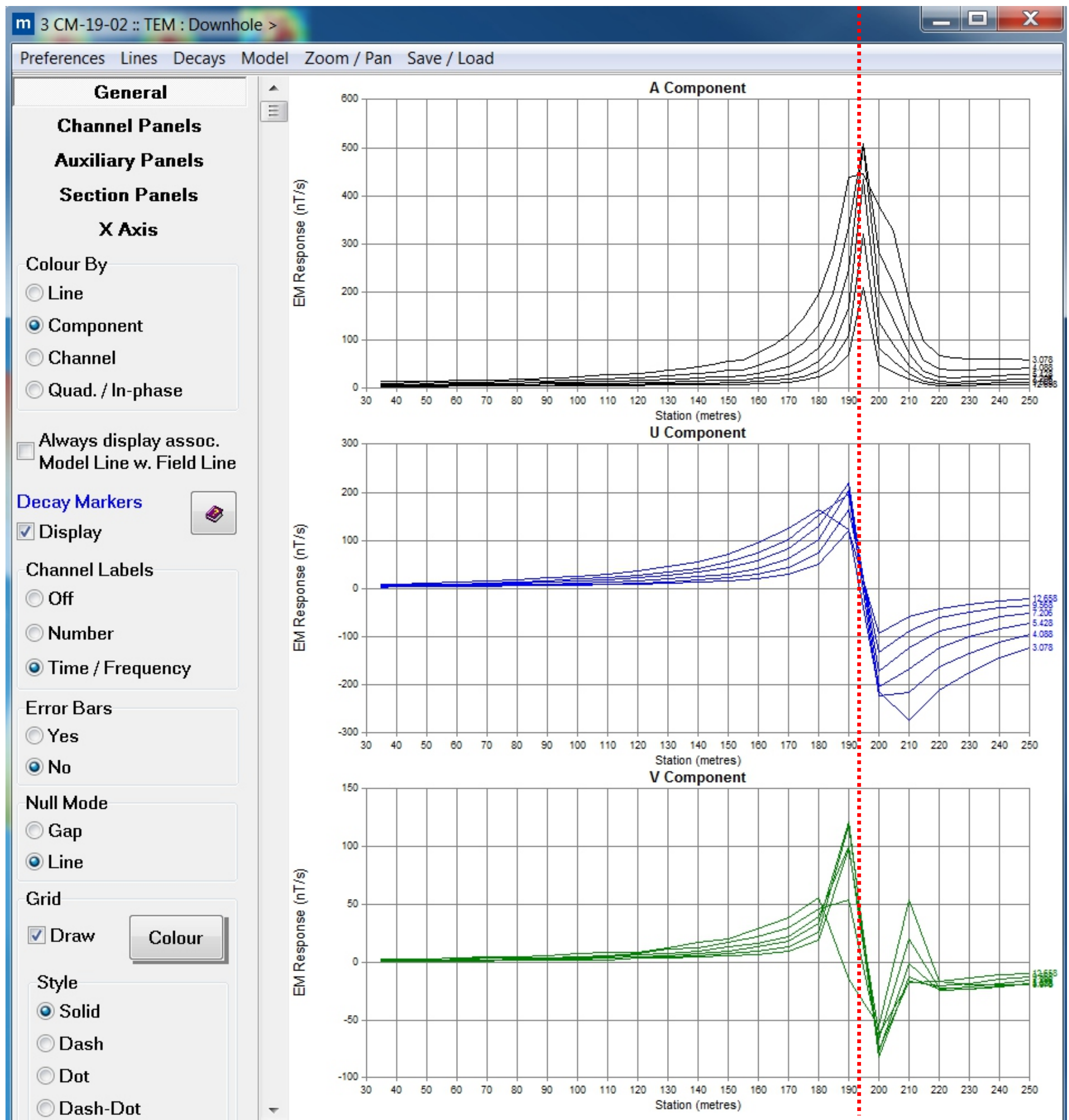
- 1 - 85m DH - minor in-hole anomaly
- 2 - 70 to 75m DH - strong off-hole anomaly

Survey Date : 16/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS





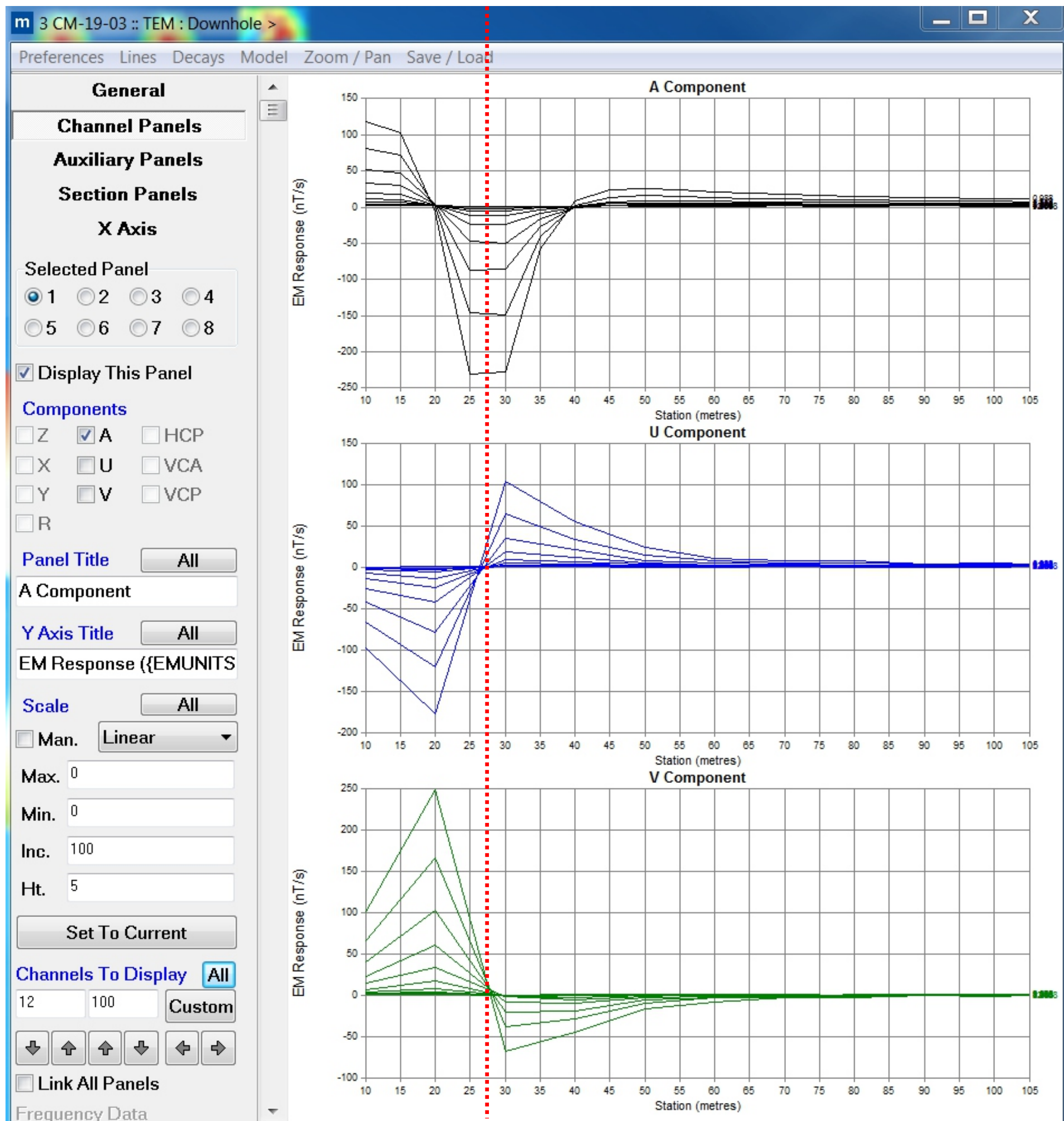
1

1 - 195m DH - strong in-hole anomaly

Survey Date : 17/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS



1

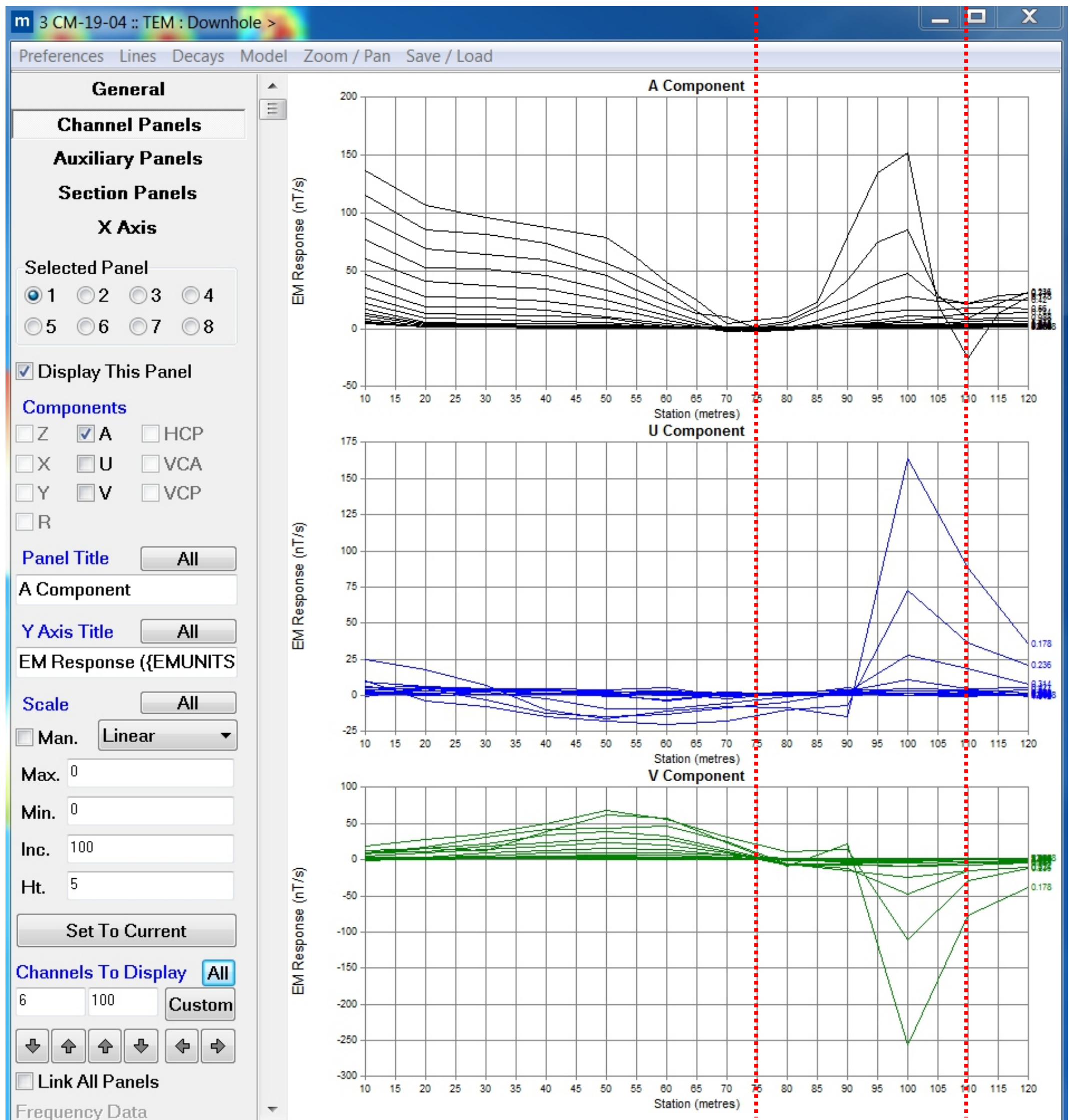
1 - 25m to 30m DH - strong off-hole anomaly

Survey Date : 18/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS





1

2

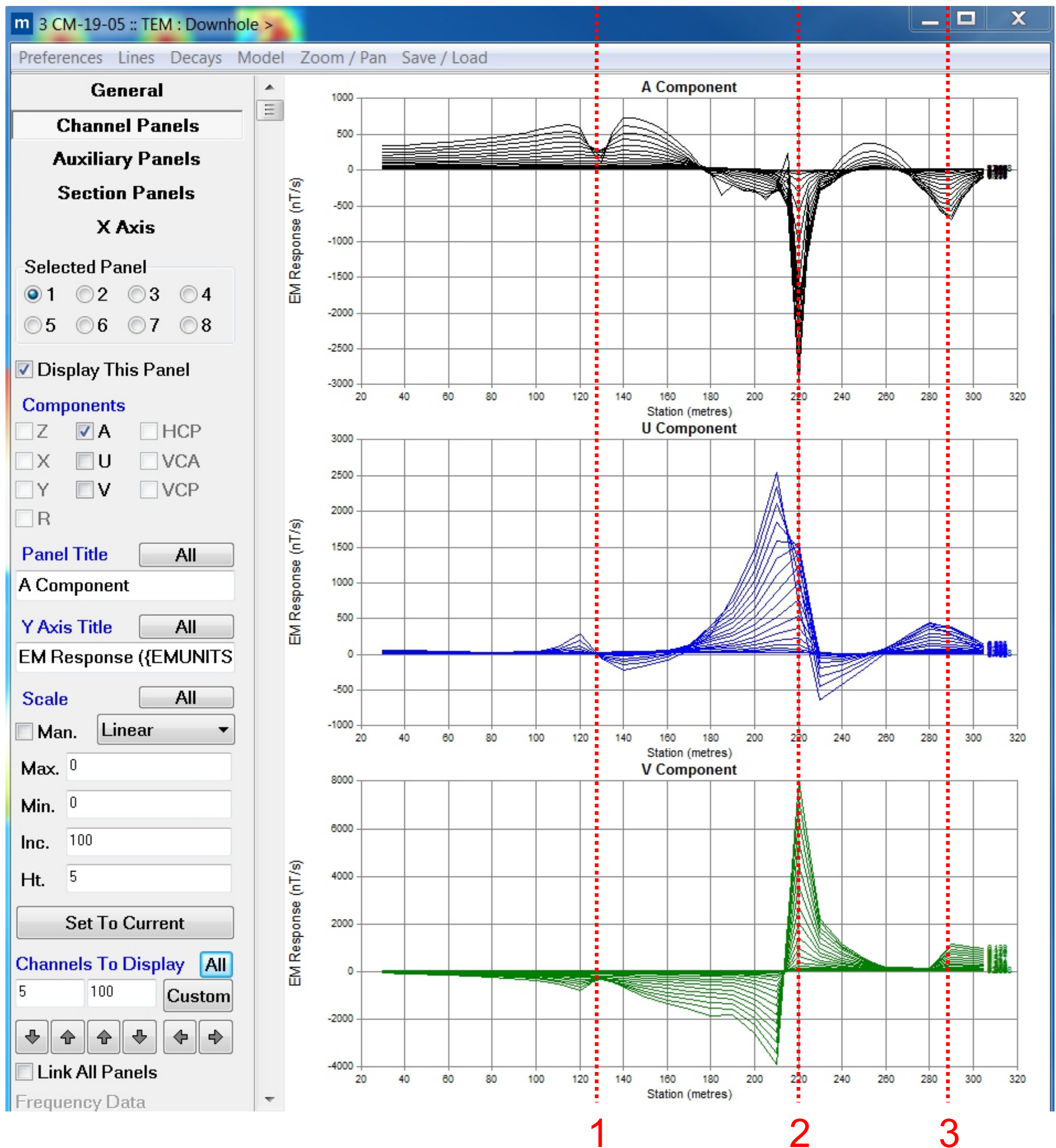
- 1 - 75m DH - off-hole anomaly
- 2 - 110m DH - weak off-hole anomaly

Survey Date : 18/09/2019



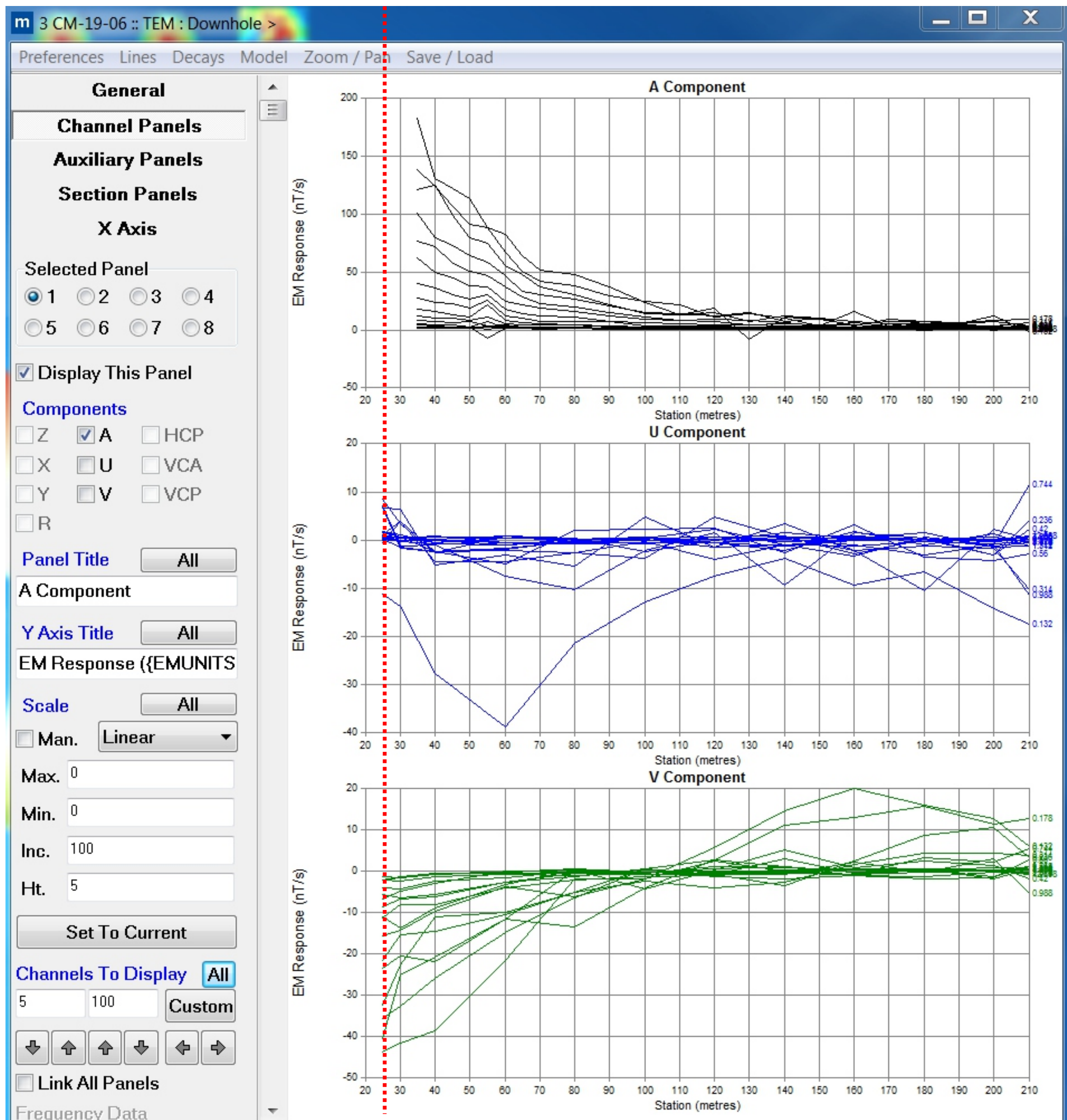
SOUTHERN GEOSCIENCE  
CONSULTANTS





- 1 - 130m DH - Weak off-hole anomaly
- 2 - 270m DH - Strong off-hole anomaly (possible weak in-hole @ 210m)
- 3 - 290m DH - Strong off-hole anomaly

Survey Date : 15/09/2019



1

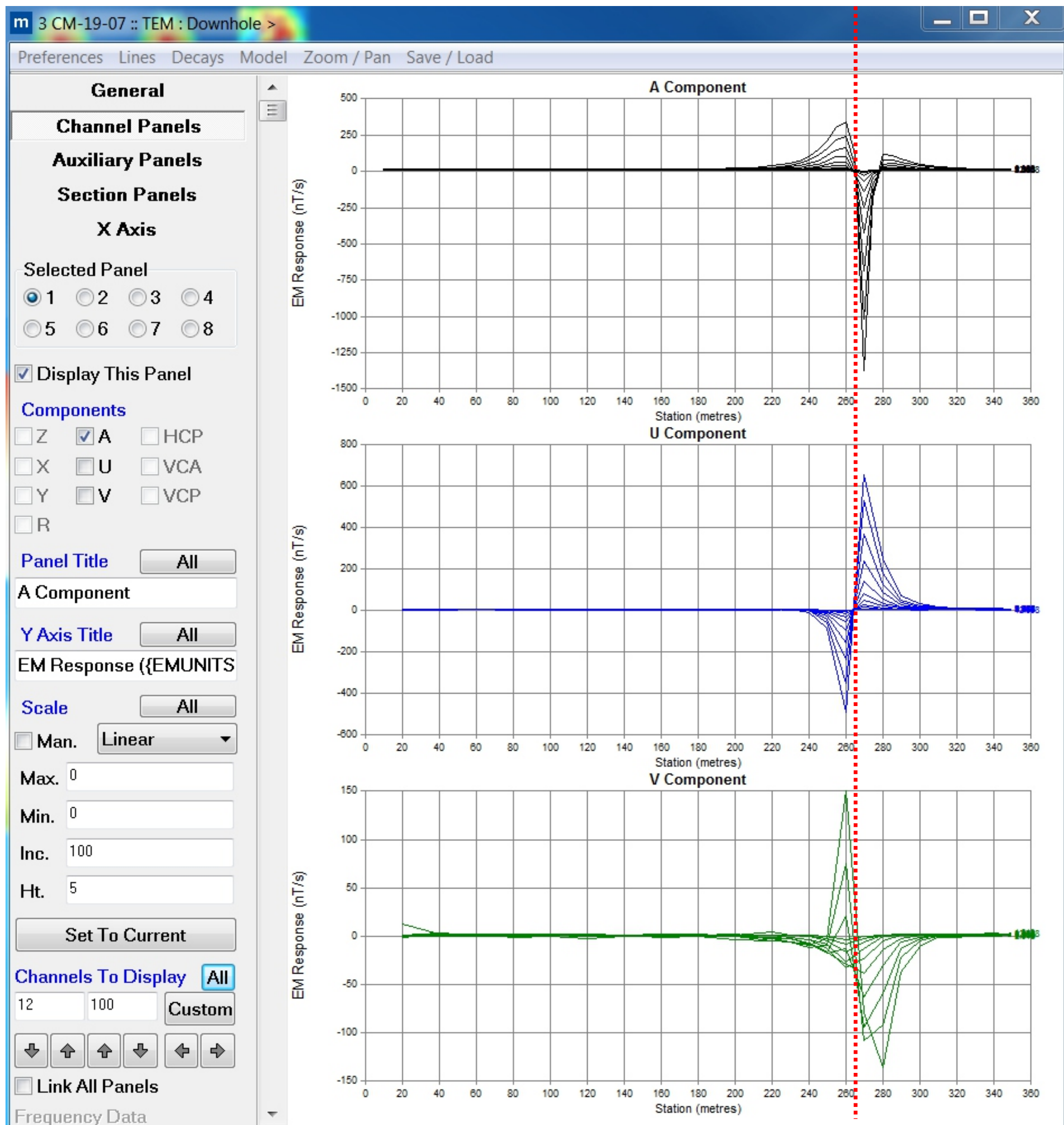
1 - top of hole - conductance increasing closer to surface

Survey Date : 13/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS





1

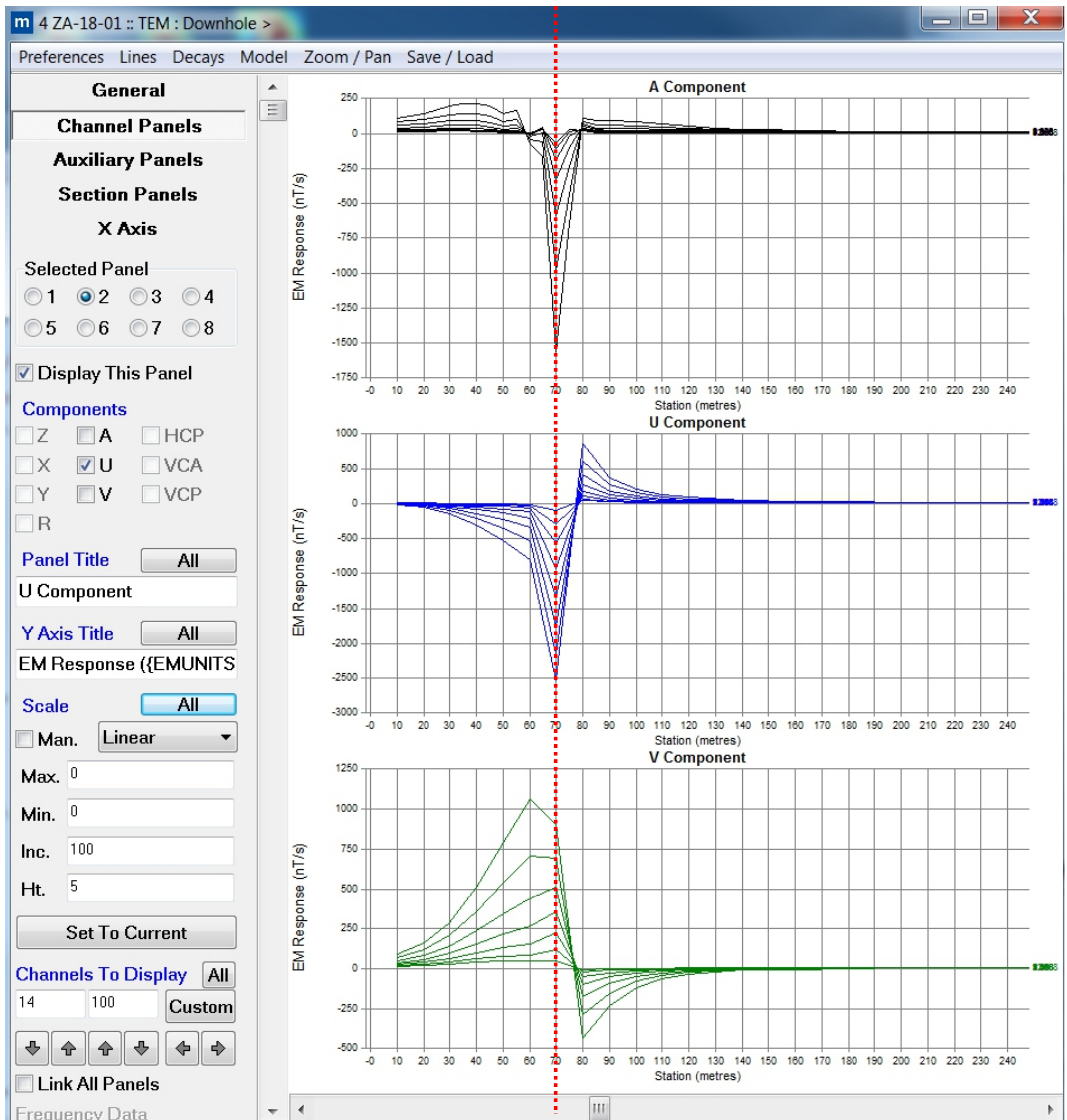
1 - 270m DH - Strong near-hole anomaly, intersected bottom edge of target

Survey Date : 14/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS





1 - 60m to 80m DH - Strong off-hole anomaly

Survey Date : 14/09/2019



SOUTHERN GEOSCIENCE  
CONSULTANTS

Table 4. DHEM equipment specifications and survey parameters.

<b>Planning/Supervision</b>	<b>Rob Hearst – Southern Geoscience Consultants Pty Ltd</b>
<b>TEM Data Acquisition</b>	TMC Geophysics
<b>TEM Operator</b>	Eric Tanguay TMC Geophysics
<b>Data Processing CP</b>	Joël Simard – Geophysique Joël Simard Inc (for TMC Geophysics)
<b>Survey Configuration</b>	Downhole TEM (DHEM)
<b>TX Loop Size</b>	From 200m x 200m to 350m x 350m
<b>Transmitter</b>	Crone TX
<b>Transmitter Power</b>	4.8 kW generator
<b>Receiver</b>	Crone CDR-2 (24 bit, 240 kHz) receiver
<b>Sensor</b>	A and U-V dB/dt coil probes
<b>Component Directions</b>	Standard A (axial), U and V components
<b>Station Spacing</b>	5 to 10m
<b>TX Frequency</b>	15 Hz (16.66 msec time base)
<b>Duty cycle</b>	50%
<b>Current</b>	~30 Amp
<b>TX Turnoff</b>	1.5 msec

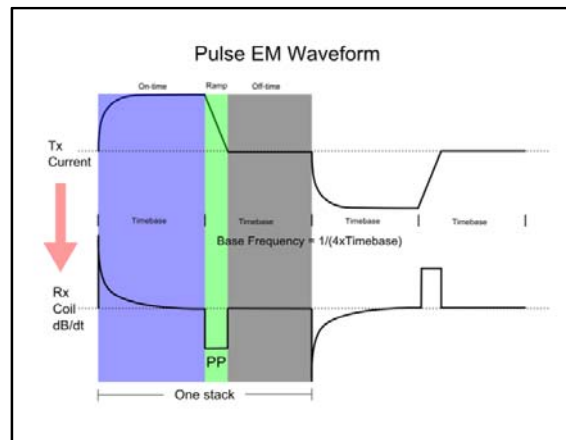
The DHEM survey was completed by TMC Geophysics Ltee. from September 13<sup>th</sup> to September 21<sup>st</sup>, 2019. The Z field and X,Y components of the EM field were measured using a ramp time of 1500  $\mu$ sec.

The Crone Pulse EM (PEM) BHEM system consisted of an approximately 200m x 200m transmitter loop operating at a peak output current of 20A and a 3-component oriented borehole probe that was moved between 5 and 10 m in the hole between measurements. The TX-RX geometry employed for the BHEM survey work was a single loop centred over the borehole.

#### Equipment

- Crone Pulse EM (PEM) in BHEM (Borehole Time-domain Electromagnetics) Operation
- 3D Borehole PEM – 3 Components (X, Y, Z) measured and oriented – dB/dt measured in nanoTesla/second (nT/s).
- Receiver:
  - Crone CDR2 fully digital (input is digitized prior to stacking) with 25 bit auto gain ranging circuit
  - Logarithmic channels in off-time and 1 during ramp (PP) reading entire ramp and off-time in single sweep
  - 42 channels and PP for 150msec time base, stacking with spike rejection
  - Synchronization between loop and receiver by cable
- Transmitter

- Current Waveform: Bipolar on-off square waveform with exponential turn-on and ramp off.



- Time Base: Off-time plus ramp time.
  - 8.33, 16.66, 50, 100, 150, 300, 500, 750, 1000 msec for 60Hz noise rejection (equivalent base frequencies of 30, 15, 5, 2.5, 1.67, 0.833, 0.5, 0.333, 0.25 Hz)
- Ramp Time: (the time required for the current to turn off) 1500 µsec for precisely controlled linear turn-off ramp.
- Transmit Loop: Single turn loop, typically 200m x 200m (any dimension can be used)
- TX Output Current: 20 Amps at 160V for 4.8kW.
- TX Output Voltage: 24 to 240 Volts continuously adjustable for 4.8 kWatt system
- TX Safety Features: Auto shut off when open loop is detected; auto shut off for high instrument temperature and overload
- Borehole Probe
  - 32 mm diameter
  - Pressure tested for depths of 2500m or more
  - Components oriented with tilt sensors or 3-axis magnetometer and 3-axis accelerometer
- Operating Temperature: -40°C to 50°C

### Loop Details

Hole	Tx Loop and Dimensions	Time Base (ms)	Off Time Channels	Ramp (ms)	Current (A)
CM-19-01	Loop LR-05 225 m * 225 m	16.66	20	1.5	20
CM-19-02	Loop LR-04 250 m * 250 m	16.66	20	1.5	20
CM-19-03 & CM-19-04	Loop LR-03 300 m * 300 m	16.66	20	1.5	20
CM-19-05	Loop LR-02 300 m * 300 m	16.66	20	1.5	20
CM-19-06 & CM-19-07	Loop LR-01 350 m * 350 m	16.66	20	1.5	20
ZA-18-01	Loop AL-01 200 m * 200 m	16.66	20	1.5	20





**Geophysique TMC Crew with Crone System**



**DHEM Survey in Progress**



## JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The <b>DHEM survey</b> was carried out by Val-d'Or based Geophysique TMC</li> <li>The Companies consultant geophysicist is Robert Hearst of Toronto based Southern Geoscience Consultants (SGC).</li> <li>The survey comprised the logging of eight (8) diamond holes drilled in September 2019.</li> <li>Hole depth varied from 108m to 354m – total depth 1,671m</li> </ul> <p><b>Crone Pulse EM Configuration</b></p> <ul style="list-style-type: none"> <li>Crone Pulse EM (PEM) in BHEM (Borehole Time-domain Electromagnetics = DHEM) Operation</li> <li>3D Borehole PEM – 3 Components (X, Y, Z) measured and oriented – dB/dt measured in nanoTesla/second (nT/s).</li> <li>Receiver: <ul style="list-style-type: none"> <li>Crone CDR2 fully digital (input is digitized prior to stacking) with 25 bit auto gain ranging circuit</li> <li>Logarithmic channels in off-time and 1 during ramp (PP) reading entire ramp and off-time in single sweep</li> <li>42 channels and PP for 150msec time base, stacking with spike rejection</li> <li>Synchronization between loop and receiver by cable</li> </ul> </li> <li>Transmitter <ul style="list-style-type: none"> <li>Current Waveform: Bipolar on-off square waveform with exponential turn-on and ramp off.</li> <li>Time Base: Off-time plus ramp time. <ul style="list-style-type: none"> <li>8.33, 16.66, 50, 100, 150, 300, 500, 750, 1000 msec for 60Hz noise rejection</li> </ul> </li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>(equivalent base frequencies of 30, 15, 5, 2.5, 1.67, 0.833, 0.5, 0.333, 0.25 Hz)</p> <ul style="list-style-type: none"> <li>○ Ramp Time: (the time required for the current to turn off) 1500 µsec for precisely controlled linear turn-off ramp.</li> <li>○ Transmit Loop: Single turn loop, typically 200m x 200m (any dimension can be used)</li> <li>○ TX Output Current: 20 Amps at 160V for 4.8kW.</li> <li>○ TX Output Voltage: 24 to 240 Volts continuously adjustable for 4.8 kWatt system</li> <li>○ TX Safety Features: Auto shut off when open loop is detected; auto shut off for high instrument temperature and overload</li> <li>• Borehole Probe <ul style="list-style-type: none"> <li>○ 32 mm diameter</li> <li>○ Pressure tested for depths of 2500m or more</li> <li>○ Components oriented with tilt sensors or 3-axis magnetometer and 3-axis accelerometer</li> </ul> </li> <li>• Operating Temperature: -40°C to 50°C</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling activities are being reported.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling activities are being reported.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling activities are being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling activities are being reported.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The Crone PEM system was calibrated prior to commencement of the survey.</li> <li>All digital data is inspected daily by the TMC site geophysicist and the Company's Toronto based consultant geophysicist from SGC.</li> <li>The Company received reports on production and of any equipment issues.</li> <li>The Company's consultant geophysicist has completed QA/QC of the data and advised that it is suitable for public domain release.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for airborne geophysical surveys.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• The grid system for the Project is NAD83 UTM Zone 17N.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• As per drill location as shown in Figure 2 in ASX report</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• All data acquired by Geophysique TMC / SGC reported to the Company's representatives.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• The data were independently verified by Greg Maude of SGC Perth.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• The Company holds 100% of the Project tenements in the name of its wholly owned subsidiary Zeus Olympus Sub Corp.</li> <li>• The Mining Claims are in good standing and no known impediments exist.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Information relating to the Projects exploration history was sourced from company reports lodged with the Quebec Mines Department (MERN -Ministère de l'Énergie et des Ressources naturelles) and compiled by ORIX Geoscience the Company's consultant geologists.</li> <li>The bulk of the data comes from exploration carried out by Canadian companies between 1987 and 2005.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Company is focused on the exploration for Ni-Cu-Co-PGM mineralised gabbro bodies which intrude a sequence of mafic volcanic and felsic volcanoclastic sedimentary rocks in the Belletierre-Angliers Greenstone Belt.</li> <li>The mineralisation occurs as disseminated to massive sulphides near the base of the gabbro bodies and as remobilised massive sulphides along shears/fault zones.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling is being reported.</li> <li>Information of the diamond drill hole programme is given in the ASX</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• No assays are being reported.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to figures in body of the report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• No assays are being reported.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• The Company's website (<a href="http://www.chasemining.com.au">www.chasemining.com.au</a>) details historical exploration, geology and mineralisation and geophysical survey data tabled in the form of ASX announcements for the Canadian projects.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• The DHEM anomalies over the Lorraine Mine and elsewhere in the Lorraine Project area and at Alotta will be reviewed further on receipt of the final interpretation report from SGC.</li> <li>• The Company plans to undertake further diamond drilling at the Alotta Prospect and the Lorraine Mine area based on the preliminary Alotta DHEM survey data</li> </ul>