

# Arctic Geophysics Inc.

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Geophysical Surveys • Prospecting • Consulting

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## **Geophysical Survey with 2D Resistivity for Placer Investigation, Dycer Creek 2013**

Placer Claims P 47177, P 41979, P 41982, P 41985, P 41988,  
P 41991, and P 41994

LOCATION

N61° 26' 47" W134° 14' 36"

FOR

Stephen A. Swaim  
737 Downie Street  
Kamloops BC  
V2B 5T1

AUTHOR

Philipp Moll

WORK PERFORMED

Sept 9-16<sup>th</sup> 2013

DATE OF REPORT

Dec 16<sup>th</sup> 2013

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# 1 Introduction

This geophysical investigation was done for Stephen A. Swaim. The survey, using 2D Resistivity, was conducted to prospect the tenures listed below for the localisation of possible targets for commercial placer gold. The ground was tested with seven 2D measuring lines with a length of 118-235m each; the depth of investigation is 20-50m.

# 2 Placer Tenures

Grant Number	Name	Owner
P 47177	Dycer 9	Stephen A. Swaim
P 41979	Dycer 4	Stephen A. Swaim
P 41982	Dycer 7	Stephen A. Swaim
P 41985	Dycer 10	Stephen A. Swaim
P 41988	Dycer 13	Stephen A. Swaim
P 41991	Dycer 16	Stephen A. Swaim
P 41994	Dycer 19	Stephen A. Swaim

# 3 Location

The placer claim property is located app. 90km northeast of Whitehorse, map number 105E08.

# 4 Access

The exploration site was accessed by helicopter from Whitehorse, and on an old trail on site.

# 5 Goal

The survey was focussed on measuring and interpreting the following subsurface characteristics:

1. Depth and topography of bedrock
  - Paleochannels
  - Bedrock benches
2. Sedimentary stratification
3. Permafrost conditions
4. Groundwater table
5. Mining/prospecting history

## 6 Geophysical Methods

**Resistivity** is not a time domain geophysical method such as Ground Penetrating Radar or Seismic. Resistivity measures a material property. In the Resistivity model the different underground zones are material-dependently differentiated according to their electrical conductivity. Thus, Resistivity promises good chances in respect of measuring the kind and character of the subsurface materials as well as the groundwater distribution, which would be of interest for placer mining. The equipment used (see below) allows for measuring of layer interfaces in depths from 0.5m to 100m by varying the electrode spacing. – Therefore, this prospecting concept is based on the use of 2D Resistivity.



Figure 1: 2D Resistivity measurement, Stefan Ostermaier, Arctic Geophysics Inc., Yukon 2009

## 7 Use of Geophysical Methods

### 7.1 Instrumentation

For this survey a lightweight, custom-built 2D RESISTIVITY and INDUCED POLARIZATION (IP) imaging system with rapid data acquisition was used. The system includes:

- “4 POINT LIGHT” EARTH RESISTIVITY METER<sup>1</sup>
- 64 ELECTRODE CONTROL MODULES<sup>2</sup>
- 64 STAINLESS STEEL ELECTRODES<sup>3</sup>
- 320m MULTICORE CABLE: CONNECTOR SPACING: 5m<sup>4</sup>

This system weighs approximately 150 kg which is about one third of regular standard equipment. It can be run with a 12V lead battery. The equipment facilitates high mobility and rapid data acquisition with a small crew.

### 7.2 Data Acquisition

#### Resistivity

The data acquisition is carried out by the automatic activation of 4-point-electrodes. Thus several thousand measurements are taken, one every 1-2 seconds. The AC transmitter current of 0.26 to 30 Hz is amplified by the electrode control modules, up to a maximum of 100mA and 400V peak to peak. The voltage measured at the receiver electrodes (M, N) is also amplified.

In this geoelectrical survey the Schlumberger-array was used. This array is appropriate to image horizontal layers as is needed for placer prospecting.

The 2D Resistivity imaging system, used for this survey, allows measurements with a depth of up to 100m. With a depth to bedrock of more than 6m, an electrode spacing of 5m can be used for placer surveys. This allows the measuring of large profile lengths in short time with a horizontal measuring resolution of 2.5m. This system has proven itself to be reliable in the determination of the bedrock topography and sedimentary arrangement for placer investigation at the most environmental conditions.

### 7.3 Processing

#### Resistivity

The measured Resistivity data were processed with the RES2DINV inversion program<sup>5</sup>.

### 7.4 Interpretation

The interpretation of the profiles should be verified by physical prospecting methods such as digging test holes/trenches, drilling, or shafting.

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<sup>1</sup> Constructed and produced by LGM (Germany)

<sup>2</sup> Ditto

<sup>3</sup> Constructed and produced by GEOANALYSIS.DE (Germany)

<sup>4</sup> Ditto

<sup>5</sup> Produced by GEOTOMO SOFTWARE SDN. BHD (Malaysia)

## **8 Profile image**

The 2D Resistivity profile is providing a model of the electrical resistivity of the different ground materials/zones.

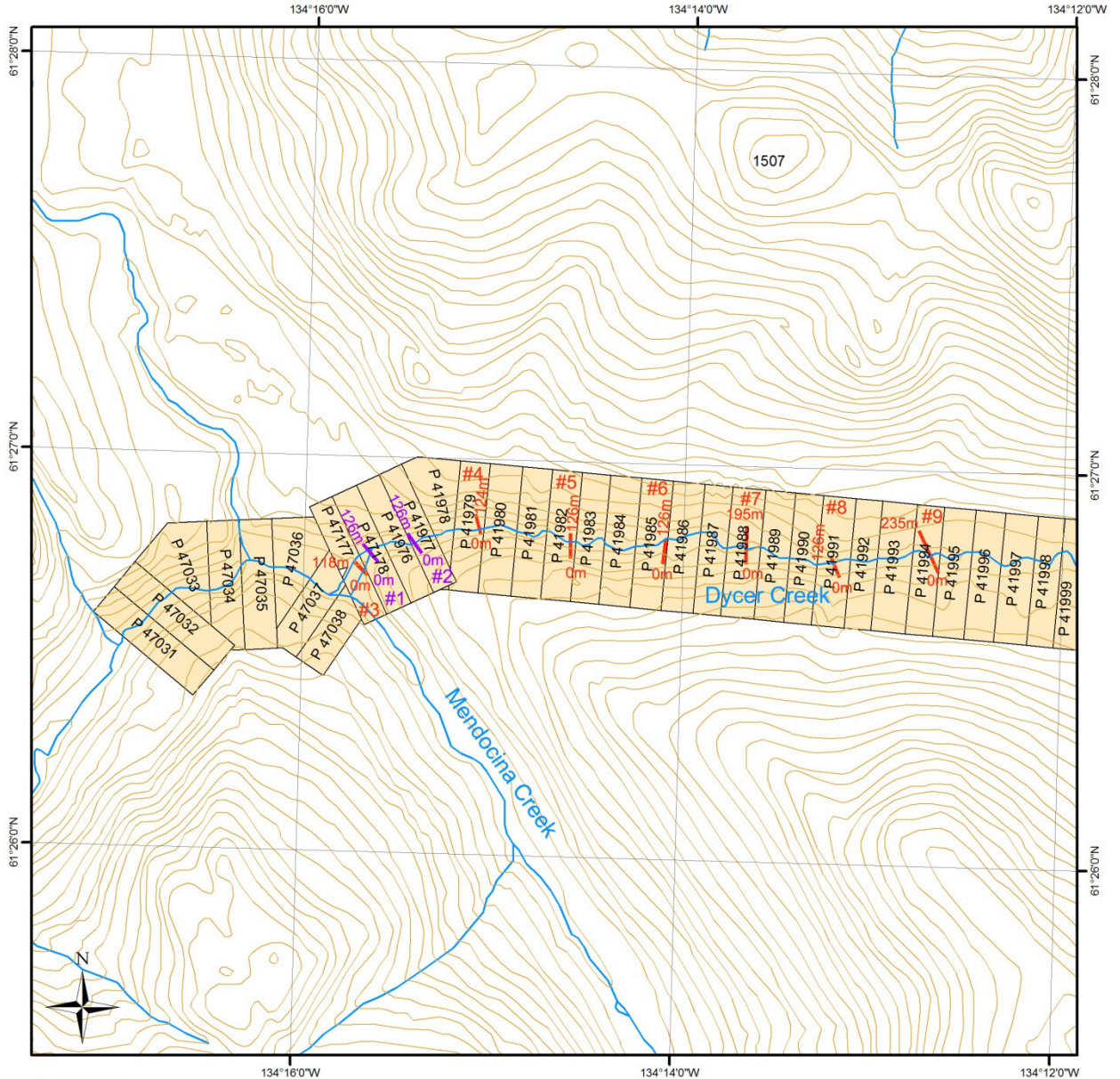
In the Resistivity profiles the interpreted bedrock interfaces are marked with a black line. The dotted black line seen in some profiles represents an alternative secondary interpretation of the bedrock interface estimated to be less likely; in those profiles the black line shows the primary interpretation of the bedrock.

## **9 Resistivity Survey**

**Preliminary Note!**

The subsurface information of this study is an interpretation and cannot be guaranteed.

# 9.1 Survey Map<sup>6</sup>



## Legend

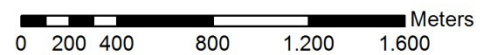
- measuring line 2013
- measuring line 2012
- contour line
- watercourse
- road
- - - trail
- - - cut line
- waterbody
- wetland
- placer claims
- Active
- Expired

## Survey Map

105E08 (Livingstone Creek)

Universal Transverse Mercator Zone7  
North America Datum 1983

Scale 1:25,000



<sup>6</sup> Government of Canada, Natural Resources Canada, Centre for Topographic Information  
ftp://ftp.geomaticsyukon.ca/Mining

## 9.2 Profiles: Interpretation, Recommendation

Line 03 2013

2D Resistivity, Schlumberger array

60 Electrodes: spacing 2m, Horizontal resolution 1m

Horizontal and vertical measure in [meter], Iteration error in [%]

Vertical exaggeration in model section display = 1.00

Data acquisition: Stefan Ostermaier, David Jennings, 10th Sept 2013

Processing: Stefan Ostermaier, 7th Nov 2013

Arctic Geophysics Inc., Yukon

Arctic Geophysics Inc.

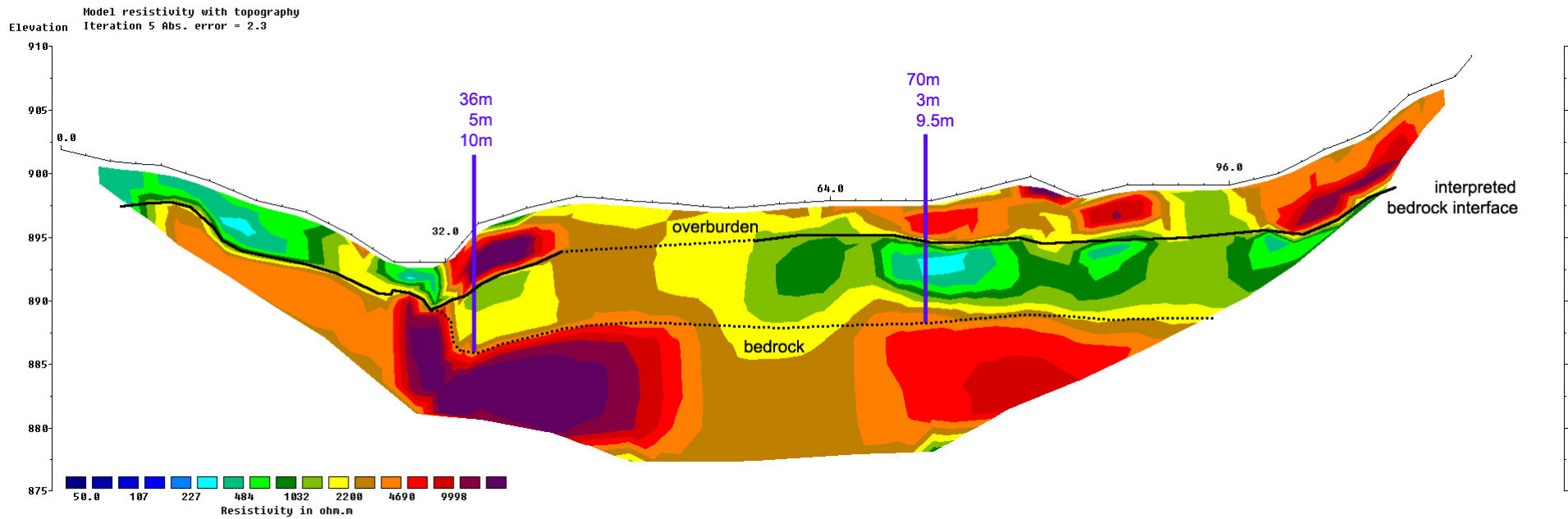


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### **Interpretation**

Resistivity profile\_03 suggests 3-5m of overburden on top of bedrock.

The uppermost resistivity layer, up to 5m thick, shows a heterogeneous data pattern (blue/green/yellow/brown/orange/red). This layer, interpreted as **overburden**, appears to be dominated by recent fluvial sedimentation. The zones of high resistivity material (red) are interpreted as coarse alluvial gravel with little fine sediments, such as sand, silt or clay. This interpretation is based on observations in the field. From 0-20m this layer shows low resistivity values (blue/ green), this material is interpreted as colluvial sediment.

The second resistivity layer (green-brown) is interpreted as water saturated **overburden**, or more likely as **bedrock**, with a depth of app. 10m. In case this layer consists of gravel, then it is most likely the same material as the topmost layer; the only difference would be the higher amount of groundwater saturation in this layer. If this resistivity layer indicates bedrock, it would most likely be the same low-resistivity bedrock as interpreted in the following profiles (blue).

Thus, at 36m in the profile the bedrock is likely 5m deep or less likely app. 10m deep. At 70m the bedrock is likely 3m deep or less likely around 9.5m deep.

### **Recommendation**

We recommend drilling the possible channel at 36m in the profile, right beside the creek, where bedrock is expected in 5m depth, or alternatively at 10m. A second drill hole at 70m for completeness sake

might be contemplated; here bedrock is expected at 3m or alternatively at 9.5m depth.

Line 04 2013

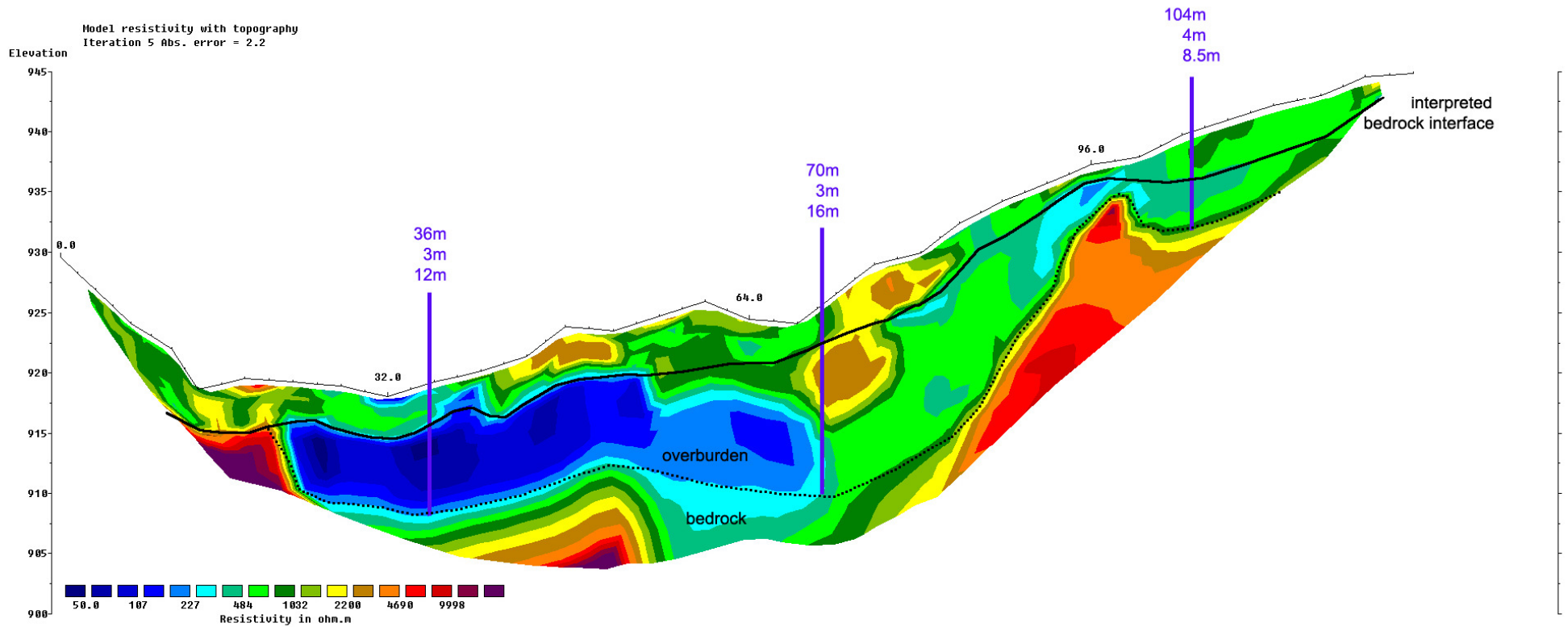
2D Resistivity, Schlumberger array  
63 Electrodes: spacing 2m, Horizontal resolution 1m  
Horizontal and vertical measure in [meter], Iteration error in [%]  
Vertical exaggeration in model section display = 1.00  
Data acquisition: Stefan Ostermaier, David Jennings, 11th Sept 2013  
Processing: Stefan Ostermaier, 7th Nov 2013  
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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching or shafting.

### **Interpretation**

Resistivity profile\_04 suggests an overburden thickness of 3-4m on top of bedrock.

The topmost resistivity layer, 3-4m thick, shows moderate resistivity values (green-brown) and is interpreted as **overburden**. The data variation in this layer is most likely a result of differing amounts of fine sediments such as sand, silt and clay, and varying water saturation.

The second resistivity layer has low values (blue-green). It is interpreted as **bedrock**. Alternatively and less likely this layer could be water saturated overburden with a depth to bedrock of up to 12-16m (see also profile\_03).

The interpreted bedrock interfaces show several depressions which could indicate paleochannels. The shallower bedrock interface, estimated to be more likely could show channels at 14-22m, 28-36m, 40-42m and at 98-106m - all 3-4m deep. The deeper bedrock interface being less likely, indicates possible channels at 24-46m, depth 12m; at 52-74m, depth up to 16m; and at 98-110m, depth 8.5m.

The interpreted bedrock seems to consist of two qualities: Bedrock Type I, fairly well conducting (blue-green resistivity values). And bedrock Type II with high resistivity values (red).

### **Recommendation**

We recommend drilling at 18m, 32m and at 64m to check if there are channels in about 3m depth (first interpretation). It is recommended to drill at 36m, 70m and 104m to find out if there are channels 12m, 16m, and 8.5m (second interpretation). Instead of doing a drill hole at 104m, it might be better to use an excavator and dig into the hill-side since it is already fairly steep at this location.

Line 05 2013

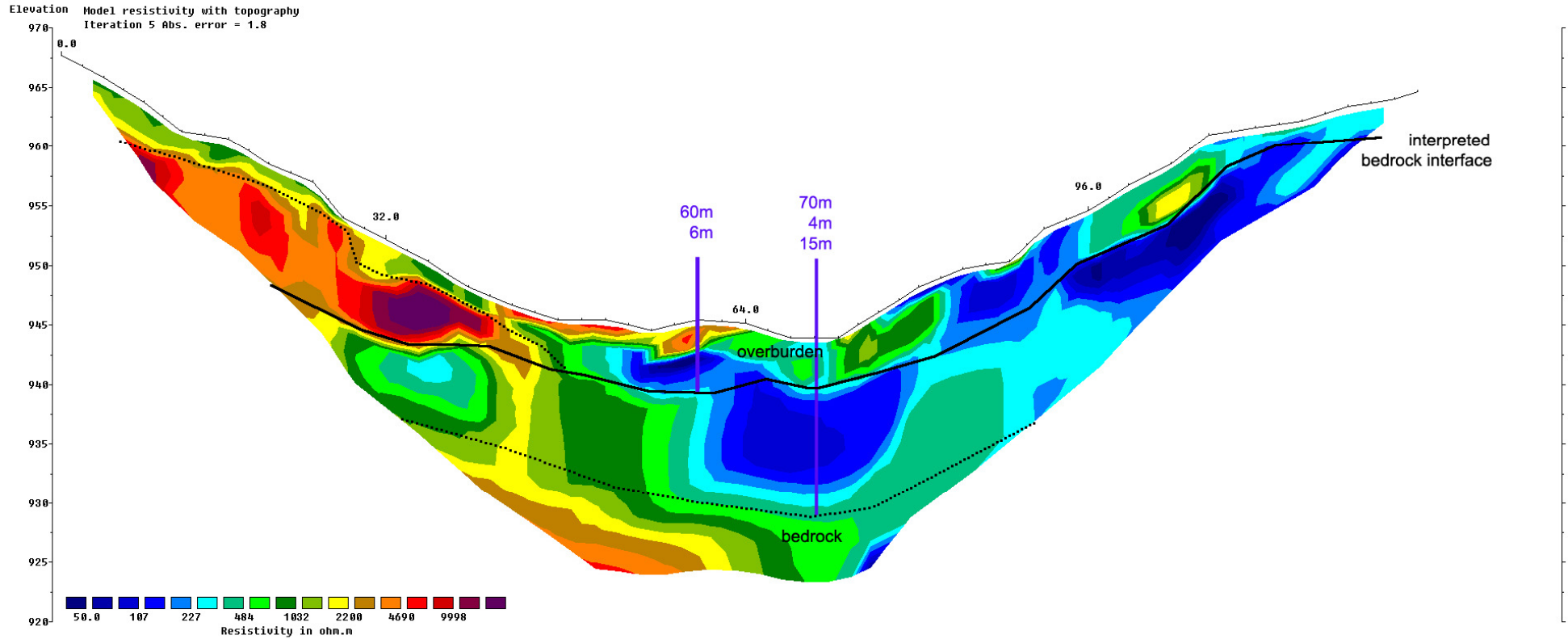
2D Resistivity, Schlumberger array  
64 Electrodes: spacing 2m, Horizontal resolution 1m  
Horizontal and vertical measure in [meter], Iteration error in [%]  
Vertical exaggeration in model section display = 1.00  
Data acquisition: Stefan Ostermaier, David Jennings, 12th Sept 2013  
Processing: Stefan Ostermaier, 7th Nov 2013  
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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching or shafting.

### **Interpretation**

Resistivity profile\_05 indicates an overburden thickness of 1-6m on top of bedrock

The uppermost resistivity layer, 1-6m thick, is interpreted as **overburden**, and shows a heterogeneous pattern of low to medium resistivity values (blue-green). The variation of the data is most likely due to various amounts of fine sediments (sand, silt and clay) and water saturation. On the left hand side of the profile, at 0-44m, this first overburden layer is interpreted as being fairly thin (1-2m) and most likely of colluvial origin. In this area there is a second layer with high resistivity values (orange-red) that is also interpreted as colluvial gravel or alternatively as bedrock.

The second resistivity layer with low to moderate resistivity values (blue-green) is interpreted as **bedrock** or alternatively as **overburden** consisting of water-saturated gravel up to 15m depth.

If the shallower bedrock interface is true (main interpretation) there might be two possible paleochannels in the bedrock, one at 54-64m with a depth of 6m; and another one at 66-74m with a depth of app. 4m. If the deeper bedrock interface is true (alternative interpretation) there could be a paleochannel at 58-74m with a depth of 15m.

The interpreted bedrock shows heterogeneous resistivity values that could again indicate two possible types of bedrock.

### **Recommendation**

We recommend drilling at 56m where bedrock is expected in a depth of 6m. And we suggest drilling at 70m to find out if the bedrock is 4m or 15m deep. In both cases a bedrock channel could be discovered.

Line 06 2013

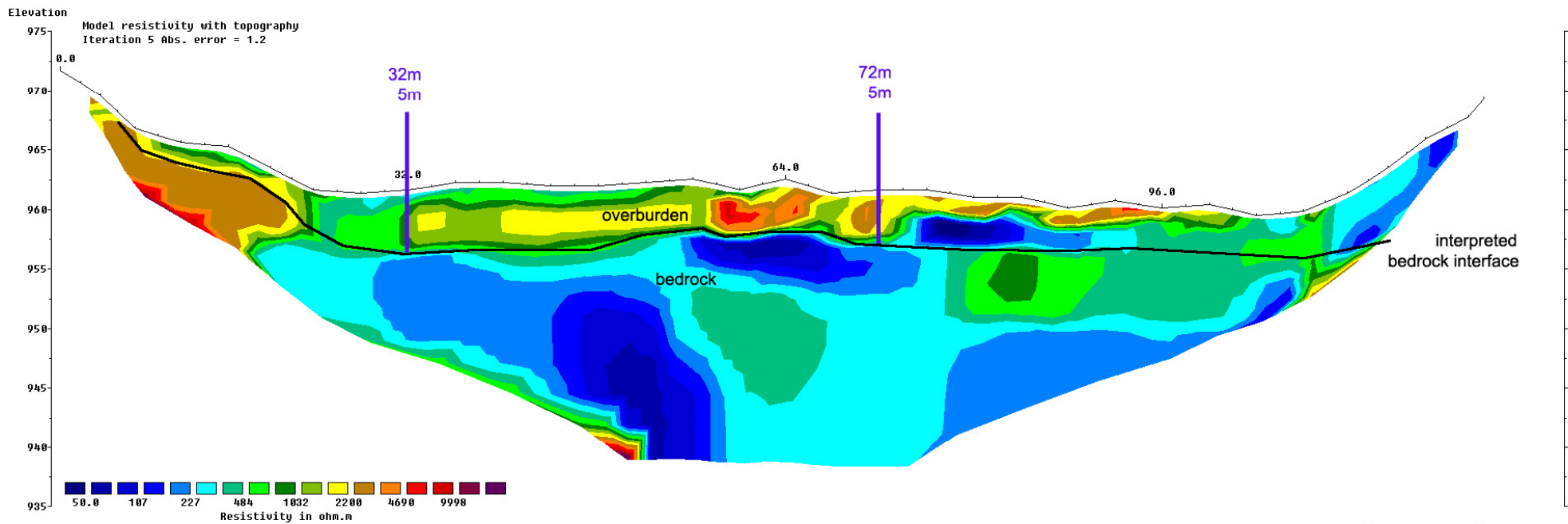
2D Resistivity, Schlumberger array  
64 Electrodes: spacing 2m, Horizontal resolution 1m  
Horizontal and vertical measure in [meter], Iteration error in [%]  
Vertical exaggeration in model section display = 1.00  
Data acquisition: Stefan Ostermaier, David Jennings, 13th Sept 2013  
Processing: Stefan Ostermaier, 7th Nov 2013  
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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

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## **Interpretation**

Resistivity profile\_06 suggests 2-5m of overburden on top of bedrock.

The uppermost resistivity layer, 2-5m thick, shows a heterogeneous data pattern, that is interpreted as **overburden** most likely having an alluvial origin. The resistivity variations are probably caused by various amounts of fine sediments, such as sand, silt and clay as well as the variation in water saturation. There is no clear indication for an alternative interpretation in the profile, however, if viewed in context with the previous profiles, it could be possible that no bedrock has been measured in this profile; if this would be the case, all of the low resistivity material (blue) in the lower part of the profile is not the well conducting bedrock Type I but water saturated gravel; this is deemed very unlikely but cannot be ruled out.

The interpreted **bedrock** interface suggests two possible paleochannels, one from 24m to 50m with a depth of 5m; and a second one at 68 to 90m also with a depth of 5m.

The bedrock in this profile seems to be mostly homogeneous Type I with only a small wedge at the left edge, at 0-20m, of Type II bedrock.

## **Recommendation**

We recommend drilling at 32m where bedrock is expected in 5m depth and also at 72m with the same depth to bedrock of 5m.

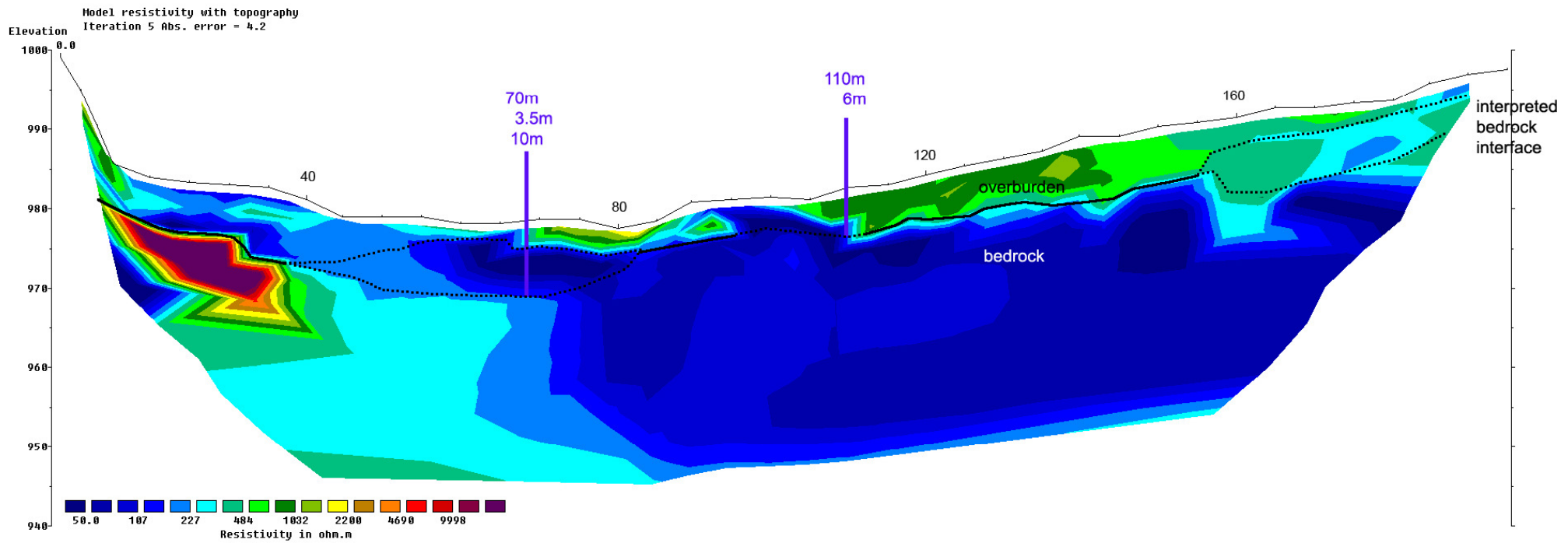
Line 07 2013  
 2D Resistivity, Schlumberger array  
 40 Electrodes: spacing 5m, Horizontal resolution 2.5m  
 Horizontal and vertical measure in [meter], Iteration error in [%]  
 Vertical exaggeration in model section display = 1.00  
 Data acquisition: Stefan Ostermaier, David Jennings, 14th Sept 2013  
 Processing: Stefan Ostermaier, 7th Nov 2013  
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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching or shafting.

### **Interpretation**

Resistivity profile\_07 suggests 3.5-10m of overburden on top of bedrock.

The resistivity profile shows several zones of differing resistivity values. The layer at 70-95m, 3.5m thick, showing moderate resistivity values (green), is interpreted as **overburden**. Also the layer from 100m to the end of the profile with a thickness of up to 7m seems to be overburden. These interpreted overburden layers are most likely gravel with only small amounts of fine sediments, such as sand, silt and clay.

The data zone 20m 70m with a depth of up to 10m showing low resistivity values (blue) is most likely clay-rich material, probably water saturated.

On the left edge of the profile to 40m the wedge of high resistivity material is interpreted as **bedrock** of Type II. The rest of the interpreted bedrock in this profile is homogeneous and shows low resistivity values, bedrock Type I. The interpreted bedrock interface is indistinct where the low resistivity overburden is located, however, one paleochannel from 40m to 80m, 10m deep, could be possible.

### **Recommendation**

We recommend drilling at 70m in the profile where bedrock is interpreted at 3.5m or 10m depth. A second drill hole at 110m would be reasonable for testing the slight depression in the interpreted bedrock interface indicating bedrock at 6m depth.

Line 08 2013

2D Resistivity, Schlumberger array

64 Electrodes: spacing 2m, Horizontal resolution 1m

Horizontal and vertical measure in [meter], Iteration error in [%]

Vertical exaggeration in model section display = 1.00

Data acquisition: Stefan Ostermaier, David Jennings, 15th Sept 2013

Processing: Stefan Ostermaier, 7th Nov 2013

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Arctic Geophysics Inc.

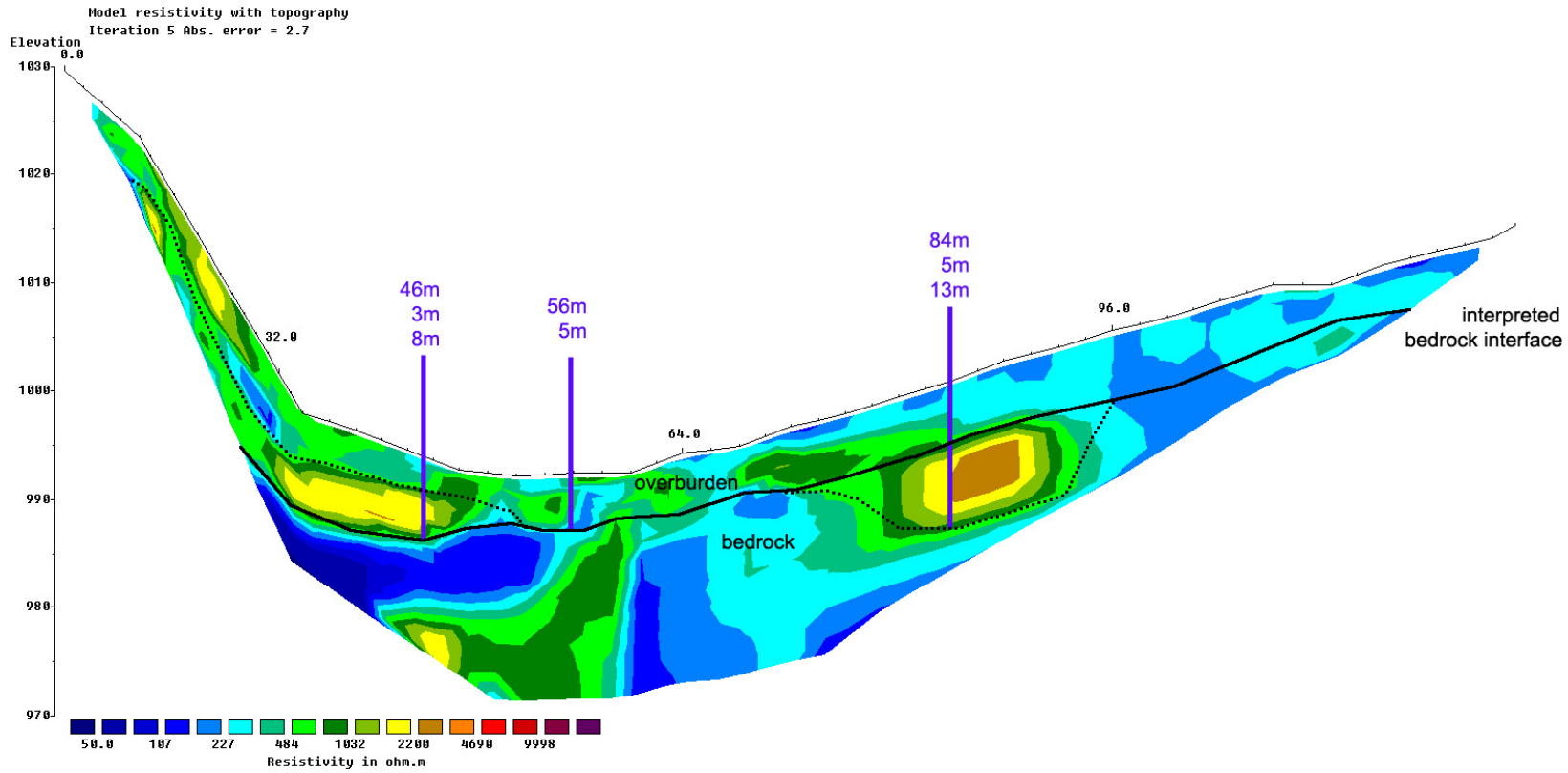


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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching or shafting.

### **Interpretation**

Resistivity profile\_08 indicates an overburden thickness of 2-8m over bedrock.

The uppermost resistivity layer, 2-8m thick, shows a fairly homogeneous data pattern with low to moderate resistivity values (blue-green) and is interpreted as **overburden**. The difference in resistivity values is most likely caused by different amounts of water and an increase in clay content towards the end of the profile (water springs and clay were observed by the survey crew on the north slope). The second resistivity layer with moderately high values (yellow-brown) is interpreted as overburden or alternatively bedrock possibly of Type II.

The interpreted **bedrock** interface shows a possible paleochannel at 32-48m with a depth of 8m. A slight depression in the bedrock interface at 52-58m with a depth of 5m could indicate channel. At 76-96m a channel, depth of up to 13m, could be located.

### **Recommendation**

We recommend drilling at 46m and 56m in the profile where bedrock is expected at 8m and 5m depth respectively. A third drill hole at 84m to check the possible 13m-deep channel (alternative interpretation) is also recommended; but it might not be possible to get a drill rig there with justifiable expense.

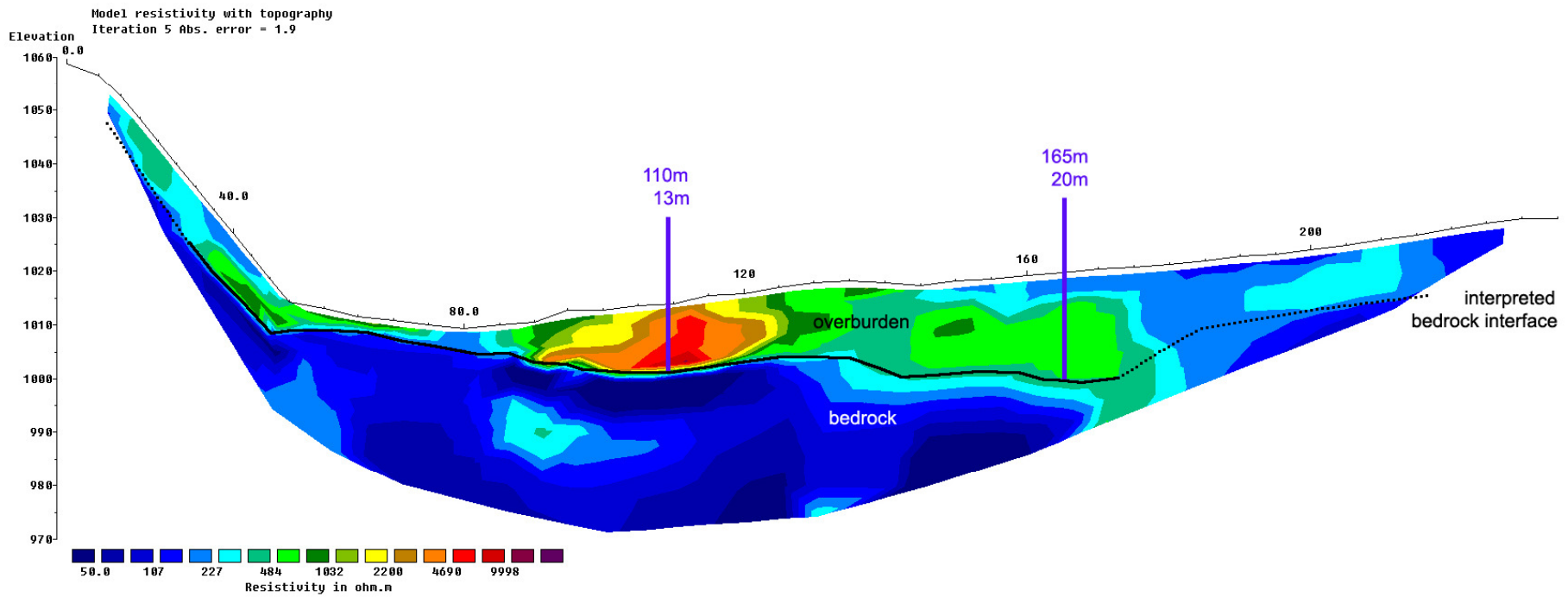
Line 09 2013  
 2D Resistivity, Schlumberger array  
 48 Electrodes: spacing 5m, Horizontal resolution 2.5m  
 Horizontal and vertical measure in [meter], Iteration error in [%]  
 Vertical exaggeration in model section display = 1.00  
 Data acquisition: Stefan Ostermaier, David Jennings, 16th Sept 2013  
 Processing: Stefan Ostermaier, 7th Nov 2013  
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The profile might show the ground-layers up to approximately 15% thicker than they are in reality.

This 2D Resistivity measuring result is an interpretation of geophysical data. We recommend the verification of the profile by drilling or trenching or shafting.

## Interpretation

Resistivity profile\_09 suggests 3-20m of overburden on top of bedrock.

The topmost resistivity layer, 3-20m thick, showing a heterogeneous data pattern of low resistivity values (blue) all the way to high resistivity values (red), is interpreted as **overburden** mainly consisting of alluvial deposits. The low resistivity material could contain high amounts of clay; the only exception is the area around the creek at 80m, here the low resistivity indicates the water-saturation. The material with moderate resistivity values (green) might indicate alluvial sediments that might have been infiltrated by clay<sup>7</sup>. The material with high resistivity values (red/orange) could be unaltered alluvial gravel that is sealed from groundwater by the clay.

The interpreted **bedrock** interface shows two possible paleochannels, one at 90-12m with an interpreted depth of 13m, and a second at 160-175m with a depth of up to 20m.

The bedrock appears to be very homogeneous and of Type I<sup>8</sup>.

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<sup>7</sup> On the north slope veritable clay streams, with up to two feet width and one foot depth have been observed on the surface. These streams also formed miniature clay flood plains with up to 25 square yards or more.

<sup>8</sup> The amount of clay that was observed on the surface, especially in the areas further upstream, would suggest, that bedrock Type I is either readily weathered into clay or already contains clay; this would explain the low resistivity values and also the shape of the valley (soft bedrock easily abraded thus narrow valley with steep walls of harder material, bedrock Type II, and wider valley upstream with only bedrock Type I).

## Recommendation

We recommend drilling at 110m in the profile where bedrock is expected in a depth of 13m and at 165m with bedrock at 20m.

## 10 Conclusion

The following table shows an **estimation** of the value of the interpreted placer targets (paleochannels)<sup>9</sup>. This estimation includes two parameters: First, the **Likeliness of the Interpretation**, this means an estimation of the likeliness if the profile interpretation formulated above is true or not. Second, the **Placer Potential**, this describes an estimation of the possible placer gold value of the interpreted placer targets prospected in this survey. Both parameters are developed by the Arctic Geophysics team based on the following aspects: data structure in the resistivity profile, geological background, and historical/current mining.

The estimation parameters are classified in: low, moderate, fair, good, high, very high.

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
03	9m (20m) / 36m 3m (9.5m) / 70m	good (fair) good (fair)	good (good) low (low)

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
04	3m (12m) / 36m 3m (16m) / 70m 4m (8.5m) / 104m	good (fair) good (fair) fair (good)	fair (high) low (good) low (good)

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
05	6m (15m) / 60m 4m (15m) / 70m	good (moderate) good (moderate)	fair (moderate) fair (good)

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
06	5m / 32m 5m / 72m	good good	fair moderate

<sup>9</sup> Values for alternative interpretations, dotted lines in the profiles, in brackets.

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
07	3.5m (10m) / 70m 6m / 110m	moderate (moderate) moderate	low (good) moderate-low

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
08	3m (8m) / 46m 5m / 56m 5m (13m) / 84m	fair (moderate) fair fair (moderate)	good (low) fair low (good)

Resistivity Line	Channel Depth / Location	Likeliness of Interpretation	Placer Potential
09	13m /110m 20m / 165m	high good	good good

# 11 References

## 11.1 Literature

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## 11.2 Maps

Government of Canada, Natural Resources Canada, Centre for Topographic Information

<ftp://ftp.geomaticsyukon.ca/Mining>

## 12 Qualification

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- Study of geology, University of Freiburg, Germany
- Visit of geophysical field courses, University of Karlsruhe, Germany
- Working for Arctic Geophysics Inc. since June 2007 (foundation)  
Geophysical field surveys using 2D Resistivity, Induced Polarization, Magnetics: Data acquisition, processing, interpretation, documentation
- Geophysical surveying for Mining Exploration in the Yukon since 2005, and geological prospecting for precious metals and minerals in the Yukon, NWTs, and Alaska since 1989
- Publications:
  - a. Numerous Assessment Reports about geophysical surveys done for Yukon mining companies, filed at Yukon Mining Recorder
  - b. Geophysical survey (45 field days) for Yukon Government: Yukon Geological Survey,
  - c. <http://virtua.gov.yk.ca:8080/lib/item?id=chamo:164867&theme=emr> "2D resistivity / IP data release for placer mining and shallow quartz mining - Yukon 2010 : Los Angeles Creek, Wolf Creek, Ladue River, and Rice Creek ; Philipp Moll and Stefan Ostermaier"

## 13 Confirmation

I have prepared this report entitled "Geophysical Survey with 2D Resistivity for Placer Investigation, Dawson Range 2013" for assessment credit, and have collected and reviewed the data. The survey was carried out by Arctic Geophysics Inc.

Schutterwald, Germany, 16<sup>th</sup> Dec 2013

"Signed" Philipp Moll



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Philipp Moll

# 14 Addendum

## 14.1 Cost

### Arctic Geophysics Inc.



Geophysical Surveys • Prospecting • Consulting

Stephen A. Swaim  
737 Downie Street  
Kamloops  
V2B5T1

Arctic Geophysics Inc.  
Box 747  
Dawson City, Yukon  
Y0B 1G0, Canada  
Phone: 867-993-3671 (Cell)  
info@arctic-geophysics.com  
[www.arctic-geophysics.com](http://www.arctic-geophysics.com)

Survey Location: Dycer Creek

**Invoice #** 20131018

Date: 18<sup>th</sup> Oct, 2013

Quantity	Description	Amount \$CAN
<b>Mob/Demob</b>		
2 days	Vehicle 70.--/ day	140.--
1100 Km	\$ 0.55/km [50%]	605.--
2 days	Driving 300.--/day, operator (Dawson-Whitehorse-Dawson)	600.--
<b>Geophysical Survey</b>		
1 day	Moving equipment, building up camp; operator 400.-- /day, Field assistant 250.--/day	650.--
7 days	Geoelectrical 2D-Resistivity Imaging System + operator, 880.--/day	6 160.--
7 days	Field Assistant, 250.--/ day	1 750.--
2 1/2 days	Data processing, Documentation, operator + assistant 400.-- /day	1 000.--
		<b>NET Amount</b> \$ 10 905.--
<b>GST Number</b> 846363216RT0001		<b>G.S.T. (5%)</b> \$ 545.25
<b>Total</b>		<b>\$ 11 450.25</b>

Access with helicopter: Fireweed Helicopters

## 14.2 GPS-Data

### Line03

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 42.0 W134 15 39.9	3	*
3	4	N61 26 42.1 W134 15 40.3	3	
5	8	N61 26 42.2 W134 15 40.7	3	
7	12	N61 26 42.3 W134 15 40.8	3	
9	16	N61 26 42.4 W134 15 41.0	3	
11	20	N61 26 42.4 W134 15 41.2	3	
13	24	N61 26 42.4 W134 15 41.5	3	
15	28	N61 26 42.6 W134 15 41.5	3	
17	32	N61 26 42.6 W134 15 41.7	3	
19	36	N61 26 42.5 W134 15 41.7	3	
21	40	N61 26 42.7 W134 15 42.0	3	
23	44	N61 26 42.9 W134 15 42.3	3	
25	48	N61 26 42.9 W134 15 42.5	3	
27	52	N61 26 43.0 W134 15 42.6	3	
29	56	N61 26 43.1 W134 15 42.7	3	
31	60	N61 26 43.2 W134 15 42.9	3	
33	64	N61 26 43.3 W134 15 43.0	3	
35	68	N61 26 43.3 W134 15 43.2	3	
37	72	N61 26 43.5 W134 15 43.4	3	
41	80	N61 26 43.7 W134 15 43.7	3	
43	84	N61 26 43.8 W134 15 43.9	3	
45	88	N61 26 43.8 W134 15 43.9	3	
47	92	N61 26 44.0 W134 15 44.1	3	
49	96	N61 26 44.1 W134 15 44.3	3	
51	100	N61 26 44.2 W134 15 44.3	3	
53	104	N61 26 44.1 W134 15 44.4	3	
55	108	N61 26 44.0 W134 15 44.4	3	
57	112	N61 26 44.1 W134 15 44.4	3	
59	116	N61 26 44.1 W134 15 44.4	3	
60	118	N61 26 44.0 W134 15 44.5	3	*

## Line04

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 48.6 W134 15 04.4	3	*
3	4	N61 26 48.6 W134 15 04.4	3	
5	8	N61 26 48.7 W134 15 04.4	3	
7	12	N61 26 48.8 W134 15 04.4	3	
9	16	N61 26 48.9 W134 15 04.5	3	
11	20	N61 26 49.0 W134 15 04.5	3	
13	24	N61 26 49.1 W134 15 04.7	3	
15	28	N61 26 49.2 W134 15 04.7	3	
17	32	N61 26 49.3 W134 15 05.0	3	
19	36	N61 26 49.5 W134 15 05.0	3	
21	40	N61 26 49.7 W134 15 05.1	3	
23	44	N61 26 49.8 W134 15 05.2	3	
25	48	N61 26 49.8 W134 15 05.2	3	
27	52	N61 26 49.9 W134 15 05.3	3	
29	56	N61 26 50.0 W134 15 05.3	3	
31	60	N61 26 50.1 W134 15 05.4	3	
33	64	N61 26 50.2 W134 15 05.5	3	
35	68	N61 26 50.4 W134 15 05.5	3	
37	72	N61 26 50.4 W134 15 05.5	3	
39	76	N61 26 50.6 W134 15 05.6	3	
41	80	N61 26 50.6 W134 15 05.7	3	
43	84	N61 26 50.7 W134 15 05.8	3	
45	88	N61 26 50.9 W134 15 05.8	3	
47	92	N61 26 51.0 W134 15 05.8	3	
49	96	N61 26 51.1 W134 15 05.8	3	
51	100	N61 26 51.1 W134 15 05.9	3	
53	104	N61 26 51.2 W134 15 05.9	3	
55	108	N61 26 51.3 W134 15 06.0	3	
57	112	N61 26 51.4 W134 15 05.9	3	
59	116	N61 26 51.5 W134 15 06.2	3	
61	120	N61 26 51.7 W134 15 06.2	3	
63	124	N61 26 51.7 W134 15 06.3	3	*

## Line05

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 45.3 W134 14 36.0	3	*
3	4	N61 26 45.5 W134 14 35.9	3	
5	8	N61 26 45.6 W134 14 36.0	3	
7	12	N61 26 45.7 W134 14 35.9	3	
9	16	N61 26 45.9 W134 14 36.0	3	
11	20	N61 26 46.0 W134 14 36.0	3	
13	24	N61 26 46.2 W134 14 36.0	3	
15	28	N61 26 46.3 W134 14 35.9	3	
17	32	N61 26 46.4 W134 14 35.9	3	
19	36	N61 26 46.4 W134 14 35.9	3	
21	40	N61 26 46.6 W134 14 35.9	3	
23	44	N61 26 46.7 W134 14 36.0	3	
25	48	N61 26 46.8 W134 14 35.9	3	
27	52	N61 26 47.0 W134 14 35.9	3	
29	56	N61 26 47.1 W134 14 35.9	3	
31	60	N61 26 47.2 W134 14 35.9	3	
33	64	N61 26 47.3 W134 14 36.0	3	
35	68	N61 26 47.5 W134 14 35.9	3	
37	72	N61 26 47.5 W134 14 35.9	3	
39	76	N61 26 47.7 W134 14 35.9	3	
41	80	N61 26 47.8 W134 14 35.9	3	
43	84	N61 26 47.9 W134 14 35.9	3	
45	88	N61 26 48.0 W134 14 35.9	3	
47	92	N61 26 48.1 W134 14 36.0	3	
49	96	N61 26 48.2 W134 14 36.0	3	
51	100	N61 26 48.4 W134 14 36.0	3	
53	104	N61 26 48.5 W134 14 36.0	3	
55	108	N61 26 48.6 W134 14 35.9	3	
57	112	N61 26 48.7 W134 14 36.0	3	
59	116	N61 26 48.9 W134 14 36.1	3	
61	120	N61 26 49.0 W134 14 36.0	3	
63	124	N61 26 49.1 W134 14 36.1	3	
64	126	N61 26 49.1 W134 14 36.0	3	*

## Line06

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 44.9 W134 14 06.7	3	*
3	4	N61 26 45.0 W134 14 06.6	3	
5	8	N61 26 45.1 W134 14 06.6	3	
7	12	N61 26 45.2 W134 14 06.6	3	
9	16	N61 26 45.3 W134 14 06.5	3	
11	20	N61 26 45.4 W134 14 06.6	3	
13	24	N61 26 45.6 W134 14 06.5	3	
15	28	N61 26 45.7 W134 14 06.5	3	
17	32	N61 26 45.8 W134 14 06.6	3	
19	36	N61 26 46.0 W134 14 06.6	3	
21	40	N61 26 46.1 W134 14 06.5	3	
23	44	N61 26 46.2 W134 14 06.5	3	
25	48	N61 26 46.3 W134 14 06.5	3	
27	52	N61 26 46.4 W134 14 06.4	3	
29	56	N61 26 46.5 W134 14 06.4	3	
31	60	N61 26 46.7 W134 14 06.4	3	
33	64	N61 26 46.8 W134 14 06.4	3	
35	68	N61 26 47.0 W134 14 06.4	3	
37	72	N61 26 47.1 W134 14 06.4	3	
39	76	N61 26 47.2 W134 14 06.4	3	
41	80	N61 26 47.3 W134 14 06.4	3	
43	84	N61 26 47.5 W134 14 06.4	3	
45	88	N61 26 47.6 W134 14 06.3	3	
47	92	N61 26 47.6 W134 14 06.2	3	
49	96	N61 26 47.8 W134 14 06.2	3	
51	100	N61 26 47.9 W134 14 06.2	3	
53	104	N61 26 48.0 W134 14 06.2	3	
55	108	N61 26 48.2 W134 14 06.1	3	
57	112	N61 26 48.3 W134 14 06.0	3	
59	116	N61 26 48.4 W134 14 06.1	3	
61	120	N61 26 48.5 W134 14 05.9	3	
63	124	N61 26 48.6 W134 14 05.9	3	
64	126	N61 26 48.6 W134 14 05.8	3	*

## Line07

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 45.2 W134 13 40.3	3	*
2	5	N61 26 45.3 W134 13 40.3	3	
3	10	N61 26 45.5 W134 13 40.3	3	
4	15	N61 26 45.6 W134 13 40.2	3	
5	20	N61 26 45.7 W134 13 40.2	3	
6	25	N61 26 45.8 W134 13 40.2	3	
7	30	N61 26 46.0 W134 13 40.2	3	
8	35	N61 26 46.1 W134 13 40.2	3	
9	40	N61 26 46.2 W134 13 40.5	3	
10	45	N61 26 46.4 W134 13 40.4	3	
12	55	N61 26 46.6 W134 13 40.1	3	
13	60	N61 26 46.9 W134 13 40.0	3	
14	65	N61 26 47.0 W134 13 40.1	3	
15	70	N61 26 47.1 W134 13 40.3	3	
16	75	N61 26 47.2 W134 13 40.2	3	
17	80	N61 26 47.5 W134 13 40.2	3	
18	85	N61 26 47.5 W134 13 40.2	3	
19	90	N61 26 47.7 W134 13 40.1	3	
20	95	N61 26 47.9 W134 13 40.1	3	
21	100	N61 26 48.0 W134 13 40.2	3	
22	105	N61 26 48.3 W134 13 40.2	3	
23	110	N61 26 48.4 W134 13 40.2	3	
24	115	N61 26 48.5 W134 13 40.2	3	
25	120	N61 26 48.6 W134 13 40.2	3	
26	125	N61 26 48.8 W134 13 40.1	3	
27	130	N61 26 48.9 W134 13 40.1	3	
28	135	N61 26 49.1 W134 13 40.2	3	
29	140	N61 26 49.2 W134 13 40.2	3	
30	145	N61 26 49.3 W134 13 40.2	3	
31	150	N61 26 49.5 W134 13 40.3	3	
32	155	N61 26 49.7 W134 13 40.2	3	
33	160	N61 26 49.8 W134 13 40.2	3	
34	165	N61 26 50.0 W134 13 40.2	3	
35	170	N61 26 50.2 W134 13 40.3	3	
36	175	N61 26 50.3 W134 13 40.4	3	
37	180	N61 26 50.5 W134 13 40.3	3	
38	185	N61 26 50.6 W134 13 40.3	3	
39	190	N61 26 50.8 W134 13 40.3	3	
40	195	N61 26 51.0 W134 13 40.3	3	*

## Line08

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 43.6 W134 13 10.5	3	*
3	4	N61 26 43.8 W134 13 10.7	3	
5	8	N61 26 43.7 W134 13 10.5	3	
7	12	N61 26 43.8 W134 13 10.6	3	
9	16	N61 26 43.9 W134 13 10.8	3	
11	20	N61 26 44.0 W134 13 11.1	3	
13	24	N61 26 44.0 W134 13 11.2	3	
15	28	N61 26 44.2 W134 13 11.2	3	
17	32	N61 26 44.3 W134 13 11.3	3	
19	36	N61 26 44.4 W134 13 11.5	3	
21	40	N61 26 44.6 W134 13 11.5	3	
23	44	N61 26 44.6 W134 13 11.6	3	
25	48	N61 26 44.7 W134 13 11.7	3	
27	52	N61 26 44.8 W134 13 11.8	3	
29	56	N61 26 44.9 W134 13 11.8	3	
31	60	N61 26 45.0 W134 13 11.9	3	
33	64	N61 26 44.9 W134 13 11.9	3	
35	68	N61 26 45.0 W134 13 11.9	3	
37	72	N61 26 45.2 W134 13 12.0	3	
39	76	N61 26 45.3 W134 13 12.2	3	
41	80	N61 26 45.4 W134 13 12.3	3	
43	84	N61 26 45.5 W134 13 12.4	3	
45	88	N61 26 45.6 W134 13 12.5	3	
47	92	N61 26 45.9 W134 13 12.7	3	
49	96	N61 26 46.0 W134 13 12.8	3	
51	100	N61 26 46.0 W134 13 12.9	3	
53	104	N61 26 46.1 W134 13 13.0	3	
55	108	N61 26 46.3 W134 13 13.0	3	
57	112	N61 26 46.3 W134 13 13.2	3	
59	116	N61 26 46.5 W134 13 13.3	3	
61	120	N61 26 46.6 W134 13 13.4	3	
63	124	N61 26 46.7 W134 13 13.5	3	
64	126	N61 26 46.8 W134 13 13.6	3	*

## Line09

Electrode No.	Location in Profile [m]	GPS-Coordinates ddd° mm' ss.s'' WGS 1984	GPS-Accuracy [m]	Post [ * ]
1	0	N61 26 44.7 W134 12 39.4	3	*
2	5	N61 26 44.8 W134 12 39.6	3	
3	10	N61 26 44.9 W134 12 39.6	3	
4	15	N61 26 45.0 W134 12 39.7	3	
5	20	N61 26 45.2 W134 12 39.8	3	
6	25	N61 26 45.2 W134 12 39.9	3	
7	30	N61 26 45.3 W134 12 39.8	3	
8	35	N61 26 45.5 W134 12 40.0	3	
9	40	N61 26 45.6 W134 12 40.0	3	
10	45	N61 26 45.7 W134 12 40.3	3	
11	50	N61 26 45.9 W134 12 40.4	3	
12	55	N61 26 46.1 W134 12 40.5	3	
13	60	N61 26 46.2 W134 12 40.7	3	
14	65	N61 26 46.2 W134 12 40.9	3	
15	70	N61 26 46.4 W134 12 41.1	3	
16	75	N61 26 46.6 W134 12 41.2	3	
17	80	N61 26 46.7 W134 12 41.4	3	
18	85	N61 26 46.9 W134 12 41.6	3	
19	90	N61 26 47.0 W134 12 41.6	3	
20	95	N61 26 47.1 W134 12 41.8	3	
21	100	N61 26 47.3 W134 12 41.9	3	
22	105	N61 26 47.3 W134 12 42.0	3	
23	110	N61 26 47.5 W134 12 42.2	3	
24	115	N61 26 47.7 W134 12 42.3	3	
25	120	N61 26 47.8 W134 12 42.4	3	
26	125	N61 26 47.9 W134 12 42.5	3	
27	130	N61 26 48.0 W134 12 42.6	3	
28	135	N61 26 48.1 W134 12 42.7	3	
29	140	N61 26 48.3 W134 12 42.8	3	
30	145	N61 26 48.4 W134 12 42.9	3	
31	150	N61 26 48.6 W134 12 43.0	3	
32	155	N61 26 48.7 W134 12 43.2	3	
33	160	N61 26 48.8 W134 12 43.3	3	
34	165	N61 26 48.9 W134 12 43.5	3	
35	170	N61 26 49.0 W134 12 43.6	3	
36	175	N61 26 49.2 W134 12 43.8	3	
37	180	N61 26 49.3 W134 12 43.9	3	
38	185	N61 26 49.5 W134 12 44.1	3	
39	190	N61 26 49.7 W134 12 44.4	3	
40	195	N61 26 49.9 W134 12 44.6	3	
41	200	N61 26 50.0 W134 12 44.8	3	
42	205	N61 26 50.2 W134 12 44.8	3	
43	210	N61 26 50.3 W134 12 45.0	3	
44	215	N61 26 50.4 W134 12 45.1	3	
45	220	N61 26 50.5 W134 12 45.3	3	

<b>Electrode No.</b>	<b>Location in Profile [m]</b>	<b>GPS-Coordinates ddd° mm' ss.s'' WGS 1984</b>	<b>GPS-Accuracy [m]</b>	<b>Post [ * ]</b>
46	225	N61 26 50.7 W134 12 45.4	3	
47	230	N61 26 50.9 W134 12 45.6	3	
48	235	N61 26 51.0 W134 12 45.8	3	*