

GEOPHYSICAL SURVEY

LOCATIONS

Hayes Creek, Yukon

Prospecting Leases IW00256, IW00255, IW00257

METHOD

2D Resistivity and Induced Polarization

FOR

Don Banks, Glenda Walker-Verm and Ted Tullis

AUTHORS

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Arctic Geophysics Inc.

WORK PERFORMED

June 10th – 18th 2009

DATE OF REPORT

29th Sept 2009

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1. Introduction

This geophysical survey was conducted at *Hayes Creek* for the benefit of Don Banks, Glenda Walker-Verm and Ted Tullis.

The survey consists of nine lines done with 2D Resistivity. Three of them include IP-data to support the interpretation.

The purpose of the survey was to determine depth and topography of the bedrock.

2. List of Prospecting Leases

Grant Number	Owner
IW00256	Ted Tullis
IW00255	Glenda Walker-Verm
IW00257	Don Banks

3. Location

The 1 mile lease IW00256 is located in an unnamed tributary to Hayes Creek downstream of Klines Gulch, map number 115J/09.

The 3 mile lease IW00255 is located on Hayes Creek starting at Klines Gulch, map number 115I/12.

The 5 mile lease IW00257 is located on Hayes Creek starting downstream of Sonora Gulch, map number 115J/09.

4. Access

The ground has to be accessed by helicopter.

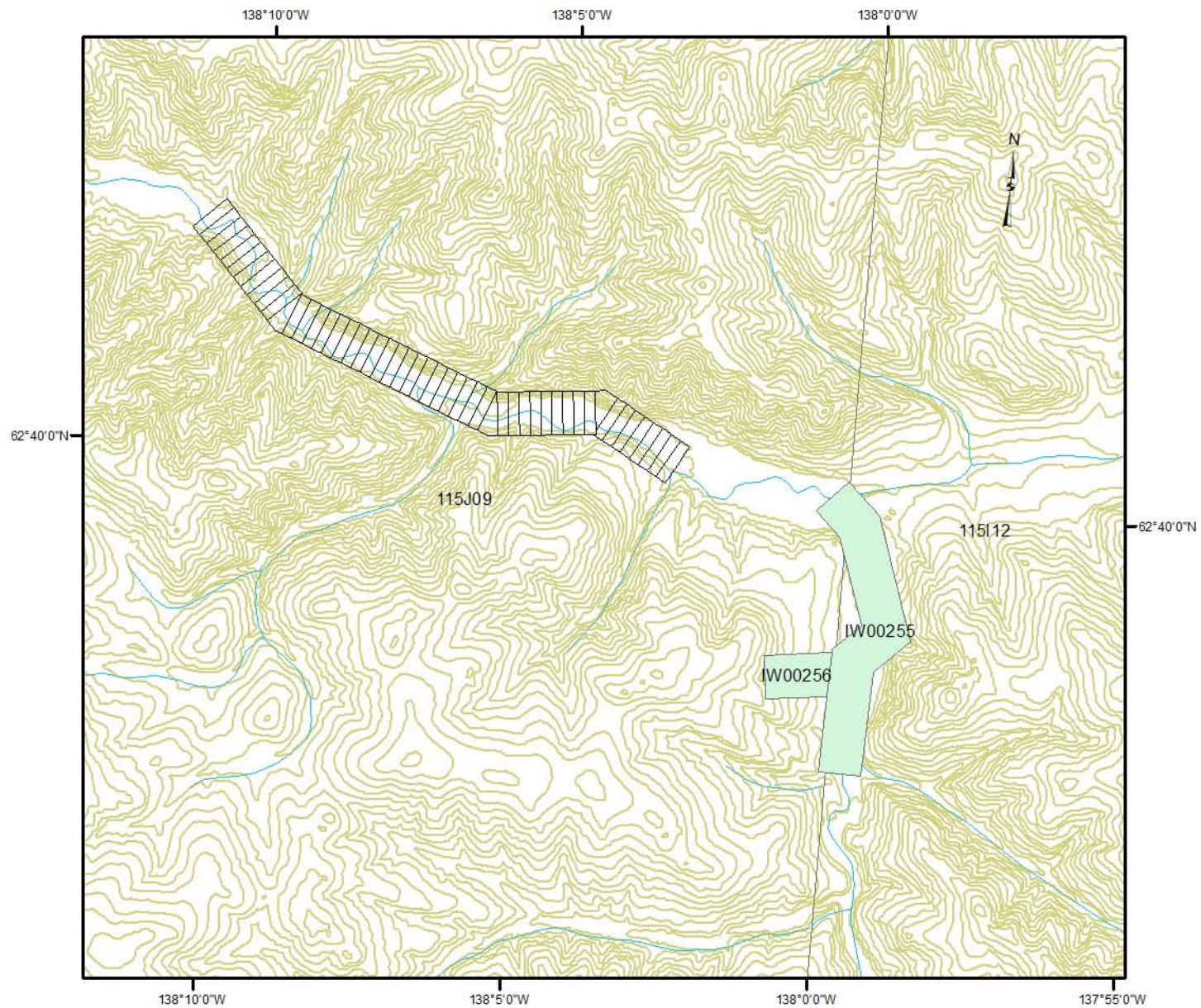
5. Work Method and Instrumentation

For this survey 2D RESISTIVITY and INDUCED POLARIZATION (IP) was used.

The Resistivity/IP imaging system includes:

- 4PPONT LIGHT RESISTIVITY METER¹
- 75 ELECTRODE CONTROLER MODULES²

¹ Constructed and produced by LGM (Germany)



**Claim Map - Prospecting Leases
IW00255, IW00256, IW00247**

Prospecting Leases

NTS 115J09 and 115I12

Nad 83, Yukon Albers Projection

75 STAINLESS STEEL ELECTRODES³
375m MULTICORE CABLE 75x5m⁴

The data acquisition is carried out by the automatic activation of 4-point-electrodes, 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. The system allows 2D measurements up to a depth of 65m.

In this geoelectrical survey the Schlumberger-array was used.

The measured resistivity data was then interpreted with the RES2DINV⁶ inversion program. Details about the survey and interpretation method can be found in published papers by Keller and Frischknecht, (1966), Griffiths *et al.*, (1990), Griffiths and Barker, (1993), and Loke and Barker (1996).

To interpret the resistivity data, a 2D model for the subsurface consisting of a large number of rectangular blocks is generated by the software. The software then calculates the resistivity of each block so, that the calculated apparent resistivity and the measured apparent resistivity from the survey match.

The RES2DINV program automatically subdivides the subsurface into a certain number of blocks, then it uses a least-squares inversion algorithm to determine the appropriate resistivity values for each block.

6. Work performed

Preliminary notes:

The resistivity profile is the foundation for the determination of the stratification (humus-gravel-bedrock). In it the beginning of bedrock was marked with a black line. Optional there is an IP-profile (Induced Polarization), below the resistivity profile, to support the interpretation.

The profiles show ground-layers approximately 15% thicker than they are in reality. The thickening of the model layers is caused by the inversion software. The correction factor for the determination of the true layer thickness of 0.85 was determined by us on the basis of numerous resistivity profiles verified by drilling, trenching and mining. – The in the interpretations mentioned layer thicknesses and depths have already been recalculated to the expected real values.

² Dito

³ Constructed and produced by GPM (Germany)

⁴ Dito

6.1 Prospecting Lease IW00256

Map 115J/09



Legend

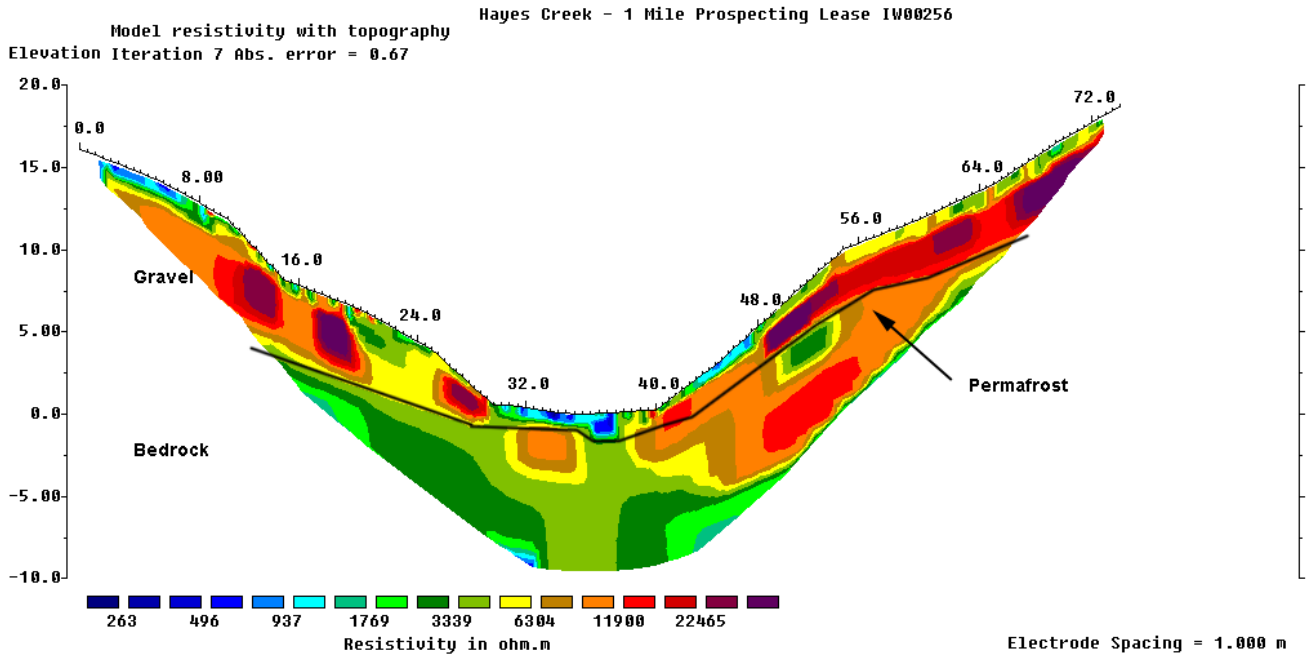
- Measured Profile
- Contours
- Watercourses
- Placer Baselines
- Active Placer Claim



1:6,385

Profile01

Electrode #1: N62° 38' 43.5" W137° 59' 56.4"
Electrode #75: N62° 38' 41.8" W137° 59' 57.6"
Electrode spacing: 1m



Interpretation:

The profile is located in a narrow gulch. On the left side of the profile is poplar forest from 0 to 8m the rest of the left slope is covered with talus with a trail at 16m. The right-hand slope is covered with spruce forest and a thick moss covering.

The profile shows discontinuously frozen gravel, changing in thickness from 1m to 7m, on top of **bedrock**.

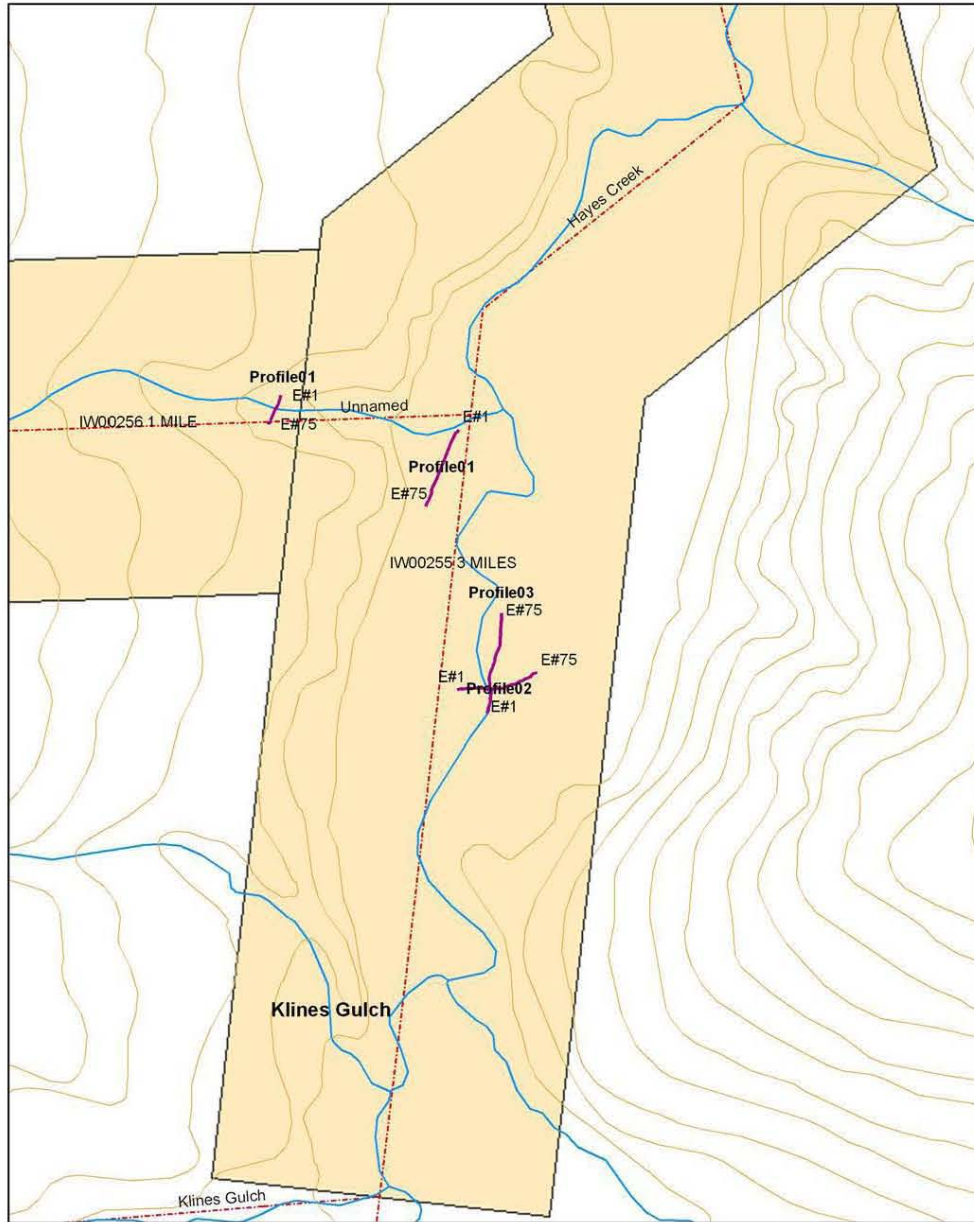
On the left side of the profile underneath the poplar forest is a thin layer of thawed gravel, about 6m thick. Beneath this thawed layer is talus which has high resistivity values due to the large amount of air-filled volume between the ground particles/stones.

In the middle of the profile from 30 to 40m is water saturated gravel of 1m to 2m depth.

On the right side of the profile starting at 40m there is frozen gravel of about 2m increasing in depth to about 4m at the end of the profile. The permafrost extends into the **bedrock** which is represented by the orange area on the right hand side of the profile.

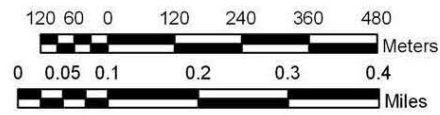
6.2 Prospecting Lease IW00255

Map 115J/09



Legend

- Measured Profile
- Contours
- Watercourses
- Placer Baselines
- Active Placer Claim



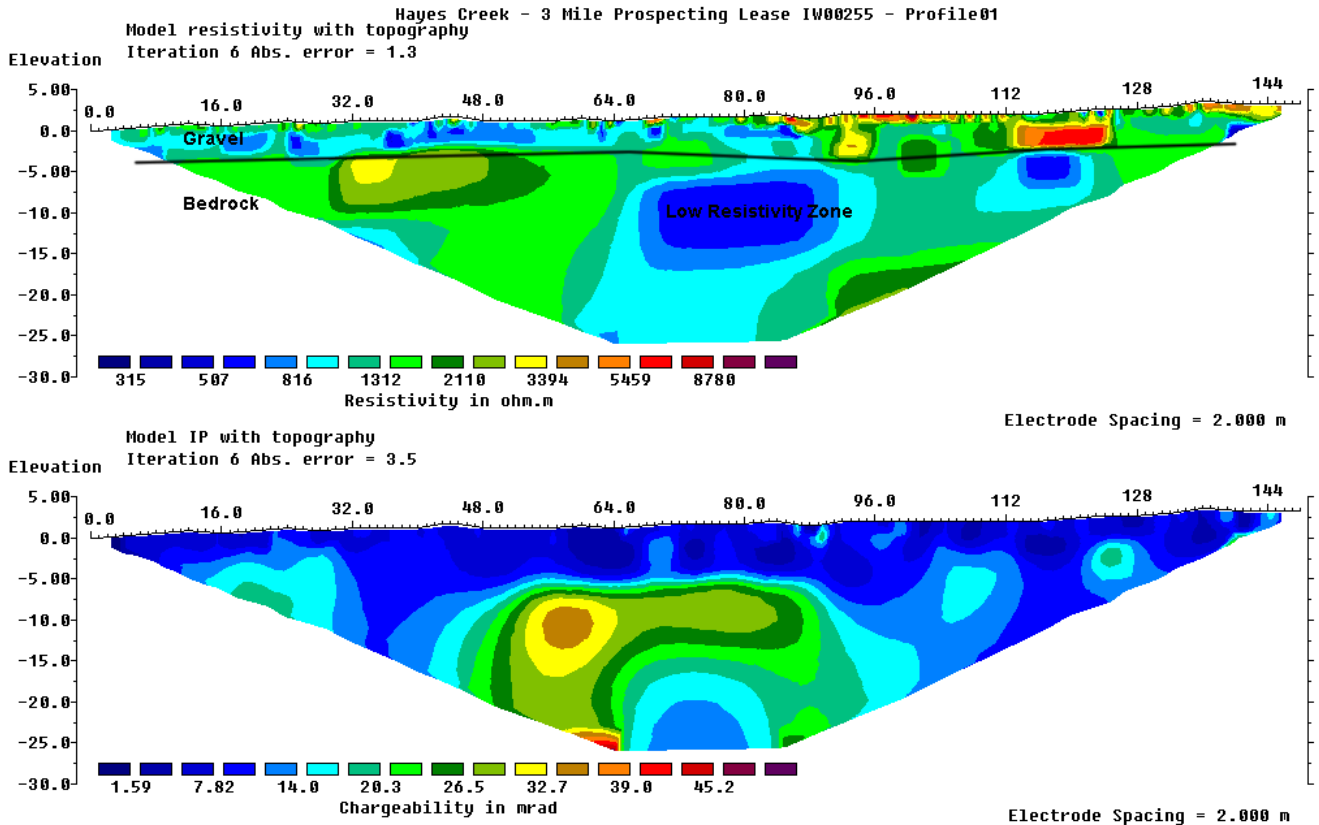
1:10,000

Profile01

Electrode #1: N62° 38' 42.2" W137° 59' 44.0"

Electrode #75: N62° 38' 37.7" W137° 59' 47.4"

Electrode spacing: 2m



Interpretation:

The profile is located slightly upstream of the unnamed tributary to Hayes Creek with the 1 Mile Lease IW00256. The profile was done on a gravel bar parallel to the stream, electrode #75 upstream.

The depth to **bedrock** is a nearly uniform 5m. On top of the bedrock there is gravel; near the surface there are some dry areas which show high resistivity values.

In the center of the profile there is a zone of low Resistivity, from 64 to 96m, in the bedrock. This corresponds well with the anomaly in the IP profile. Since anomalies in IP are chiefly caused by sulfides the anomaly has to be in solid bedrock; therefore bedrock, in the area of the anomaly, cannot be deeper than 6m.

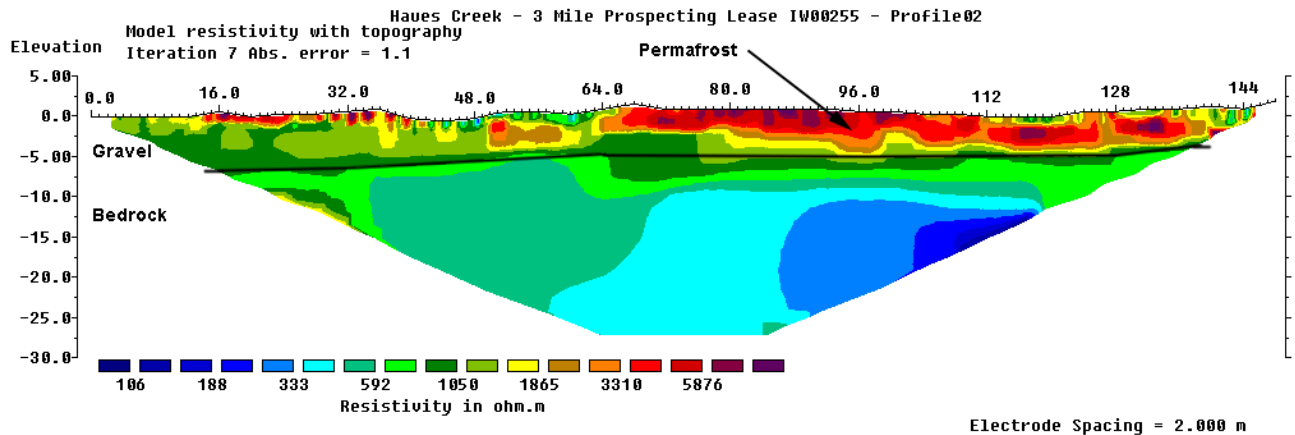
The anomaly, which displays milliradian values 10 times higher than the surrounding host rock, we have been discussing with Dr. Ballintine⁵. He agreed with our interpretation that the bedrock anomaly in Profile01 on the 3 Mile Lease likely could be a Tetradyomite dike. Veins of Tetradyomite have been found by the prospecting efforts of Firestone Ventures Ltd.⁶ on the left slope of Hayes Creek (looking downstream) near Little Klines Gulch. Tetradyomite is a Bismuth Tellurium Sulfide and sulfides produce very strong IP signals! These Tetradyomite veins are usually rich on precious metals and valuable minerals.

⁵ Minconsult Mining Exploration Services Ltd., 10107, Coldstream Creek Road, Coldstream, B.C., Canada, V1B 1C8, <http://www.minconsult.ca>

⁶ Firestone Ventures Ltd. #52 10203 – 178th Street, Edmonton, Alberta, T5S 1M3, www.firestonventures.com Sonora Gold-Copper Project 2006

Profile02

Electrode #1: N62° 38' 27.3" W137° 59' 41.4"
Electrode #75: N62° 38' 28.7" W137° 59' 31.6"
Electrode spacing: 2m



Interpretation:

The profile shows a cross valley section of the right-hand side of Hayes Creek. The edge of Hayes Creek is at 0m in the profile, with a gravel bar to 48m and forest from 64m to the end of the profile. At 55m is an old trail.

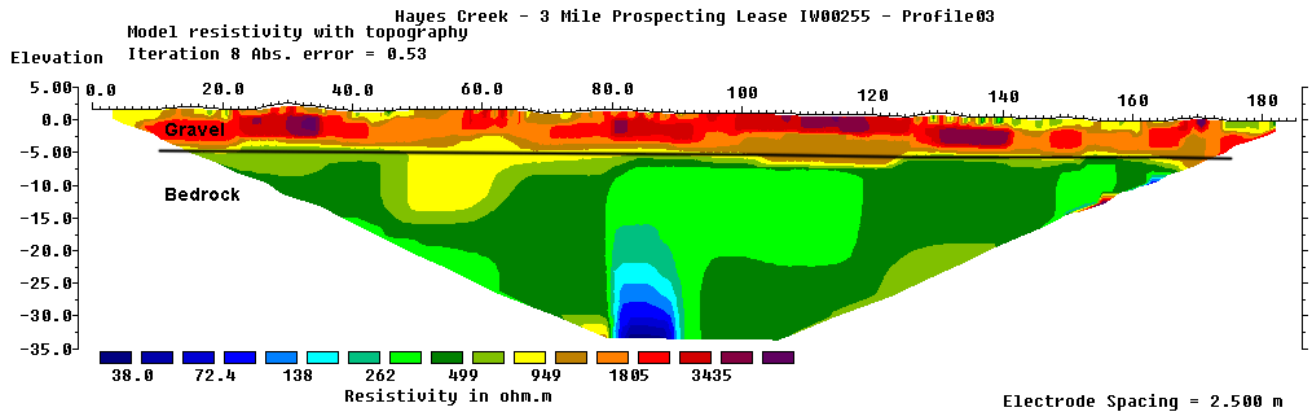
The stratification of gravel-bedrock with areas of permafrost is clearly defined. Bedrock is continuously at a depth between 3m and 5m.

The gravel on the left side of the profile (0m-65m) is thawed. After 65m underneath the forest on the right side of the profile the gravel is frozen.

The profile intersects with Profile 03 at 55m.

Profile03

Electrode #1: N62° 38' 26.1" W137° 59' 37.5"
Electrode #75: N62° 38' 31.9" W137° 59' 36.6"
Electrode spacing: 2.5m



Interpretation:

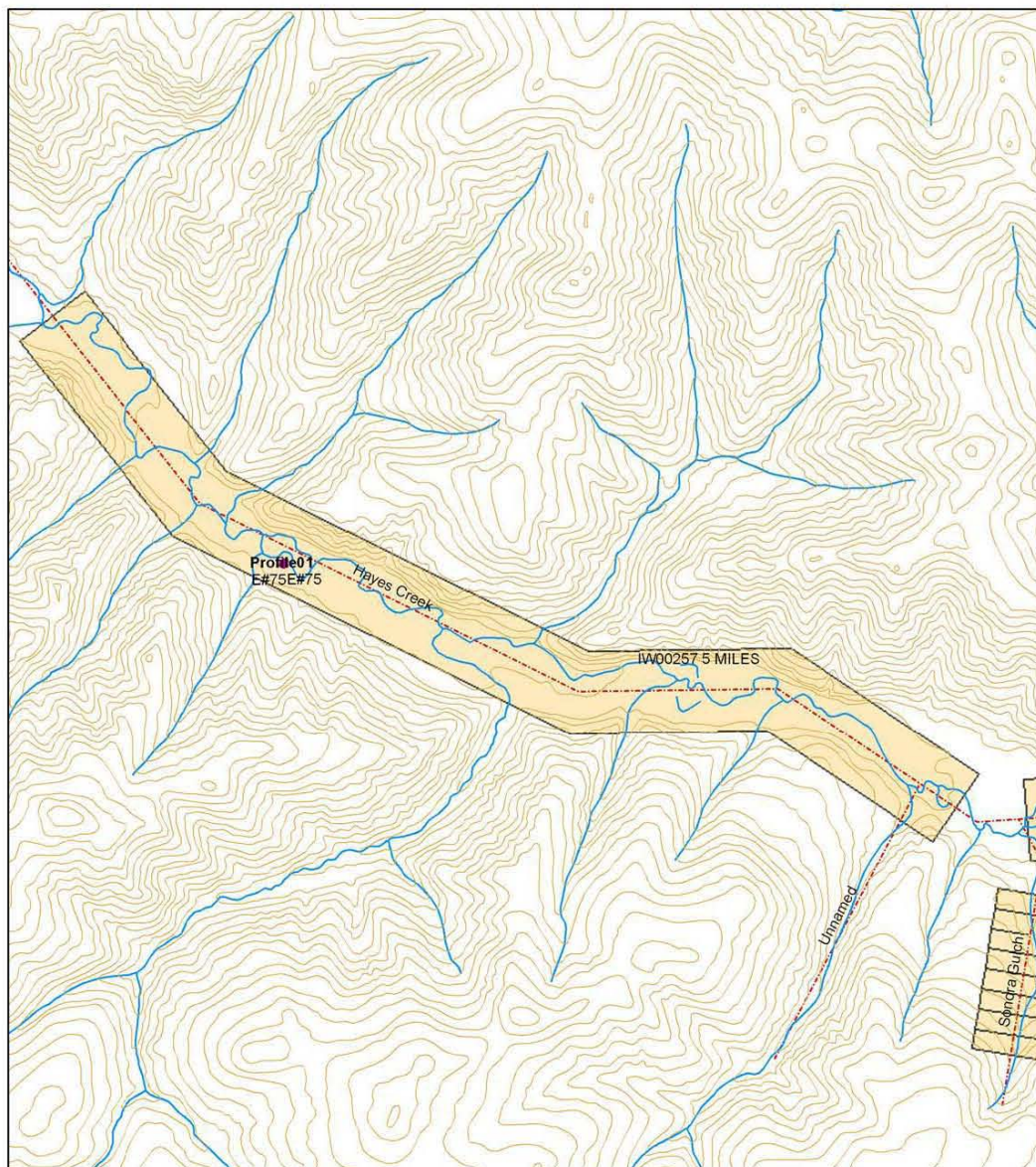
The profile was done parallel to the creek on the old trail, electrode #1 is upstream. There is a clear distinction between the frozen gravel and the **bedrock** underneath. **Bedrock** has a uniform depth of 5m.

Profile 02 intersects at 60m.

6.3 Prospecting Lease IW00257

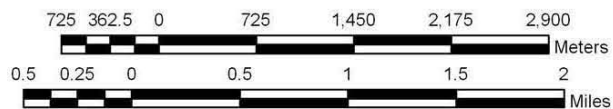
Profiles 1-4 have been done cross valley with 10m spacing between the profiles. Profile 5 intersects the other four profiles at 34m.

Map 115J/09

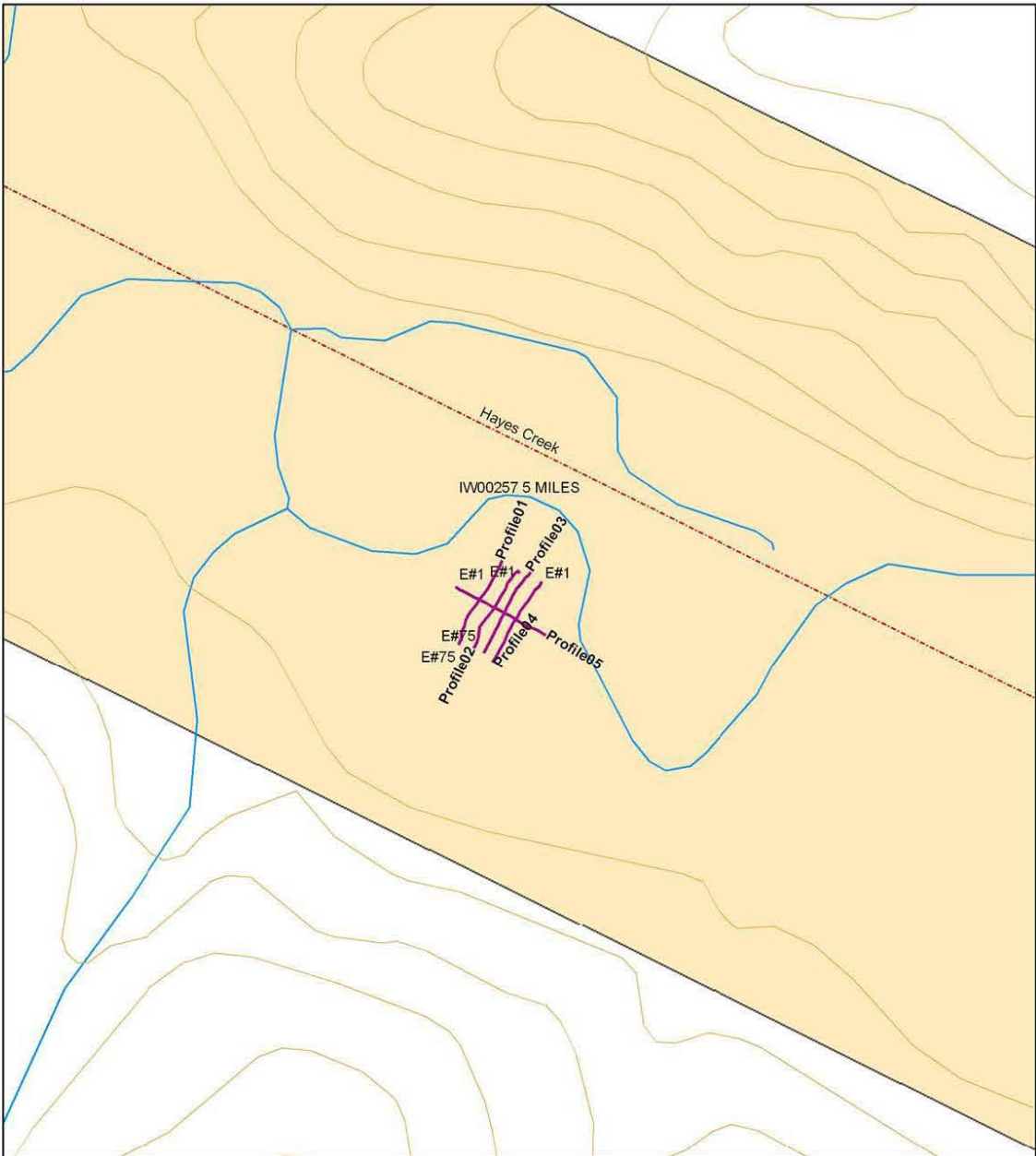


Legend






- Measured Profile
- Contours
- Watercourses
- Placer Baselines
- Active Placer Claim

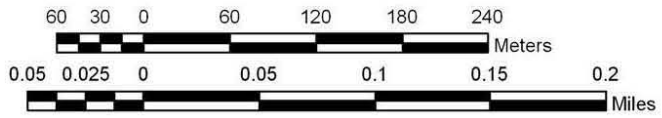


1:40,020



Legend

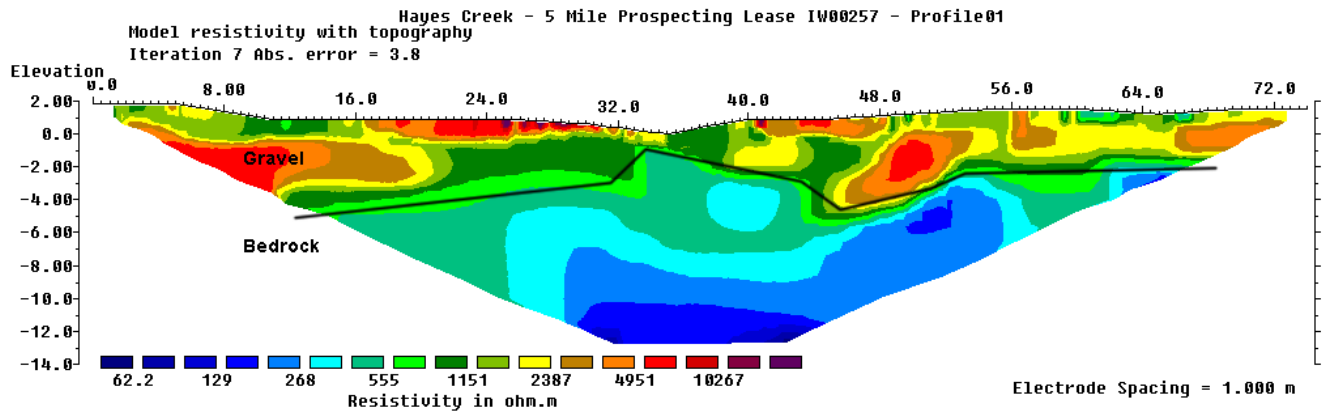
-  Measured Profile
-  Contours
-  Watercourses
-  Placer Baselines
-  Active Placer Claim



1:4,000

Profile01

Electrode #1: N62° 40' 51.7" W138° 08' 36.4"
Electrode #75: N62° 40' 49.6" W138° 08' 38.4"
Electrode spacing: 1m



Interpretation:

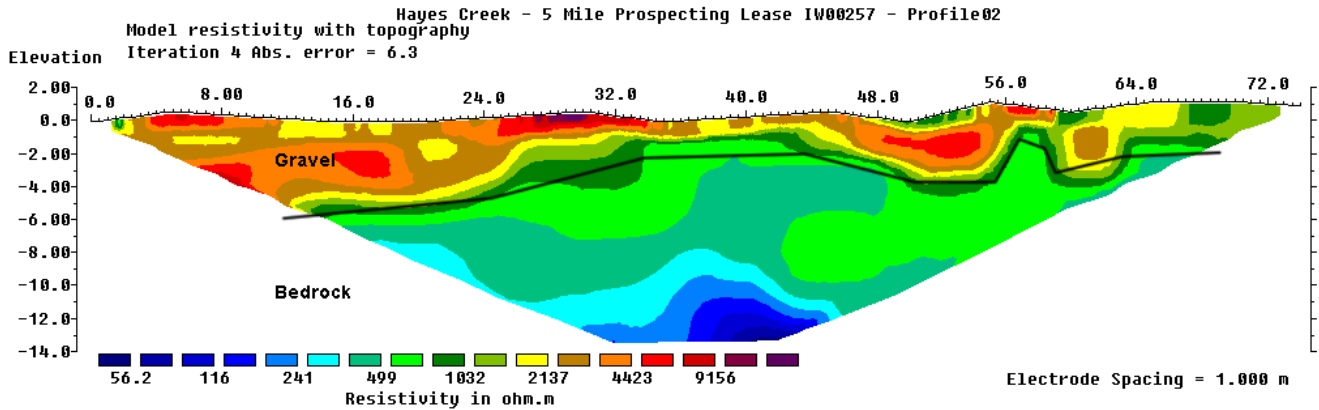
The orientation of the profile is cross valley. The surface of the profile from 0m to 54m has been previously stripped; the rest of the profile is covered by spruce forest.

The profile shows a disturbed top layer with a high variability in resistivity values and a very changeable **bedrock** topography underneath. The bedrock could be changing between 1 and 5m in depth.

In places where the bedrock trends to greater depth, there could be old channels: left of 32m; at 44-50m. There could possibly be a small channel at 56-61m.

Profile02

Electrode #1: N62° 40' 51.5" W138° 08' 35.4"
Electrode #75: N62° 40' 49.6" W138° 08' 37.5"
Electrode spacing: 1m



Interpretation:

This profile is cross valley parallel to Profile01 with a spacing of 10m.

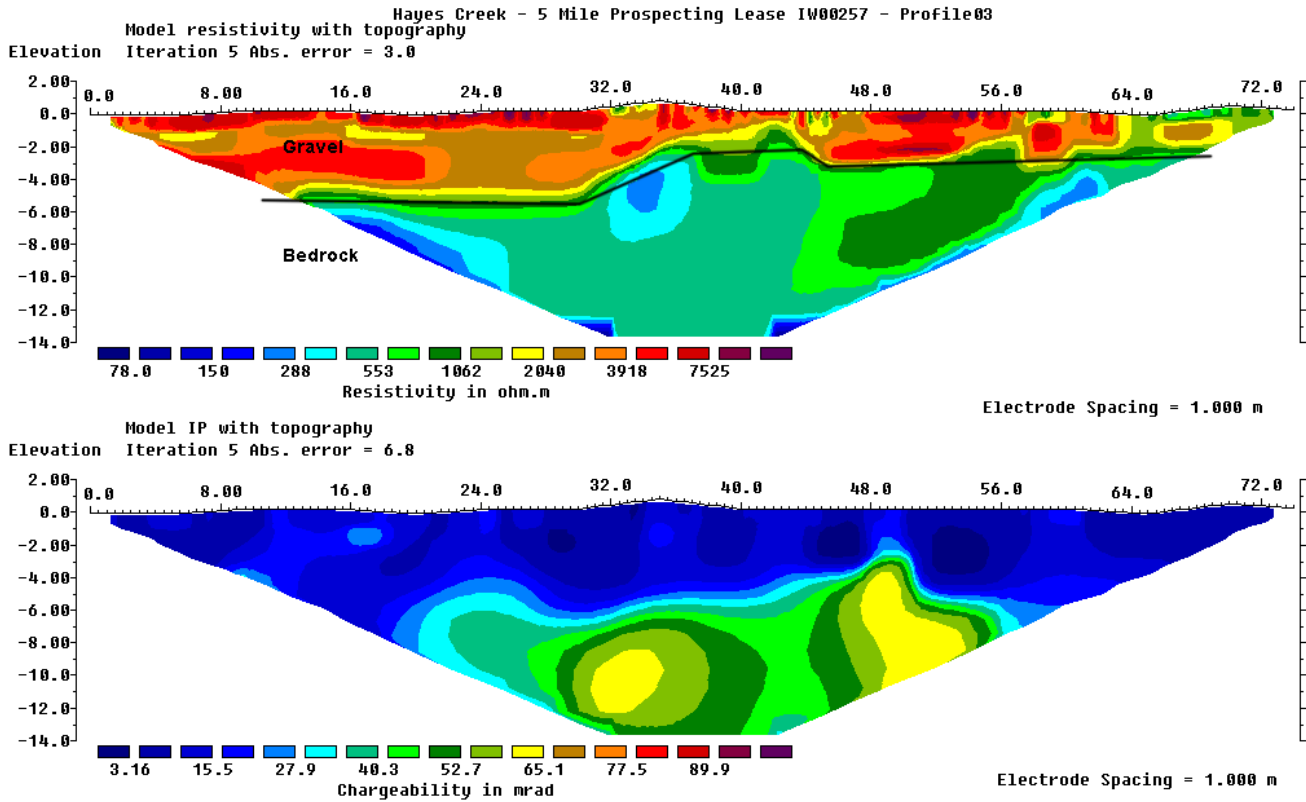
The profile exhibits high resistivity values representing dry and probably processed gravel on the left side of the profile and discontinuously frozen gravel on the right side of the profile. The **bedrock** depth is from 5m to 2m.

The gravel layer starts with app. 6m depth to **bedrock** on the left side of the profile and reaches a plateau with 2m to 3m depth to bedrock from 32m to 46m in the profile. From 48m to 56m there is a trough with 4m depth to bedrock with a possible reef at 56 m. For the rest of the profile depth to bedrock is again at 4m.

There could be some channels left of 25m, at 45-55m, and at 58-62m. The structure of these three hypothetical bedrock depressions, which could possibly represent former channels, is shown in profiles 01, 02 and 03. The topographic features seen along the three profiles must belong to the same phenomenon.

Profile03

Electrode #1: N62° 40' 51.5" W138° 08' 34.9"
 Electrode #75: N62° 40' 49.5" W138° 08' 37.0"
 Electrode spacing: 1m



Interpretation:

The profile is 10m upstream and parallel to Profile02.

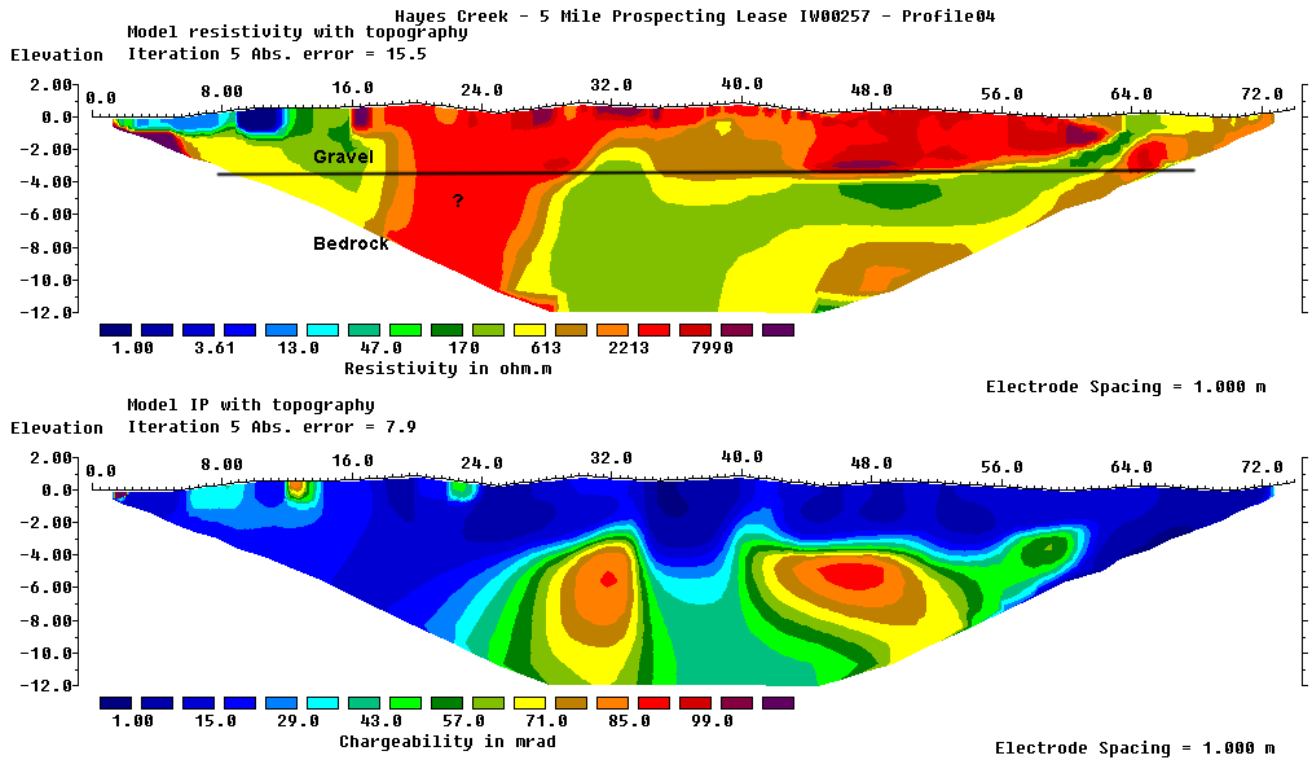
This profile shows the same stratification of gravel and **bedrock** as the other profiles of this series.

The depth to **bedrock** starts at app. 5m and remains at this depth until 30m in the profile. Then the bedrock rises to a depth of nearly 2m at 38m and falls again to a depth of 4m at 44m. The bedrock shows an increase in resistivity from 44m – 58m, this seems to be a change in the kind of bedrock.

There could be some channels left of 32m, at 46-54m, and at 58-61m.

Profile04

Electrode #1: N62° 40' 51.3" W138° 08' 34.3"
Electrode #75: N62° 40' 49.2" W138° 08' 36.5"
Electrode spacing: 1m



Interpretation:

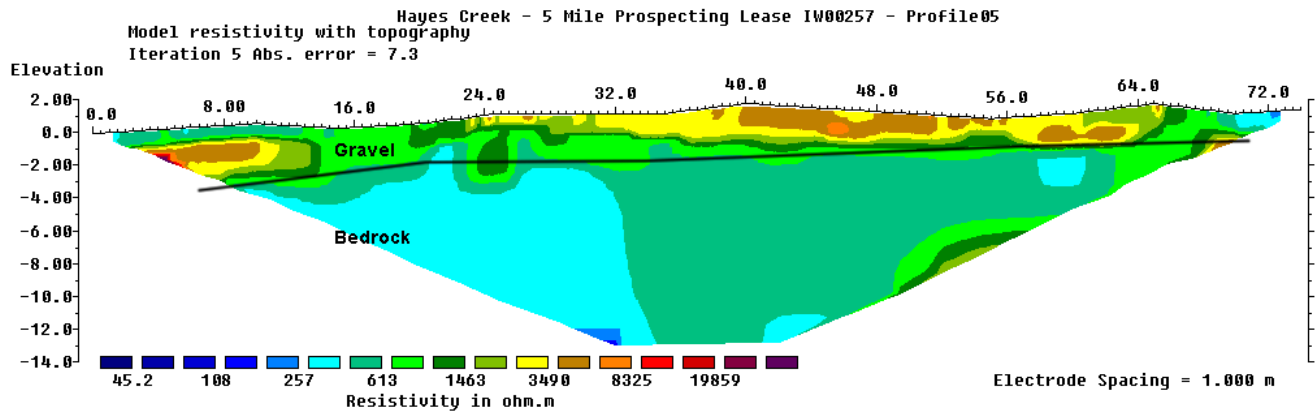
The profile is the furthest upstream of the four cross valley profiles with 10m spacing between them.

The measurement for the profile was negatively influenced by a thunderstorm; therefore the data on the left side of the profile is not entirely reliable.

A uniform depth to **bedrock** of 3.5 m is the best possible interpretation of the measured and processed data of both the resistivity and IP profile.

Profile05

Electrode #1: N 62° 40' 51.0" W138° 08' 38.8"
Electrode #75: N 62° 40' 50.0" W138° 08' 33.8"
Electrode spacing: 1m



Interpretation:

This profile is parallel to the creek and intersects the other four of this series. Profiles 01 – 04 intersect at 24m, 34m, 44m and 54m respectively. The depth to **bedrock** decreases from 3m to 1,5m depth along the profile.

7. Geological implications

“Deposits are only partially frozen and near Apex Creek they consist of a thin layer of moss and muck overlying 1.6 to 2.8 meters of gravel which contain the occasional large boulder. Deposits farther downstream should be very similar except that depths probably increase slightly. A terrace extends along both sides of Hayes Creek from above Fourmile Creek to the mouth. Below Butterfield Creek it is mainly on the southwest side [left limit], and forms a broad bench for a distance of at least 5 kilometers.”¹

8. Recommendations

We recommend the verification of the results of the interpretations by drilling or trenching.

The following table shows the suitable locations on the measuring lines for the verification of the depths to bedrock, shown in the profiles, with drilling or trenching.

Profile	Recommended places in the profile for verification by drilling or trenching
Prospecting Lease IW00256	
Profile01	34m,
Prospecting Lease IW00255	
Profile01	40m, 80m, 117m
Profile02	80m
Profile03	100m
Prospecting Lease IW00257	
Profile01	15m, 35m, 47m, 58m, 65m ⁷
Profile02	16m, 40m, 52m, 60m, 66m
Profile03	24m, 40m, 50m, 59m, 65m
Profile04	12m, 24m, 50m
Profile05	12m, 28m, 50m

9. Note

All these conclusions are based on the interpretation of the measured data.

⁷ The topographic anomalies seen along profile 01, 02 and 03 must belong to the same phenomenon. We recommend to only verify Profile02 by drilling or digging and to extrapolate the results for the Profiles 01 and 03.

10. References

Chesterman W. Ch. and Lowe K.E. Field Guide to Rocks and Minerals - North America, Chanticleer Press Inc. New York 2007

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Keller, G.V.and Frischknecht, F.C. Electrical methods in geophysical prospecting. Oxford: Pergamon Press Inc. (1966)

Loke M.H. and Barker R.D. Rapid least-squares inversion of apparent resistivity pseudosections by a quasi-Newton method. Geophysical Prospecting 44: 131-152 (1996)

Press F., Siever R., Grotzinger J., Thomas H.J. Understanding Earth, W.H. Freeman and Company, New York (2004)

Robb L. Introducing to Ore-Forming Processes, Backwell Science Ltd., 2005

<http://www.yukonminingrecorder.ca/PDFs/115/115J09P.pdf>

<http://www.yukonminingrecorder.ca/PDFs/115/115I12P.pdf>

Yukon Placer Database 2007

Firestone Ventures Ltd., Sonora Gold-Copper Project 2006, #52 10203 – 178th Street, Edmonton, Alberta, T5S 1M3, www.firestonventures.com

11. Qualification

Stefan Ostermaier

- Study of geology, University of Freiburg, Germany
- Geophysical lectures and field courses, University of Karlsruhe and University of Stuttgart, Germany
- Geological prospecting for precious metals and minerals in the Yukon and Alaska since 2001
- Geophysical Surveying for Mining Exploration in the Yukon since 2005
- Study of computer science, University of Stuttgart, Germany



Stefan Ostermaier

Philipp Moll

- Study of geology, University of Freiburg, Germany
- Geophysical lectures and field courses, University of Karlsruhe and University of Stuttgart, Germany
- Geological Prospecting for precious metals and minerals in the Yukon, NWTs, and Alaska since 1989
- Geophysical surveying for Mining Exploration in the Yukon since 2005
- Study of biology and German language and literature, University of Freiburg, Germany
- Apprenticeship of precision mechanic, Tools Factory Hermann Bilz, Zell, Germany



Philipp Moll

12. Cost

Arctic Geophysics Inc.

Invoice # 200906241

Date: June 24, 2009

Services provided:

Quantity	Description	Amount \$CAN
Transportation		
1	Work day traveling @ \$CAN 200.00	200.00
10 days	Van @ \$CAN 200.00 / week	285.00
904	Km @ \$CAN 0.45	406.80
Geophysical Survey		
9	Geoelectrical 2D-Resistivity Survey @ \$ CAN 600.00 / day	5400.00
3	Report @ \$CAN 200.00 / day	600.00
Communication		
9	Satellite Phone @ \$CAN 20.00 / day	180.00
Misc Equipment		
9	GPS/Altimeter/Solar System @ \$CAN 20.00 / day	180.00
9	Camp equipment @ \$CAN 20.00 / day	180.00
		NET Amount \$CAN 7,431.80
GST Number 846363216RT0001		G.S.T. \$CAN 371.59
		Total Due \$CAN 7,803.39

Heli Dynamics Ltd.



Heli Dynamics Ltd.

Heli Dynamics Ltd.

Helicopter Charter Services

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Canada Y1A 5X9

Phone: (867) 668-3536 or 667-4971

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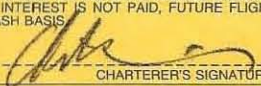

Charterer Billing Address <i>Arctic Geophysics Inc. Box 747 Dawson City Y.T. Y0B 1G0</i>			Customer P.O. #		
Aircraft: <i>GTD F</i> Type: <i>206</i> Rate/Hour: <i>1,050⁰⁰</i>			Flight Authorized By: <i>Stefan Ostermayer Carl Steffen</i>		
Date: <i>June 10/2009</i>		Fuel: <input checked="" type="checkbox"/> HD <input type="checkbox"/> Customer	Pilot: <i>Mike Dorse</i>		
From: _____ To: _____			Base: <i>Sonora Gulch</i>		
			Time Up	Time Down	Flight Time
<i>Sonora Gulch → Minta</i>			<i>11:30</i>	<i>11:53</i>	<i>.4</i>
<i>Minta → Kline Gulch - Sonora Gulch</i>			<i>12:28</i>	<i>12:56</i>	<i>.28</i>
<i>Sonora → Kline Gulch → Sonora</i>			<i>13:13</i>	<i>13:19</i>	<i>.01</i>
					<i>1.0</i>
Fuel Costs/Litre \$ <i>1.70</i>			TOTAL REV HOURS <i>1.0</i>		
FUEL @ <i>114</i> Litres/hr					

G.S.T. Reg. No.: 102320090

SUMMARY	AMOUNT	G.S.T.	TOTAL
<i>1.0 Hours FLYING</i> <i>1,050⁰⁰</i>	<i>1,050⁰⁰</i>	<i>52.50</i>	<i>1,102.50</i>
<i>1.0 Hours FUEL & OIL Expenses</i>	<i>193.80</i>	<i>9.69</i>	<i>203.49</i>
Misc.			
TOTALS			
GRAND TOTAL			<i>1,305.99</i>

Payments must be made monthly on accounts, or 2% interest will be charged.

Trans North Helicopters

		REMIT PAYMENT TO: TRANS NORTH HELICOPTERS TRANS NORTH TURBO AIR LTD. P.O. Box 8, 115 Range Rd. Whitehorse, Yukon Canada Y1A 5X9 Tel: (867) 668-2177 - Fax: (867) 668-3420 www.tntaheli.com		ACCOUNT NUMBER INVOICE NUMBER 45185 INVOICE DATE AREA B.C. <input type="checkbox"/> YUKON <input type="checkbox"/> NWT <input type="checkbox"/> ALTA <input type="checkbox"/>	
CHARTERER Don Banks 668-2177		BILLING ADDRESS		A/C TYPE BH206-BGTNY	
FUEL & OIL-X TANTA FUEL USED TANTA CUST. CMX		HRS./LITRES		AIRCRAFT REGISTRATION C FLIGHT DATE DAY MONTH YEAR 13 06 09	
HOOK INSURANCE VALUE		DECLINED <input type="checkbox"/> INT ACCEPTED <input type="checkbox"/>		TNTA'S TARIFF LIMITS THAT TNTA'S LIABILITY FOR LOSS OR DAMAGE TO GOODS CARRIED IS 50¢ PER LB.	
FROM CMX - Hayes Crk		UP 1812		DOWN 2024	
HOURS 1.9		REMARKS NO. OF PASS Move 1 Pass + Gear			
				Pat: Stefan	
SUB 0000323		G.L.		AMOUNT D.G. TRANSPORTED 1.9 @	
				HOLDING TIME: @ / HR.	
				FUEL @ / LITRE	
				FUEL @ / LITRE	
TERMS: PAYABLE UPON RECEIPT OF INVOICE. 2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS.		MEALS & LODGINGS			
X  CHARTERER'S SIGNATURE		OTHER			
CHARTERER'S NAME (PRINTED)		OTHER			
INITIALS K		PILOTS SIGNATURE 		SUB TOTAL	
ENGINEER'S NAME Terry		SHIPPING NAME & QTY.		GOODS & SERVICES TAX REGISTRATION NO. R121483135	
CLASS		UN #		PACKING GR.	
				TOTAL \$	

CARRIAGE SUBJECT TO TERMS OF PUBLISHED TARIFF. TARIFF AVAILABLE TO PUBLIC VIEW AT TRANS NORTH OFFICE.

FLIGHT REPORT - CUSTOMER'S COPY

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 2,467.42+
 2,478.79+
 7,425.*

2,478.79+
 2,467.42+
 2,478.79+

Coal Mine Campground

#2 Stephanie.

Guest Check

DATE	SERVER	TABLE NO.	GUESTS
MEALS			AMOUNT
June 18 - Cabin			65 -
Shower ✓			3 -
1 ham			6 -
1 Fuel			3 -
BEVERAGES			
			77.00
GST			3.85
SUB-TOTAL			
GST			
PST			
TOTAL			80.85

443776 SC375 **Thank You!**

Guest Receipt

DATE	SERVER	TABLE NO.	GUESTS
TOTAL			

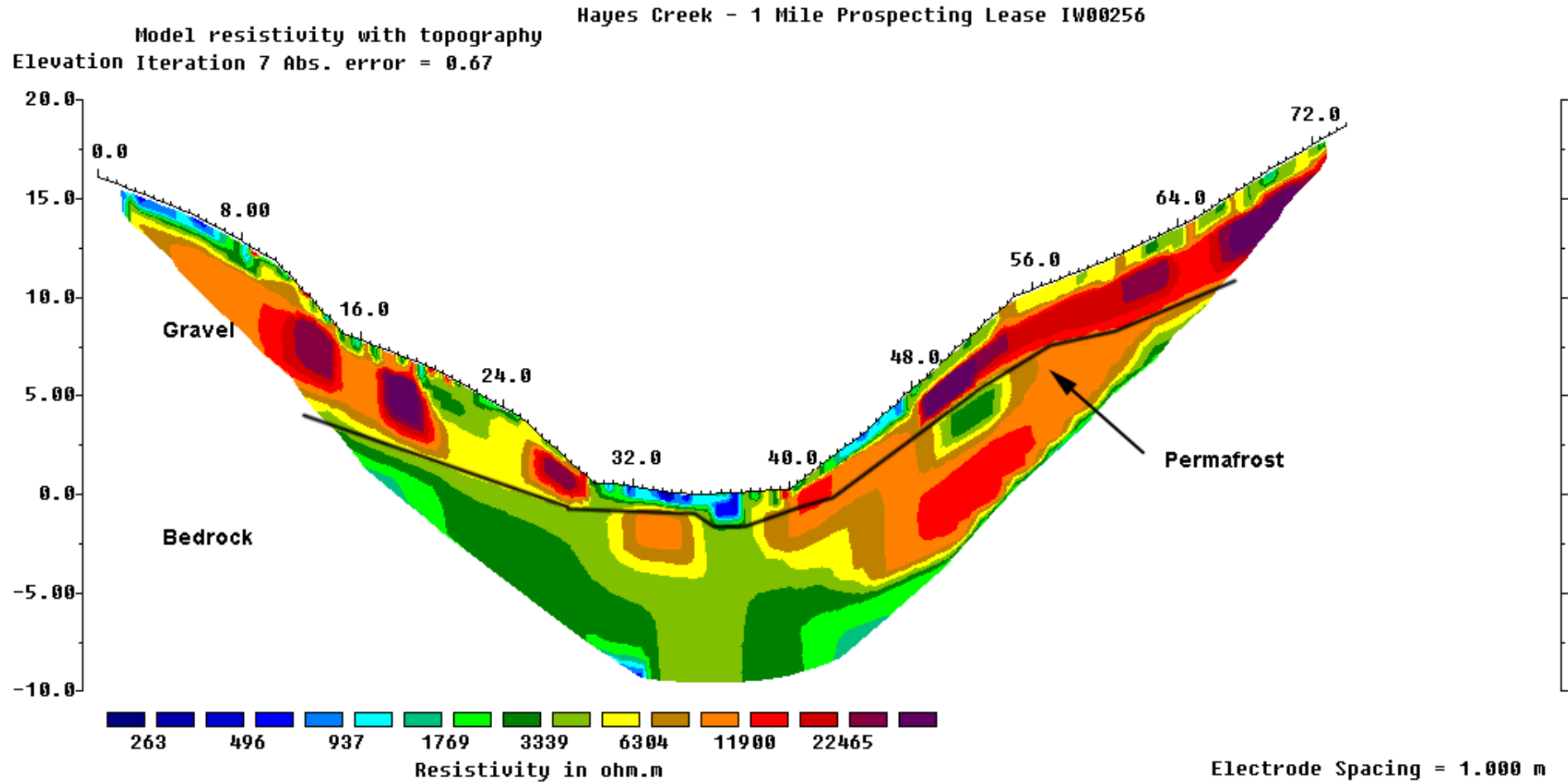
443776

Total Cost

Arctic Geophysics Inc.	7,803.39
Heli Dynamics Ltd.	1,305.99
Trans North Helicopters	7,425.00
Coal Mine Campground	80.85
<hr/>	
Total \$CAN	16,615.23

13. Addendum

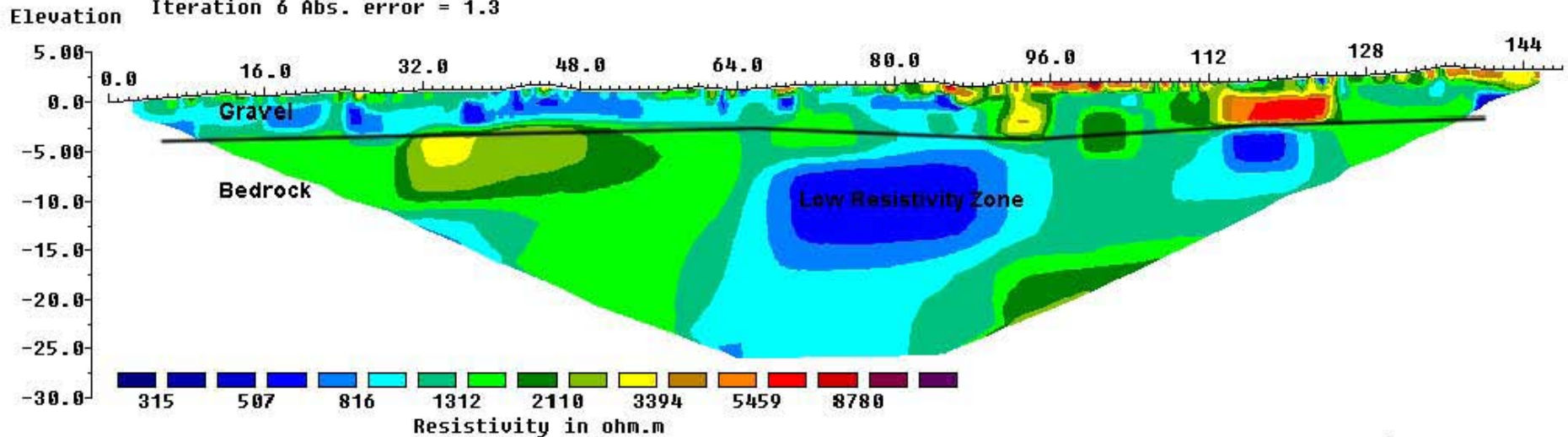
Profiles Large



Hayes Creek - 3 Mile Prospecting Lease IW00255 - Profile01

Model resistivity with topography

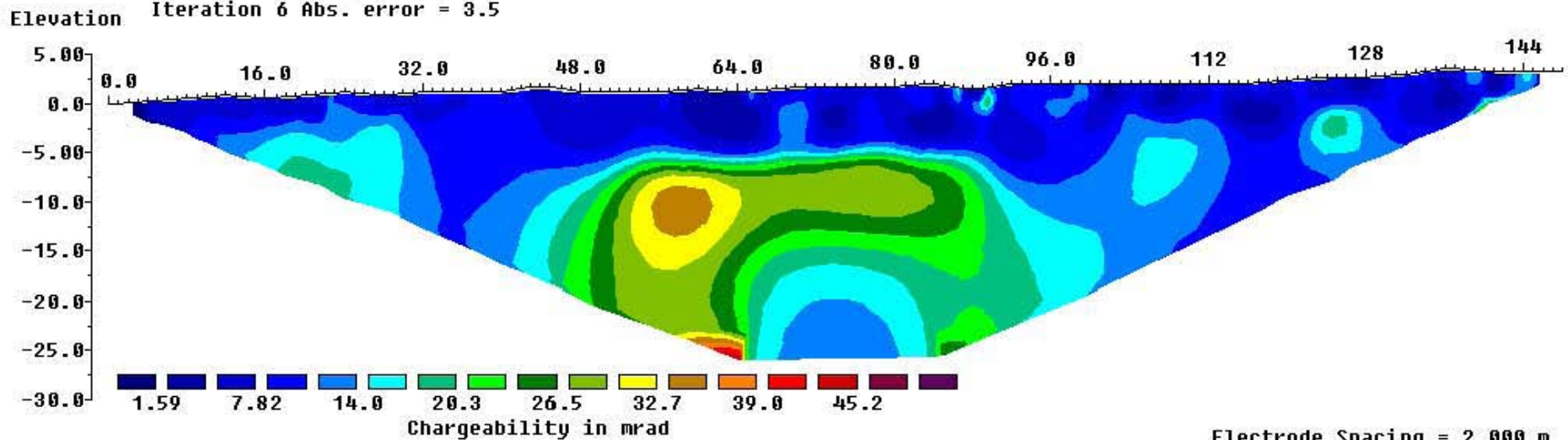
Iteration 6 Abs. error = 1.3



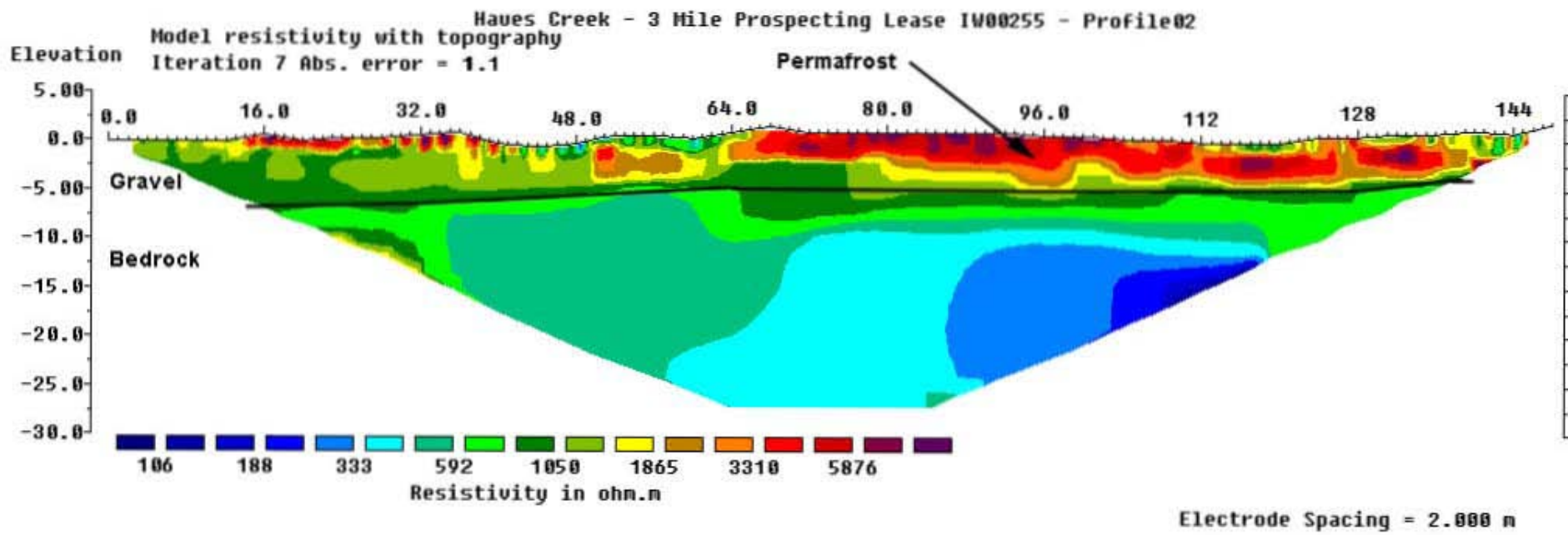
Electrode Spacing = 2.000 m

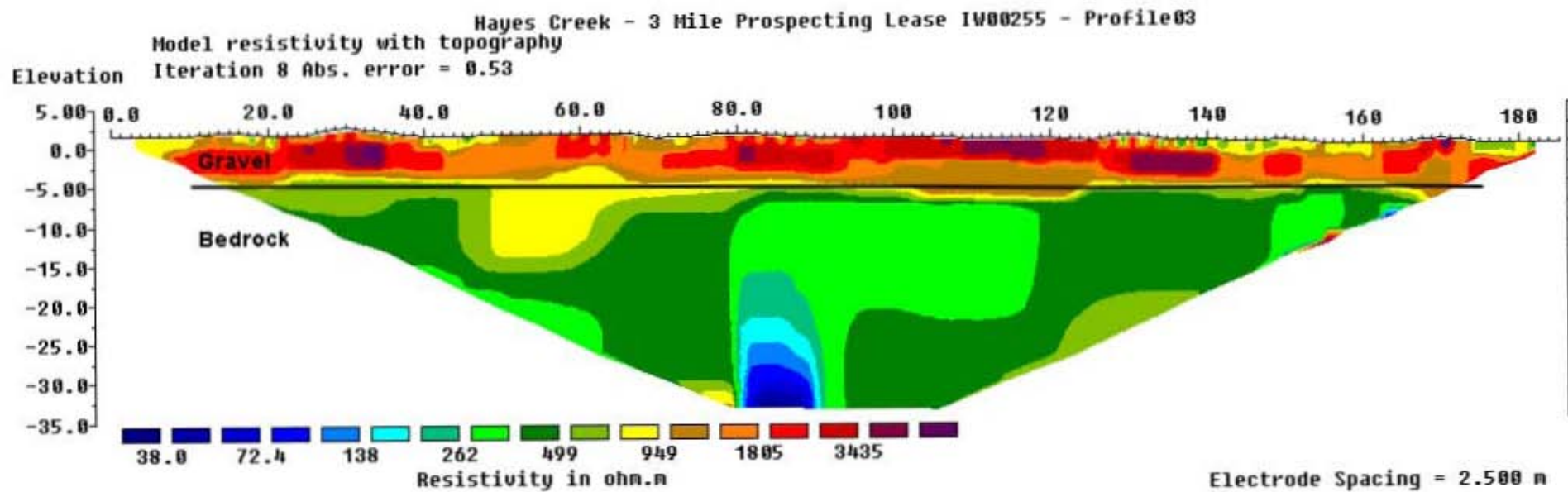
Model IP with topography

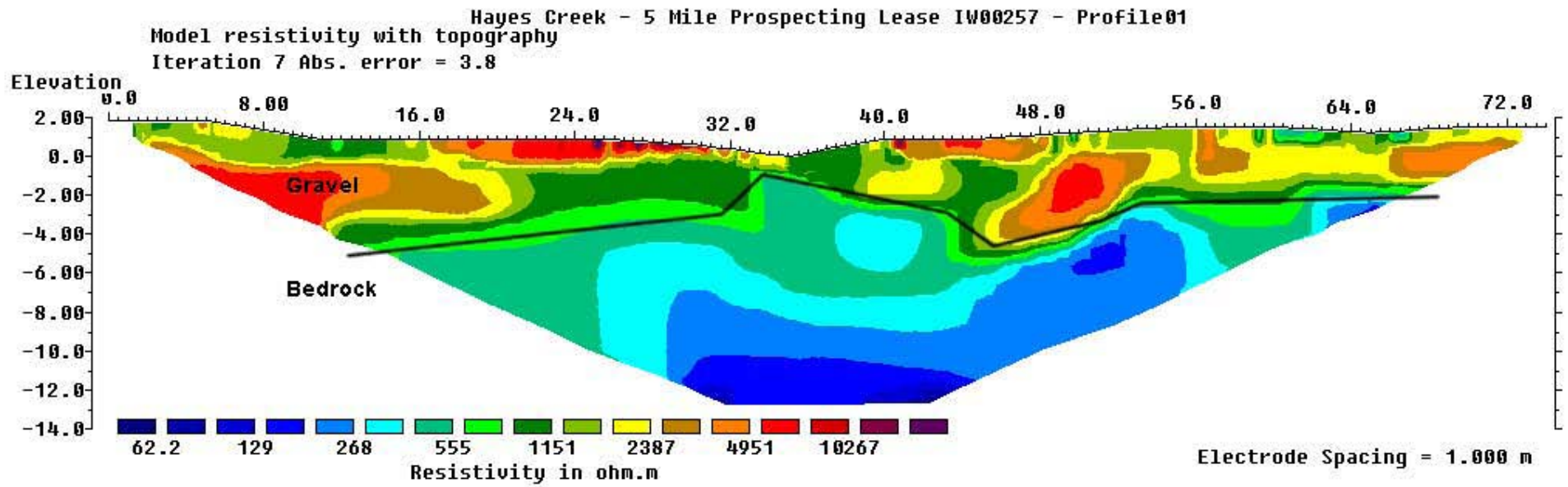
Iteration 6 Abs. error = 3.5

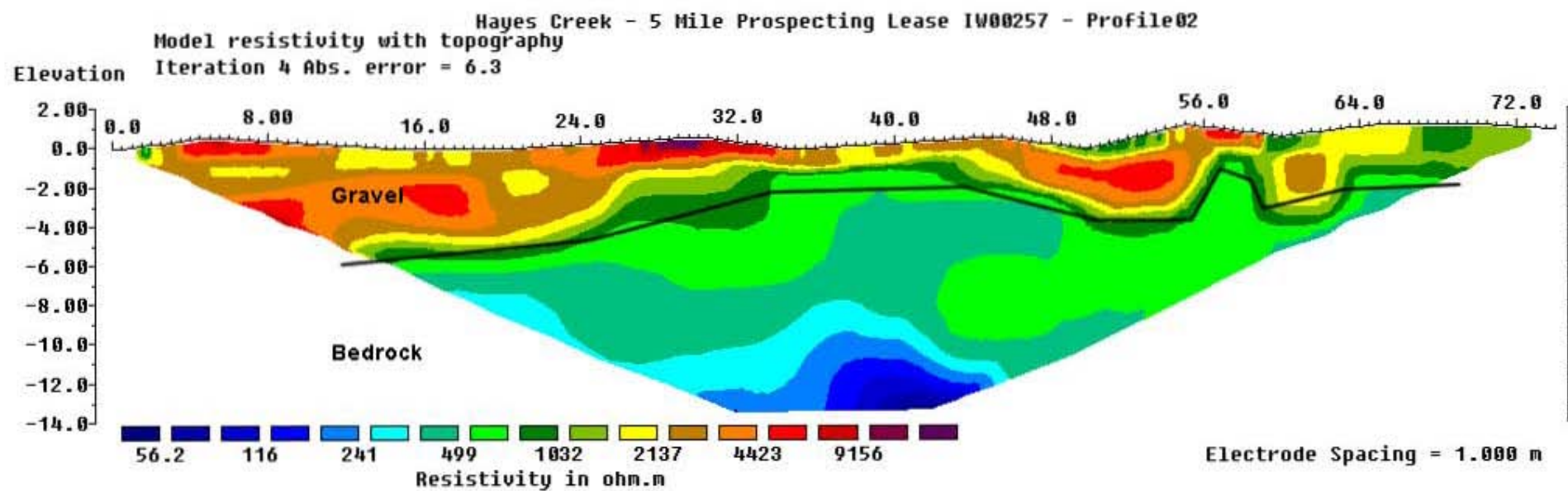


Electrode Spacing = 2.000 m





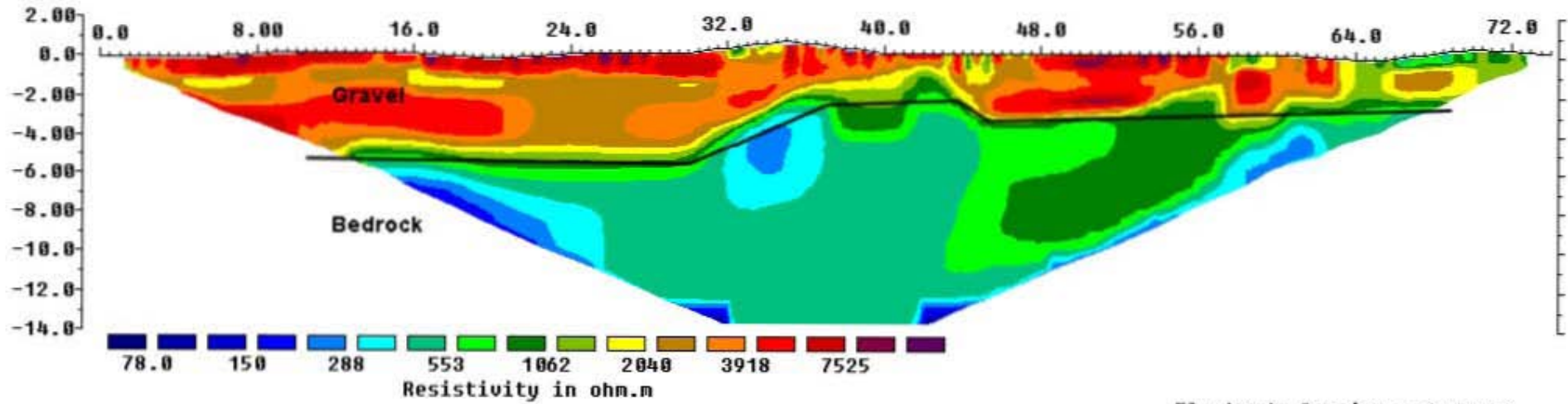




Hayes Creek - 5 Mile Prospecting Lease IW00257 - Profile03

Model resistivity with topography

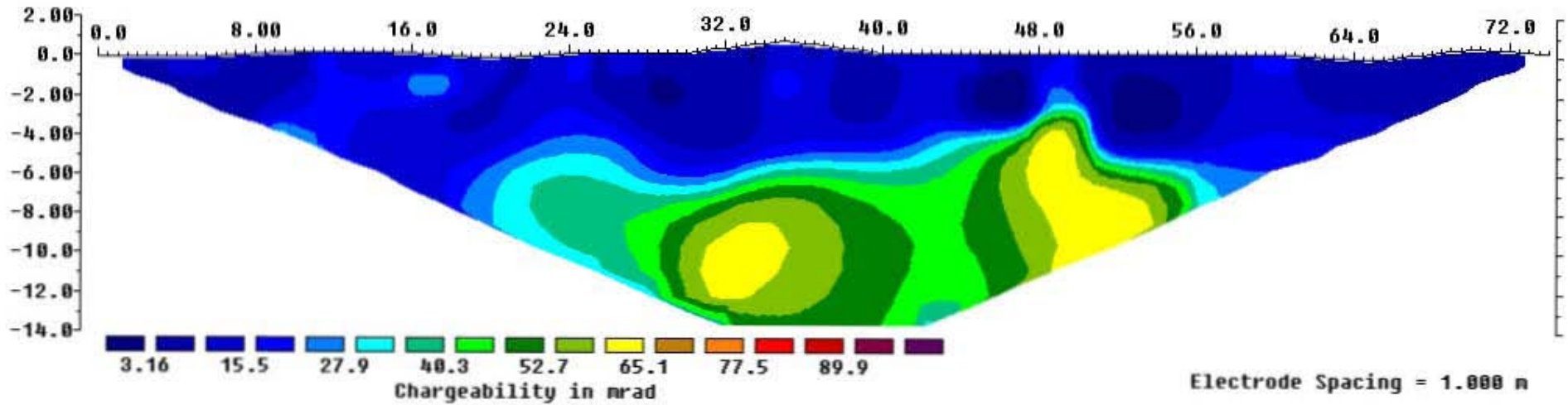
Elevation Iteration 5 Abs. error = 3.0



Electrode Spacing = 1.000 m

Model IP with topography

Elevation Iteration 5 Abs. error = 6.8

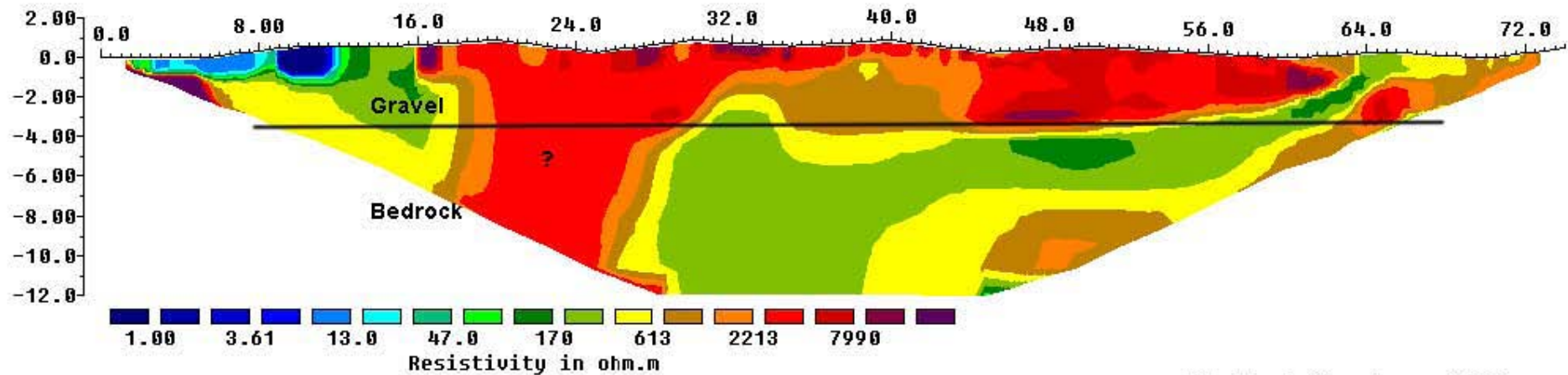


Electrode Spacing = 1.000 m

Hayes Creek - 5 Mile Prospecting Lease IW00257 - Profile04

Model resistivity with topography

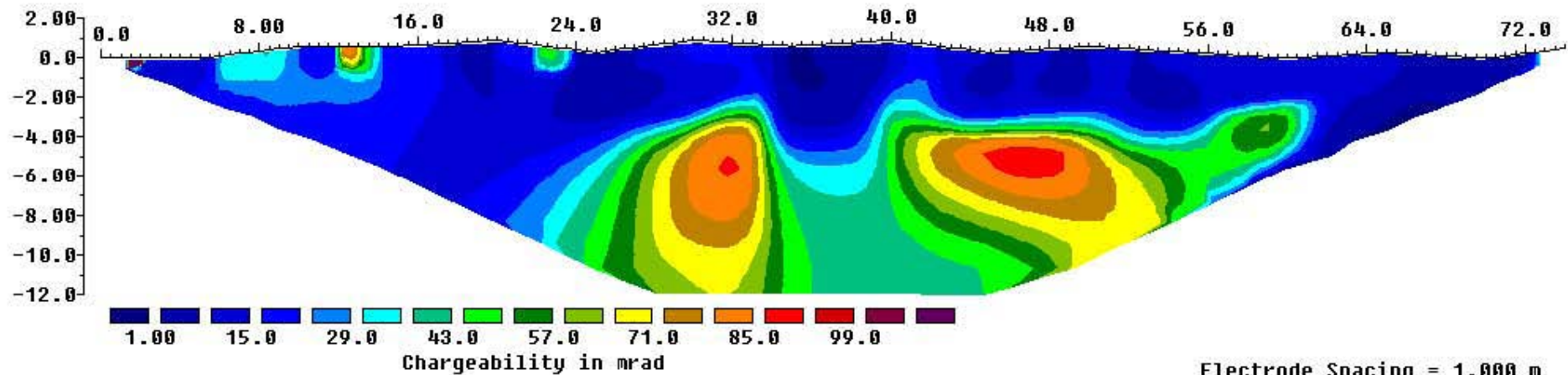
Elevation Iteration 5 Abs. error = 15.5



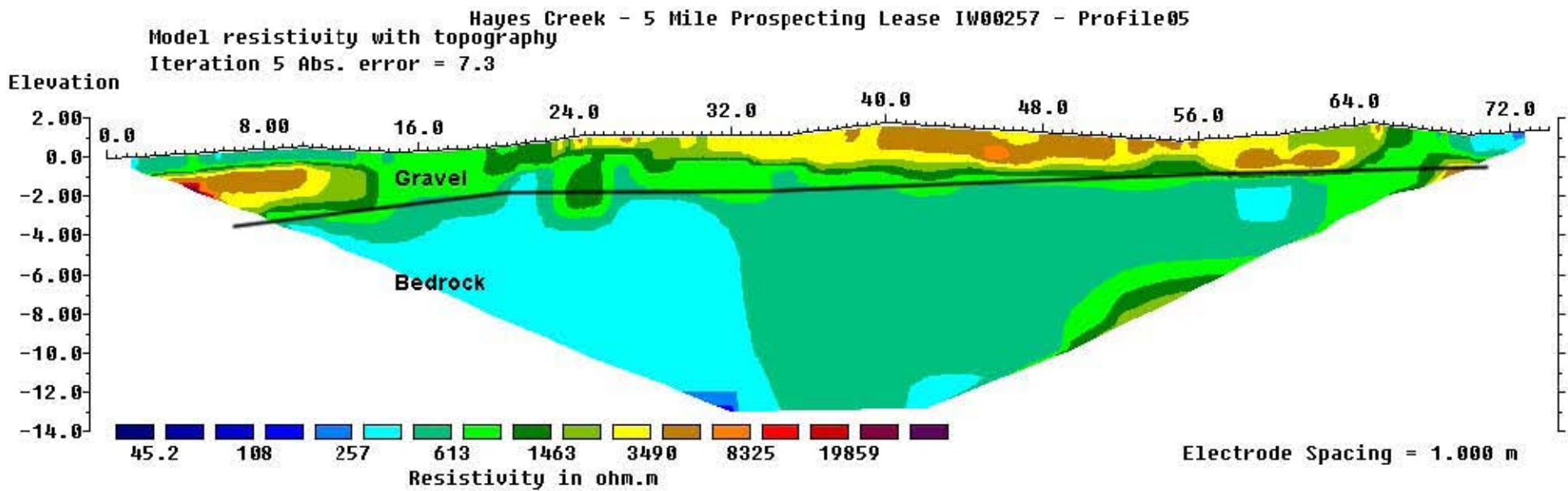
Electrode Spacing = 1.000 m

Model IP with topography

Elevation Iteration 5 Abs. error = 7.9



Electrode Spacing = 1.000 m



GPS-Data

1 Mile Lease IW00256

Profile01

Electrode	Lat. Long.	Elevation
1	N62 38 43.5 W137 59 56.4	16.15
5	N62 38 43.4 W137 59 56.4	14.33
10	N62 38 43.2 W137 59 56.4	11.89
15	N62 38 43.1 W137 59 56.5	8.23
20	N62 38 43.0 W137 59 56.6	6.4
25	N62 38 42.9 W137 59 56.7	3.96
30	N62 38 42.7 W137 59 56.8	0.61
31	N62 38 42.7 W137 59 56.9	0.61
35	N62 38 42.7 W137 59 57.1	0

Electrode	Lat. Long.	Elevation
40	N62 38 42.7 W137 59 57.4	0.3
45	N62 38 42.5 W137 59 56.9	3.35
50	N62 38 42.5 W137 59 57.2	6.71
55	N62 38 42.3 W137 59 57.3	10.06
60	N62 38 42.1 W137 59 57.3	11.89
65	N62 38 41.9 W137 59 57.4	14.02
70	N62 38 41.8 W137 59 57.6	16.76
75	N62 38 41.8 W137 59 57.6	19.2

3 Mile Lease IW00255

Profile01

Electrode	Lat. Long.	Elevation
5	N62 38 42.0 W137 59 44.3	0.61
7	N62 38 41.9 W137 59 44.5	0.91
9	N62 38 41.8 W137 59 44.6	0.61
11	N62 38 41.7 W137 59 44.7	0.91
13	N62 38 41.4 W137 59 44.9	1.22
15	N62 38 41.3 W137 59 45.0	0.91
17	N62 38 41.2 W137 59 45.1	1.22
19	N62 38 41.1 W137 59 45.1	1.22
21	N62 38 40.9 W137 59 45.2	1.22
23	N62 38 40.8 W137 59 45.3	1.83
25	N62 38 40.7 W137 59 45.4	1.22
27	N62 38 40.6 W137 59 45.4	1.22
29	N62 38 40.5 W137 59 45.5	1.22
31	N62 38 40.3	1.52

Electrode	Lat. Long.	Elevation
	W137 59 45.6	
33	N62 38 40.2 W137 59 45.7	1.22
35	N62 38 40.1 W137 59 45.8	1.52
37	N62 38 40.0 W137 59 45.8	1.83
39	N62 38 39.8 W137 59 45.9	1.83
41	N62 38 39.7 W137 59 46.0	1.83
43	N62 38 39.6 W137 59 46.1	2.13
45	N62 38 39.5 W137 59 46.2	1.52
47	N62 38 39.3 W137 59 46.2	2.13
49	N62 38 39.2 W137 59 46.3	2.13
51	N62 38 39.0 W137 59 46.5	2.13
53	N62 38 39.0 W137 59 46.5	2.13
55	N62 38 38.9 W137 59 46.6	2.13
57	N62 38 38.7 W137 59 46.7	2.13

Electrode	Lat. Long.	Elevation
59	N62 38 38.6 W137 59 46.8	2.13
61	N62 38 38.5 W137 59 46.8	2.44
63	N62 38 38.4 W137 59 46.8	2.74
65	N62 38 38.3 W137 59 46.9	2.74
67	N62 38 38.1 W137 59 47.0	3.05

Electrode	Lat. Long.	Elevation
69	N62 38 38.0 W137 59 47.1	3.66
71	N62 38 37.9 W137 59 47.2	3.35
73	N62 38 37.8 W137 59 47.3	3.35
75	N62 38 37.7 W137 59 47.4	3.35

Profile02

Electrode	Lat. Long.	Elevation
1	N62 38 27.3 W137 59 41.4	0
3	N62 38 27.3 W137 59 41.2	0
5	N62 38 27.4 W137 59 40.9	0
7	N62 38 27.3 W137 59 40.6	0
9	N62 38 27.4 W137 59 40.4	0.61
11	N62 38 27.4 W137 59 40.1	0
13	N62 38 27.4 W137 59 39.8	0.3
15	N62 38 27.4 W137 59 39.5	0.3
17	N62 38 27.4 W137 59 39.2	0.61
19	N62 38 27.5 W137 59 39.0	0.91
21	N62 38 27.5 W137 59 38.6	-0.3
23	N62 38 27.5 W137 59 38.4	-0.61
25	N62 38 27.5 W137 59 38.0	-0.3
26	N62 38 27.5 W137 59 37.9	0.3
27	N62 38 27.5 W137 59 37.7	0.61
29	N62 38 27.5 W137 59 37.3	0.61
31	N62 38 27.5 W137 59 37.0	0.3
33	N62 38 27.5 W137 59 36.7	0.91
35	N62 38 27.5 W137 59 36.5	1.52
37	N62 38 27.5 W137 59 36.3	0.91
39	N62 38 27.5 W137 59 36.0	0.91
41	N62 38 27.6 W137 59 35.7	0.91

43	N62 38 27.7 W137 59 35.4	0.91
45	N62 38 27.7 W137 59 35.2	0.91
47	N62 38 27.8 W137 59 35.0	0.91
49	N62 38 27.8 W137 59 34.7	0.61
51	N62 38 27.9 W137 59 34.4	0.61
53	N62 38 27.9 W137 59 34.1	0.3
55	N62 38 28.0 W137 59 33.9	0.3
57	N62 38 28.0 W137 59 33.7	0
58	N62 38 28.1 W137 59 33.5	0
59	N62 38 28.1 W137 59 33.3	0
61	N62 38 28.2 W137 59 33.1	0
63	N62 38 28.3 W137 59 32.8	0.61
65	N62 38 28.3 W137 59 32.6	0.61
67	N62 38 28.4 W137 59 32.4	0.91
69	N62 38 28.5 W137 59 32.2	0.91
71	N62 38 28.6 W137 59 32.0	1.22
73	N62 38 28.6 W137 59 31.8	0.91
75	N62 38 28.7 W137 59 31.6	1.83

Profile03

Electrode	Lat. Long.	Elevation
1	N62 38 26.1 W137 59 37.5	1.83
3	N62 38 26.2 W137 59 37.3	1.83
5	N62 38 26.4 W137 59 37.3	1.83
7	N62 38 26.6 W137 59 37.2	2.13
9	N62 38 26.7 W137 59 37.2	1.83
11	N62 38 26.8 W137 59 37.1	1.83
13	N62 38 27.0 W137 59 37.1	2.74
15	N62 38 27.2 W137 59 37.1	2.13
17	N62 38 27.3 W137 59 37.1	1.52
19	N62 38 27.6 W137 59 37.4	1.52
21	N62 38 27.8 W137 59 37.4	1.83
23	N62 38 27.9 W137 59 37.5	1.83
25	N62 38 28.1 W137 59 37.5	1.83
27	N62 38 28.2 W137 59 37.5	1.83
29	N62 38 28.3 W137 59 37.5	1.22
31	N62 38 28.5 W137 59 37.4	1.52
33	N62 38 28.7 W137 59 37.3	1.83
35	N62 38 28.8 W137 59 37.2	1.52
37	N62 38 29.0 W137 59 37.1	1.22
39	N62 38 29.1 W137 59 37.0	1.22

Electrode	Lat. Long.	Elevation
41	N62 38 29.3 W137 59 37.0	1.22
43	N62 38 29.4 W137 59 37.0	1.22
45	N62 38 29.6 W137 59 36.9	0.91
47	N62 38 29.7 W137 59 36.7	0.91
49	N62 38 29.9 W137 59 36.6	0.91
51	N62 38 30.1 W137 59 36.5	0.61
53	N62 38 30.2 W137 59 36.5	1.22
55	N62 38 30.4 W137 59 36.6	0.61
57	N62 38 30.5 W137 59 36.6	0.61
59	N62 38 30.8 W137 59 36.6	0.3
61	N62 38 31.0 W137 59 36.6	0.61
63	N62 38 31.1 W137 59 36.6	0
65	N62 38 31.2 W137 59 36.6	0
67	N62 38 31.3 W137 59 36.6	0
69	N62 38 31.4 W137 59 36.6	0.61
71	N62 38 31.6 W137 59 36.6	0
73	N62 38 31.7 W137 59 36.6	0
75	N62 38 31.9 W137 59 36.6	0

5 Mile Lease IW00257**Profile01**

Electrode	Lat. Long.	Elevation
1	N62 40 51.7 W138 08 36.4	1.83
5	N62 40 51.6 W138 08 36.5	1.83
10	N62 40 51.4 W138 08 36.7	0.91
20	N62 40 51.2 W138 08 36.9	0.91
25	N62 40 51.0	0.91

Electrode	Lat. Long.	Elevation
	W138 08 37.1	
30	N62 40 50.9 W138 08 37.2	0.61
35	N62 40 50.8 W138 08 37.5	0
40	N62 40 50.6 W138 08 37.6	0.91
45	N62 40 50.5 W138 08 37.8	0.91

Electrode	Lat. Long.	Elevation
50	N62 40 50.3 W138 08 38.0	1.22
55	N62 40 50.2 W138 08 38.1	1.52
60	N62 40 50.1 W138 08 38.1	1.52

Electrode	Lat. Long.	Elevation
65	N62 40 49.9 W138 08 38.3	1.22
70	N62 40 49.8 W138 08 38.2	1.52
75	N62 40 49.6 W138 08 38.4	1.52

Profile02

Electrode	Lat. Long.	Electrode
1	N62 40 51.5 W138 08 35.4	0
5	N62 40 51.5 W138 08 35.5	0.61
10	N62 40 51.4 W138 08 35.7	0.3
15	N62 40 51.3 W138 08 35.9	0
20	N62 40 51.2 W138 08 36.1	0
25	N62 40 51.1 W138 08 36.1	0.3
30	N62 40 50.9 W138 08 36.3	0.61
35	N62 40 50.7 W138 08 36.5	0

Electrode	Lat. Long.	Electrode
40	N62 40 50.6 W138 08 36.6	0.3
45	N62 40 50.5 W138 08 36.8	0.61
50	N62 40 50.3 W138 08 37.0	0
55	N62 40 50.2 W138 08 37.1	1.22
60	N62 40 50.1 W138 08 37.3	0.61
65	N62 40 49.8 W138 08 37.3	1.22
70	N62 40 49.7 W138 08 37.4	1.22
75	N62 40 49.6 W138 08 37.5	0.91

Profile03

Electrode	Lat. Long.	Elevation
1	N62 40 51.5 W138 08 34.9	0
5	N62 40 51.4 W138 08 35.0	0
10	N62 40 51.4 W138 08 35.1	0.3
15	N62 40 51.2 W138 08 35.3	0.3
20	N62 40 51.1 W138 08 35.6	0
25	N62 40 50.9 W138 08 35.7	0.3
30	N62 40 50.8 W138 08 35.8	0.3
35	N62 40 50.6 W138 08 36.0	0.91
40	N62 40 50.5	0.3

Electrode	Lat. Long.	Elevation
	W138 08 36.1	
45	N62 40 50.3 W138 08 36.2	0.3
50	N62 40 50.1 W138 08 36.4	0.3
55	N62 40 50.0 W138 08 36.5	0.3
60	N62 40 49.9 W138 08 36.6	0.3
65	N62 40 49.8 W138 08 36.7	0
70	N62 40 49.7 W138 08 36.8	0.61
75	N62 40 49.5 W138 08 37.0	0.3

Profile04

Electrode	Lat. Long.	Elevation
1	N62 40 51.3 W138 08 34.3	0
5	N62 40 51.2	0

Electrode	Lat. Long.	Elevation
	W138 08 34.3	
10	N62 40 51.1 W138 08 34.6	0.61

Electrode	Lat. Long.	Elevation
15	N62 40 51.0 W138 08 34.7	0.61
20	N62 40 50.8 W138 08 34.9	0.91
25	N62 40 50.7 W138 08 35.1	0.3
30	N62 40 50.5 W138 08 35.2	0.91
35	N62 40 50.4 W138 08 35.4	0.61
40	N62 40 50.3 W138 08 35.5	0.91
45	N62 40 50.1 W138 08 35.7	0.3
50	N62 40 50.0	0.61

Electrode	Lat. Long.	Elevation
	W138 08 35.8	
55	N62 40 49.8 W138 08 35.9	0.3
60	N62 40 49.6 W138 08 36.1	0
65	N62 40 49.5 W138 08 36.2	0.3
70	N62 40 49.3 W138 08 36.4	0
75	N62 40 49.2 W138 08 36.5	0.61

Profile05

Electrode	Lat. Long.	Elevation
1	N62 40 51.0 W138 08 38.8	0
5	N62 40 50.9 W138 08 38.5	0.3
10	N62 40 50.9 W138 08 38.1	0.61
15	N62 40 50.8 W138 08 37.8	0.3
20	N62 40 50.7 W138 08 37.4	0.61
25	N62 40 50.7 W138 08 37.1	1.22
30	N62 40 50.6 W138 08 36.8	1.22
35	N62 40 50.5 W138 08 36.4	1.22

Electrode	Lat. Long.	Elevation
40	N62 40 50.5 W138 08 36.1	1.83
45	N62 40 50.4 W138 08 35.8	1.52
50	N62 40 50.3 W138 08 35.3	1.22
55	N62 40 50.2 W138 08 35.0	0.91
60	N62 40 50.2 W138 08 34.7	1.22
65	N62 40 50.1 W138 08 34.4	1.83
70	N62 40 50.1 W138 08 34.1	1.22
75	N62 40 50.0 W138 08 33.8	1.52

Cost Breakdown for leases Hayes Cr.

lease 1W00256
lease 1W00255
lease 1W00257



\$ 1846.13
\$ 5538.40
9230.70

DOW BANKS
[Signature]

Arctic Geophysics Inc.



Geophysical Surveys • Prospecting • Consulting

Donald Banks
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Carmacks, YT
Y0B1C1, Canada

Arctic Geophysics Inc.
Box 747
Dawson City, Yukon
Y0B-1G0, Canada
Phone: 867-993-3671 (Cell)
Phone (011) 8816-514-50477 (Satellite)
info@arctic-geophysics.com
www.arctic-geophysics.com

Invoice # 200906241

Date: June 24, 2009

Services provided:

Quantity	Description	Amount \$CAN
Transportation		
1	Work day traveling @ \$CAN 200.00	200.00
10 days	Van @ \$CAN 200.00 / week	285.00
904	Km @ \$CAN 0.45	406.80
Geophysical Survey		
9	Geoelectrical 2D-Resistivity Survey @ \$ CAN 600.00 / day	5400.00
3	Report @ \$CAN 200.00 / day	600.00
Communication		
9	Satellite Phone @ \$CAN 20.00 / day	180.00
Misc Equipment		
9	GPS/Altimeter/Solar System @ \$CAN 20.00 / day	180.00
9	Camp equipment @ \$CAN 20.00 / day	180.00
		NET Amount \$CAN 7,431.80
GST Number 846363216RT0001		G.S.T. \$CAN 371.59
		Total Due \$CAN 7,803.39

Banking Information:

CIBC, Bank Number: 010
Branch Address:
978 2nd Avenue, Dawson City, YT
Y0B 1G0, Canada
Branch Transit 00480
Account Number: 99-06312

Pay by CHIPS to: Bank of America, New York:
BIC: BOFAUS3N
CHIPS: UID 0959

Pay by FEDWIRE to: Bank of America, New York:
BIC: BOFAUS3N
ABA or Routing Number 026009593

CIBC Swift Code: CIBCCATT
CIBC Institution Number: 010